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DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1968

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETIETH CONGRESS

FIRST SESSION

SUBCOMMITTEE ON DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE AND RELATED AGENCIES

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NEAL SMITH, Iowa
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ROBERT M. MOYER, *Staff Assistant to the Subcommittee*

PART 6

Members of Congress, Interested Individuals and Organizations

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THURSDAY, APRIL 20, 1967.

OFFICE OF EDUCATION—CIVIL RIGHTS GUIDELINES

WITNESSES

HON. JAMIE L. WHITTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI
HON. ROBERT L. F. SIKES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA
HON. GEORGE W. ANDREWS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA
HON. JOHN J. FLYNT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA
HON. WATKINS M. ABBITT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Mr. FLOOD. Gentlemen, we have the pleasure and the privilege this morning of hearing from one of our most distinguished colleagues and an old friend of mine, Congressman Jamie L. Whitten of Mississippi who, among other things, is Chairman of the Appropriations Subcommittee for the Department of Agriculture. I have served with him for a number of years on the subcommittee for the Department of Defense. He has requested permission to appear before this subcommittee to discuss a subject which is very close to him and very close to his people. I am sure he will command our complete attention.

Mr. Whitten.

STATEMENT OF HON. JAMIE L. WHITTEN

Mr. WHITTEN. Mr. Chairman, first let me say I appreciate your kind statements. I appreciate our friendship and our relationship through the years.

The fact that I am presenting the statement comes from working with several cases before hearing examiners. As you will see, we have with us our fellow colleagues on the Appropriations Committee.

Mr. FLOOD. Why don't you introduce them for the record at this time, Mr. Whitten? We, of course, know all of them well.

Mr. WHITTEN. We have with us, of course, Congressman Andrews, and Congressman Sikes and Congressman Flynt, our mutual friends and fellow members of the Appropriations Committee. Others would have been here if they had not had conflicts. In fact, Congressman Jonas, of North Carolina, asked that I report to the committee that he was in accord with the position that we shall take here this morning and regrets being unable to be present. Also I present petitions directed to you and your committee joining in the request for relief we seek; petitions from the congressional delegations from Virginia, North Carolina, South Carolina, Georgia, Tennessee, Florida, Missis-

sippi, Alabama, and Louisiana. A very few members did not sign or were out of town. You will also hear from Members from Arkansas and Texas. All would be glad to appear.

Before getting to my prepared statement, Mr. Chairman, I received a copy of a letter sent by the U.S. Commissioner of Education and I have here a book with a number of instruments in it, one of which contains excerpts from a brief filed in one case which quotes Senator Humphrey, who was floor manager on the Civil Rights Act of 1964 in the Senate, and I think the record itself, which you will find here, is a complete answer to the statements that were made in a letter to me by the Commissioner of Education, a copy of which came to you.

In the interests of time, I have put in this record which I hand you the various instruments which I shall refer to and will leave this book with these instruments with the committee, along with the hearings—I means the hearings before the examiners in three cases in which I happened to participate.

With that background, if I might stick to the text of my prepared statement it might shorten the time we take.

Mr. FLOOD. Those hearings, Mr. Whitten, were held in your State?

Mr. WHITTEN. They were held here in Washington and the circumstances were that the superintendent of one and the president of the board of trustees in another are from committees where I once served as district attorney. They were here for a hearing before a Federal examiner in connection with the withholding of funds by the U.S. Department of Education. They invited me to go along. I accepted. They thought, as did I, that they were going down to sit around a table with their U.S. Department to discuss a mutual problem.

I got to the place of hearing and found out the Government was represented by two lawyers, who while courteous, set out not to help but to prove a case for withholding educational funds we had appropriated, from the school district.

Mr. FLOOD. There were attachés of the General Counsel's Office of HEW.

Mr. WHITTEN. That is right, and the hearing examiner's statement, which I have right here, will indicate what the issue was. They were surprised and I was surprised. I have here the issue as set out by the hearing examiners.

This is the hearing examiner's statement of the issue:

> The Commissioner of Education seeks to terminate and refuse to grant or continue certain classes of Federal financial assistance to the respondents for use in program activities.

Mr. FLOOD. How did the case arise?

Mr. WHITTEN. I shall go into some detail briefly to start with. The Commissioner of Education issued what he calls guidelines and then after issuing the guidelines, while they have been approved as being within the authority of the department they are not required and certainly they go beyond congressional intent. Then the Department of Education holds the various schools in noncompliance, offers to go do and help the school to get into compliance. They then suggest that the school offer proposals and they continue to object to submitted proposals until the school submits one that suits the Department's representative—and to satisfy the Department, the school must offer to use force if necessary to make students of one race attend a school or school building predominately attended by students of another race.

What I tell you is confirmed in these hearings, copies of which I shall leave with you.

In the case that I mention, I first asked permission—and I have maintained my rights to practice law. I asked to appear as amicus curiae or a friend of the court. I saw that would limit my effort too much so then I asked to appear as counsel, and I did. Of course, as you can imagine, I was rather ill prepared, but I did participate in three of these hearings.

Mr. FLOOD. This was a hearing before an examiner?

Mr. WHITTEN. Before an examiner.

Mr. FLOOD. Who is, under the act, an examiner appointed for the purpose of taking testimony.

Mr. WHITTEN. That is right.

Mr. FLOOD. Apparently somebody decided this particular school was not in compliance with the guidelines.

Mr. WHITTEN. That is right.

Mr. FLOOD. Who asked for the hearing or was it ordered?

Mr. WHITTEN. The course of procedure—and I am speaking off the cuff—the course of procedure is to issue guidelines. They require a recipient school to agree in advance to abide by the rules and regulations of the Department. The Department, in turn, retains the right to change those guidelines from time to time so a school that agrees is agreeing to that which they haven't yet seen.

Then when they come out with the revised guidelines, the Department of Education, through funds that are appropriated here, sends representatives around to the various schools. As I say, up until now, as far as I know, it has largely been in 11 Southern States. They send these to see whether they are "in compliance."

Mr. FLOOD. Did that happen in your case?

Mr. WHITTEN. That happened in two of the cases. The other they held in noncompliance without even going there.

Mr. FLOOD. Then what happened?

Mr. WHITTEN. Then the school under the procedures has to ask for a hearing.

Mr. FLOOD. And they did that?

Mr. WHITTEN. That is right.

And the hearing examiner—if I remember correctly, the rules provide that his findings shall be conclusive as to facts with the right, of course, of the school to go to court, after denial by the secretary and a 60 day delay.

All of this traces back to what I think we have gotten into a faulty practice of doing here and that is trying to finance various things throughout the country by grant.

Last year, as you mentioned, Mr. Chairman, I do serve as chairman of appropriations for the Department of Agriculture. The Bureau of the Budget recommended cuts in nearly all of the programs distributed by formula fixed by law. They recommended greatly increased funds to be distributed by the Secretary of Agriculture as a grant. Our committee put the money back where it would be distributed under laws written by Congress and took it away from the grant procedure where the Secretary—for whom I have a high personal regard—would have had absolute control. He could have been guilty of favoritism; he could have been guilty of this, that, and the other.

What we have here is a system of grants which gives a whole lot of power to a limited number of people.

May I say, to begin with, these schools are all completely desegregated, as the word is defined in the Civil Rights Act of 1964, subtitle 401(b). These schools have taken all school buildings and schools and made them one insofar as designation is concerned. They have issued notices in the paper that all students can go to any school them wish to. They have written the parents of every family that their children can go to the school they wish to. They have done everything that at the time even the Department of Education required.

In one school the colored children elected to go to the same building where they have heretofore gone and the white children elected to go where they have gone.

In the other two districts a number of colored children have gone to the school where the predominant race has been the white race and they have been treated excellently. This was done in the school in my own county, west Tallahatchee. They did this prior to any requirement by the U. S. Department of Education.

I am discussing here schools in an area where they are completely desegregated as that term was defined by the Congress in the Civil Rights Act of 1964. So let's keep that in mind as we go ahead.

The practice which is being followed, as I have said, is for the Department of Education, under the guise of disapproving compliance with their own guidelines, make the local school offer and offer and offer until they finally come up with a proposal to hire or transfer colored teachers to schools where the predominant students have been white and to hire or transfer colored teachers to schools where the majority of the students have been colored.

They try to avoid the expressed intent of Congress by dealing with this problem indirectly, but they refuse to approve school programs for Federal funds until they voluntarily do what I am describing to you.

Having laid this background and having here the hearings in which I participated and where the answers appear on what I am saying, I will show where HEW is making a determination for other departments, and making threats toward all areas.

March 11, 1967, the Washington Post held this article—I'm just pointing out where this will go if our Committee on Appropriations doesn't do something about it. I quote:

UNIVERSITY OF MICHIGAN WARNED BY UNITED STATES

ANN ARBOR, MICH., March 10.—The Federal Government has told the University of Michigan it is in danger of losing federal funds for research contracts if it fails to take immediate action to recruit more negro students and faculty.

This action resulted from a meeting yesterday between university officials and Walter Greene, Acting Director of the Defense Department's Contract Compliance Office in Detroit.

Michigan's 34,000 student enrollment includes 450 negroes. The University faculty totals about 2500, of which only 25 are negroes.

I quote further from a letter sent February 24, 1967 to a science teacher in my district, a school which is completely desegregated, according to the act, who had asked to borrow educational films for

use by his science class, in line with a common practice. He received this reply:

> In accordance with arrangement with HEW, we have designated the Department of HEW under Section 4.93 of our regulations the responsibility for determining whether schools which apply for assistance are in compliance with Title VI.
>
> The Department of Health, Education, and Welfare has advised the Atomic Energy Commission of information of noncompliance on the part of the Coffeeville Consolidated School District, of which the Coffeeville High School is a unit; that a hearing has been held and noncompliance substantiated.
>
> In view of the current situation with respect to your compliance status, the Atomic Energy Commission regrets it will be unable to provide the films you have requested.

Educational films paid for by the Government are being withheld from students of both races because HEW says the school district is not in compliance, yet there has been no final decision.

I will repeat again, as I turn to this, these schools have announced in the press, that any student can go to any school building or school in that district.

They have written to each parent that their children can go to any school in the district without regard to race or color, creed or religion, and in most cases some students of one color have elected to go to formerly white schools.

I might say in many areas of the country, in Washington, Detroit, and New York, with which I am familiar, involved many times in the choice of schools is the matter of economic level of families. I taught school 1 year and there is nothing more embarrassing than for one child to see that his classmates are better dressed than he. I have taught school in an area where there was a good deal of poverty where teachers provided from their own pockets funds to get school lunch for many students. Nothing is more embarrassing to youngsters than not to be able to be like everyone else. There are many factors as to why students like to go where their parents went, where their relatives have gone. But I want you to know that in these schools there is complete freedom to go to school wherever the student wants to.

Now, Mr. Chairman, I think I might save you time because I think I cover some of these in the prepared statement if you will permit me to follow it.

Mr. Chairman, with your permission, I will proceed with my statement.

Mr. Chairman and my colleagues, you and your committee are now considering budget requests for fiscal year 1968 for the Department of Health, Education, and Welfare. We are here today to discuss with you what we believe to be our joint responsibility in making proper recommendations to the Congress with reference to funds for Federal aid to education for fiscal year 1968, which begins July 1, 1967.

We believe the U.S. Office of Education has been and is now deferring and threatening to withhold funds for aid to education from southern schools which were provided by the Congress in the various laws and, particularly, in the appropriation for the Departments of Labor and Health, Education, and Welfare for the present fiscal year.

First may I say, the purpose of the U.S. Department of Education is and has been to promote the cause of education throughout the country as is shown by every act which has been passed providing for

such Department, all the way back to that of March 2, 1867 (14 Stat. 434, 20 U.S.C. I).

It is on this basis and for this purpose that appropriations for Federal aid to education have been made through the years, and increasingly so in the last few years.

During the past year or more it appears to us that the Department and the Commissioner of Education have been making aid to education secondary to other desires and wishes of the Commissioner and others in the Department, including that of having local schools, school districts, and other educational institutions assign students and faculty by race or color to bring about racial balance.

In this connection, Mr. Chairman, I think it well to quote several provisions of the law which will be of help to you in your considerations:

TITLE IV—DESEGREGATION OF PUBLIC EDUCATION

Section 401(b) of the Civil Rights Act of 1964:

"Desegregation" means the assignment of students to public schools and within such schools without regard to their race, color, religion, or national origin, but "desegregation" shall not mean the assignment of students to public schools in order to overcome racial imbalance.

Significant, too, is section 601, title VI, of the same act:

SECTION. 601. No person in the United States shall on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Recently I participated in three cases affecting my congressional district. The testimony and action taken in each of these cases leaves no doubt that the withholding of Federal funds is being used to "blackjack" local school districts to voluntarily submit to the wishes of the U.S. Commissioner of Education. I have the hearing record with me in these cases and shall leave them with the committee.

All of the school districts involved have made all schools and school buildings a part of one system, with each student given complete freedom to go to any school or school building in the district. Notice of this right was published in the local newspapers and sent to all parents by mail, together with notice of the adoption of proper orders providing for one school system for the district. Where children of one race have decided to go to a school building where a majority of students have been of the other race, they have been fully accepted without incident.

These schools are completely desegregated, as that term is defined in subsection 401(b), title IV, of the Civil Rights Act of 1964, quoted before.

The students in these school districts are not excluded from participation in, nor denied the benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance prohibited by title VI, section 601 of such Civil Rights Act of 1964.

Yet funds are being deferred and notice has been given that unless "voluntary" plans are submitted for hiring colored teachers for schools heretofore attended by predominantly white students, and white teachers in schools heretofore attended by colored students, with students assigned by race and color so as to have some of each in each school by next year, schools will not be eligible for Federal aid.

Please keep in mind that in most schools, of their own choice, some students of one race are going to the schools where a majority of the students are of another race.

From these hearings, and I understand this is typical, it soon became apparent that the course followed by the Commissioner's office is as follows: First, so-called guidelines—which, though approved by some courts, go beyond anything required by the law, and certainly beyond what you and other Members of Congress intended or contemplated—are set up. The local school board is then called on by mail, as a condition to qualifying for aid funds, to agree to carry out such guidelines, including such amendments as may be adopted from time to time by the Office of Education. The Department, of course, reserves the right to change its requirements, leaving the local board in the position of not knowing what they have pledged themselves to do.

The hearing records show that most local school districts are first advised by letter from the Office of Education that they are in "noncompliance." The local school board then is urged to offer proposals as to what they will do to voluntarily meet the guidelines; proposals which the Office of Education then continues to find unsatisfactory until such time as the local board offers a program to bring about racial balance through the hiring and reassignment of students and faculty by race. The local school or school district is pressed into a corner where it has to "voluntarily" agree to assign or hire faculty members by race or make changes in district lines or designation of schools so as to force mixing, even where against the wishes of parents and children of both races, or have funds withheld.

This course clearly violates the intent of Congress as set out in section 604 of the Elementary and Secondary Education Act of 1965, which reads as follows:

> Nothing in this Act shall be construed to authorize any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the curriculum, program or instruction, administration, or personnel of any educational institution or school system, or over the selection of library resources, text books or other printed or published instructional material by any educational institution or system.

This is the general situation, and I have the records here. In one case where I participated, Dr. Lloyd Henderson, representative of the Commissioner's office, finally agreed—after I asked him to—under crossexamination to tell the hearing examiner what he would do to comply with his Department's guidelines if he were the local school board or local school superintendent. He did so. He finally said, however—see page 60 of the attached brief—that if the local school or school authorities did everything that he had just said he would do in order to conform, he still would not recommend funds. I quote Dr. Henderson's statement:

> If, as you say, they have already done some of the things that I suggested, or all, or more, I still don't feel that I could make a personal recommendation that the school district be found in compliance, because if they have done this, to the best of my knowledge, they have not succeeded in desegregating their faculties. Some of their neighbors have. It seems to me it would not be fair to other school districts who have desegregated their faculties to then recommend a school district which has not been found in compliance.

I have the finding by the hearing examiner in still another case where the Assistant General Counsel, who has appeared against various schools, appeared. You will note on page 1 of this document the significant statement by the hearing examiner in which he set out the issues before him. I quote:

> The Commissioner of Education seeks to terminate, and to refuse to grant or continue, certain classes of Federal financial assistance to respondents. . . .

If there was any question as to the attitude of the Department or the Office of Education, this statement by the hearing examiner, made in the presence of counsel, clearly shows what the purpose was in each of these hearings. I am sure that this unreasonable position on this sensitive question is not in accord with the intentions of the Congress.

Congress, of course, prohibited the busing of students to bring about racial balance. In the North, busing would be a method to bring about integration and would go beyond desegregation as set out in title IV, subsection 401(b) of the Civil Rights Act of 1964. I have here a letter in which you will be interested. It indicates the same tactics will be used to get "voluntary" busing. In the South and other sections, a requirement that school district lines be set up to force integration or that faculties and students be assigned or reassigned based on race, are also methods to bring about racial balance, contrary to the intent of Congress as shown by title IV, subsection 401(b) It is my own belief that neither the Commissioner of Education, Mr. Howe, nor anyone else has the right to make regional distinctions by forcing the assignment of students and faculty in one section of the country and not in another, merely because the actions to bring it about are different. Again, from observation, if they get by with indirect control here, you can count on them moving in on you.

I have here a copy of the statement of Mr. Howe, Commissioner of Education, as it appeared in the Washington Post, Friday, March 3, in which he said:

> . . . the agency could not require racial balancing as a condition of aid.

Despite this, withholding funds or the threat to withhold funds is being used throughout the Southeastern United States to do that which Mr. Howe says his agency could not do.

From all these hearings the conclusion is inescapable that the Department of Education, by withholding funds is trying to force racial balancing by requiring hiring or assignment by race, or by change in school district lines, or by abolishing schools, or changing from high schools to grammar schools, using the power of the school district officials.

As to how far reaching this matter of pressure goes, I have here a copy of a letter from the Atomic Energy Commission, refusing educational films to a public school for use in science classes—"on the recommendation of the U.S. Department of Education." This school is completely desegregated within the meaning of title IV, subsection 401(b) of the Civil Rights Act of 1964. Also, I have here the news account of a threat to cut off defense research contracts with the University of Michigan unless the University recruits students and faculty by race.

It borders on the criminal to deprive children of all races of educational benefits, where there has been a bona fide desegregation within

the definition of title IV, subsection 401(b), with all students having the right to attend any school in any school building within the district where they live, and receiving all the benefits protected by section 601 of title VI, as is the case in our schools; and the Department of Education should be directed to approve and/or release funds where a school district desegregates within the definition of that term in title IV, subsection 401(b) of the Civil Rights Act of 1964.

We would respectfully urge that to grant funds to schools which are desegregated, as that term is defined by the Civil Rights Act of 1964, and where all the rights of section 601 are protected and enjoyed, does not support discrimination; but to withhold funds is to deprive all students of funds Congress has provided for education.

For the U.S. Department of Education to require local schools or school districts or other educational institutions to submit a plan of operation calling for compulsory assignment of students and faculty by race satisfactory to the Commissioner of Education before Federal funds for education are released, is to run the schools by indirection from Washington and is completely contrary to the intent of Congress.

Even the revised guidelines prohibit what is being forced by threat on a "voluntary" basis:

> SEC. 181.52. Officials Not To Influence Choice.
>
> No official, teacher, or employee of the school system may require or request any student or prospective student to submit a choice form during the choice period other than by the prescribed letter, notice, and choice form. After the choice period, the school system must make all reasonable efforts to obtain a completed choice form from any student who has not exercised a choice. However, at no time may any official, teacher, or employee of the school system, either directly or indirectly, seek to influence any parent, student, or any other person involved, in the exercise of a choice, or favor or penalize any person because of a choice made. Information concerning choices made by individual students or schools to which they are assigned may not be made public.

Up to this point I have discussed what has been happening with or to Federal aid to education funds appropriated last year for the present fiscal year. I realize it may be beyond your control to force a correction in the use of these funds already appropriated. However, it is our plea that funds provided by your committee for the coming fiscal year be on such terms as to see that funds are made available to all school districts or other educational institutions completely desegregated as that term is defined in title IV, subsection 401(b), of the Civil Rights Act of 1964, and open to all students within such district.

We respectfully submit that to withhold funds or threaten to do so until a local school district agrees to abolish certain schools, or to use the power of the school board to assign students or hire faculty by race, is as much a use of force to bring about racial balancing as requiring busing in our cities.

What the Department of Education seeks to force, "racial balance," must not be one thing in one area and another in another, merely because the actions to bring it about are different. The use of force is common to both, the end result is the same, and the use of force was prohibited by the Congress.

We respectfully submit we must prohibit use of educational funds to pressure, to interfere with, or otherwise attempt to control or change the operation of local public schools where there is freedom of choice

of attendance extended to all students to attend any school building in such district and full enjoyment by all in line with section 601 of title VI of the Civil Rights Act of 1964.

We hope your committee will make plain in your report the true intent of Congress and provide such restrictions in the use of funds, administrative and otherwise, as are necessary to prevent the Commissioner of Education or any other Federal official from directly or indirectly controlling local schools, school districts, or other educational institutions, contrary to congressional intent in writing the various laws; thereby depriving students of the benefits of Federal funds appropriated to aid education, and affirmatively direct the allocation of funds to schools which are fully desegregated as that term as defined by said title IV, subsection 401(b).

May I say I firmly believe that what we ask is in line with the law. I know it is in line with the intention of Congress. If there be any question as to whether the courts have misinterpreted what the Congress meant in the various acts, that is all the more reason for your committee to correct such judicial misinterpretation.

From my experience in practicing law and my experience in the Congress, I have written two or three proposals here which I shall not put in the record since this is, of course, the job of the committee, but, having written many reports and many limitations in the years that I have been here, I have taken the liberty of including in this book which I shall leave with the committee, several suggestions——

Mr. FLOOD. The committee would certainly like the benefit of your experience.

Mr. WHITTEN. I will leave these suggestions with the committee. At any rate, they are available for the committee and I shall leave this with you.

Mr. FLOOD. I think we should have the language you suggest for the bill and report as a part of the record.

May I say I certainly appreciate this opportunity to discuss what to me is a national problem, and it is a problem all of us on the Appropriations Committee have to deal with.

Mr. FLOOD. Mr. Whitten, what is the status of the specific case in which you found it necessary to appear?

Mr. WHITTEN. There are three of those cases. As I say, the school districts did not realize they needed counsel and I volunteered in one and then the others came. I called them and told them they needed counsel and counsel did appear.

The hearing examiner in each case found against the district.

Mr. FLOOD. Found against the district?

Mr. WHITTEN. That is right.

Mr. FLOOD. What was the nature of the finding?

Mr. WHITTEN. That the sole test, in effect, would be how much mixing there was; that if you didn't have a certain percentage of people, including faculty, of one color going to a school of another color that on the face of it was discrimination.

Mr. FLOOD. In other words, the examiner found that the guidelines were violated unless the school districts conformed. You say it was an attempt to do indirectly what the Commissioner could not do directly?

Mr. WHITTEN. That is correct, if by "conform" you mean force one race to go to schools or school buildings attended mostly by members of the other race and that was not sufficient unless a certain "unfixed" percentage made the change, for there has been change.

Mr. FLOOD. That leaves the status of the case where?

Mr. WHITTEN. It leaves the status of the case where the Commissioner——

Mr. FLOOD. This finding of the examiner now——

Mr. WHITTEN. The funds, as they say, are being deferred.

Mr. FLOOD. Has the Commissioner acted on the finding of the examiner? The examiner made a finding. I presume the finding of the examiner now goes to the Commissioner, since he was merely acting for the Commissioner?

Mr. WHITTEN. I shall first answer that, Mr. Chairman, by saying that the Commissioner of Education has indicated that funds will be denied. I am not aware whether the formal order has been issued but I would like to make clear in this testimony I am not appearing

before this committete merely for these three schools, but having had this experience in these three schools, it gives me a better idea of what they are doing in all the schools in this area. These schools are presented here as representative of the situation. What makes it worse—and I have a letter here which I will leave with the committee—Mr. Howe, the Commissioner of Education, has notified the schools of 11 States that unless by next fall they have hired colored teachers in schools where the attendance is predominantly white, and white teachers in schools where the attendance is predominantly colored, they will not be eligible for Federal educational funds.

You are doubtless aware they have had cases in the district court and court of appeals as to the authority of the Department to issue guidelines. Involved here is whether the guidelines and practices are within the intent of Congress and whether they are being misused; but more importantly, the decision as to what Congress provides in funds and in declaring how funds for the coming year will be used. The Congress in providing this appropriation has it in its power to straighten out a bad situation as to the intent of Congress and to provide that the funds be handled so as to help students without regard to race, color, creed or religion. Our purpose was and is to "aid education."

Mr. FLOOD. I cannot imagine how your case could have been presented with better clarity.

Mr. Sikes, we would like to hear from you.

STATEMENT OF HON. ROBERT L. F. SIKES

Mr. SIKES. Mr. Chairman, I support in its entirety the position set forth by Mr. Whitten. I think a limitation should be written into this bill which would withhold the funds which make it possible for the Office of Education to go beyond the law and to violate the law by means of the issuance of these guidelines.

The Department of Education, by withholding funds, is trying to force racial balancing in the South by requiring hiring or assignment by race, or by change in school district lines, or by abolishing schools, or changing from high schools to grammar schools, using the power of the school district officials.

Neither the Department of Education nor anyone else should have the right to make sectional distinction and be permitted to force racial balance. I think a prohibition should be written into this bill to make it impossible for officials of the Department of Education to go beyond and to violate the law by the use of guidelines.

We have every right to presume that the primary purpose of the Department of Education was and is to help education. Accepting that, it must follow that since funds are essential to education—and Federal funds promote education—that the desire of the Department should be to find ways to aid, rather than means to cut off funds.

This is not what is happening. There are those who use their power to punish educators and to deny education to the Nation's children. This is what happens when officials of the Department of Education use that Department to promote integration regardless of what they are doing to education. In this they are abdicating the whole purpose for which the aid-to-education program was created.

The Department of Education is requiring a pledge not to abide by the Civil Rights Act, but by guidelines, which go far beyond the Civil Rights Act and which are illegal.

By calling for "voluntary" action to propose plans by the local school district and finding fault with each, the Department of Education is forcing or attempting to force assignment to maintain Negro-white ratios—which is prohibited by the Civil Rights Act.

Title IV, section 401(b), of the Civil Rights Act of 1964, reads as follows:

> "Desegregation" means the assignment of students to public schools and within such schools without regard to their race, color, religion, or National origin, but "desegregation" shall not mean the assignment of students to public schools in order to overcome racial "imbalance."

Even the revised guidelines prohibit what is being forced, by threat, on a "voluntary" basis:

> "SEC. 181.52. Officials Not To Influence Choice.
> No official, teacher, or employee of the school system may require or request any student or prospective student to submit a choice form during the choice period other than by the prescribed letter, notice, and choice form. After the choice period, the school system must make all reasonable efforts to obtain a completed choice form from any student who has not exercised a choice. However, at no time may any official, teacher, or employee of the school system, either directly or indirectly, seek to influence any parent, student, or any other person involved, in the exercise of a choice, or favor or penalize any person because of a choice made. Information concerning choices made by individual students or schools to which they are assigned may not be made public.

Abolishing schools or other actions by force to create racial balance in the South is the same as requiring busing in the cities of the North.

What the Department of Education seeks to force, "racial balance," must not be one thing in the South and another in the North, merely because the actions to bring it about are different. The use of force is common to both, the end result is the same, and the use of force was prohibited by the Congress.

We should prohibit use of educational funds to pressure, to interfere with, or otherwise attempt to control or change the operation of local public schools where there is freedom of choice of attendance extended to all students to attend any school in such district.

Mr. FLOOD. Mr. Andrews, we will be happy to hear anything you have to add.

STATEMENT OF HON. GEORGE W. ANDREWS

Mr. ANDREWS. Thank you, Mr. Chairman.

I think Mr. Whitten has made an excellent statement.

Mr. Chairman, it would be obvious to anyone reading the 1965 and 1966 guidelines for school desegregation that the Secretary of Health, Education, and Welfare and the U.S. Commissioner of Education have overstepped their legal authority granted by the 88th and 89th Congresses in the area of school desegregation. In fact, no Congress has granted the Commissioner of Education the authority to promulgate regulations such as those in his 1965 and 1966 guidelines.

The effect of the Commissioner's guidelines has been demoralizing on the public school officials in our States. Our school administrators and teachers are fine, loyal citizens who respect and abide by the laws of our Nation. They are sincere and they act in good faith. They

cannot, however, be expected to comply with regulations which are completely outside the laws made by their elected representatives. Boards of education cannot successfully administer school programs and follow the 1965–66 guidelines at the same time.

Let me call your attention to specific requirements in the guidelines which go beyond the 1964 civil rights law and which have been next to impossible to administer.

The first has to do with racial balance in schools. The civil rights law of 1964 states that desegregation shall not mean the assignment of students to public schools in order to overcome racial imbalance. Yet, in his own set of rules, the Commissioner of Education arbitrarily determines percentages of students who must transfer from segregated schools in order to achieve racial balance. If voluntary transfers do not bring about the required percentages, the Commissioner requires that school systems adopt different types of desegregation plans such as busing students. On this point, the 1964 Civil Rights Act states that "nothing herein shall empower any official or court to issue any order seeking to achieve a racial balance in any school by requiring the transportation of pupils or students from one school to another." The very process of fixing percentages and busing students away from their neighborhood schools takes away the so-called freedom of choice.

Equally outside the law, in my opinion, is the requirement handed down in the 1965 and 1966 guidelines that school districts act to desegregate faculties in staff meetings and in the school staffs. Teachers and school personnel must now be assigned in such a way as to produce faculty integration in every school. Let me quote to you the 1964 civil rights law on employment practices:

> Nothing contained in title 6 shall be construed to authorize action under this title by any department or agency with respect to any employment practice of any employer . . . except where a primary objective of the Federal financial assistance is to provide employment.

I can tell you that a superintendent in my district held four positions vacant until 10 days before schools opened in order to secure appropriate personnel to comply with the faculty integration requirements of the guidelines. When no qualified teachers applied for these four positions, the superintendent asked the U.S. Office of Education to recommend qualified people. Even this venerable Office could not help the superintendent. No one can say that he did not act in good faith and that he did not try to comply with the Commissioner's rules.

In addition to the guidelines, which are outside laws passed by Congress, I am concerned about the difficulties encountered by school officials in dealing with representatives of the Office of Education. I have received numerous letters complaining about the uncooperative, contemptuous, and totally disrespectful actions exhibited by these representatives when they meet with school boards and superintendents. Their conduct is, in my opinion, inexcusable. Even when school administrators travel all the way to Washington to discuss problems with personnel in the Office of Education, they do not receive very cordial treatment. In such cases, we need for the Commissioner to promulgate "guidelines for personal conduct."

Congress cannot sit back and allow abuse of authority—or, I might say, the assumption of authority—never even granted in the first place.

Nor can the dedicated school people of our Nation cope with the severe, complicated, and impractical regulations growing out of this usurpation of authority. The best interests of education for all the youth of our Nation cannot be served while these guidelines are in effect.

Mr. FLOOD. Mr. Flynt, we will be happy to hear from you.

STATEMENT OF HON. JOHN J. FLYNT, JR.

Mr. FLYNT. Thank you, Mr. Chairman.

First I would like to associate myself with the remarks of my colleagues, Mr. Whitten of Mississippi, Mr. Sikes of Florida, and Mr. Andrews of Alabama.

Let me respectfully request that this committee include language in the bill, as well as language in the report, which will have the effect of a limitation on the expenditure of funds contained in this appropriation to prohibit harassment and intimidation of local school administrators and school boards by employees and teams of employees sent out by the Office of the Commissioner of Education.

My colleagues have recited many instances in which the Commissioner of Education and employees working under him have arbitrarily, capriciously, and without cause, deferred and withheld funds provided under the Elementary and Secondary Education Act of 1965—Public Law 89–10—from many school districts.

In most of these instances the school boards are without funds or time which would enable them to appeal such administrative actions to the U.S. district court having jurisdiction. Many of us feel that at least a portion of the fault for such arbitrary action lies with the determination of the Commissioner of Education that he intends to deal directly with every individual school district, instead of with the designated State education agency. If the Commissioner of Education would undertake to deal only with the State school superintendent or other designated State education agency, the cost of administration could be substantially reduced and the incidents of arbitrary denial of funds and the abuse of power would either be prevented or at least kept to a minimum.

The action of the Commissioner of Education, which requires individual applications, often including multiple applications under separate titles, from each school district, is an example of compounding administrative costs and of bureaucracy at its worst.

Once a State's overall entitlement under the provisions of Public Law 89–10 has been determined by law and administrative action, the cause of education would be better served by making these funds available directly to the State education agency and let the State board of education and/or the State superintendent of schools use these funds where they are most needed to strengthen educational processes throughout the State.

The cost of administration is increased and the availability of funds for education is diminished in substantial amounts by the willful and arbitrary action of the Commissioner of Education and his subordinates in harassing, intimidating, and browbeating individual school districts into compliance with secret instructions and directions which are often written out in longhand during conferences with superin-

tendents and school board members of individual school districts, which handwritten instructions are of questionable legality.

In August of 1966 I attended as an interested observer a regularly scheduled conference between our local school board and superintendent and a so-called compliance team sent out from the Office of the Commissioner of Education. Never have I witnessed a more arrogant and unsympathetic attitude on the part of any Federal employee than I did on this occasion.

On this occasion this meeting had been scheduled well in advance. Representatives of the local newspapers and radio stations and four or five interested citizens expected to be permitted to observe the proceedings, participate in such proceedings, or both. Much to the surprise of our local people, the chief of this compliance team bluntly announced that this meeting would be conducted in secret and that he and his associates would leave unless the public, including the representatives of the news media were excluded. In an effort to cooperate and to proceed with the conference which had been scheduled, the school board and the superintendent of schools reluctantly agreed to continue the conference despite this unexpected action by the compliance team leader.

I was not present at the time these interested citizens and friends of education were excluded and when I arrived about 20 minutes later and sat down to listen and observe, an effort was made to exclude me. Of course, I refused to leave, and I expressed myself as saying that I wished the other person who had also been entitled to remain but had been excluded from the meeting, had likewise remained to observe the proceedings as I had.

Several weeks later the Commissioner of Education and the Secretary of Health, Education, and Welfare apologized for the action of the leader of this compliance team.

The transcribed report of the proceedings of this meeting clearly indicate the attitude of the Office of Education toward State and local school officials. One or more of the compliance team members freely admitted that he had participated in activities which local school officials are prohibited from doing. One of the team members suggested that economic pressure be used against certain schoolteachers and specifically suggested that the superintendent "pick out a schoolteacher with an aged parent, or an invalid husband, or one with heavy medical expenses and apply this economic pressure against such teacher because such teacher would be least able to resist."

Such action and such suggestions can only be described as brutal and inhuman, to say nothing of being adverse to the best interest of public education as it affects faculty and students alike.

Throughout the State of Georgia, and certainly throughout the 16 counties of the congressional district with which I am most familiar, our school officials, and our people generally, have exercised restraint, have used good judgment, and have demonstrated a spirit of cooperation that can be described as exemplary. In return, they have been confronted with lack of sympathy, total hostility, and an arrogance and tyranny which almost defies description.

During late July and August of 1966, a group of investigators descended on the offices of two separate school districts located in a single county. These investigators identified themselves and pro-

ceeded to take charge of these two school district offices at a time when the administrators and employees were busily preparing for the opening of school less than 6 weeks away. When the school board presidents and the respective school superintendents asked the nature of the investigation, they were told that their instructions directed the investigators to divulge neither the names of the complainants nor the nature of the complaints. The president of one of the school boards telephoned me and during this telephone conversation described what was taking place and said that despite every offer of cooperation, that the working of the investigators was disrupting normal office procedures and could result in delaying the opening of school.

Later on that same day, I conferred personally with members of both school boards and the superintendent of one system and the assistant superintendent of the other. In the presence of this group, I called the Assistant Attorney General in charge of the Civil Rights Division, Department of Justice. I tried to explain to him the disruptive affects of this investigation. I told him of the qualifications, the character, and the integrity of the administrators and board members of both of these school systems, and I told him that if he would advise these people of the complaints that had been received, that prompt and totally accurate answers would be given to any questions which would be asked. If any wrongful act had been committed, it would be admitted and corrected. If no wrongful act had been committed, the allegations would be denied and the investigation would be allowed to proceed from there.

The Assistant Attorney General insinuated, without actually stating, that he had more confidence in his anonymous informer-complainant than he did in all the school board members and school superintendents, and that he would conduct his investigation in any manner he saw fit. I asked him if he would notify these people under investigation of the results of such investigation when completed. He replied that if his investigation produced evidence of a violation of law, that we would present such evidence to the appropriate Federal grand jury, but that if the results of the investigation showed no violation of law that the parties under investigation would never be notified of the nature of the complaints, and that the file would be kept open and pending until such time as additional complaints of a similar nature were made. Nine months have now elapsed. The investigators have long since completed their investigations. No evidence of violation of law was uncovered, in spite of weeks of harassing investigation. These good citizens who administer our schools have not been cleared of these reckless and unfounded charges, and have never been informed of the nature of such charges and complaints.

Such actions by responsible Federal officials have the effect of causing dedicated, capable, law-abiding citizens to come to look upon such Federal employees as their enemies, instead of part of a democratic government. Such Federal employees seem to consider themselves the masters rather than the servants of the American people.

At a time when we need to restore and strengthen a healthy respect for every level of our government and for law and order, these compliance teams and similar employees, seem determined on a course of replacing cooperation with hostility, while demonstrating tyranny and arrogance. If our school board members and school administrators

had received a fraction of the cooperation and good faith which they have accorded to employees sent out by the Office of the Commissioner of Education and other agencies, we could have long since solved any problem which existed, and have been on course toward improved educational standards throughout the United States.

Mr. Chairman, I hope that you and the members of your committee will include the necessary language in both the bill and the report which will deny funds to individuals and groups of Federal employees who would continue to use these funds for purposes of harassment, intimidation and disregard for provisions of law and rules of common courtesy and decency.

Mr. WHITTEN. Mr. Chairman, I think the Virginia delegation sent you a petition requesting relief. And I have petitions from the delegations of the other States that are involved.

Mr. FLOOD. Is the Virginia petition there?

Mr. WHITTEN. I have a copy of it, I think. I know a copy was sent to the committee and I can supply a copy, and I have petitions from most of the other delegations here. One or two individuals have not had an opportunity to sign the petitions, but I shall leave these with you. They speak for themselves.

Mr. FLOOD. Of course if these people wish to sign they will have the opportunity to do so.

Mr. WHITTEN. I do not want to eliminate anybody. I will leave these and supply the others as they come in. We have one from the State of Florida here, from the State of Louisiana, from the State of Alabama, from the State of North Carolina, from the State of Georgia, from the State of Tennessee, from the State of South Carolina, and from the State of Mississippi, and the State of Virginia has already supplied its petition. I hope the text of that petition can be included in the record.

Mr. FLOOD. I am not sure the petition from the State of Virginia is before the committee.

Mr. WHITTEN. I believe it was mailed to you as chairman with copies to the subcommittee, but I will supply that to the committee.

The reason I have not listed all the names in the record, a few individuals did not have a chance to sign and I am not trying to create a schism, I want to show the unanimity of our feeling that we need help.

Let me repeat, the courts have a right to enforce their decrees. The Congress has the responsibility of making its determination of what funds are provided for education.

I wish to thank you again, Mr. Chairman.

Mr. FLOOD. Thank you.

STATEMENT OF HON. WATKINS M. ABBITT

I see Mr. Abbitt of Virginia has come into the room. Mr. Abbitt, do you have a copy of the Virginia petition?

Mr. ABBITT. I do not have it with me but I can get it in a few minutes.

Mr. FLOOD. Do you have a statement?

Mr. ABBITT. First may I say I share these gentlemen's views and my purpose in coming here was to associate myself with them and to give

my views regarding the appropriation to the Office of Education and to point out that in my opinion we will ruin the educational opportunities in my area unless something is done about the dictatorial practices of the Commissioner of Education. Our people are making a real effort to comply with the law and nowhere in my district is a child sent to a school other than a school of his choice or the choice of parents.

The worst part is where agents of the Office of Education come to the school people and tell them what to do, and the next day they call and say that is not enough, that they have to do more and more and more. This will ruin the public school system. Private schools are springing up all over Virginia. That may be good or not good, but I think the public school system is being hurt. I hope this committee can do something that will provide the funds for the schoolchildren in the public schools of America.

I would like permission to file a statement.

Mr. FLOOD. Without objection.

(The following statement was submitted for the record:)

STATEMENT OF HON. W. M. ABBITT, OF VIRGINIA

Mr. Chairman, many of us are alarmed about the actions of the Commissioner of Education in his all-out effort to dictate the policies of the public schools of America. If something is not done immediately, he is well on the way to wrecking public education in America. I am convinced that the Commissioner and many officials of the Office of Education are far more interested in controlling school policies than they are in educating our youth.

Armed with the Civil Rights Act of 1964 and his so-called "Guidelines", the Commissioner has undertaken to force compliance with his policies—regardless of the consequences. For sometime I have been cooperating with and working with other Congressmen from our area in trying to prevail upon Commissioner Howe to stop his harrassment of dedicated public school officials in our section. Last May a group of us met with the Commissioner and urged him to consider the educational value of our schools and not to dwell so much on his guidelines. It was pointed out cogently to him that if he maintained his present policies of forced compliance, he would not only disrupt our schools but would set back the cause of public education. Apparently, we got nowhere with him because the efforts of his agency have been increased and the reports of harrassment of school officials have multiplied.

It is because of this chain of events that I am here today. I cannot sit idly by and see public education ruined by aimless pursuits of misguided theorists. We cannot allow experimentation with institutions that have stood the tests of time. We would be remiss in our duty if we did not recognize our responsibility to cite mismanagement and deviation from Congressional intent where it is so openly practiced.

The size and scope of the budget of the Office of Education has multiplied many times. We have seen vast amounts of money for distribution to the states and many millions of dollars are siphoned off for the Federal bureaucracy in Washington and Regional Offices around the country. More and more it becomes our responsibility, as members of Congress, to see that this money is wisely spent and that the programs are handled in line with the intent of Congress.

I say without apology that the dictatorial attitude of the Commissioner of Education in administering Federal aid to education has become more of an issue than the programs themselves. Congress has directed billions of dollars into various programs of Federal aid to education—and it is the duty of Congress to see that this money is properly spent.

It is axiomatic that programs and funds are interdependent, but it is also necessary that administration of government funds be handled in a fair and impartial manner. Commissioner Howe and his assistants have set themselves a course which does not listen to reason or confine itself to law or regulations. He has relegated the real purposes of his office in order to demand, compel, and

assure compliance with his so-called guidelines. The taxes of *all* our citizens are being spent in an endless campaign to coerce and browbeat school officials in a certain section of the country to do what the whole country is not being compelled to do. Funds are being cut off from school districts, ostensibly in compliance with the Civil Rights Act of 1964. But Mr. Howe's actions and the far-flung operations of his "field teams" were not contemplated by that Act nor were they required by Congress. He is attempting to take over operation of the public schools by harrassment, intimidation, coercion and blackjacking.

On October 4, 1966, I appeared before the House Rules Committee in support of H. Res. 826 and stated at that time that representatives of the Office of Education were dangerously disrupting education in many places in Virginia. It is obvious that the intervening seven months have done little to alter that appraisal. These field officials, presumably operating under specific orders from Washington, are coercing local authorities in a manner which brings discredit to the programs which this Congress set in motion. Agents of the Office of Education are using threats of funds cut off as a lever to get what they want by way of "voluntary agreements". These agreements are about as voluntary as those extracted by the Gestapo. Congress has not required these agreements; Congress has not prescribed these "guidelines" and Congress is the place to get them corrected.

It is clear that Mr. Howe and his associates are seeking through the medium of withholding funds to exercise direction, supervision and control over school personnel, including faculty assignments, which is in violation of the intent of Section 604 of the Elementary and Secondary Education Act of 1965 and other acts providing Federal aid to Education.

The provisions of Title IV of the Civil Rights Act of 1964 do not envision a Federal Czar of Education who can snip off Federal funds at will or who can dangle rewards before the eyes of wavering school districts. Congress has a legitimate interest in seeing that its laws are properly administered. Congressional review is entirely in order—and, it is incumbent upon us to see that the law is being fairly administered before dumping more billions onto the assembly line of forced compliance.

I do not want to tell the Committee what to do, but it is clear to me that we do something to curtail the actions of the Commissioner and put limits on his agency.

I hope that your subcommittee will take note of the unfair way in which certain of these funds are being administered. We cannot have one type of administration for one part of the country and another for the rest. Guidelines which can be changed hour by hour according to the whims of the Commissioner are no guidelines at all. At one point, we are told that they can be changed because they are, in fact, only guidelines. Then again we are told that the guidelines have the force and effect of law. School officials do not know where they stand—and we, who are supposed to have written the law, are not able to tell them.

We hope that this subcommittee will see to it that funds are not available for this vendetta against school districts. Many of these districts are trying honestly and sincerely to comply with the Federal requirements, as set forth in the Civil Rights Act of 1964, but one cannot expect compliance when there is no concrete requirement from those who are administering the whims and fancies of officials who change their minds at the drop of a hat. The administrative procedure set up for hearing on complaints of school districts can be effective only when there is at least an outside chance that the school districts will be able to win a point. As it is now, they are simply pawns in a game where the end is not in sight.

The dedication of Commissioner Howe to the mass rearrangement of school assignments in a manner detrimental to education is well known. Nowhere in law is authority found for the Office of Education requirement that children be shifted from one school to another solely on a basis of race. Quite the contrary, Congress said specifically in the 1964 Civil Rights Act that desegregation shall not be construed to mean overcoming racial imbalance.

Can the Commissioner of Education do what the Supreme Court in 1954 said that states may not do—that is, assign children to schools not of their choice on a basis of race? Can the Commissioner of Education withhold Federal funds appropriated for schools by interpreting the word "desegregation" in a manner which Congress specifically says he may not do? The answer is that he can, and he will continue to do so until compelled to obey the law.

In addition to ordering violations of the law, the Commissioner orders violations of his own guidelines. The published guidelines require that school authorities do absolutely nothing to influence children or parents in their choice of a school; the orders from the Office of Education personally delivered required school authorities to convince parents to choose particular schools or even to make assignments on a racial basis which will satisfy the desires of the Commissioner.

Not only does the Commissioner of Education disregard the Supreme Court decision of 1954, the clear expression of Congress, and even his own guidelines, but worst of all, the Commissioner completely and absolutely ignores the interests and educational needs of the children affected by his decrees. Testimony before committees of Congress and before hearing examiners prove these points beyond any possible doubt. Supporting evidence in profusion will be furnished to any member of this Committee who wishes it.

As an example of what I mean, I would like to cite some of the Virginia experience with the Office of Education as set forth by Mr. Frederick T. Gray, counsel for five Virginia counties in hearings before a Federal examiner:

"They (the agents of the Office of Education) have suggested closing colored schools and sending the students to already overcrowded white schools; they have suggested team-teaching in areas where the localities are hard pressed to obtain even one good teacher for each class because they are unable to compete with the salary scale of nearby urban areas; they have suggested shifting high school students back and forth from one school to another during their high school careers and admitting that they did not know whether this would be a sound educational practice."

Mr. Howe has proven repeatedly that his sole interest in desegregation lies in giving Southern classrooms a salt and pepper appearance, regardless of the educational cost to the children involved.

Mr. Howe discriminates significantly by applying standards and making demands in Southern states which he makes nowhere else in the United States. Southern states may not like the Supreme Court decision of 1954 or the Civil Rights Act of 1964, but they have obeyed them. Freedom of choice policies carried out in good faith assure Negro and white children that race will not be a factor in school assignments and that children will not be forced into a school against their will because of race. It may seem odd that Southern states are now upholding the Brown decision and the Civil Rights Act, but it is entirely logical. If these decrees of government were originally used to protect Negro children against discriminatory state laws, may they not now be used to protect *all* children against the discriminatory decrees of Commissioner Harold Howe?

The fact is that they offer no protection whatsoever. Mr. Howe and his agents have ignored every invocation of court decision and statute which attempts to curb his destructive work. His ultimate weapon is the cut-off of Federal funds to schools which do not obey him—a weapon used only against Southern schools, except in one hastily-retracted threat to Chicago.

Because Mr. Howe has ignored the language of the Supreme Court and the language of a Congressional act, I request this Committee in its wisdom to consider correcting the Commissioner's educationally destructive program and his improper use of purse strings entrusted to him in language which he cannot misinterpret. I ask this in the interest of a fair administration of Federal funds aiding education and in the interest of all of the children of the South who are entitled to the best education we can give them, free from the new type of discrimination now being forced upon them.

HOUSE OF REPRESENTATIVES,
Washington, D.C., April 12, 1967.

Hon. DANIEL J. FLOOD,
Chairman, Subcommittee on Labor-Health, Education, and Welfare, House Committee on Appropriations, Washington, D.C.

DEAR MR. CHAIRMAN: We are deeply concerned about activities of the United States Office of Education in Virginia. We have been told that personnel representing that office are using coercive methods with local school officials to require the operation of certain schools, school districts and other educational insti-

tutions in a manner which is contrary to the Civil Rights Act of 1964, particostensibly voluntary agreement which the Act does not contemplate, and it is acularly Title IV, Sub. Sec. 401(b). This is done through pressure to achieve an complished through the refusal to approve the allocations to these schools of their share of Federal funds unless and until such a "voluntary agreement" is reached.

Clearly through this means the Office of Education is attempting to exercise direction, supervision and control of school personnel, including faculty assignments in violation of the intent of Section 604 of the Elementary and Secondary Education Act of 1965 and other acts providing Federal aid to education.

We therefore, urge your Committee to take appropriate action to see that funds are not made available for a continuation of such policies, but that all funds appropriated for educational purposes be used for such purposes and distributed on a fair and equitable basis to all schools which are fully desegregated, as that term is defined by Title IV, Sub. Sec. 401(b) of the Civil Rights Act of 1964.

Respectfully submitted.

Thomas N. Downing, 1st District; Porter Hardy, Jr., 2d District; David E. Satterfield III, 3d District; Watkins M. Abbitt, 4th District; William M. Tuck, 5th District; Richard H. Poff, 6th District John O. Marsh, Jr., 7th District; William L. Scott, 8th District; William C. Wampler, 9th District; Joel T. Broyhill, 10th District.

Mr. FLOOD. Thank you very much, gentlemen.

Mr. NATCHER. Mr. Chairman, I want to join with you in thanking our distinguished friends and colleagues from the Committee on Appropriations who have appeared before us at this time and also our friend, Mr. Abbitt, of Virginia, another colleague in the House.

Mr. Chairman, these are all outstanding members of our Committee on Appropriations and they are very much concerned over the action that has taken place over the past few months by the Secretary of the Department of Health, Education, and Welfare and the Commissioner of Education in withholding funds from the schools not only in the South but in certain other States.

Mr. Chairman, I want you to know I share their concern. As you will recall, when the Secretary of the Department of Health, Education, and Welfare and the Commissioner of Education appeared before this committee I went into detail on this situation with those gentlemen and you gentlemen, I think, will be glad to see the record made on that occasion.

Mr. FLOOD. Mr. Laird.

Mr. LAIRD. Mr. Chairman, I think we have developed a good record during the hearings on this whole subject. The committee laid down certain instructions in its report last year. These instructions were not followed by the Department of Health, Education, and Welfare, the Office of Education, the Public Health Service, or the Welfare Administration in this important area. There is no doubt that they violated the committee's instructions and are still violating them.

Mr. FLOOD. Mr. Hull.

Mr. HULL. I want to concur in what Mr. Natcher has said and commend Mr. Whitten and the gentlemen with him for the excellent presentation they have made. I certainly have a concern about the way these things are going as well as they have.

Mr. FLOOD. Mr. Michel.

Mr. MICHEL. I, too, want to express my appreciation to our distinguished colleagues for presenting the case they have today, because I happen to know for a fact that the harassment they make reference to is not confined to the Southern States. It is a shocking thing and I do not like it and I want the record to show I sympathize with the concern they have expressed here and feel we ought to do something about it.

Mr. FLOOD. Mr. Casey.

Mr. CASEY. I, too, want to commend the gentlemen for their statements. I think we all agree that their constituents as well as all the rest of our constituents in this great country want to comply with the law, but they do resent the promulgation of rules and regulations that do not conform with the law or the intent of Congress, and I appreciate their bringing these matters to our attention.

Mr. FLOOD. Thank you very much, gentlemen.

Mr. WHITTEN. I want to thank you again and express the opinion we are talking about a common problem.

(NOTE.—In addition to the letter from the Virginia delegation which appears on pages 21 and 22, the subcommittee received identical letters signed by Members from various States. The letter is reproduced below and is followed by the names of the Members who signed the various submissions to the subcommittee.)

(The letter follows:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., April 10, 1967.

To: Hon. Daniel J. Flood, Chairman; Hon. Neal Smith; Hon. Melvin Laird; Hon. Wm. R. Hull, Jr.; Hon. Bob Michel; Hon. Wm. H. Natcher; Hon. Bob Casey; Hon. Garner Shriver; Appropriations Subcommittee on Labor-Health, Education, and Welfare, U.S. House of Representatives.

DEAR FRIENDS: We, the undersigned, respectfully submit that the Department of Education, by refusing to approve the operation of certain schools, school districts, and other educational institutions, is thereby using force to require such schools, school districts and other educational institutions to make assignments based on race of students and faculty, contrary to the Civil Rights Act of 1964, particularly Title IV, Sub. Sec. 401(b) thereof, in order to qualify for their share of federal funds.

Your colleagues would respectfully submit that we are advised this department has gone so far as to cause the Atomic Energy Commission to refuse the use of educational films by science classes in schools cmpletely desegregated under Title IV of the Civil Rights Act, and has caused the Department of Defense to threaten to deny research contracts to institutions which refuse to recruit students and faculty based on race.

Your colleagues respectfully submit that the U.S. Department of Education, through this means, has and is now attempting to exercise direction, supervision and control over school personnel, including faculty assignment, in violation of the intent of Section 604 of the Elementary and Secondary Education Act of 1965 and other acts providing federal aid to education.

We therefore urge your Committee to take appropriate action to see that funds are not made available for a continuation of such policies, but that all funds appropriated for educational purposes be used for such purposes and distributed on a fair and equitable basis to all schools which are fully desegregated, as that term is defined by Title IV, Sub. Sec. 401(b) of the Civil Rights Act of 1964, which reads as follows:

" 'Desegregation' means the assignment of students to public schools and within such schools without regard to their race, color, religion, or national origin,

but 'desegregation' shall not mean the assignment of students to public schools in order to overcome racial 'imbalance.'"

Respectfully submitted.

JAMIE L. WHITTEN.
TOM ABERNETHY.
WM. COLMER.
JOHN BELL WILLIAMS.
G. V. MONTGOMERY.
BOB SIKES.
CHARLES E. BENNETT.
J. HERBERT BURKE.
DANTE B. FASCELL.
DON FUQUA.
JAMES A. HALEY.
EDWARD J. GURNEY.
WILLIAM C. CRAMER.
PAUL G. ROGERS.
SYD HERLONG, Jr.
ROBERT G. STEPHENS, Jr.
JACK BRINKLEY.
W. S. (BILL) STUCKEY, Jr.
PHIL M. LANDRUM.
FLETCHER THOMPSON.
JOHN J. FLYNT, Jr.
JOHN W. DAVIS.
G. ELLIOTT HAGAN.
MASTON O'NEAL.
BEN B. BLACKBURN.
GEORGE ANDREWS.
TOM BEVILL.
ARMISTEAD I. SELDEN, Jr.
JOHN H. BUCHANAN, Jr.
BILL NICHOLS.
JACK EDWARDS.
BOB JONES.
WM. L. DICKENSON.
JOE D. WAGGONNER, Jr.
E. E. WILLIS.
JOHN R. RARICK.
F. EDW. HÉBERT.
OTTO PASSMAN.
EDWIN EDWARDS.
SPEEDY O. LONG.
JOHN L. MCMILLAN.
ROBERT T. ASHMORE.
MENDEL RIVERS.
TOM S. GETTYS.
WM. JENNINGS BRYAN DORN.
ALBERT WATSON.
L. H. FOUNTAIN.
HORACE R. KORNEGAY.
ALTON LENNON.
DAVID N. HENDERSON.
BASIL WHITENER.
WALTER B. JONES.
C. R. JONAS.
NICK GALIFIANAKIS.
JAMES T. BROYHILL.
ROY A. TAYLOR.
JAMES C. GARDNER.
BILL BROCK.
JOE L. EVINS.
DAN KUYKENDALL.
JOHN J. DUNCAN.
JAMES H. QUILLEN.
WILLIAM R. ANDERSON.
RAY BLANTON.
RICHARD FULTON.
OMAR BURLESON.
MENDEL RIVERS.
JOHN L. MCMILLAN.
W. R. POAGE.
CLARK FISHER.
E. C. GATHINGS.

THURSDAY, APRIL 20, 1967.

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATION FOR 1968

WITNESSES

ED LASHMAN, LEGISLATIVE REPRESENTATIVE, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

JACK SESSIONS, REPRESENTING THE EDUCATION DEPARTMENT OF THE AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

Mr. FLOOD. We are pleased to have with us this morning representatives of the AFL–CIO Department of Legislation. You may proceed.

Mr. LASHMAN. Mr. Chairman, my name is Ed Lashman. I am sorry Mr. Biemiller, our legislative director, is not able to be here this morning. I will do my best to substitute for him. I have with me Jack Sessions, a representative of the Education Department of AFL–CIO, who also is a member of the school board of the District of Columbia. Since some of the things we have to say have to do with education, I thought Mr. Sessions could be helpful.

Mr. LAIRD. I am disappointed that my friend and former colleague from Wisconsin is not able to be with us today. I had looked forward to his presentation, but I am sure you will represent him well.

Mr. LASHMAN. I think he is intending to meet with you on May 2 on some tax matters.

Mr. FLOOD. Please proceed, Mr. Lashman.

Mr. LASHMAN. As I have said, my name is Ed Lashman. I am legislative representative for the American Federation of Labor and Congress of Industrial Organizations. On behalf of the AFL–CIO I want to express our appreciation for this opportunity to present to your subcommittee our views on appropriations for the Department of Labor, for the Department of Health, Education, and Welfare, and for related agencies for fiscal 1968.

The 89th Congress enacted a tremendous volume of long-overdue social legislation. Appropriations for many of the newly enacted programs fall under the jurisdiction of this subcommittee. We in the labor movement supported these new programs, not because they specifically helped labor unions and union members, but because they are good for the country and good for all the American people. We urge that these programs receive adequate appropriations, so that opportunities for progress are not lost and wasted.

We are confident that this subcommittee will—as it has in the past—give careful, conscientious, and sympathetic attention to the needs and opportunities for progress under the programs which receive funds under the Labor-HEW appropriations bill.

We believe these programs should be fully and adequately financed. There have been some suggestions recently that appropriations for domestic programs should be cut back in order to support our military commitments, especially in Vietnam. The AFL–CIO most emphatically rejects such suggestions.

The AFL–CIO supports our Nation's commitment in Vietnam and we yield to no one in our longstanding opposition to Communist aggression. However, we believe the United States has the capacity to continue domestic social progress at the same time that we are maintaining our foreign policy commitments in Vietnam and elsewhere.

At its most recent meeting, the AFL–CIO Executive Council declared:

> The AFL–CIO remains firmly convinced that the American economy has the resources for extending our social advances, while meeting the military requirements of the conflict in Viet Nam. The cost of the Viet Nam war should not be absorbed by freezing or cutting expenditures for such essential domestic programs as housing and the rebuilding of our cities, aid to education, the war on poverty, the achievement of clean air and water.

The AFL–CIO is firmly committed to continuation and strengthening of the domestic social welfare programs which protect people and which help develop this Nation's human resources.

In line with this view, we are submitting to this subcommittee a supplemental statement with some detailed recommendations. However, I would like to highlight for you some areas in which we believe your sympathetic attention is particularly essential.

One area of particular concern to us is enforcement of the minimum wage law requirements. With increases in coverage and increases in the minimum wage itself, last year's amendments to the Fair Labor Standards Act gave new hope to lower income families throughout the Nation. Unfortunately, the personnel budget for the Wage-Hour Division of the Department of Labor is so low that the percentage of inspections will actually decrease in relation to coverage instead of keeping pace with the increased coverage. The decline will be from about 5 percent of covered establishments to 3 percent. Under current procedures, it would take 20 years to investigate all the establishments covered by the Federal minimum wage law. Under the proposed budget for fiscal 1968, it would take 33 years.

The AFL–CIO has urged in the past that a greater number of investigators be employed to enforce the wage-hour law. At its most recent meeting the AFL–CIO Executive Council called for a substantial increase in the number of investigators.

Let me add here that we are not only issuing statements and asking for stronger Federal enforcement. We have also alerted our State and local community labor councils to the need for enforcement of the wage-hour law and we have asked them to help all workers—whether union members or not—in processing complaints of violations of the Fair Labor Standards Act. And I must confess we have had a remarkable response from our people in the field.

This law, like all laws, is only as good as its enforcement. The AFL–CIO has consistently said that improving the minimum wage and broadening its coverage is the best and cheapest antipoverty program. To enact such a law, and then to deny its promise by limiting its effective enforcement is utterly shortsighted.

In connection with civil rights compliance activities of the Department of Health, Education, and Welfare, we wish to express our strong support for the $5,434,000 requested for the Office of the Secretary for fiscal 1968.

This amount, an increase of $2 million, will allow an increase of 131 positions, from the present 278 to a new total of 409 persons involved in HEW civil rights functions.

The courts have spoken clearly on the duty of school systems to comply with existing law, and yet, unfortunately, we note that a number of Members of Congress only this week have asked this subcommittee to deny the funds requested for civil rights compliance activities.

We want to make it perfectly clear that the AFL–CIO supports the Department's request for these funds. We urge this subcommittee to meet what we believe to be both a moral and a legal duty by appropriating the full amount requested by the Secretary of Health, Education, and Welfare for civil rights compliance activities.

Now let me turn to appropriations for education.

The Congress has passed a series of important laws bring significant benefits to millions of America's children and young people. These include the National Defense Education Act, the impacted aid program, the Vocational Education Act of 1963, the Elementary and Secondary Education Act, and the Higher Education Act of 1965. We of the AFL–CIO are proud to have played a major part in helping secure passage of these laws. This Federal support is bringing new educational opportunities to children and young people, and especially to those who need them the most, those from low-income families who must have excellence in education if they are to break out of the poverty cycle which has entrapped their families, in many cases for generations.

We feel that the Congress, if it were to appropriate less than the full authorization for these education programs, would be doing an injustice to its own wisdom and vision. The present authorizations are themselves compromises which fall short of actual needs.

The proposed appropriation for the Elementary and Secondary Education Act for fiscal 1968 is more than $1.5 billion under the present authorization. The requested appropriation for title I is only 49 percent of the full authorization. This is the title directly designed to improve education opportunities for low-income children, and anything less than full appropriation will diminish opportunities open to those children.

For title III, which has done so much to stimulate new and innovative educational programs, the proposed appropriation is only 47 percent of the full authorization. The proposed cut under title II which provides library resources and textbooks is only one-third of the authorization. Nearly half of existing schools have no library.

Total cuts under existing authorizations for Federal aid to elementary and secondary education total more than $1.68 billion, not including cuts in vocational education.

The total cut of $1.68 billion includes not only the $1.5 billion cut in the Elementary and Secondary Education Act authorization, to which I referred previously. It includes also cuts in elementary-secondary education aid under the National Defense Education Act and in impacted aid programs under Public Law 815 and Public Law 874.

The AFL–CIO is deeply concerned about this inadequate funding. The proposed cuts will severly damage State and local programs now underway or just getting out of the planning stages. Incidentally, we made presentations to the Education and Labor Committee much along these lines.

Let me give you some idea of the extent to which the proposed budget falls short of our responsibilities in the field of elementary and secondary education. The total overall cut of $1.68 billion means an average cut in available funds of more than $1,000 for each classroom in America.

Cuts in the impacted aid programs—$63.8 million in Public Law 874 funds and $2.1 million in Public Law 815 funds—are particularly dangerous because these are continuing programs which are jeopardized by uncertainty.

The funds for vocational education for the 1968 fiscal year are $43,591,000 below the authorization for these programs. This is false economy. In our supplemental statement we spell out our views in greater detail, with particular emphasis on research and demonstration programs, residential vocational education schools, and work-study programs. We believe this subcommittee fully realizes the increasing need for vocational education and training to supply the skills the labor force requires to guarantee economic progress and full employment.

We are equally concerned about the suggested cuts in higher education activities. The proposed appropriations for construction of undergraduate facilities in community colleges and technical institutes are only 54 percent of present authorization. This cut in construction funds authorized under title I of the Higher Education Facilities Act would amount to $338 million, enough to provide new and badly needed facilities for 300,000 young people in institutions of higher education. Similarly, we are concerned that with the shortage of graduate school facilities, it is proposed to appropriate only 42 percent of the authorized funds.

We are particularly disturbed that it is proposed to cut $60.1 million from the college work-study program established under title I, part C of the Economic Opportunity Act. This work-study program is one of the most useful forms of student aid for young people from low-income and minority families. These young people have usually been too educationally disadvantaged to come out well in the tight competition for scholarships and the level of their family income makes it difficult for them—and in most cases unwise for them—to obtain loans to pay for higher education. If Congress were to cut funds for the work-study program it would make higher education that much more difficult for low-income students.

Finally, I turn to occupational health needs.

While the budget request for occupational health programs for fiscal 1968 is 25 percent greater than the previous year's appropriation, there is still no meaningful national occupational health program.

In November 1965, recommendations for a strong national occupational health program were submitted to the Surgeon General and to the U.S. Public Health Service. The recommendations of the so-called Frye report had the support of organized labor, the organized medical profession—particularly the AMA in this instance—and other public health and medical groups.

A year ago the AFL–CIO testified before this subcommittee urging necessary appropriations to carry out the Frye report recommenda-

tions and to remedy the failure of the Budget Bureau to recommend such appropriations. Unfortunately, the President's fiscal 1968 budget recommendation of $8.1 million for occupational health activities is far short of the amount called for in the Frye report in the first phase of the program proposed for fiscal 1967. We have lost 1 whole year.

In view of past failures to carry forward the vitally important Frye report recommendations, we strongly urge this subcommittee to include in the current budget $6.7 million additional funds for fiscal 1968, funds which are necessary to place into effect the first phase of the Frye report's program recommendations. Thus, occupational health program activities under the new budget heading of "Urban and industrial health" should total at least $14.8 million.

We further urge this subcommittee to direct the Surgeon General to carry this program forward vigorously, without delay, and in full cooperation with the Department of Labor.

Mr. Chairman, I appreciate the opportunity to present the views of the AFL–CIO in this statement and in the attached supplemental statement, which I am submitting. I hope you and the members of this subcommittee will give careful and sympathetic attention to our proposals for improvements in the Labor-HEW budget now before you.

We reiterate our conviction that the American economy can provide the foundation for both continued social progress at home and an honorable settlement of the war in Vietnam. The rising expectations, aroused by Government programs in the past several years, must not be undermined by blocking the expansion of efforts to meet the needs of our growing population.

(The following supplementary statement was submitted for the record:)

SUPPLEMENTARY STATEMENT OF ANDREW J. BIEMILLER, LEGISLATIVE DIRECTOR, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

This supplementary statement discusses the individual recommendations of the AFL–CIO in some detail for the fiscal 1968 budgets of Department of Labor, the Department of Health, Education and Welfare, and various related agencies.

We ask most respectfully that this Subcommittee make certain that vital programs be continued by approving the full budget requests, and that other programs not be cut below useful levels and that appropriations be restored where cuts have been proposed in the budget.

We are particularly concerned that social and economic progress of recent years be maintained. We believe all the economic evidence indicates that we can support our military and foreign policy commitments, and, at the same time, continue and expand our domestic economic and social progress.

In support of our request for many increases in the Labor-HEW appropriations bill, we present here recent statements by the AFL–CIO Executive Council on the national economy, on minimum wage law enforcement, and on air and water pollution.

The National Economy, February 27, 1967

The American economy is now going through a series of adjustments. This transition follows:

Tight money and the highest interest rates in 40 years, which threw residential construction and related industries into a severe recession in 1966.

The failure of workers' buying power to rise last year.

The renewed increase of idle productive capacity toward the end of 1966, as large-scale installations of new plants and machines added to productive capacity at a faster pace than production.

The build-up of excessive inventories in many businesses.

These soft and weakening spots in the private economy have been offset by the sharp rise of federal government expenditures, largely for defense, and the continued increase of state and local government expenditures. But the reduction of unemployment, which proceeded from 1963 to early last year, has come to a halt.

A key to the trend of economic developments in 1967 is government policy.

Administration actions in the past two months have halted the sharp drop of home-building. Moreover, the modest easing of monetary policy and interest rates is encouraging economic expansion and should lift home-building and related activities in the coming months, if the recent trend in monetary policy continues.

Collective bargaining gains will also add strength to consumer markets.

The President's budget proposes a continued, but slower, rise of military spending to meet our obligations in Viet Nam, as well as a moderate increase of government expenditures to meet domestic needs.

The AFL–CIO remains firmly convinced that the American economy has the resources for extending our social advances, while meeting the military requirements of the conflict in Viet Nam. The cost of the war should not be absorbed by freezing or cutting expenditures for such essential domestic programs as housing and the rebuilding of our cities, aid to education, the war on poverty, the achievement of clear air and water.

America could easily afford a substantial expansion of domestic programs, within the present tax structure, were it not for the war in Viet Nam. The additional cost of pursuing freedom in Viet Nam, in the President's judgment, will require a tax increase later in 1967—a 6% surtax on corporate and individual income, excluding lower-income taxpayers. At the same time, the government has acted to shore up home-building and to reduce the exceptionally high interest rates of the past year.

By proposing to exempt lower-income families from the suggested tax increase the President has given partial recognition to the principle that taxes should be based on ability to pay. It is the view of the AFL–CIO that, if such a tax increase is to be imposed later in the year, a greater increase should be levied on the extraordinarily high profits of business than on individual incomes.

It is expected that the Administration's budget proposals will be moderately expansionary in 1967. In the first half of the year, the federal government will add about $2½ billion more to the spending stream than it takes out. This will provide a moderate stimulus—in addition to a less stringent monetary policy—to sales, production and employment.

In the second half of the year, the suggested tax boost would offset the Administration's proposed increase in Social Security benefits. Anticipating a substantial rise of economic activities, the Administration's proposed budget would add only about $1½ billion more to the economy's spending stream than it takes out in the final six months of 1967.

Economic projections, however, are far from precise. Actual trends of the next three to four months may not develop as the government's experts now foresee them. Whether or not the suggested tax increase will have a beneficial impact on the economy in the second half of the year will be clearer in May or June than it is at present.

We will, therefore, review this issue at a later date, in light of the economy's performance in the next several months, particularly the trends in employment and unemployment.

We reiterate our conviction that the American economy can provide the foundation for both continued social progress at home and an honorable settlement of the war in Viet Nam. The rising expectations, aroused by government programs in the past several years, must not be undermined by blocking the expansion of efforts to meet the needs of a growing and increasingly urban population.

With unemployment down to 3.8% of the labor force in 1966, we urge the government to continue to reduce joblessness—to move on to the achievement of job opportunities for all Americans who are able to work and seek employment.

We commend the President for calling on the heads of government agencies to prepare coordinated economic policies for the eventual leveling off or decline of military spending. America must be prepared with detailed plans to substantially step up government investments for public facilities and services as soon as the objective of an honorable settlement of the Viet Nam conflict becomes a reality.

Minimum Wage, February 21, 1967

The amendments to the Fair Labor Standards Act, which went into effect on February 1, represent the greatest single victory in the current war against poverty. They extend the protection of federal law to more than 8 million additional workers and another million will receive federal legal protection on February 1, 1968. They raise the minimum wage, in steps, to $1.60 an hour.

On February 1, 3.8 million workers who were previously covered by the $1.25 minimum received increases to bring their wages to $1.40 an hour. Of the newly protected workers, another one million received increases to bring them to a $1.00 an hour wage. These increases for nearly 5 million of America's lowest-wage workers will add up to approximately $1 billion of buying power in the next twelve months.

This great forward step, however, requires effective enforcement.

Unfortunately, many low-wage workers are underpaid millions of dollars each year by unscrupulous employers who flaunt the law. Last year some 430,000 workers were underpaid a total of $90 million and merely one-third of these underpayments have been recovered—yet these figures include only those employers whose violations of the Fair Labor Standards Act were discovered. It is estimated that only one-half of actual volations have been uncovered.

The new improvements in the law expand the volume of potential chiselling and enormously enlarge the enforcement task. While the number of protected workers is increased by almost 30 percent, the number of covered establishments is raised by nearly 60 percent. About 700,000 establishments—including laundries, hospitals, schools, construction firms, moderate sized retail stores, restaurants, hotels, and large farms—come under FLSA coverage for the first time, in addition to the 1.2 million establishments previously covered by the law.

A substantial increase in the number of wage-hour investigators is essential. The President's Budget Message to the Congress recognized this need and requested some additional enforcement funds—a necessary first step in translating the promise of the new minimum wage legislation into reality.

We urge the Congress to appropriate the increased funds needed to meet the enlarged problem of FLSA enforcement.

We urge the Secretary of Labor to pursue effective enforcement of the Act to the maximum feasible extent.

We commend President Meany's directive to all AFL–CIO state and local central bodies to establish standing committees on wage-hour enforcement—to assist low-wage workers, whether or not they are union members, in processing complaints—and to announce the availability of this service to their communities.

We will resist the attempt of several governors to remove tens of thousands of low-wage state employees from the protection of the Fair Labor Standards Act.

Finally, we want to make it crystal clear that the AFL–CIO is determined to achieve its long-range goal of a Fair Labor Standards Act that completely meets today's needs. That means a $2 minimum wage, universal coverage of all workers in interstate commerce, a 35-hour week and double-time for overtime.

Air and Water Pollution, February 23, 1967

The increasing pollution of America's air and water constitutes a growing threat to the health and well-being of the American people.

A growing investment in physical facilities will be required over the next decade to meet this challenge. It is estimated by government and private experts that the cost of an effective anti-pollution effort during the 1966–75 decade would include the following outlays from the federal government, states, localities and private industries:

About $10 billion for the building of needed sanitary sewer collection facilities.

Capital costs of constructing needed storm sewers may amount to about $25 billion. Large additional outlays may be necessary for separating present combined storm and waste sewer systems and providing new separated systems, if inexpensive alternatives are not devised.

Capital costs of constructing new and modernizing waste water treatment plants may run as high as $20 billion.

Costs of a relatively effective program to reduce air pollution, including the costs of control equipment by industry, have been roughly estimated at about $3 billion a year in the next 10 years.

There is growing public awareness of both the challenge and the cost. Modern facilities have been constructed and are being planned, particularly in the effort

against water pollution. But this progress to date has been offset by the increasing volume of waste that is spewed into the water and air. The anti-pollution effort must be speeded up.

Control of Water Pollution

1. It is most urgent that the Congress appropriate the full $450 million authorized by the 1966 Amendments to the Federal Water Pollution Control Act for grants-in-aid to assist localities to finance needed water waste treatment plants. Such appropriation is needed by the large cities and essential to stimulate state legislatures to provide their own matching grant programs.

2. The Federal Water Pollution Control Act should be strengthened by amendments to streamline federal enforcement powers, more adequately deal with oil pollution, expand manpower training and research and create federal river basin commissions responsible for dealing with water pollution among other water resources responsibilities.

We continue to oppose any special federal tax benefits to industry for the costs of controlling water and air pollution from its own operation; such costs are already covered by federal tax treatment of business investment and depreciation.

We do not regard the levying of effluent charges on industrial wastes as the essential answer to the problem; the solution requires control and abatement of pollution.

We call on AFL–CIO state and local bodies to urge their state water control boards to establish and enforce adequate water quality standards that will assure a clean water supply.

Control of Air Pollution

The Federal Clean Air Act requires strengthening amendments in order to:

1. Empower the Secretary of Health, Education and Welfare to set air quality criteria over all sources of industrial pollutants released into the atmosphere, not merely those by automobiles and provided under the present act.

2. Establish federal airshed commissions to control air pollution in those areas, in cooperation with state and local governments.

3. Provide meaningful enforcement procedures.

4. Expand research into causes, effects and control methods with regard to air pollution and reorganize the scattered federal research program in this area.

Expanded use of electric-powered vehicles would sharply reduce the largest and most rapidly-growing source of air pollution. Any federal program to develop an economically feasible electric-powered vehicle should provide public domain ownership of all federal patents and a searching assessment by a national commission, with labor representation, of the social and economic impact of a large-scale changeover to the electric automobile.

The growing trend toward nuclear power will also help reduce the large output of air pollution. This program should continue to retain all necessary safeguards, established by the Atomic Energy Commission, to protect against the possibility of nuclear accidents and of pollution from nuclear wastes.

The President's recent message on air pollution and his proposed program demonstrate his deep concern over the problem. We are in general agreement with his stated goals and will give his legislative proposals the serious considerations they require.

We urge AFL–CIO state and local bodies to cooperate with other groups in their communities to help achieve strong local and state air pollution control programs.

DEPARTMENT OF LABOR

Wage-Hour Division

With an increase in coverage and increases in the minimum wage itself, last year's legislation gave new hope to lower income families throughout the nation. Unfortunately, the Labor Department won't be able to translate that hope into reality because of the personnel budget for the Wage-Hour Division is so low that the percentage of inspections will decrease in relation to coverage instead of keeping pace with the increased coverage.

In the past, the AFL–CIO has been critical of the small number of investigators, and the resulting small number of investigations made each year. Currently, the division investigates about 5% of the establishments covered by the Act. Under the proposed 1968 budget, the division could only investigate 3% of the establishments. Under the old procedure, it would take 20 years to investi-

gate all the establishments covered by the Law—under the proposed budget, it would take 33 years.

Currently there are 1000 wage hour investigators to enforce the Act in the 1,200,000 establishments covered by the law. The expansion of FLSA coverage under the 1966 Amendments increases the number of establishments covered by the Act to 1,900,000, but the number of investigators under the proposed budget is only increased to 1175. While the number of establishments covered by the Act increased nearly 60%, the number of investigators is only being expanded 17% by the 1968 budget proposals.

Under the 1966 FLSA amendments the number of workers protected by the Act increased by 30% from 32 million to 41 million. However, it is establishments rather than employees which need to be checked. We believe that the increase in the number of investigators should keep pace with the increase in the number of establishments covered by the Act.

The AFL–CIO Executive Council in its February meeting called for a substantial increase in the number of investigators. The increase of some 700,000 establishments covered, a 50% rise, would mean an increase of some 500 investigators, just to take care of new coverage and keep the previous standard of investigations up to the 5% level. That may seem unrealistic in political terms or budget terms. But the figure of 175 inspectors proposed by the Budget Bureau is unrealistic in human terms.

The AFL–CIO has not only issued statements indicating its concern with problems of enforcing the Act and its new coverage. It has acted by getting its state and community affiliated councils to offer assistance to all workers—whether union members or not—in processing complaints of wage-hour violations.

That may well be one reason why complaints of violations have increased substantially during the first two months that the higher minimum and broader coverage have been in effect. During these two months, the number of complaints has increased 43% over the same months in 1966, as the table below shows.

Months	Number of complaints	Increase (percent)
February 1966	1,885	
February 1967	2,572	36
March 1966	2,216	
March 1967	3,275	48
February and March 1966	4,101	
February and March 1967	5,847	43

In addition to this increase in the number of complaints the first two months under the new amendments, it is also generally true that violations were already increasing under the old terms of the Act. In Fiscal 1966, the Wage-Hour Division investigated some 60,000 plants and found 429,000 employees were underpaid. These violations amounted to $90,000,000.

The Labor Department's own compliance survey indicates that these figures represent only about half the actual violations and that only about $1 out of every $3 owed workers is ever recovered.

But the significant fact is that the 1966 figures, however inadequate, represent an increase of 50% since the 1964 figures when workers were underpaid by some $60 million. Yet, the budget figures for Fiscal 1968 reflect no anticipation of any increase in violations to be handled despite the vastly increased coverage.

The law, like all laws, is only as good as its enforcement. The AFL–CIO has consistently said that improving the minimum wage and broadening its coverage is the best and cheapest anti-poverty program. To enact such a law and then to deny its promise by limiting its effective enforcement is utterly shortsighted.

Bureau of Employment Security

The rock bottom standstill budget for the Bureau of Employment Security is inadequate to finance the extremely important functions it should perform. The slight increase in the dollar amount over fiscal 1967 is entirely illusory since it will be used almost exclusively to meet unavoidable mandatory cost increases. Despite urgent needs, it will not permit any program expansion. To the contrary, it is quite probable that because of new responsibilities and the likelihood of an

increase in the work load, the BES will have to contract certain of its programs if the requested amount is not increased.

The budget for the unemployment insurance program is based on the assumption that insured unemployment which fell to a level of approximately one million in the last three months of 1966 will not rise above this level in fiscal 1968. This is an unrealistic assumption for two reasons:

1. The growth in the insured labor force will mean that even if the unemployment rate remains the same, the number of insured unemployed will increase.
2. It is entirely possible that employment displacement in fiscal 1968 will increase unemployment.

It would be safer, therefore, to assume that insured unemployment in fiscal 1968 will be approximately 1.1–1.2 million. This revised assumption would require an increase in the appropriation of approximately $7.5 million.

The BES is attempting to launch an ambitious Human Resources Development Program. If it is successful, this program could expand job opportunities significantly for the disadvantaged by increasing their employability, helping to find jobs for them and easing their work adjustment. Unfortunately, the budget provides no additional funds for this very important undertaking. Instead, this new activity is to be financed partly by diversion of MDTA funds and partly by cutting back on other essential Employment Service activities. We think this is the wrong way to finance an important new project. Funding of the Human Resources Development Program should not be at the expense of urgently needed MDTA projects or involve shortchanging workers, including unemployment insurance claimants, who look to the Employment Service for counseling and job development.

Besides the additional funds which we think will be needed just to maintain present activities, we are disappointed that no provision has been made for expanding both the Employment Service and Unemployment Insurance Programs despite unmistakable increased needs. Better financing would permit the Employment Service to give more individual service to help direct job seekers to available employment opportunity. Additional funds are needed for the Unemployment Insurance Program not only to give better service to claimants, but also to be able to undertake some long delayed basic research. No fundamental studies of unemployment insurance have been made since those authorized by the Congress in connection with the Temporary Emergency Unemployment Compensation Program of 1961–62. BES should be given adequate funds to carry out studies of such key questions as the adequacy of benefit amounts, required duration of benefits, the role of unemployment insurance in meeting the problems of the long-term unemployed and appropriate criteria of attachment to the labor force.

Bureau of Labor Statistics

We support the entire request of the Bureau of Labor Statistics. The Bureau is seeking increases for work in essentially three areas—in manpower, for employment and unemployment surveys in localities and particularly in slum areas; in wages and industrial relations, for the purpose of adding to its present program of reports on wage changes in manufacturing industries comparable information on non-manufacturing industries, and to expand information on employee benefit plan; in prices, in order to strengthen both the consumer price index and industry-sector price indexes, as well as for work in prices of commodities involved in international trade.

The need for more research in human resource development leads to an especially enthusiastic endorsement of the BLS request for labor force surveys in the localities and in slum areas. This is not in itself a research activity. It is, rather, data gathering. But the information to be obtained by BLS through these surveys can both point the way toward needed research and be helpful to program administrators.

If we would have a criticism here, it would concern the very modest nature of the request—$1 million for surveys in ten to 15 areas. The nation's most reliable data on employment and unemployment are in terms of national aggregates. The need for local area detail, and especially for detail relating to slum areas, is quite urgent. We would hope that, not only will this request be approved, but that in the future the Bureau would come forth with a much more ambitious program along these lines.

With regard to the Bureau's request in the area of wages and industrial relations, we think this work is important and should be encourage and endorsed by Congress.

What may not be as clearly understood by the subcommittee is our interest in the Bureau's work in the field of prices. The AFL–CIO attaches no less significance to this area of the Bureau's program than we do to any other.

We are, of course, concerned about the reliability of the Consumer Price Index because of the role it frequently plays in the field of collective bargaining and industrial relations. It is safe to say that, in one way or another, the issue of the cost of living is involved in every wage bargain, and the ability of the parties to come to a meeting of the minds is often tied directly to their belief that the CPI accurately reflects the trend in consumer prices. Consequently, we feel it is most important to strengthen the index by eliminating the weaknesses, and we think the Bureau is to be commended for recognizing the need for this kind of effort.

Our interest in the Bureau's work in the field of prices, however, goes far beyond the matter of the CPI. The labor movement is concerned with economic policy problems in the broadest sense, and our analysis of these problems—and the policies at which we ultimately arrive—depends heavily on data provided by many government agencies. Insofar as a wide range of data on prices is concerned, we rely quite heavily on the BLS as do so many others.

There is a clear need to strengthen and expand the Bureau's work in the field of prices in the directions indicated by the Bureau's request. Our view, simply stated, is that the new and improved data will be helpful in analysis and in formulating policies—not only insofar as the AFL–CIO is concerned, but by other groups as well, including the federal government.

In summary, we think the money being sought by the Bureau for fiscal 1968 is needed and represents an effort to move the Bureau's program in the right direction. We endorse the Bureau's full request and we urge the subcommittee to do likewise.

Manpower Development and Training Activities

We support the request for funds for manpower development and training activities. As a matter of fact, we believe that substantially greater funds should have been sought by the Department of Labor.

The money is being requested to provide the opportunity to train approximately 30,000 more workers next year as compared to this year. This is because some 56,000 will receive training in new programs created by last year's Manpower Development and Training Act amendments.

On the other hand, the regular MDTA institutional and on-the-job training programs are being reduced. During the current fiscal year, 250,000 workers are to be trained under these regular institutional and OJT pograms, but in fiscal 1968 only 224,000 trainees are expected.

This is not to say that we disagree with the Department's development of programs pursuant to the 1966 MDTA amendments. What does bother us is the fact that the Department is not seeking enough money, either to maintain the program at this year's level, or to expand it and improve it. We think it deserves to be expanded.

The AFL–CIO is, of course, concerned with the need to place unemployed workers in jobs. We are equally concerned with the need to place those workers in good jobs, jobs which pay decent wages and which provide a potential for growth and development. Unfortunately, our present impression is that the Department of Labor, under pressures to meet immediate demands for entry-level workers in some industries, has been placing too much emphasis on short-run manpower needs.

Viewed properly—that is, as an instrument of manpower policy designed to facilitate the matching of workers and jobs—manpower training can be an effective anti-inflation device. Thus, amid all the talk about inflation and skill shortages which we have been hearing of late, we should expect an effort to strengthen manpower programs. We would expect those manpower activities to place more emphasis on the shortage occupations—occupations involving skills which require extensive training.

In other words, under the conditions that presently prevail, we believe that it would be the soundest policy to increase substantially the amount of money made available for manpower training activities.

General Statement on Research in Manpower

One of the areas of long-time concern to the AFL–CIO is the very slow growth of the federal government's research activities in the broad field of human re-

source development and utilization. Given the nation's often-expressed commitment in recent years to a fuller and more humane use of our manpower, this inadequate research effort is a contradiction.

There is no need to recite in detail all of the problems which, in our judgment, suggest the need for a substantial expansion of the federal government's investment in this type of research activity. The mere mention of a few broad categories suggests the magnitude of the task—problems of minority groups, problems of training, problems of motivation, problems of mobility, problems of youths and older workers, problems of counseling and guidance, problems of manpower and occupational projections. Each of these, and many others not mentioned, requires a good deal of exploration which cannot be undertaken without federal leadership and federal financing. Moreover, the problems are all complicated by the constant advance of technology which has caused, and continues to cause, fundamental changes in the nature of our society—in the relationship of people to people, of people to the society in which they live, and of workers to jobs.

A few shocking figures underline the need for greater effort in this field of research.

According to estimates made by the National Science Foundation, federal obligations originally sought for research and development in fiscal 1967 came to roughly $16 billion. Of this amount, some $5½ billion fell into the research category. And of this amount, only $12.4 million was estimated for research activities carried on in programs administered by the Department of Labor. Even assuming that all of this Department of Labor money would have been used in the field of human resource problems—and this would not have been the case—it would represent about two-tenths of one percent of total federal obligations estimated for research in fiscal 1967. A little over one-half of this amount—$6.6 million—was estimated for the Office of Manpower Policy, Evaluation and Research—the agency charged with providing federal leadership in the manpower research field.

In actual fact, the amount finally approved for the OMPER contractual and grant research program—which is intended to stimulate and finance manpower-related research by academicians and other researchers—was a mere $3.8 million in fiscal 1967, and only $4.3 million is requested for this activity in fiscal 1968.

Obviously, some research related to this general area of human resource utilization is elsewhere in the federal budget, mainly in HEW and OEO. But the fact remains that the broad areas of research in this field which are the responsibility of the Department of Labor are pitifully under-financed, especially when viewed in relation to the totality of federal obligations for research, and surely when viewed in relation to the magnitude of the problems that confront us in the human resource field.

In our view, it is not meaningful to talk about the full use of human resources while at the same time we ignore the need for adequately funding research activities that will provide the underpinning for sound program direction. The AFL–CIO is, of course, pleased that this nation has embarked on many new manpower-related activities in recent years. The Manpower Development and Training Act, the Economic Opportunity Act, the Vocational Educational Act, as well as much other legislation, and the administrative measures which have improved the public employment service, are all aimed at helping people in their relationship to jobs. These are all good and we applaud the efforts. But we also believe that these measures have helped to point up the great and growing needs for much more research in manpower and related fields. It is our strong view that the size of the federal government's commitment in these research areas has not been sufficiently responsive to the needs of the nation.

We bring this to the attention of the subcommittee at this time, not because we have any specific proposals to make in relation to the fiscal 1968 budget. We do so because we think this is an area which deserves greater attention than has been given it in the past. And we do so, quite frankly, because we think the Department of Labor has been much too modest in its requests in this field.

Bureau of Labor Standards

The AFL–CIO is pleased that the Bureau of Labor Standards efforts to promote the safety of our members in the maritime industry have been more adequately recognized by the Department of Labor in the proposed budget.

The Department also has wisely concentrated its safety functions in the Bureau of Labor Standards which has so effectively demonstrated its capabilities in this technical area. However, the proposed budget for 1968 does not realistically reflect the burden of these newly transferred responsibilities. Only 23 positions—including clerical personnel—were transferred to the Bureau to discharge its responsibilities for the safety of an estimated 25 million wage earners working on goods and services contracts for the Federal Government. There has been a shortage of personnel in the Administration of the Public Contracts Acts for many years and now the recently enacted Service Contract Act is beginning in a similar fashion. Consolidation of safety functions in the Bureau requires more than drawing new lines on an organizational chart. This new safety structure requires additional money if it is going to build on a solid foundation.

Proposals have been made for partially financing safety inspections from a fund based on assessment of employers. We don't feel this is necessary, for we have confidence that Congress will appropriate sufficient funds to insure that workers will be protected by adequate safety inspection.

Similarly, the present budget lacks any meaningful emphasis upon providing safe working conditions for our members employed by the Federal Government. The great promise of Mission Safety-70—the President's own program—is endangered because no additional funds are provided in the proposed budget. Yet, this program is the most imaginative attack ever developed by the Federal Government to prevent accidents and injuries to its own employees. The Federal Government should demonstrate by its own investment in safety what it preaches to employers in the private sector.

The Bureau has demonstrated its ability to perform excellent safety research as illustrated by its work in hearing conservation. There is an unmet need for research that will contribute to the elimination of injuries that have too long been accepted as inevitable. But there is no provision made in the 1968 budget of the Bureau for additional funds to stimulate this kind of safety research which is of great benefit to both management and labor. Your Committee should encourage the Department of Labor to undertake such imaginative contributions toward the prevention of occupational injuries by providing additional funds for this purpose.

Through its cooperation with the individual States in their efforts to enact and administer protective labor laws, the Bureau of Labor Standards has constructed a bridge between the Department of Labor and the State labor agencies. State legislation to protect children as workers; to insure fair treatment of unemployed workers by private employment agencies; to collect wages; to establish minimum wages; and to provide workmen's compensation for wage earners killed or injured on the job illustrates broadly the vital meaning of labor standards. In 1965–66, more than 9,200 protective labor bills were introduced into State legislatures and more than 1,000 were enacted into law; the totals for 1967 and 1968 are expected to be larger.

For the Bureau to meet this steady increase in demand for its services taxes to the limit the capabilities of the staff. The performance of its workmen's compensation personnel is one example. With three experienced technicians, the Bureau acts as a consultant; provides comparative analysis of State laws dealing with workmen's compensation; drafts language for changes desired by individual States; conducts workshops on workmen's compensation on State and regional bases; directs research into administrative and substantive problems of workmen's compensation which are of value to the State agencies. Yet, the proposed 1968 budget for State Services provides no additional funds for the increased services sought by the 50 States, the District of Columbia, and Puerto Rico.

This is an unrealistic budgeting and the Committee should assist this program and, in turn, State programs by increasing the Bureau's budget for State Services. There is no other agency of the Federal Government that has equivalent expertise in workmen's compensation—and expertise increasingly in demand by the States.

In summary, if the increased activity in labor standards by the States is to continue to grow and bear fruit, then a more adequate budget must be developed by the Department of Labor for the consideration of your Committee. The proposed increase of $676,000 for the Federal maritime safety functions of the Bureau and the proposed increase of $80,000 for Federal Wage and Hour law administration in no way increase funds required to service the States or to provide the broad base of industrial safety so badly needed and overlooked for so long.

Women's Bureau

The 1968 budget request for the Women's Bureau is $912,000. This figure is almost identical with the $911,000 to be made available for the current fiscal year ending June 30, 1967.

We hope the Committee will seriously consider an increase over the requested amount.

For the past several years there has been no basic increase in the Women's Bureau budget. Higher money amounts have covered only the statutory requirements for general employee pay increases, and not an expansion in staff.

We believe that at least some slight staff expansion is urgently needed to deal with the mounting demands on the Women's Bureau that have come about through the creation and continuation of State Commissions on the Status of Women. These Commissions require extensive servicing and research materials from the one agency of the federal government that specializes in women's affairs.

The workload generated by the Commission is likely to be a permanent one as efforts to carry out Commission recommendations proceed in the future. This result is already apparent in such areas as school counseling programs for girls and provision of day-care services for children of working mothers.

Bureau of International Labor Affairs

The one significant program increase requested by the Bureau of International Labor Affairs has to do with problems of labor-management relations of U.S. firms overseas. We believe that this activity can make an important contribution in the development of good relations between the U.S. and other countries. We, therefore, support this request and urge the Committee to do likewise.

It strikes us that this is an especially critical issue in developing countries. In these situations, the failure of American firms to understand their responsibilities, as well as the people with whom they are dealing, can have disastrous results.

There is more involved here than just the image of American business or even the image of America. In the final analysis, what may be involved is the political direction in which the developing countries move.

The AFL–CIO is concerned with the need to develop effective free trade unions in these countries in order to strengthen their democratic institutions. We put a good deal of effort into this objective, as well as substantial resources. We cannot, therefore, be indifferent to practices of American firms abroad—whether intentional or not—which may have the opposite result.

So far as the rest of the Bureau's budget request is concerned, we think it is minimal. The Bureau of International Labor Affairs integrates foreign economic policy activities in the various Bureaus of the Department of Labor and services to other government and international agencies, as well as other international labor affairs. Trade negotiations and operations of trade agreements require not only collection and analysis of statistics but also expert advice to U.S. negotiators during negotiations and participation in some trade programs. These include such complex problems, for example, as the operation of the Long-Term Cotton Textile Arrangement. Since foreign investment trade and other economic policy issues increasingly affect labor and manpower conditions within the United States, we believe the Department of Labor should have an even greater role in the formulation of policies than at present.

Trade Adjustment Activities.—We endorse the purpose of trade adjustment and we ask this Subcommittee to approve the funds requested.

The Bureau of Employees' Compensation

The AFL–CIO has a strong interest in the programs administered by the Bureau of Employees' Compensation. This agency is responsible for the various workmen's compensation laws coming within Federal jurisdiction. They provide coverage for more than five million workers in both governmental and private employment for disability resulting from injury or disease caused by their employment. In thousands of cases each year, they are the difference between poverty and despair for the working man and his family and livelihood, hope, respectability, as well as an early return to gainful employment.

We were gratified with the passage of P.L. 89–488, the Federal Employees' Compensation Act Amendments, during the last session of Congress, and proud of our role in supporting the action. We are hopeful that the present Congress

will consider similar action in improving the Longshoremen's and Harbor Workers' Compensation Act.

Federal statutes should be leaders in the field. They should be models both in terms of benefit provisions and administration. Laws regardless of how well devised or how ideal in terms of benefit structure are, in the final analysis, only as good as their administration. Over the past 50 years we have been pleased with the administration of these Federal laws recognizing that this Bureau has been handicapped by very limited financial resources. It has a reputation for very conservative budgets and expenditures. It is a remarkable feat and a tribute to the ability and ingenuity of its administrators over the years that it has been able to accomplish what it has.

We were extremely disappointed that following the enactment of the 1966 amendments, administrative funds were not provided during the current fiscal year for their implementation. If these programs are to continue to accomplish the purpose for which they are intended additional funds must be provided for their administration. If not, many injured ind disabled workers and their families will pay with pain, suffering, and economic hardship.

The appropriation request of this Bureau for 1968 is again a modest one. We note that it asks for an additional $650,000 for Salaries and Expenses, of which $100,000 is to be used for some type of management study. This means that the increase will in fact be less than $500,000 to devote to operations. We not only wholeheartedly endorse and urge favorable action on this request but would like to suggest that in the interest of achieving the goals of the program the increase should be greater. Inadequate funds will mean many injured employees will not receive the remedy the law intends they should receive.

The expenditure of additional funds in administration would result in overall savings to the government in terms of reduced expenditures from the compensation fund. They would enable the Bureau to improve reporting, engage in closer case management, return employees to work at an earlier date, and provide the benefits and service in the manner contemplated by the law.

THE NATIONAL LABOR RELATIONS BOARD

In Fiscal Year 1967, the Congress approved $30,442,000 for the National Labor Relations Board, meeting its request. It is our purpose to support fully the NLRB's request for an increase of $1,258,000 for a total of $32,288,000 in Fiscal Year 1968. At the outset, let it be noted that about one-fourth of this requested increase is for increased program costs. The principal amount is for mandatory administrative cost increases.

We are concerned that the early case-load estimates on which the agency based its requests are proving to be far too low, judging by the actual case-load handled in the first quarter of this year.

But beyond these dry statistics is the problem itself. For those workers who believe in the stated purpose of Federal law to guarantee their right to organize, the fact is all too often a hollow mockery of the law's guarantee. It does little good to assure workers that their rights are protected if the administrative problems create delays beyond their ability to wait for justice. "We will deny justice to none, nor delay it," said the Magna Carta in 1215. Yet more than 700 years later in America, delay is more often served than justice in matters involving workers' rights to join unions of their own choosing.

Much of the difficulty lies not only in obstructionist tactics by employers like J. P. Stevens and their lawyers; but it is also created by lack of sufficient staffing at various levels of the National Labor Relations Board—principally here in Washington, D.C. where review procedures and necessary court procedures are often delayed simply because there is not time enough in the day for present staff to accomplish all that needs to be done to speed justice for working people.

Generally speaking, the NLRB has made significant progress in solving its case-load problems at the regional level. Unfortunately, however, more and more cases require action to complete at the Board level itself, either in the Board or in the Courts. It is here that more funds are necessary if working people are not to find that despite the law's assurances of equal treatment, the fact is that administration of the law is one-sided because of inadequate appropriations.

In the category of unfair labor practice cases, the Boards load in the first quarter of this calendar year has been running 10 percent or more compared to an estimated increase of 3–4 percent for 1967. Because the people needed to

handle these kinds of cases cannot be hired overnight but instead require some training and seasoning to develop capability, the problem is further complicated. In short, any cutback in appropriations would mean the NLRB simply could not handle the work that is already in the foreseeable future.

We might point out that this failure to resolve cases promptly even where there is undisputed law violation is simply encouragement to companies to violate the law with impunity in order to frustrate union organization. When they know that it will be difficult to bring them to justice in time for an effective remedy for workers denied the right to join unions of their choosing, it is an overwhelming temptation to many managements to take advantage of this situation. Again J. P. Stevens is a substantial case in point.

Surely the Appropriations Committe will not allow this deplorable situation to become worse.

FEDERAL MEDIATION AND CONCILIATION SERVICE

The request for Fiscal 1968 of $7,475,000 is an increase of only $265,000 over the anticipated funding of the service for Fiscal 1967.

We would like to make a special point of noting for the second year in a row that the problem of adequate secretarial positions for the mediators in the field has not been resolved. The necessary clerical work involved in successful mediation is immense as any person who has participated in such crises in collective bargaining knows.

To handicap the delicate conciliation skills of mediators by lack of sufficient secretarial personnel is short-sighted economy indeed. Either in crisis bargaining or in the area of preventive mediation, the balance of forces is always a delicate one and unnecessary delays or the use of the highly skilled time of a professional for routine secretarial and clerical chores or the delay of his functioning by the absence of such services seems to defeat the very purpose of the Federal Mediation and Conciliation Service.

To those who have dealt with collective bargaining for years it is all too apparent that many work stoppages actually take place because of foolish errors committed by one side or other in the pressures of a strike deadline. To compound this natural problem with an unnecessary artificial problem is only to add unnecessary burdens to the mediation process.

We urgently request the members of this committee to take a closer look at this serious administrative problem and to fund the agency's operations in this important respect beyond the figure permitted by the Bureau of the Budget.

NATIONAL MEDIATION BOARD

We support fully the appropriation request for the National Mediation Board. The $2,150,000 is less than $100,000 more than last year's appropriation and is barely sufficient to cover projected workload increases for Fiscal 1968. In other areas labor disputes can often affect the public convenience. But in the vital area of transportation, a strike can materially affect the economy itself nd the national interest is served by resolving early the issues which lead to stoppages.

We would also like to point out that there is likely to be an increasing workload for special adjustment boards to handle the substantial number of grievance and arbitration cases arising out of technological chnges in the railroad industry.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The programs of the Department of Health, Education, and Welfare affect the life of nearly every individual and family in the nation. They represent society's concern for the individual—to provide greater freedom by preventing the individual from falling victim to vast economic and social forces over which he has no control and by helping him to do what he cannot do as well individually.

The 89th Congress passed new and expanded legislation to assure greater security for the average man. Adequate appropriations are an important factor in insuring that these programs will be successful and that existing programs achieve their intended purposes.

We do not urge increased federal funds for their own sake but only those amounts which we feel can be productively used to achieve worthwhile goals. We urge approval of full budget requests where adequate and appropriation of

additional funds where necessary to insure that the vital programs of this Department will achieve maximum effectiveness.

Civil Rights Functions—Office of the Secretary

We want to offer special support for the projected $2 million increase in funds for civil rights functions of the Secretary's office as required by Title VI of the 1964 Civil Rights Act. The requested amount of $5.434 million for Fiscal Year 1968 will mean an increase of 131 positions from the present 278, for a new total of 409 persons.

Now that the courts have spoken so clearly about the duty of school systems to comply with existing law in recent decisions in the 5th Circuit, we are seeing renewed efforts to avoid the consequences of what both the Courts and the Congress has decided. We are disappointed to note that as recently as this week, a number of Congressmen have petitioned this subcommittee to refuse the funds we are supporting for civil rights compliance activities and thus to circumvent legal desegregation requirements.

We want to make it perfectly clear that the AFL–CIO supports the Department's request and we urge this Subcommittee to meet what we believe to be both a moral and a legal duty by appropriating the full amount requested by the Secretary for civil rights compliance activities.

Social Security Administration

The social security program has grown into a vast and complex income maintenance system, a system that affects the great majority of citizens in all walks of life. Congress has fostered this growth and in the process has established a legislative framework which provides income protection in the case of retirement, death or disability, and more recently, protection against the high costs of medical care for the elderly. Within this framework, under the current old-age, survivors and disability insurance programs, cash benefits of nearly $20,000,000,000 were paid in the fiscal year ending June 30, 1966. These benefits afforded a basic income to almost 22,000,000 persons, more than one out of every nine individuals in the United States. In addition, the hospital insurance program has paid for over $1,000,000,000 worth of hospital care received by more than $2,300,000 of our elderly citizens in the first six months the program was in operation. In the same period over $100,000,000 was paid out under the supplementary medical insurance program for physicians' services.

The Social Security Administration has presented a budget which reflects a further growth in these programs. Under the old-age, survivors and disability insurance programs cash benefits are expected to increase to nearly $22,000,000,000 in fiscal year 1968. The number of persons receiving cash benefits will increase to 24,334,000 at the end of June 1968. The health insurance programs will also grow in 1968: by the end of that year, a total of 19,530,000 elderly people will be eligible for benefits under the hospital insuracne program while an estimated 17,923,000 persons will have enrolled in the supplementary medical insurance program.

The budget before you requests sufficient appropriations to support the anticipated growth in the program. In the operating area, the request for Salaries and Expenses funding, the Administration needs $635,260,000 including a $25,000,000 contingency fund. Excluding the contingency fund, this is an increase of about $27,700,000 of which nearly $16,000,000 is for the intermediaries and State agencies whose work loads under the health and disability insurance programs will increase in 1968. The remainder of the increase, over $11,000,000, is needed for the increased expenses which the Administration incurs in operating all social security programs. Over half of this money is needed to cover mandatory salary increases for the existing staff. SSA work output in 1968 will be 3.3 percent higher than this year. Certain productivity improvements will enable them to absorb over 57 percent of this increase without increasing staff. An increase of 656 man-years is needed for the remaining increased output which cannot be absorbed at the 1967 manpower level.

There is also a request to appropriate $906,631,000 of general fund monies for payment to the hospital insurance trust fund and the supplementary medical insurance trust funds. This payment is provided for in Title XVIII of the Social Security Act as amended in 1965. This amount is needed to reimburse the trust funds for hospital insurance benefits for persons not insured under the social security program and to pay the government's matching premium for the supplementary medical insurance program.

Welfare Administration

Over 10 million persons will seek help for food, clothing, shelter and medical care from the Federal-State public assistance and medical assistance programs during the coming fiscal year. The principal increase in funds is directed toward the financing of improved and extended medical assistance for the poor. Although a modest increase in funds is proposed for payments to recipients under the categorical programs, these increases are hardly adequate in view of the already existing low-level of payments. We call attention to 1968 forecast of average monthly payments to welfare recipients.

Old-age assistance	68.35
Aid to the blind	84.25
Aid to the permanently and totally disabled	75.00
Aid to families with depended children:	
Per family	154.75
Per recipient	37.35

In light of the efforts of the Federal government to eradicate poverty, public assistance payments at the levels indicated above tend only to perpetuate want among a vast strata of our population.

With respect to medical assistance to low income groups under Title XIX of the Social Security Act, in view of the tremendous losses of all kinds caused by illness and premature death, it is essential that this program be implemented with a broad scope of benefits, adequate in duration and available to the needy and medically needy who otherwise would have no medical services available to them. Restrictions placed on the availability of this program based on budgetary limitations are both harmful and shortsighted. The budget request should be greatly increased so that medical care can be made available to the poor.

In the Children's Bureau, the budget requests for 50 million dollars each for Maternal and Child Health Services and Crippled Children's Services and $46 million for Child Welfare Services remain the same as the request for the fiscal year 1967. In view of the expanding nature and the demonstrated value of the programs we regret that the present budget request is not more closely related to actual need.

The Work Experience program (Title V of the Economic Opportunity Act) request has been substantially reduced from last year's $100 million to $70 for this year. This is another program which has opened up to many public assistance recipients the door to self-supporting employment opportunities after they have had some remedial education, job training and counseling. This program has reached the hard-core unemployed and has been able to provide them with opportunity to attain a degree of self-sufficiency many more never before enjoyed. To limit this program designed to help this most needy group is at best shortsighted. Every effort should be made to restore the budget request to the 1967 level.

Public Health Service

The goal of public policy should be to provide comprehensive health services to all of the American people. It is also the responsibility of government, Federal, State, and local, to provide the healthiest possible environment in order to reduce the incidence of disease. The main barriers to accomplishing these goals include: (1) the need for more health facilities; (2) the need for more health manpower; and, most important, (3) the need for rationalization of health resources and services. Making it possible for people to purchase health care is also a major problem, but does not primarily concern the Public Health Service.

The Public Health Service programs which are most directly related to resolving these problems should, in our opinion, be funded in greater amounts than the administration is currently requesting. The greatest need is in those programs which hold promise of improving the organization of health services. Public Law 89–749 of the "Comprehensive Health Planning and Public Health Services Amendments of 1966" holds great promise of bringing some order into the health care industry.

The last decade has seen a phenomenal period of advance in medical science and technology. Within the last few years, spectacular advances has been made in the application of automation and electronics to medicine. We now have automated laboratories, auto-analyzers capable of reading electro-cardiograms. These developments not only have the potential of reducing errors and improving the

quality of medical care but also of reducing the cost of detecting and treating disease.

However, the pace of scientific advance has far outstripped our capacity to apply what we now know for the benefit of the people. This gap is widening. The current budget contains $1.3 billion for bio-medical research but a relative paucity for research into methods and systems of health services delivery. What use is new medical knowledge if it isn't applied, or, at least, if it isn't applied efficiently? We would like to cite just two examples to illustrate our point. The heart lung machine, which made open-heart surgery possible, was a most dramatic scientific break-through. What happened? We now have an expensive proliferation of such equipment most of which sits idle most of the time in many hospitals and the surgical team, including highly trained technicians, have little opportunity of developing their skills. At another extreme, a technique for early detection of cervical cancer, the Papanicolaou or "Pap" smear test could all but eliminate this form of cancer, yet the test is rarely utilized.

We, therefore, believe the number one priority in this budget should be to increase substantially the funding for Section 314(e) of the Public Health Service Act, which section was part of Public Law 89–749. This section provides for project grants for health services development. While the administration is asking $62.5 million in such project grants, most of this money will simply replace the so-called "categorical" grant programs for chronic disease, tuberculosis, venereal disease, etc. For improving the provision of health services, only $5 million is being requested. If we are to make any significant progress in reducing the gap between our medical knowledge and in its application, this request should not just be doubled or tripled, but should be increased at least tenfold to $50 million.

Aside from this item, which we believe should be substantially increased, those budgetary items relating to facilities should receive some consideration for increased appropriations, particularly for nursing homes and Community Mental Health Centers.

The 1968 budget for the health manpower activities of the Public Health Service will emphasize programs designed to increase the quantity and quality of health professional personnel. The $164.7 million in additional funds is modest in relation to the serious health manpower shortages we now face. The increase also reflects the new program passed by the 89th Congress to support the education of allied health workers. $42.3 million of this increase will be for the construction of new health education facilities.

Air and water pollution is a major national problem and will certainly get much worse unless vigorous efforts and substantial resources are devoted to making our rivers and streams clean and our air reasonably pure. We have already had an air pollution episode in Donora, Pennsylvania, and, sooner or later and probably sooner, we will most certainly experience a major episode in one of our major cities. Unless a substantial effort is begun now, we are likely to have a catastrophe in one of our major cities and the resulting "crash" program will be both more expensive and less effective than providing adequate funds now.

The direct medical care portion of the Public Health Service budget includes funds for operating Public Health Service hospitals and out-patient clinics. These facilities provide medical care to U.S. Seaman and U.S. Coast Guard. The additional $6.3 million requested for in-patient and out-patient care represent an improvement in staffing will help to improve the hospital and medical care provided for our seamen and coast guard.

The total 1968 budget for the National Institutes of Health will be $64.2 million over 1967. We believe that among the most important components of this increase are an additional $12.6 million for general research and services, including further expansion of programs for computer research and technology, and an additional $19.3 million for the heart, cancer and stroke program passed by Congress in 1965. The importance of this program in rationalizing health services for persons afflicted with these catastrophic afflictions cannot be underestimated.

The National Institute of Mental Health would receive an additional $31.3 million under the 1968 budget. The Community Mental Health Centers Act of 1963, as amended, is one of the most exciting Public Health Service programs to have passed Congress. Now, only upper income people can afford out-patient psychiatric treatment. This program has the potential of bringing out-patient mental health services to all Americans.

The 1968 budget for the new Comprehensive Health Planning program and the proposed Partnership for Health amendments totals $168.6 million. As we indicated at the beginning of our testimony, the appropriation for project grants for health services development should be substantially increased.

Occupational Health

In November 1965, recommendations for a strong national occupational health program were submitted to the Surgeon-General and to the U.S. Public Health Service. The program recommendations in this special report (The Frye Report) received general support from organized labor, the organized medical profession, and other public health and medical groups.

The AFL–CIO presented testimony a year ago before this Subcommittee urging the Congress to approve necessary appropriations to implement the Frye Report on schedule and to remedy the failure of the Bureau of the Budget to recommend such appropriations.

In May of last year the President in his remarks before a gathering of labor press editors, said: "The time has also come to do something about the effects of a working man's jobs on his health. This problem has been neglected too long. It must be neglected no longer."

In these remarks, he announced that he was directing the Secretary of Health, Education and Welfare to report to him "at the earliest possible moment" on what can be done by the federal government to deal properly with present occupational hazards and take precautions to prevent new hazards from threatening the health of working men and women. If there has been any meaningful response by the Secretary or the Surgeon General, it has not come to our attention.

There did take place however, within the Public Health Service, a reorganization of both administrative Structure and function during 1966. The existing Division of Occupational Health was placed within a National Center For Urban and Industrial Health, where it is now in great danger of losing its identity and its direction. The National Center has been given a miscellany of programs directed toward the control of environmental hazards and health problems associated with urban living. Thrown into this grab-bag operation are a number of dissimilar programs dealing with inter-state quarantine regulations, international shellfish sanitation agreements, solid waste disposal and salvage, among others.

The President's fiscal 1968 budget recommendations call for $8.1 million for occupational health program activities under the new budget heading of "Urban and Industrial Health".

In his health message of February 28, 1967, he reiterated the earlier $8.1 million budget request for the purpose of expanding research and training and strengthening state and local programs in this field. The President also directed the Secretary of Labor to "improve and strengthen health protection and safety standards for workers through cooperative Federal-State programs".

While the budget request for occupational health programs for fiscal 1968 is 25% greater than was appropriated the previous fiscal year, there is still no meaningful national occupational health program to go with it. The amount recommended is far short of that which was proposed to carry forward the first phase of the program embodied in the Frye Report for the previous fiscal year.

Thus, we have already lost one year in mounting a strong national occupational health program and may lose still another year unless Congress acts.

In 1966 the AFL–CIO warned that proposed reorganization of the Public Health Department "could very well result in fragmentation of the nation's attack upon environmental health problems and in the loss of integrity and efficacy of the important environmental health program of the federal government, including long neglected occupational health problems."

A strong national federal occupational health program could be a cooperative endeavor whereby the P.H.S. provides the necessary research to develop occupational health standards and the Department of Labor could enforce them. This sharing of administrative responsibilities, however urgently require an overall program, together with a willingness on the part of the Surgeon General to face up to his responsibilities in this field. Lacking either of these ingredients and furthermore lacking adequate funds, the present situation promises nothing to American workers except continued exposure to both known and unknown hazards in the work place and little or nothing being done by the federal government to prevent or reduce them.

In view of this failure by the Public Health Service to shoulder its occupational health responsibilities we strongly urge this Committee and the Congress to appropriate the $6.7 million additional funds for fiscal 1968 necessary to place into effect the first phase of the Frye Report's program recommendations, or about $14.8 million in all. We further urge that the Surgeon General be directed to carry forward this program vigorously without delay and in full cooperation with the Department of Labor.

Vocational Rehabilitation Administration

The related problems of disability and dependency are becoming increasingly important to our nation. Over 22 million people in the United States have some type of physical, mental, or health handicap, according to figures of the U.S. Public Health Service. About 13 million of these people are within a working age and potentially eligible for employment. About 3.5 million are willing and able to work, but are unemployed as a result of lack of experience and training and need vocational rehabilitation help. All services—public and private—combined do not rehabilitate as many people as become disabled in any one year. Each year an additional 450,000 people join the group who are disabled and who could be restored to activity and work through vocational rehabilitation.

The VRA Program rehabilitated 145,000 people during the fiscal year ending June, 1966—the large majority to productive employment. They were employed at an annual earning rate of $345 million or about six times their earning rate before rehabilitation began and were contributing 214 million man-hours of productive effort each year to the economy. The rehabilitated person will return, on an average, during his life time of work five times the cost of his rehabilitation.

Organized labor does not advocate that rehabilitation be supported primarily for the monetary gain to society. However, for a long time to come Congress is in the fortunate position of helping our economy, both monetarily and productively, as it appropriates money to rehabilitate the disabled.

The proposed 1968 Budget provides additional resources to enable VRA to carry forward the new and expanded programs resulting from the 1965 amendments to the Vocational Rehabilitation Act. In general, the proposed 1968 budget will permit a higher level of activities for providing services to the handicapped. Overall, it would provide a total of $388 million for VRA programs—an increase of $60 million over 1967.

Most of the $60 million increase for 1968 is for grants to States for basic support programs under Section 2. This increase is due to the additional State funds that are being matched under the higher allotment base authorized for fiscal year 1968 by the 1965 amendments. The proposed budget contemplates the rehabilitation of about 218,000 persons—a 15 percent increase over the 190,000 estimated for fiscal year 1967.

There are some specific cuts, however, that concerns us. The appropriation for new construction of workships has been cut by $650,000. The amount available for fiscal 1967 was inadequate and a reduction compounds the problem.

There has been no increase in appropriations for research and demonstration projects. This will necessitate a reduction from 439 projects for fiscal year 1967 to 406 for fiscal year 1968. These projects support much needed investigation of the rehabilitation problems of special groups, such as the mentally retarded, disabled public offenders, disabled public assistance clients, and the older, chronically ill workers. Reduction in such projects will mean that many individuals in these categories will not be successfully rehabilitated because of inadequate knowledge and experience. It is essential that as the program expands that supporting research also expand.

The AFL-CIO hopes that Congress will increase funds for construction and research and will appropriate the other funds requested for VRA so that increasing numbers of the disabled will be restored to happy and productive lives.

FOOD AND DRUG ADMINISTRATION

For the fiscal year 1968, the appropriation requested for salaries and expenses of the Food and Drug Administration is $66,749,000, an increase of $5,892,000 or approximately 9.7 percent over the $60,857,000 estimated for the 1967 fiscal year. In addition a sum of $1,150,000 is requested for the FDA buildings and facilities program.

The budget request for the Food and Drug Administration is entirely inadequate. That any increase has been submitted at all in the context of the Adminis-

tration's severe economy effort is evidence of a large backlog of unmet requirements which do not appear in the proposed figures. The proposed budget probably represents only a fraction of actual requirements. FDA programs in some areas have actually been cut back.

The vigorous and efficient operation of the Food and Drug Administration under its current leadership makes it one of the outstanding consumer protection agencies of the federal government. Its direct functions in protecting the health and safety of the public are too vital and too basic to be sacrificed to defense economy moves. Its work loads have continually expanded, not only with the volume of the consumer products it regulates, but also because of Congressional enactments enlarging its responsibilities. Within the past two years alone, Congress has added the Drug Abuse Control Act, the Child Protection Act, and the Fair Packaging and Labeling Act.

We earnestly request that the Committee approve a budget of at least $100,000,000 for the Food and Drug Administration.

APPROPRIATIONS FOR EDUCATION

After generations of deadlock over the issue of federal aid to education and years of widening inequality of educational opportunity throughout the nation, Congress passed a series of important laws which have brought significant benefits to millions of America's children and young people. These include the National Defense Education Act, the Impacted Aid program, the Vocational Education Act of 1963, the Elementary and Secondary Education Act, the Higher Education Facilities Act of 1963 and the Higher Education Act of 1965. We of the AFL-CIO are proud to have played a major part in helping to secure the passage of these laws. This federal support is bringing new educational opportunities to children and young people, and especially to those who need them the most, those from low income families who must have excellence in education if they are to break out of the poverty cycle which has entrapped their families, in many cases for generations.

We feel that the Congress, if it were to appropriate less than the full authorization for these educational programs, would be doing an injustice to its own wisdom and vision. The present authorizations are themselves compromises which fall short of the actual needs. Yet, as the following chart indicates, the proposed appropriations for the various education programs involve severe cuts in funds, cuts which we believe represent an altogether false economy.

Appropriation requests for selected education programs

[Dollar amounts in millions]

Program	Fiscal year 1968 authorization	Fiscal year 1968 appropriation requests	Amount under authorization	Percent of authorization requested
Higher education activities	$1,649.0	$851.9	−$797.1	52
Elementary and secondary education activities	3,367.1	1,686.7	−1,680.4	50
Libraries and community services	293.1	166.0	−127.1	57
School assistance in federally affected areas	505.0	439.1	−65.9	87
Expansion and improvement of vocational education	237.5	199.3	−38.2	84
Total	5,490.1	3,343.0	−2,147.1	61

The proposed appropriation for the Elementary and Secondary Education Act for Fiscal Year 1968 is more than $1.5 billion under the present authorization. The requested appropriation for Title I is only 49% of the full authorization. This is the title which is directly designed to improve educational opportunities for low income children, and anything less than full appropriation will by that much diminish the best chance which is open to those children. For Title III, which has done so much to stimulate new and innovative educational programs, the proposed appropriation is only 47% of the full authorization. The proposed cut under Title II which provides library resources and textbooks that are desperately needed in a nation in which nearly half of the existing schools have no library amounts to nearly ⅓ of the authorization. And Title V funds to

strengthen state departments of education would be cut under the request to only 44% of authorization. The total cuts proposed for existing authorizations under programs in the field of elementary and secondary education—exclusive of the cuts proposed in the Vocational Education Act—amount to more than $1.68 billion. This would mean an average cut in available funds of more than $1,000 for each classroom in America.

The AFL-CIO is deeply concerned over this possibility of inadequate funding. The proposed cuts will severely damage state and local programs now under way or just getting out of the planning stages.

In addition to the drastic cuts proposed for the Elementary and Secondary Education Act programs, there is also a severe cut of $63.8 million in funds for P.L. 874 and $2.1 million in the funds for P.L. 815, or a total cut of $65.9 million in the whole impacted aid program. These cuts are especially damaging in that this is a continuing program, the benefits of which are jeopardized by uncertainty as to future funding, a situation making educational planning impossible.

The funds for vocational education for the 1968 fiscal year are $43,591,000 below the legal authorization for these programs as can be seen from the following table:

Budget for vocational education for fiscal year 1968

[Does not include Appalachian Regional Development Act of 1965 and National Vocational Student Loan Insurance Act of 1965]

	Legal authorization	Suggested appropriation	Difference authorization and 1968 budget
	Millions	*Millions*	*Millions*
Smith-Hughes and George-Barden Acts	$57.2	$57.2	0
Vocational Education Act of 1963, sec. 2	225.0	216.409	[1] $8.591
Vocational Education Act of 1963, sec. 15	35.0	0	35.0
Total	317.2	273.609	43.591

[1] Of this amount, $3,191,000 relate to grants to the State and $5,400,000 to research and demonstration projects.

Last year the General Subcommittee on Education of the House Labor and Education Committee held hearings on legislation to increase federal grants to the states from $225 million to $400 million. Impressive and cogent arguments were presented to the committee from all segments of our society, including the AFL–CIO, to step up federal aid to vocational education. Again, this year testimony will be heard on similar bills.

In view of the need for a sharp increase in federal grants, as recognized by the whole country, it seems to us short-sighted not to appropriate the full amount authorized in the law.

It is not necessary to convince this Subcommittee of the increasing need for vocational education and training to supply the skills the labor force requires to guarantee economic progress and full employment. It is difficult to justify the proposed cut of $3.2 million, a relatively small amount, from the sum that goes to the states for operating vocational education programs and for constructing area vocational schools (authorized $202,500,000—suggested appropriation for 1968—$199,309,000).

Furthermore, it is very unwise to cut, for the second consecutive year, the amount authorized for research and demonstration programs for vocational education—this year from $22.5 to $17.1 million—a difference of $5.4 million.

The use of research and demonstration projects for the purpose of furthering effective vocational education was one of the most important innovations of the 1963 Vocational Education Act. Research in vocational education has been contributing a great deal to knowing more about the jobs open to our young people, the curricula needed for training for these jobs and the effectiveness of special programs directed to the people with special educational needs.

Finally, we regret that again no money is requested for residential vocational education schools. This part of the 1963 Act has had no opportunity to be tested because Congress has not yet given it a chance to be implemented. In addition, the Administration also has eliminated the whole amount for the last year of the work-study programs.

We strongly believe that the total amount of $35 million, authorized by the law, should be appropriated for the work-study and residential programs.

We seriously urge this Committee to appropriate the whole amount, as authorized by the law for vocational education, and to restore the amount of $43.6 million which the suggested budget for the fiscal year 1968 would cut out from the amount to be spent for vocational education.

We are equally concerned about the suggested cuts in higher education activities. The proposed appropriations for construction of undergraduate facilities in community colleges and technical institutes are only 54% of present authorization. This cut in construction funds authorized under Title I of the Higher Education Facilities Act would amount to $338 million, enough to provide new and badly needed facilities for more than 300,000 young people in community colleges and technical institutes. Similarly, we are concerned that with the shortage of graduate school facilities, it is proposed to appropriate only 42% of the authorized funds.

We are particularly disturbed that it is proposed to cut $60.1 million from the college work-study program established under Title I, Part C of the Economic Opportunity Act. This work study program is one of the most useful forms of student aid for young people from low income and minority families. These young people have usually been too educationally disadvantaged to come out well in the tight competition for scholarships and the level of their family income makes it difficult for them—and in most cases unwise for them—to obtain loans to pay for higher education. If Congress were to cut funds for the work-study program it would make higher education that much more difficult for low income students.

Closely related to the education bills is the Library Services and Construction Act which is bringing library service to millions of Americans and raising the level of available library service for millions more. The proposed cuts in appropriations for this bill include a $10 million cut in funds for library services and a $22.8 million cut in library construction funds. With the widely discussed explosion of knowledge which is taking place in our time, inter-library cooperation becomes an essential aspect of making information available to those who need it. The $7.5 million authorized to further inter-library cooperation is a modest amount of money to achieve an important purpose. The proposal to cut $5.1 million out of this amount is a kind of penny pinching that could have serious consequences.

All of these programs have been established as a result of extensive hearings by the committees of the Congress. These hearings helped to identify and measure critical educational needs. This nation has the necessary resources to meet those needs as they have been spelled out in the legislation. The AFL–CIO has vigorously supported this nation's foreign policy, but with equal vigor we insist that there is nothing in the world situation which can justify economizing by shrinking those new educational opportunities which the Congress has opened up. We urge this committee and the Congress to appropriate the full amounts authorized under the existing educational acts including the National Defense Education Act, the impact aid programs of P.L. 874 and P.L. 815, the Elementary and Secondary Education Act, the Higher Education Facilities Act of 1963, the Higher Education Act of 1965, the Vocational Education Act of 1963, and the Library Services and Construction Act.

Mr. FLOOD. Mr. Natcher.

Mr. NATCHER. No questions, Mr. Chairman.

Mr. FLOOD. Mr. Michel.

Mr. MICHEL. No questions.

Mr. FLOOD. Mr. Casey.

Mr. CASEY. I would like for you all to think about one of my pet ideas—I do not know if it is any good or not but I keep throwing it out and I know it would take the cooperation of your great organization—and that is to work out some method of allowing youngsters (and when I say youngsters I am talking about those that are in school) to have more job opportunities in the summer, opportunities to do work that is not ordinarily done, such as cleaning up storerooms or things of

that nature. I do not know if it is true or not but what I hear is that the minimum wage is too high for someone of that age in order to encourage anybody to employ them. And another thing is that companies say when they do employ someone like that they have to set up the retirement fund and so forth and they will have them for maybe just 2 or 3 months.

In other words, would it be possible, in cooperation with your organization, to agree upon guidelines on types of jobs to encourage companies to employ these young people at a wage that would not take advantage of them but at the same time would provide more opportunities for them to work? Not on a Government program because then they get the idea the Government is supposed to give them a job. I think a lot of youngsters like to brag about the fact they found a job. Also this would give them a greater incentive to go back to school because they would see jobs that will be available to them when they have a better education.

That is just an idea I have. You no longer see the delivery boy on a bicycle; you no longer see a Western Union boy on a bicycle; not necessarily a bicycle, but in other words a youngster, when he gets to be about 15 or 16 years old, wants to work, he wants to earn money. In many instances employers say, "We can't hire you because you are not worth $1.40 an hour." And in other instances they will tell the youngster there are restrictions on employing him for a job because it is called hazardous and they do not want to get into any argument about that.

I want you all to think about that because I think it would be the greatest thing in the world to get some of these boys off the street and instill in them an incentive to seek jobs and to obtain jobs, rather than hang around the local bowling alley or what have you.

Would you care to comment on this?

Mr. LASHMAN. I would be happy to.

I am afraid I cannot entirely agree with some of the things you say. So far as the minimum wage goes, there is no way that this Federation can take any action on employment in that field because there is now a statute which sets what those wages should be and which spells out the areas of coverage.

I might say in all honesty that we supported that and frankly, we would be in favor of even greater coverage than the law now gives.

I would like to suggest a couple of things in that line which is the basis for our position.

One of them is that, as we said in our statement here, we think the minimum wage law is about the cheapest kind of antipoverty program you can run in this country. We realize sometimes it creates problems for the kind of situations you describe, but for people who have got to try to support families with their work, we believe that any figure below this is literally impossible to live on. I think you would agree with that.

Mr. CASEY. I am not talking about people supporting families. I am talking about youngsters still in school and for part-time work and summer work. I am not talking about a full-time job. If it is a full-time job, I agree with you that we do not want any subterfuge,

but it looks to me like we could have such a program. We have all sorts of guidelines on every thing else with everybody riding herd on them. It looks like you could agree on some guidelines to get the youngsters off the street.

Mr. LASHMAN. You see, our problem is, you look at this from the point of view of the youngsters in summer employment and you have a case to make. There is no question about that.

Whether you like it or not, they also do happen to provide competition for employment for other people. If you hire kids for the summer at a rate below what you can hire other people—I am sorry, we are just unfortunately in disagreement with your point of view—we think it provides the kind of competition which makes it difficult for other people to maintain full-time employment.

I can understand your concern and I can certainly share your concern about the need for opportunities for youngsters who have this kind of initiative, but we do feel fairly strongly that breaching the minimum wage will create more problems in other areas than perhaps it would solve in those. That is the point you make there.

Mr. SESSIONS. Could I add a comment?

Mr. CASEY. Yes, indeed.

Mr. SESSIONS. I do not think it is necessarily true, and there is good evidence to the contrary, that the minimum wage law makes it impossible for young people to find work.

I was very encouraged here in the District School System, looking at the record of last year's graduates, to find that Cardozo High School, which deals with the hard core intercity kids, that the unemployment out-of-school rate among last year's graduates from Cardozo High School is only 3 percent, which is considerably below the national average.

It seems to me to indicate if you really do a job in trying to prepare these kids for work, they can get jobs, minimum wage law or no.

Mr. LASHMAN. The other point I wanted to adddess myself to was the point you raised about restrictions in terms of employment itself. These in general, as you know, go to a situation where there is an existing labor contract between the management of the company and the union represented.

Mr. CASEY. Some of it is State laws.

Mr. LASHMAN. The other point I was going to suggest, the things you are talking about, unsafe working conditions, are essentially matters of State law, as I am sure you know.

Mr. CASEY. I do not know that they should be changed.

Mr. LASHMAN. In general I think it is true in local communities and in States, our State and local central bodies are the kinds of groups that will try to work cooperatively to solve community problems. We at least hope we work in that direction.

Mr. FLOOD. I think you have made your point, both of you, quite well.

Thank you very much.

Mr. LASHMAN. Thank you so much, Mr. Chairman, we appreciate the opportunity to be here.

THURSDAY, APRIL 20, 1967.

ACCIDENT PREVENTION PROGRAMS

WITNESS

DR. A. L. CHAPMAN, DIRECTOR, BUREAU OF PLANNING, EVALUATION, AND RESEARCH OF THE PENNSYLVANIA DEPARTMENT OF HEALTH

Mr. FLOOD. Dr. Chapman.

Dr. Chapman is director of the Bureau of Planning, Evaluation, and Research of the Department of Health of the great State of Pennsylvania.

You may proceed.

Dr. CHAPMAN. I am Dr. A. L. Chapman, director of the Bureau of Planning, Evaluation, and Research of the Pennsylvania Department of Health.

However, I come before this committee today as a private citizen who has long been concerned with the development of an effective national accident prevention program.

Recently, I was privileged to serve as the chairman of a task force, composed of nationally known experts in accident prevention, to make recommendations to the Chief of the Bureau of Disease Prevention and Environmental Control of the Public Health Service concerning future injury control activities of the Service.

Mr. FLOOD. Are you speaking now of accident control and prevention for government employees, or for the public generally?

Dr. CHAPMAN. The public generally.

In commenting in its report on the size of the injury control problem the task force noted the annual toll of 107,000 deaths and 52 million injuries. It noted the permanent disability of 2 million people each year and the annual cost of accidents of well over $10 billion.

The task force also noted that in the fiscal year 1967–68 the Public Health Service will have funds sufficient to employ a staff of only 192 persons. The budget for all injury control activities, including research, will be less than $7 million.

The task force had to conclude on the basis of the total experience of its individual members that such a level of support is unrealistically low in relation to the resources the Service has been permitted to devote to the control of some diseases which cause far less morbidity and mortality.

The task force then provided a 10 point outline of activities its considered to be essential in an effective national injury control program. I have taken the liberty of abbreviating them:

1. Conduct and encourage research investigations, and studies, to identify the basic factors in accident causation.

2. Provide a mechanism for taking known and applicable facts about injury prevention down to the grassroots level—into every community across the Nation.

3. Focus injury prevention activities on specific causes such as burns, falls, drowning, poisoning, and traffic accidents so that people will understand and support the program.

4. Motivate schoolchildren to live and play safely.
5. Develop pilot studies in which promising injury control techniques can be refined.
6. Establish demonstrations in the States to show how accidental injuries can be prevented.
7. Intensify recruitment and training activities to insure a supply of competent specialists in injury prevention.
8. Produce and distribute hard-hitting educational material understandable to the man-on-the-street.
9. Provide architects, builders, manufacturers, and others with information about unsafe building and equipment design.
10. Help States and communities to formulate reasonable but effective codes, standards, ordinances that will help to insure a safer environment.

This is a formidable list of tasks that has been proposed to the Public Health Service. All of them are important. All must be done if the number of accidental injuries and deaths is to be lowered.

It is clear that the Public Health Service cannot discharge this grave responsibility with a staff of 192 persons.

To make clearer the kind of lifesaving knowledge that can and should be made available to everyone the task force listed, as examples, just a few of the tangible things that should be stressed—not in Washington, not in State capitals like Harrisburg, but in every city, town, and hamlet across the Nation:

1. Mouth-to-mouth resuscitation;
2. The value of nonflammable clothing, drapes, and bedding;
3. How to escape from a burning home;
4. The safe storage of poisons in the home;
5. The proper handling of firearms;
6. The characteristics of gasoline vapors;
7. How to prevent short-circuits;
8. The value of swimming instruction to young children;
9. The reason for always using seat belts;
10. The effect of alcohol on human performance, not only in the car but in the home;
11. The need to supervise the activities of children;
12. The safe use of power lawnmowers, and power tools.

How many of us have seen friends or relatives injured—even killed—because of a lack of safety indoctrination of this homely nature.

This is not an exhaustive list of the things people should know that would help prevent accidental deaths and injuries but it does illustrate the magnitude of the educational task that still has to be done.

That is why the task force recommending that the Public Health Service employ and train many more injury control specialists to be assigned to State and local health departments. It is in the States and particularly in communities that this type of knowledge can be most readily and successfully gotten across to people—often on a face-to-face basis—to the very people who have accidents.

The task force rightfully emphasized the many things that are known about the control of accidental injuries—things which if commonly known and widely applied could dramatically reduce the num-

ber of injuries. At the same time it stressed the need for an expanded research program.

Much is known about how, when, and where accidents occur but little, much too little, is still known about the basic underlying causes of accidents. Very few hard facts have as yet been developed about the role that people themselves play in precipitating accidents.

Until the basic causes of accidents are better identified and described through research, injury control as a goal can only be partially achieved. This search for the basic causes of accidents will be as arduous, as costly, and as time consuming, but just as rewarding in the end, as the search for the basic causes of cancer and other types of malignancy.

May I quote briefly from a report entitled "Accidental Death and Disability—The Neglected Disease of Modern Society." It was prepared by the Committee on Trauma and the Committee on Shock, National Academy of Sciences, National Research Council. The paragraph I will read is captioned "Current Status of Research Support," and I quote:

> Research in trauma has suffered from the lack of recognition of trauma as a major public health problem. * * * An analysis in 1965 identified only five million dollars in support of research related to trauma by six of the Institutes of the National Institutes of Health and other bureaus of the United States Public Health Service. National expenditures for all medical research in 1964 were estimated to be $1,675,000,000 of which $1,134,000,000 was from government, 395 million from industry, and 146 million from private sources.
>
> On the basis of these vast sums, it is estimated that the current research expenditures by the National Institutes of Health and the Division of Chronic Diseases of the United States Public Health Service for fiscal year 1963 was 50 cents for each of the 10 million persons disabled by accidental injury, $220 for each of the estimated 540,000 cancer cases, and $76 for each of the estimated 1,420,000 cardiovascular cases. The 1966 federal budgets for research on cancer and cardiovascular diseases alone are estimated to be in excess of 280 million dollars.

Commenting on this lack of support for research in injury control, the report goes on:

> The most obvious reason for current lack of emphasis on the kinds of research required and the ways and means of utilizing knowledge we already have is that there is no unified mechanism, Federal or non-Federal, to present the full picture of needs, to identify and encourage necessary research, to enlist financial support, to serve as a clearinghouse for information, or to offer advice and consultation.

In other words, there is a tremendous void in injury control at the national level. This the Public Health Service is well qualified to fill—if and when it finally receives the financial support needed to implement a truly comprehensive national injury control program.

There is now being developed in the Public Health Service a proposal to create a Public Health Service Trauma Center. If approved and funded, this Center would provide the instrumentality alluded to in the report of the National Research Council. Such a Center is long overdue.

Time does not permit a detailed description of the magnitude of resources recommended for the injury control program by the task force.

But, referring again to the report of the task force, the following statement is meaningful:

> The task force believes that Public Health Service funding for injury control has been unduly low both in relation to the size of the problem and the benefits

which could be anticipated from the application of control measures already known to be effective. It recommends that the Public Health Service request funds and personnel for injury control activities at a level realistically related to the human and economic losses resulting from accidental injuries, and to the scope of a program required to make a significant impact.

The task force recommended a rapid buildup in support of the injury control program from its present level of $2,874,000 to a level of $60 million by fiscal year 1978.

It is recommended that for the next fiscal year the budget of the injury control program be doubled and that the buildup in resources be stepped up in succeeding years at a pace that will permit the long-range support goal of $60 million to be achieved as quickly as staff can be recruited, trained, and assigned.

The accident death rate in the United States last year reached unprecedented heights—57 deaths per 100,000 population. This was 4 percent above the 1965 level and 13 percent above the rate for 1961, and the end of this upward trend is not in sight.

In my opinion there is no other major area of public health endeavor where so much can be accomplished, in such a short period of time, for the expenditure of a given sum of money.

That concludes, sir, my brief presentation.

Mr. FLOOD. Mr. Natcher?

Mr. NATCHER. No questions.

Mr. FLOOD. Mr. Casey?

Mr. CASEY. No questions.

Mr. FLOOD. Thank you, Doctor.

THURSDAY, APRIL 20, 1967.

HEART DISEASE RESEARCH AND CONTROL PROGRAM

WITNESSES

DR. LEWIS E. JANUARY, PROFESSOR OF MEDICINE, UNIVERSITY OF IOWA, AND PRESIDENT, AMERICAN HEART ASSOCIATION

DR. JESSE EDWARDS, PROFESSOR OF PATHOLOGY, UNIVERSITY OF MINNESOTA, AND PRESIDENT-ELECT, AMERICAN HEART ASSOCIATION

DR. JAMES V. WARREN, PROFESSOR AND CHAIRMAN, DEPARTMENT OF MEDICINE, OHIO STATE UNIVERSITY; FORMER PRESIDENT, AMERICAN HEART ASSOCIATION; AND CHAIRMAN, LEGISLATIVE ADVISORY COMMITTEE

DR. CAMPBELL MOSES, DIRECTOR OF POSTGRADUATE MEDICINE, UNIVERSITY OF PITTSBURGH, AND MEDICAL DIRECTOR, AMERICAN HEART ASSOCIATION

Mr. FLOOD. We will now have Dr. James Warren, chairman of the Legislative Advisory Committee of the American Heart Association, and his associates. If I understand correctly, Dr. January will be the principal spokesman. You may proceed, Doctor.

Dr. JANUARY. Mr. Chairman and gentlemen, I am Dr. Lewis E. January, professor of medicine at the University of Iowa and presi-

dent of the American Heart Association. With me are Dr. Jesse E. Edwards, professor of pathology at the University of Minnesota and president-elect of the American Heart Association; Dr. James V. Warren, professor and chairman of the department of medicine at Ohio State University, a former president of the American Heart Association and chairman of our legislative advisory committee; and Dr. Campbell Moses, director of postgraduate medicine at the University of Pittsburgh and medical director of the American Heart Association.

We are here to testify in regard to the proposed 1968 budget for the National Heart Institute and the heart disease control program of the National Center for Chronic Disease Control of the U.S. Public Health Service.

Before speaking to these specific budgetary requests, I should indicate that the American Heart Association is firmly committed to the proposition that the adequate support of basic research is the key to the conquest of the several cardiovascular diseases.

We recognize the trends toward directed and contract research along mission-oriented lines. In effect, these are efforts for buying a desired result and admittedly there are numerous problems in cardiovascular disease which can profitably be attacked in this way. Also, there is a trend toward Federal support of block or institutional grants to underwrite research. We do not decry these various trends; there is a place for all of them.

Even so, the fundamental discoveries which will lead the way to the prevention and control of the serious cardiovascular diseases almost certainly will result from basic research.

Let me emphasize to you here the urgency of the cardiovascular diseases among the health problems which confront our country.

In 1965, nearly 1 million Americans died from some form of cardiovascular diseases. The best estimates indicate that in the United States, 14.6 million people have some form of heart disease. Very importantly, of these, 3 million now have symptoms of coronary heart disease and there are uncounted hundreds of thousands in whom it has not yet been diagnosed as a result, in 1965 alone, 556,000 people in this country died from heart attacks and 203,000 died from stroke due to disease of the arteries of the brain. It has been estimated that the total annual cost, including death, disability, and treatment of cardiovascular disease approximates $25 billion.

Mr. FLOOD. What is a coronary heart attack?

Dr. JANUARY. The coronary arteries supply the blood to the heart itself and a heart attack means that the blood supply through one of these arteries has been suddenly cut off.

Mr. FLOOD. The artery has been diminished?

Dr. JANUARY. Usually blocked. This is what we determine medically by myocardial infarction.

Viewed against this background, the 1968 fiscal year appropriation request from the National Heart Institute of less than $168 million seems a small investment aimed at reducing death and disability from cardiovascular disease.

Does research pay off? In 1952, when the National Heart Institute appropriation was just over $10 million per year, the death rate from hypertensive heart disease (high blood pressure) was just under 54

per 100,000 population. Thirteen years later, in 1965, when the Heart Institute appropriation was nearly 125 million, the death rate from high blood pressure had been cut almost in half (28.3 per 100,000). The research development of effective treatment for many forms of high blood pressure had been in large measure responsible for this improvement.

Research has produced new lifesaving techniques in other types of heart and blood vessel diseases as well. These are new, more sensitive, more revealing diagnostic tools. As a result, we have in this country been able to effect a reduction in the death rates from many of the cardiovascular diseases. Hypertensive heart disease and rheumatic heart disease, the latter at one time childhood's worst health enemy. These are notable examples.

However, we have not yet succeeded in reducing the death rate from arteriosclerotic heart disease—which is heart attack or coronary heart disease. In fact, it continues to rise. At all ages, it has increased by 11.1 percent between 1955 and 1965. Part of this, of course, is accounted for by the fact that more people are living longer and into the advanced ages in which heart disease takes its greatest toll. This is understandable, and no one certainly decries an increasing longevity. What we cannot condone, however, in this age of scientific potential, is the unchecked and unreversed portion of the heart disease death rate that affects men and women in the most productive periods of their lives, the years in which we depend upon them for the greatness of our Nation. These are men and women in the age groups of 45 to 55, and 55 to 65. In each of these age decades, the heart disease death rate is 5 percent higher than in 1955, and still climbing.

The research progress I have alluded to has been supported by many groups along with the National Heart Institute, including the American Heart Association and the pharmaceutical industry, among others. The important point is that research has improved our ability to cope with some types of cardiovascular disease. Continued support can be expected to produce additional benefits.

We understand that the 1968 National Heart Institute appropriations request is for $167,954,000. This is only 3 percent more than over the 1967 request. This miniscule increase, which doesn't even match the increasing annual cost of research, will mean that in 1968, less research will be supported than in 1967. In 1967 there were 90 approved research grants which the National Heart Institute could not fund. We predict that this figure will rise significantly in 1968.

We predict this will rise significantly in 1968. In our estimate, the 1968 National Heart Institute budget request is an absolute minimum asking. I would comment on only three programs which cannot go forward on any less money. Much more is indicated.

One is the cooperative drug study for which the National Heart Institute has requested an appropriation of $3,820,000 for 1968 and similar amounts will be needed for another 5 to 10 years. In this study, four drugs that are known to lower the serum cholesterol and some of the other fats of the blood will be given to a group of people between the ages of 35 and 60 who have suffered one heart attack. About 55 clinics and a total of 8,500 individuals will cooperate in this study and continue to take these preparations for 5 to 10 years.

This large number of people and this amount of time are needed to obtain statistically reliable data since the criterion for drug effect is going to be a change in death rate or a reduction in the recurrence rate of heart attack in these subjects on the various drug programs.

Secondly, the myocardial infarction study facilities—and I have just explained to you what I mean by myocardial infarction—of which only from four to six will be established in 1968, are included in the budget as part of the artificial heart study item because some patients with an acute heart attack (myocardial infarction) may temporarily require mechanical assistance to maintain their circulation. These centers will study in great detail the events taking place immediately following a heart attack. The goal will be to reduce the 25 percent mortality occurring in the first 24 to 48 hours after the onset of a heart attack.

Mr. FLOOD. What centers?

Dr. JANUARY. The myocardial infarction centers that are proposed to be established next year.

Mr. FLOOD. How does this conflict with the proposed heart, cancer, and stroke centers?

Dr. JANUARY. It has no relationship whatsoever, sir.

These are demonstration research facilities—a few of them, four to six—that are proposed to be set up to study this particular problem which has never been adequately looked into. And as I say, there is a 25 percent mortality.

Mr. FLOOD. Is there a duplication?

Dr. WARREN. May I comment?

I do not believe so, sir. The Heart, Cancer, Stroke Centers are by and large facilities to utilize new research, pass it along to the practicing physicians, and train new people. What Dr. January is talking about here are centers of basic research related to the underlying problem. They would work closely together, but they are not really related.

Dr. JANUARY. I would indicate for you the great urgency for these centers. When a preliminary session to discuss the possibility of these centers was announced, 160 representatives from medical schools and hospitals came to a meeting in Washington at their own expense. Within a few weeks, 46 applications for establishing these centers were received by the National Heart Institute. Despite this interest, at least for the first year, a relatively small number of centers to carry on pilot studies and develop appropriate instrumentation is all the National Heart Institute is recommending.

Mr. FLOOD. Of what would a center consist? What would they look like and where would they be?

Dr. WARREN. I think these centers are really research rather than treatment centers.

Mr. FLOOD. Where will they be?

Dr. WARREN. They will be primarily at the university medical centers. There will only be a small number of them established, but they will be centers where patients will have very special studies and testing as part of a research program.

I would point out today if you or I go to a hospital with a myocardial infarction, our statistical chances are 1 out of 3 or 1 out of 4 that we are going to die in the first 2 weeks. There is early evidence to indi-

cate by the application of newer principles this could be perhaps halved. This is the tantalizing goal.

Dr. JANUARY. Third, you will note an increase of $1 million requested for the blood use program. This effort, designed to develop the use, with maximum efficiency, of our vital resource, "human blood," was implemented by the Congress last year. It is most important to continue this work in the coming year. Even in the absence of a national emergency, human blood is in short supply and we must exert every effort to insure its efficient use.

Having followed the scientific career of the new Director of the National Heart Institute, Dr. Donald S. Fredrickson, with great interest for many years, I want to assure you of the wisdom of his selection for this position. He is an outstanding scientist and administrator, perceptive and sensitive in his understanding of people and highly articulate in simplifying complicated scientific information for all of us. In October of this year Dr. Fredrickson was to assume the chairmanship of the Council of Arteriosclerosis of the American Heart Association. We hated to lose him to the directorship of the National Heart Institute but it could not have been to a more important assignment.

The American Heart Association has a similar concern for the heart disease control program of the National Center for Chronic Disease Control. The 1968 request of this unit is for $7.3 million, an amount similar to the 1967 budget after the Senate added $1 million to their original request to permit the development of additional facilities for training personnel in the care of coronary disease patient; similar to the discussion you have had with Dr. Warren.

We question if their request this year is enough to meet present needs. Additional support in the amount of $1 million could permit extension of some literally lifesaving activities in 1968. For example, it has been clearly established that specialized facilities in large hospitals for the monitoring and care of patients after an acute heart attack have been lifesaving. The great majority of people in this country depend for hospitalization on institutions which have less than 100 admissions per year for suspected or proven myocardial infarction. As a result, few if any of these smaller institutions are prepared to provide this new lifesaving care to heart attack patients. Provision of additional funds would permit exploratory efforts in extending these facilities to smaller hospitals, thus providing these lifesaving facilities to people in smaller communities and rural hospitals.

Also, in spite of the substantial gains I have indicated in reducing high blood pressure, some community surveys have indicated that perhaps 50 percent of people with hypertension are unaware of it and obviously they are not receiving adequate treatment. The extension of the community hypertension and stroke control program of the heart disease control program would permit expansion of these community detection programs for the control of hypertension.

Mr. FLOOD. Why is that not like the heart, cancer and stroke program?

This is not basic research, this is application. This is out in the field at the hospital level dealing directly with the affected patient. Why is this not the heart, cancer and stroke program?

How could this be different?

Dr. JANUARY. The heart, cancer, and stroke program, sir, is only right now in the planning stage.

Mr. FLOOD. Is this better?

Dr. JANUARY. This is going much beyond that. This is operating if given the opportunity.

Mr. LAIRD. That is not quite the case.

I think the chairman is correct in his remarks about the application of the program.

Dr. WARREN. I said this before you came into the room, but I think the heart, cancer, and stroke program is primarily a program of education at various post-M.D. levels.

Mr. LAIRD. I hope it is not.

Mr. FLOOD. If that is all it is——

Mr. LAIRD. We had better forget it.

Mr. FLOOD. On this I could not possibly agree with you less, Doctor.

Dr. WARREN. The division here is between making the discovery, finding out what should be done. That is primarily the mission of the National Institutes of Health research program, and then taking these discoveries——

Mr. FLOOD. We have no quarrel with the doctor's statement on basic research. He has made that clear and I agree with him completely. But he left basic research about 2 minutes ago. He is now in the heart, cancer, and stroke program in the regions, back in the provinces.

Mr. LAIRD. Applying this information.

Dr. WARREN. The heart disease control program is in part this in-between area.

Mr. FLOOD. There can be no in-between area.

Dr. JANUARY. I am afraid there is, sir, in this particular program.

Mr. FLOOD. You are applying what you know?

Dr. JANUARY. We are trying to.

Mr. FLOOD. You are trying to apply what you know to the rural hospitals. The heart, cancer, and stroke program is going to try and do the same thing.

Dr. JANUARY. They are going to try and make them operate. The Heart Disease Control Branch is trying to set up a few training areas to supply the people, to look into the type of equipment that might be desirable. This information will then certainly be taken by the heart disease, cancer, and stroke regional program.

Mr. FLOOD. Suppose the regional medical proposal is executed. Based upon a regional mother hen say in Philadelphia, the great medical and institutional complex in Philadelphia—that is the mother hen, and mother hen reaches out for 150 miles all around her and does what you say should be done. Her chicks in this area are the town and small city medical facilities.

What is the difference?

Dr. JANUARY. Indeed I think this is the very great hope of the regional medical program. This is not an operative program that we are talking about.

Dr. MOSES. It is not at all in conflict. It is to implement a first faltering step that the regional medical program is hopefully going to carry forward.

We are talking here about a small amount of programs which are not in conflict, a demonstration of what the regional medical program will ultimately provide.

Mr. FLOOD. It will have to be. We are not going to have a proliferation of heart programs.

Dr. MOSES. This is the first initial step of what hopefully will all be encompassed under the regional medical program.

Mr. FLOOD. I hope you get your hope.

Mr. LAIRD. They can carry on in the heart, cancer, and stroke program the demonstration activity you are talking about right now.

Dr. MOSES. That is right.

Mr. LAIRD. That is the only thing they have asked for. They say they are not advanced enough to go beyond demonstration. They can do exactly what you are talking about.

Dr. MOSES. They have four funded now. This is just a small step. I do not think they are in conflict, they are working very closely together. I think the next paragraph will show one of the areas where this relationship is very important.

Dr. EDWARDS. This might change after the regional medical program becomes more general. This is an immediate need.

Mr. FLOOD. Just so we are all talking about the same thing.

Dr. JANUARY. I think we are. I really do not believe there is any conflict.

The more effective use of medical manpower is one of the most important problems present in this country today. The development of automatic data processing of electrocardiograms is an important project that has only minimum support in the current heart disease control budget. Additional funds would enable the development of techniques and computer facilities to permit more accurate and efficient handling of electrocardiographic diagnostic problems. The whole problem of the application of computers and data processing to medicine is somewhat static in this program.

In conclusion, I wish to assure you that the private support of cardiovascular research continues to increase. The American Heart Association provides the majority of the private funds available for this purpose in this country and the voluntary giving of Americans has enabled us to steadily expand our research program. We mean to continue to increase our support of men and ideas. We believe that at this point in our Nation's history, when 54 out of every 100 deaths are due to cardiovascular disease, it is imperative that we find ways of providing the greatest possible public and private support to control the Nation's No. 1 public health problem. Frankly, we are alarmed over the prospect of the increasing numbers of approved but unfunded grants which will result from this budget. This means that vital research will not be done.

Mr. FLOOD. Thank you very much, Doctor.

Of course, as you know, this is one subcommittee where you have no burden of proof; you do not have to sell this subcommittee your premise.

Dr. JANUARY. We know that.

Mr. FLOOD. There are various other problems which complicate these things. These I think you are aware of. I am sure you read the election

returns. These things all contribute to these problems. But you know you are in a very friendly court.

Dr. JANUARY. We are happy to know that.

Dr. WARREN. It may be of some historical interest I think, 2 years ago when I prepared this similar testimony for the late Mr. Fogarty, it was our recommendation at that time that the heart disease control program, which was the controversial area here, be transferred to the National Institutes of Health just to avoid duplication.

I personally think this is still a valid thing.

Mr. FLOOD. I agree with that. We are all trying to do exactly the same thing. You are the technician and we hope we are in a position to help. There are other problems.

Thank you very much, Doctors.

THURSDAY, APRIL 20, 1967.

REGIONALIZATION OF OFFICE OF EDUCATION

WITNESS

EDGAR FULLER, EXECUTIVE SECRETARY, COUNCIL OF CHIEF STATE SCHOOL OFFICERS

Mr. FLOOD. We now have Mr. Edgar Fuller, who is the executive secretary of the Council of Chief State School Officers.

Do you have anybody with you that you would like to introduce, Mr. Fuller?

Mr. FULLER. No, I do not.

Mr. FLOOD. I see that you have a statement, Mr. Fuller.

Mr. FULLER. I have a short statement with a little attachment on the back of it.

Mr. FLOOD. Proceed as you see fit.

Mr. FULLER. All right. I will read the four pages double spaced, if you don't mind, and be ready for questions.

Mr. Chairman and members of the committee, my name is Edgar Fuller. I am executive secretary of the Council of Chief State School Officers. Superintendent Rackley is the council member in Pennsylvania.

Mr. FLOOD. He is rather temporary. He is going back to Penn State.

Mr. FULLER. The council is composed of the State superintendents or commissioners of each of the 50 States and the chief school officers of Puerto Rico, Virgin Islands, Canal Zone, Guam, American Samoa and the Trust Territory of the Pacific Islands. These State educational officials have major administrative responsibilities for State and Federal-State programs of education. I appreciate very much the opportunity to appear here today.

Mr. Chairman, I would like to make it entirely clear that the Chief State School Officers and their office here in Washington cooperate fully with the U.S. Office of Education to make Federal educational laws as effective as possible. We work together on a personal and friendly basis. When we have differences they are usually on issues of

policy and administration between State and local school systems on the one hand and the Federal Government on the other.

Today I want to stress two situations important for State and local freedom in education. They involve leaving to State and local educational authorities the professional decisions that need to be made at or near the place where teaching occurs in the schools. We want to limit Federal controls to fiscal accounting and to such reporting as may be required to show that the broad objectives of the Federal laws and reasonable Federal regulations under the authority of those laws have been met.

U.S. OFFICE OF EDUCATION REGIONAL OFFICES

We respectfully request that you add limiting language to prevent the use of Federal funds from the fiscal 1968 U.S. Office of Education budget for increases in Federal educational personnel in regional offices of the U.S. Office of Education. The State and local legal agencies for education, the State and local professional and administrative personnel responsible for State and local school systems, and the principal nationwide organization of citizens especially interested in education do not favor expansion of these regional educational offices. A statement was addressed to the President and the Congress on January 18, 1967, after a legislative conference of national organizations[1] as follows:

> We oppose expansion of the regional offices of the U.S. Office of Education and recommend that wherever possible educational functions and authority be vested in the state departments of education.

We believe that the history of Federal educational administration from regional offices is one of delaying and confusing middlemen between Chief State School Officers on the one hand and the U.S. Commissioner of Education on the other. We do not believe it is possible for nine U.S. Assistant Commissioners of Education in nine widely separated Federal regional offices to make final and binding decisions under a single set of Federal regulations without causing long periods of intercommunication among Federal officials which deter State and local action. We also believe that decisions at the general level appropriate for the Federal agency to make can be made for the entire country, and that variations within States should be developed in State plans.

The personnel proposed for the new U.S. Assistant Commissioner positions at the present time are being chosen carefully. They probably will assert Federal authority moderately for a time, but it is in the nature of regional offices, after the first generation of officials have gone, to taken on the character of large bureaucratic government. American educators and legal authorities generally do not want and do not need this additional Federal layer of educational government. We ask you to help us minimize its establishment at the grassroots of American education.

The administration's 1967 proposed amendments for title V raise serious questions about the declared national policy of strengthening

[1] American Association of School Administrators, Council of Chief State School Officers, National Association of State Boards of Education, National Congress of Parents and Teachers, National Education Association, and the National School Boards Association.

State departments of education. Some of these proposals may weaken State and local administration of education.

Mr. Chairman, the State educational agencies need the full appropriations authorized under the current law to strengthen State departments of education, not merely the $22 million the administration has requested for fiscal 1968. They do not need the new part B. They can do any planning and evaluating under the current law that they can do under the proposed part B, which would authorize $15 million for its own strictly defined Federal purposes. The purposes of part B are clearly to bring federally enforced uniformity among the State planning and reporting systems through Federal controls under part B and regulations to be added under its authority.

As the appropriations proposals stand before your committee, Mr. Chairman, there is another insistent Federal control attached. Only 70 percent of the total appropriation under title V can be used for the current law (part A) and only 30 percent of the total appropriations under title V can be used for new part B. The proposed transfers from title III and title X of the National Defense Education Act to title V would leave the NDEA programs federally unfunded and also subject the transferred amounts to the 15 percent Federal "set-aside."

This is in effect under the current title V law, but part B funds would be subjected to a 25-percent Federal "set aside." These proposals would decrease the amounts the State educational agencies would otherwise receive and increase the funds for direct Federal use.

The chief State school officers have expressed themselves forcefully on part B. Among the 35 who have thus far answered a recent inquiry on whether they prefer the provisions of new part B or whether they favor the current title V, section 503 (a) (1), (2), (3), and (4) as the basis for their State planning and evaluation, only three favor the new part B, 31 favor the current law, and one is noncommital.

If the other returns came in, I dare say the proportion would remain approximately as it is among those who have replied.

The five witnesses for the Council of Chief State School Officers who spent the day of March 5, 1967, testifying before the House Education and Labor Committee opposed part B and asked that the $15 million proposed for it be appropriated instead to the current title V.

This really strengthens State departments of education.

This is the view of a large majority of the State superintendents and commissioners.

Mr. Chairman, the Appropriations Committee and the Congress can contribute greatly to State and local school systems by defining Federal educational expenditures to discourage Federal controls over local schools. I respectfully request your careful consideration of personnel limitations or funds for additional personnel to curtail development of regional offices of the Office of Education. I also hope you will preserve State and local autonomy in planning and evaluating the result of education in funding title V of the Elementary and Secondary Education Act of 1965. I shall be glad to reply to questions you may have.

Thank you very much. I appreciate very much having been here, Mr. Chairman.

I would like to ask that these attachments be made a part of the record. They include a foreword on the groundrules of the legislative conference I refer to, and the report of that conference.

Mr. FLOOD. Without objection, we will have these inserted in the record.

(The information follows:)

FOREWORD TO REPORT—LEGISLATIVE CONFERENCE OF NATIONAL ORGANIZATIONS, WASHINGTON, D.C., JANUARY 16–18, 1967

Organizations

Delegations of four persons designated by each of the following organizations:

1. American Association of School Administrators
2. Council of Chief State School Officers
3. National Association of State Boards of Education
4. National Congress of Parents and Teachers
5. National Education Association
6. National School Boards Association

Ground rules

1. Each organization was responsible for three priority items.
2. All positions adopted were required to be within the policies of all six organizations; otherwise, they were not considered.
3. Each of the organizations will sponsor its own educational program, in addition to its support of the joint statement.
4. Each organization will support the joint program in its own way.

Results

Eighteen topics were suggested. Three were dropped for policy reasons expressed by one or more delegations during the discussions. Two new items were added to the agenda and approved. The statements on the seventeen items are not necessarily listed in order of importance in the Report that follows.

It was presented to White House, Health, Education, and Welfare, U.S. Office of Education and Bureau of the Budget officials at the White House on January 18, 1967 by a committee of six persons representing the six organizations.

PROPOSALS ON EDUCATIONAL LEGISLATION

(Recommended for Consideration by the President and the Congress in 1967 by a Legislative Conference of National Organizations.)

A legislative conference of national organizations, representing the following groups: American Association of School Administrators, Council of Chief State School Officers, National Association of State Boards of Education, National Congress of Parents and Teachers, National Education Association, National School Boards Association, met in Washington, D.C., on January 16–17, 1967. The Conference considered a comprehensive agenda of items relating to federal policy and legislation, developments in the administration of various federally related school programs, and the needs and problems reported from school systems throughout the country. As a result of its deliberations the Conference unanimously makes the following recommendations for the consideration of the President and the Congress.

1. Timing of Federal authorizations, appropriations, regulations, allocations, payments and reports

One of the most crucial problems resulting from the increased participation of the federal government in the financing of education is the incompatibility of the legislative year and the school year as it affects planning and financing of school programs. The problem results primarily from the fact that federal funds become available beyond the time when planning for their use can be effective.

We propose that Congress study this problem and recommend a solution which would provide local school districts with the information on available funds at a time when they can use it most effectively.

2. Amendments to title V of the Elementary and Secondary Education Act of 1965—Grants to strengthen State departments of education

We recommend amendment of the present formula for the allocation of all federal funds to the states under Section 502 to provide for distribution of 40% on a flat grant basis and 60% on a relative pupil population basis.

3. Transfer of Head Start to the Office of Education

We recommend the transfer of the Head Start program from the Office of Economic Opportunity to the Office of Education, retaining the elements of the program which emphasize health, social services, parent education, and parent participation.

4. Educational television

The Ford Foundation proposed to the Federal Communications Commission in August, 1966 that the use of domestic satellites could provide more television channels than now are available for commercial use at considerably less cost, with other channels available for educational and instructional television, and proposed further that the savings to commercial stations be set aside for operation and programming of non-commercial television in the public interest. Since then, proposals have been made by other individuals and organizations.

We support in principle the objectives of a domestic satellite system which could provide more television channels for educational use. We further recommend the extension of the ETV Facilities Act during the current session of Congress.

5. Judicial review

We support the passage of Senate Bill 3 of 1967, to provide effective procedures for the enforcement of the establishment and free exercise clauses of the First Amendment to the Constitution.

6. Amendments to Teacher Corps law

We recommend that the National Teacher Corps be continued as a pilot program for a period of three (3) years with an appropriation level of approximately:

a. $10 million for the fiscal year ending June 30, 1968;
b. $20 million for the fiscal year ending June 30, 1969;
c. $30 million for the fiscal year ending June 30, 1970.

We further recommend that the National Teacher Corp Act be amended to:

a. Provide for the allocation of funds through state departments of education, and for state approval of Corps members and their training;

b. Provide grant authority for contracts with local school districts and universities for a two-year period of service;

c. Set the compensation for teacher-internes at the prevailing rate for graduate students of $75 per week plus $15 per week for each dependent;

d. Provide that initiative for project proposals shall rest with the local school districts and cooperating institutions of higher education with approval of the state department of education.

7. Federal funds for large city educational planning

We recommend that substantial earmarked funds be provided through Title V of the Elementary and Secondary Education Act of 1965 or some other appropriate channel to the state educational agencies for comprehensive planning for the provision of quality education in metropolitan areas including cities of 100,000 or more.

8. Amendments to title III of the Elementary and Secondary Education Act—Supplementary educational centers

We recommend amendments to Title III of the Elementary and Secondary Education Act to provide that local project applications and proposals for supplementary centers shall be subject to final approval by the state departments of education under provisions of state plans, with the exception that approximately 15% of federal funds available shall be "set aside" for projects to be approved by the United States Commissioner of Education.

9. General Federal support of public education

We recommend federal participation in the financing of public education through substantial general support, with minimum limitations on its use, rather than through fragmentary categorical grants.

10. Federal financing of overseas dependent schools

We recommend the financing of overseas dependent schools at a level which will provide a quality of education equal to that of the better schools in the United States.

11. Manpower Development and Training Act

We recommend that the administration of the Manpower Development and Training programs be transferred from thre Department of Labor to the Department of Health, Education, and Welfare.

12. Proposals regarding the Adult Education Act of 1966

We recommend the following legislative action:

1. A supplemental appropriation to provide financing at the maximum level authorized for the current fiscal year.

2. An appropriation at the maximum level authorized for adult basic education in Fiscal 1968, and such funds in fiscal years thereafter as Congress may authorize.

3. Establish a consistent definition of "adult basic education" to be used throughout the Act and fix the minimum age of eligibility at sixteen years.

13. Proposals regarding Child Nutrition Act of 1966

We recommend the full funding of programs under the Child Nutrition Act and the appropriation of additional funds for state administration of programs under this Act.

14. Amendments to the National Defense Education Act

We recommend that Titles III and XI of the National Defense Education Act be amended to include health education and physical education.

15. Federal financing of school construction

We recommend the inclusion of substantial capital outlay funds for public school buildings under Title I of the Elementary and Secondary Education Act or some other appropriate channel.

16. Tax credits for education

We recommend the extension of scholarship funds for higher education and oppose enactment of legislation to allow tax credits for school or college tuition and/or expenses.

We oppose expansion of the regional offices of the U.S. Office of Education and recommend that wherever possible educational functions and authority be vested in state departments of education.

CONFERENCE PARTICIPANTS

American Association of School Administrators:

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M. F. Peterson, President-elect; State Superintendent of Public Instruction, Bismarck, North Dakota.

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Mr. FLOOD. Mr. Hull?

Mr. HULL. How many of these regional offices do they have?

Mr. FULLER. These are nine regional offices in the HEW, Health, Education, and Welfare regional offices.

Mr. HULL. How many people do they have in the regional offices?

Mr. FULLER. I don't know exactly how many are assigned to the regional offices, nor do I know the numbers that are there in the Office of Education branch. I do know that the request for additional personnel in the offices approaches 400 persons. It is between 350 and 400, as I recall.

Mr. HULL. Would the schools' problems go through these regional offices and from the regional offices come back here? How would it work?

Mr. FULLER. The way this would work would be that small grants and the supervision of grants in the field would be delegated to the Assistant Commissioner of Education in each of the regional offices to make it possible for them, under the theory that this is being done, to make decisions there without coming to Washington. This has long been a desire of the people in the Office of Education.

In 1961, Secretary Flemming issued an order decentralizing the Office of Education to some extent and for a dozen years or more before that the chief State school officers had opposed the suggestion that this decentralization be made. The reason is that our experience with regional offices in the field of education—that is, concerned with State departments of education—is that you cannot get prompt action, you cannot get satisfactory action by having one set of regulations in Washington and then having nine interpretations of them in the field.

Mr. HULL. In other words, they wouldn't have the last say on whatever might come up before them?

Mr. FULLER. They promise that they would have the final say on certain classes of grants, and on other matters we say it would be impossible for them to have the final say. For one reason, appeal from their decisions to the Commissioner would always be in order. Usually it would occur whenever the State or local educators were dissatisfied.

The experience with the Manpower Training and Development Act, and with other acts administered in the regions that we have had in

State departments of education, is that they constitute communication roadblocks. It is a difficult thing to put decisionmaking Federal agencies between the U.S. Commissioner of Education and the chief State school officers of each State. They do not want it. They do not want it done. They have made it clear for almost two decades that they did not want this done, but it has been done now by order by two HEW Secretaries.

The first time its effect was minimized because of the opposition of the chief State school officers and others. The six organizations considered this in January. The representatives of these six organizations, which are the legal authorities at the State level and the local level and the professional authorities at the State level and the local level, together with the 13-million-member Congress of Parents & Teachers, all agreed.

Their point No. 17 is just at the top of the last page of their report where the list of the delegates who attended the conference are printed. They were very much opposed to USOE regional expansion. Commissioner Howe was quite surprised when six of us representing these six organizations presented this point to Presidential Assistant Douglas Cater, Mr. Howe, Mr. Elliott, of the Bureau of the Budget, and Assistant Secretary Ralph Huitt and his deputy, Sam Halperin, at the White House on January 18.

They thought we must be mistaken, that we must not understand it. So Commissioner Howe set up a meeting and called in the presidents and secretaries of the six organizations. We met just a few weeks later.

We spent 2½ or 3 hours in the Office of Education. We listened to all the reasons given by the top officials there. We saw the charts and then we went back to our office building and held another meeting, following this discussion with the Office of Education. The sentiment expressed there, I believe by all six—I know by five organizations—was that seeing the charts and having them trace through the way this would actually work made us more convinced than ever that we were right in the first place.

We were going to redouble our efforts to prevent this sort of thing from taking place in American education, at least at the elementary and secondary levels. We telephoned to Commissioner Howe, and informed him how we felt, especially after seeing the charts about the way it would work. There were so many solid lines of authority at low levels in the field that we felt it would be a very damaging thing to efficient operation of Federal, State and local relationships.

Mr. FLOOD. Did the Labor and Education Committee of the House ever act on this problem?

Mr. FULLER. They have put this title B into the current law.

Mr. FLOOD. That was done by the Labor and Education Committee?

Mr. FULLER. It was.

Mr. FLOOD. Was it acted on by Congress?

Mr. FULLER. It was by the committee and is in rules now.

Mr. FLOOD. That is the legislative authority?

Mr. FULLER. The legislative authority is there and——

Mr. FLOOD. The committee has reported out the bill, including section B?

Mr. FULLER. Right.

Mr. FLOOD. The Congress or the House has not yet acted?

Mr. FULLER. Right. That is correct.

Mr. FLOOD. Mr. Casey?

Mr. CASEY. Thank you.

I was quite interested in the other recommendations that you have attached to your statement. That is, the recommendations made by the organizations. Was there pretty much agreement on the recommendations concerning the Teacher Corps?

Mr. FULLER. There were some differences of opinion there, and the conclusions reached in this report represent a sort of compromise, a little give and take on the Teacher Corps. I might add, too, that the administration, at the time this report was presented to them on January 18, had not formulated their entire legislative program. They had not planned, as I understand it from Mr. Graham and others, to change it very much from the way it had operated last year. Some of these requirements for organizational support were added when it was transferred to title I of ESEA. At least two of these have been. The one under A, calling for the allocation of funds through State departments was not added, but the projects for the Teacher Corps at the local level under agreements between the Teacher Corps and the local school systems must now be approved by the State educational agency.

We did not get a number of other things we wanted. We did say that the expense allowances for corpsmen, which in some local districts had been more than the district paid its own fully qualified full-time teachers, ought to be brought down to the graduate school level of $75 a week, or whatever it is.

Mr. FLOOD. What is the proposal now?

Mr. FULLER. What it recommends now is substantially the same as the compensation for teacher interns at the prevailing rates for graduate students, $75 per week, plus $15 per week for each dependent. They did concede that and put it in.

As I understand it, the House Education and Labor Committee has divided the Teacher Corps between two subcommittees. Mrs. Green's Subcommittee on Higher Education is going to handle the provisions for the training of corpsmen. That training and the curriculum for the training was prescribed by the Federal officials previously. I do not know what kind of amendment is going to be proposed now in regard to it. Some of the conditions have been met that were mentioned by the six organization reports.

Mr. CASEY. The other one that interested me particularly—and I am interested in all of your recommendations—but one other that I wanted to have you enlarge on a little was your No. 9, concerning the recommendation that the Federal participation should be through general support, rather than through fragmentary categorical grants. In other words, you would see a tendency for, say, the Congress to try to pick out various areas, or if they think some one wheel squeaks the loudest, shoot the grease there and ignore the whole wagon, so to speak?

Mr. FULLER. A squeaking wheel usually gets the grease. I am glad to comment on that, especially when you have the problem of the timing of the authorizations, appropriations, regulations, calculations,

allotments, payments, and reporting. It takes about 6 or 8 months to get through the Congress the requirements that a school district must meet and a State department must plan for with definite funds available. The bill last year amending ESEA was signed by the President on November 3.

Mr. FLOOD. So far as appropriations are concerned, this committee reported out the Labor-HEW bill in April last year and the House passed it very early in May.

Mr. FULLER. I am not complaining here about the House or this committee. The fact of the matter is that the bill was signed last year on November 3. Then the funds were allocated only on a very tentative basis until the regulations were ready. Definite and official allocations was the last Federal action which was necessary before State programs could spend money, and this was late in February. The fiscal year had begun the previous July 1.

Mr. FLOOD. No question about that. The legislative bill held up this program.

Mr. CASEY. On recommendation No. 9, as I understand it, the recommendation through this organization is that rather than give grants for the, say, Teacher Corps or for languages or something like that, you want basic grants for the overall buildup of your education system; is that correct?

Mr. FULLER. I am sorry that I failed to answer that.

Mr. CASEY. That is why I say, are you saying we are getting to develop the tendency where we may pick out one segment or one small item and shoot the grease to the wheel that squeaks the loudest and ignore the whole structure of the wagon and not give it the proper support? Do you think the States are better fitted to spread this money out if they are just given limited control?

Mr. FULLER. All six of these organizations, Mr. Chairman, believe first in the general-aid principle. They do not believe in categorical aid except where a general support provision could not possibly reach some need. There are a number of fields like vocational rehabilitation, for instance, that probably would not be reached through a general-aid bill of the kind that we have become more or less accustomed to talking about during the past two decades.

Categorical aids are very much more difficult. They not only have this timing element, but each categorical aid faces all of these different processes. If you have 25 categorical aids, you have this same process 25 times, much of it at different times, different places, different agencies, and you multiply——

Mr. CASEY. Competing against each other for funds?

Mr. FULLER. You multiply the paperwork. It is a syndrome of red-tape. That is what it amounts to. Local school districts and State departments alike are held back.

Mr. FLOOD. Have you ever worked in a State capital?

Mr. FULLER. I was a State commissioner of education.

Mr. FLOOD. Where?

Mr. FULLER. New Hampshire.

Mr. FLOOD. How long?

Mr. FULLER. For more than 2 years. Then I was with the U.S. Office of Education as Director of the Administration Division there.

Mr. FLOOD. I was wondering if you ever worked with a State government.

Mr. FULLER. Yes, as a State commissioner of education.

Mr. FLOOD. You are acquainted with State capitals?

Mr. FULLER. I worked personally in every State capital in the United States before 1946 and since then.

Mr. FLOOD. Doing what?

Mr. FULLER. In connection with their office here in Washington, the Council of Chief State School Officers.

Mr. FLOOD. Mr. Michel.

Mr. MICHEL. Thank you, Mr. Chairman.

I remember when we were developing the testimony with Mr. Howe I posed several specific questions taking a different tack than what you did here today.

We all tend to get somewhat abashed at times at this big, monolithic Federal bureaucracy. When there is a move to proliferate it to some degree there is a tendency to salute those efforts because we feel that it get might the Federal Government closer to the people. In direct response to my questions I believe Mr. Howe said, "We intend to make the decisions easier, more readily accessible to the people. The decision-making process will be expedited."

Of course, your testimony would fly directly in the face of that.

Mr. FULLER. It is in the face of it.

Mr. MICHEL. Doesn't your testimony say that these regional centers actually create another layer of Federal bureaucracy?

Mr. FULLER. That is correct. Ray Page was one of the four State superintendents, with myself, who occupied the whole day before the Education and Labor Committee on March 6. Superintendents Page and Harry Sparks from Kentucky, and Superintendent Floyd Christian, the State school officer from Florida, and Superintendent Paul Johnston, the chief State school officer from Iowa, all took the same position I am taking here.

In 1961, when Secretary Flemming decentralized the Office of Education to some extent or at least announced it, we made an effort to persuade him to decentralize only service personnel, but not decision-making personnel. We did not want decisionmaking personnel down there, because that ties all up in intramural, endless discussion. There must be one set of regulations, but nine different regional offices would have to discuss separately how to decide these questions under a single set. It won't be long before the people in Illinois will have an altogether different interpretation than another region, with different interpretations in Boston, Atlanta, Chicago, and San Francisco. Then when cases are appealed, the Commissioner of Education is going to have to revise these regulations so that they can be more or less uniformly applied among the States. It is a very sensitive situation at best that this would give rise to, and the extra Federal layer complicates it.

Mr. MICHEL. I see your point and I think it is a valid one.

It is something like the Internal Revenue Service with all its various interpretations within a given State. You might see this come about in the field of education. Isn't it true that you are mostly interested

in the money resources that you can get from Washington? It really doesn't take much more than just a decision, whether or not the Office of Education says, "Yes, go ahead," or "No, we cannot give you the money."

Mr. FULLER. No, we are not interested primarily in the money.

Mr. FLOOD. I beg your pardon?

Mr. FULLER. We are not interested primarily in the money. We are interested in the principle. We need the money, too.

Mr. FLOOD. You do not want the $15 million cut, do you?

Mr. FULLER. I don't know. It would be a hard decision to make. I think we would prefer not to have part B because the same functions are authorized under A.

Mr. FLOOD. You are not suggesting that we cut the $15 million?

Mr. FULLER. If you put the $50 million back in part A we give the $15 million——

Mr. FLOOD. You want it both ways?

Mr. FULLER. Well, the part A is the best protection we have in this country today against Federal control of elementary and secondary education; the adequate funding of part A which is on a State and local economy basis.

Mr. MICHEL. Do you feel strongly enough about the principle you argue here today, this extra layer, that if sufficient members on this subcommittee were to withhold funding of the regional offices, would you support this decision?

Mr. FULLER. There is no question at all but that we would support it. The way we presented this to Commissioner Howe, and when we notified him what we were going to do, was that we were not going to oppose any line item of the Office of Education budget. We were going to leave that to the committee. We would want limitation language on the functions, a limitation on the additional educational personnel now being disseminated in regions in the regional offices in education to work there in elementary and secondary education, but not necessarily a budget cut. Appropriations could be used elsewhere.

Mr. MICHEL. One final question on your appendix.

"Item 16. Tax credits for education.

"We recommend the extension of scholarship funds for higher education and oppose enactment of legislation to allow tax credits for school or college tuition and/or expenses."

Mr. FULLER. This is a unanimous view.

Mr. MICHEL. Unanimous view?

Mr. FULLER. Yes, sir.

Mr. MICHEL. Why do they take that view?

Mr. FULLER. They take that view because the tax credit for the reasons expressed quite well in the Senate debate a week or two ago. In the first place it does not help the people who need it the most, who don't pay that much in Federal taxes. The Senate did not adopt Senator Prouty's "reverse equalization" proposal to pay tax funds to the person who didn't save on his income tax.

In the second place, the tax credit goes up to a man with an income of $57,500, I believe, before he gets no reduction in his taxes.

In the third place, by using the same amount of money in item 12 it would cost the Treasury more to get equal educational results. In a

good scholarship system, where you take into account personal need and ability, you can get a great deal more educational mileage out of that money, a very great deal more. This other is going to people who pay income taxes, and whose boys and girls who are going to go to college anyway, maybe with scholarships.

Mr. MICHEL. Not necessarily just rich people?

Mr. FULLER. No, but many——

Mr. MICHEL. What about the great mass of just ordinary, good, solid citizens who are making the extra effort to send their kids to college? Not everyone will make that extra effort.

Mr. FULLER. I understand the strength of that argument. The Senate debate, I thought, was very illuminating on the point. But there is more educational mileage the other way and what will happen is this—and it has been admitted by the proponents of the tax credit theory—the higher institutions will raise their tuition. That puts college education further out of the reach of the modestly placed people in the country than before. They will have to pay a higher tuition. The tax credit is an indirect institutional aid to private institutions and public institutions that will raise tuition rates high enough to absorb this tax credit.

Mr. FLOOD. Thank you very much.

STATEMENT OF RAY PAGE, SUPERINTENDENT OF PUBLIC INSTRUCTION, STATE OF ILLINOIS

Mr. MICHEL. Mr. Chairman, Ray Page who is our State superintendent of public instruction has spoken to me about this same subject. He is sending in a statement within the next few days. I would like to have it placed in the record at this point.

Mr. FLOOD. Without objection that will be done.

(The statement follows:)

STATEMENT FOR THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE

As Superintendent of Public Instruction for the State of Illinois, I am vitally concerned with the Federal, State and local district relationship in authority, communication and policy in educational matters.

There has been established the concept that the State Educational Agency—in Illinois, the Office of the Superintendent of Public Instruction—is the liaison between the U.S. Office of Education and the local school districts. This rela tionship, more important than ever under Public Law 89–10, has been improved recently through the efforts of both the U.S. Office of Education and the Council of Chief State School Officers.

It is not proper at this time to decentralize administrative power of the U.S. Office of Education through the expansion of the regional offices. Decision making power at the regional level would increase the delay in answering specific questions as well as establishing another step in the lines of communications.

Education is a State function and the solution to educational problems can best be solved at the local level. The development of strong Regional Offices would not be advisable at the present time in safeguarding local control of the schools. Another layer of the federal government administrative structure is unnecessary and not in the best interest of education.

In his statement to your committee, Doctor Edgar Fuller, Executive Secretary of the Council of Chief State School Officers, covered my position very thoroughly and I am certain this is the position of the present chief state school officers. We support his testimony.

THURSDAY, APRIL 20, 1967.

CENTRALIZED CATALOGING AND ACQUISITION OF LIBRARY MATERIALS

WITNESSES

DR. L. QUINCY MUMFORD, LIBRARIAN OF CONGRESS
MRS. ELIZABETH E. HAMER, ASSISTANT LIBRARIAN OF THE LIBRARY OF CONGRESS
EDMOND L. APPLEBAUM, ASSISTANT DIRECTOR, PROCESSING DEPARTMENT, LIBRARY OF CONGRESS
MISS ADOREEN McCORMICK, LEGISLATIVE LIAISON OFFICER

Mr. FLOOD. We now have our friend, the Librarian of Congress, Dr. L. Quincy Mumford.

Doctor, do you wish to identify your associates?

Dr. MUMFORD. Yes. Mrs. Elizabeth Hamer, the Assistant Librarian; Miss Adoreen McCormick, assistant to Mrs. Hamer; and Mr. Edmond L. Applebaum, Assistant Director of the Processing Department.

Mr. FLOOD. You have a statement, do you, Doctor?

Dr. MUMFORD. Yes, sir.

Mr. FLOOD. Please proceed.

Dr. MUMFORD. Mr. Chairman and members of the subcommittee, I appreciate the opportunity you have given me to appear here today.

As you know, the Library of Congress has been deeply concerned with the development and growth of the Nation's libraries. During the last decade, the Congress of the United States, in recognition of the important role libraries are playing and of the national need for improved library services, has made Federal funds available to libraries for the purpose of improving their programs. The progress has, I believe, been great, but much still remains to be done.

We urge that your subcommittee grant adequate appropriations for libraries under the Library Services and Construction Act, the Elementary and Secondary Education Act, and the Higher Education Act. We consider the programs authorized by these acts vital to the maintenance and growth of libraries in this Nation.

The Library of Congress is particularly interested in the centralized cataloging and acquisitions program authorized under title II–C of the Higher Education Act of 1965. The program is administered by the Library with funds appropriated to the Department of Health, Education, and Welfare for transfer to us by the Commissioner of Education. We are not alone in considering it to be one of the most significant and important activities ever launched on behalf of U.S. research libraries and the improvement of their services to the academic community.

Title II–C of the Higher Education Act authorized an appropriation of $5 million for fiscal year 1966; $6,315,000 for fiscal year 1967; and $7,770,000 for fiscal year 1968. Only $300,000 was appropriated late in fiscal 1966 and only $3 million for fiscal 1967. We strongly urge your subcommittee to consider the full appropriation of $7,770,000 for fiscal 1968. If the fiscal 1968 budget is held at $4 million, the amount in HEW's budget requests, the Library of Congress will be unable to meet the needs of the U.S. libraries for the prompt receipt of catalog card copy as envisioned by the law.

I would like to summarize briefly the development of this program. Because research libraries in the United States could not get from the Library of Congress—at least not fast enough to serve their needs—catalog cards for a considerable portion of the foreign books they acquired, they were forced to try to catalog them for themselves. This led to competition for scarce catalogers and, worse, to wasteful duplication of effort. When the Higher Education Act was before the Congress, the research librarians, with the full support of the Library of Congress, presented testimony to the Congress, pointing out that the cost of cataloging a book was so high—often more than the price of the book—that the universities were wasting millions of dollars in duplication of effort, and that the scarcity of catalogers was making the task of getting books, especially foreign titles, to the shelves for prompt use next to impossible. A centralized agency to do this cataloging seemed imperative if the money provided for in title II–A of the Higher Education Act was to be properly utilized. This, of course, is the section which provides assistance to the college and university libraries for the purchase of materials.

With my concurrence, the research libraries requested that funds be appropriated for transfer to the Library of Congress in order that it could serve as such an agency. The Library of Congress was already cataloging promptly about 50 percent of the materials being acquired by these research libraries and providing printed catalog cards. Therefore, it was the logical place for such an operation. In addition, the Library's machinery—to say nothing of its international connections and reputation—for acquiring foreign materials was the most effective available. In recognition of the need for such a program—called the National Program for Acquisitions and Cataloging or NPAC (ENPAC) to suggest the impact we hoped and expected it to have—title II–C authorizing it was added by the Congress to the Higher Education Act of 1965. It should be emphasized that the program is designed to speed up the flow of catalog information to the college and university libraries of the country so that they can make available, without undue delay, materials sorely needed by the academic community for teaching and research. Thus it is a program for the primary benefit of higher education. The Library of Congress and its users, of course, also benefit through supplements to our acquisitions and from the prompt cataloging of more materials.

As a result of detailed advance planning, the Library was ready to begin to implement this program as soon as the first funds became available, less than a year ago. Because not even the national library of the United States, the Library of Congress, could hope to obtain enough catalogers with the necessary linguistic and technical ability to do the original cataloging of all the foreign books needed by American college or university libraries, a feature of the program as planned by the Library of Congress was "shared cataloging" on an international basis. Many countries describe their own currently published materials in national bibliographies and this descriptive cataloging is of a high standard. It therefore seemed desirable to try to work out arrangements with these national bibliographies to obtain this information for incorportation in the Library of Congress catalog card copy, and to obtain it quickly enough to meet the Library of Congress responsibilities to the research community. The reaction of the directors of the national libraries and the national bibliographies abroad was enthu-

siastic, and to date agreements have been entered into with 13 national bibliographies for the Library of Congress to receive printer's copy well in advance of publication in the country of origin in order that the Library of Congress may have printed catalog cards available by the time the research libraries acquire the book itself. To date, small offices to handle this work, staffed with local catalogers and usually headed by one American, have been established in London, Paris, Oslo, Wiesbaden, Vienna, and Belgrade. These offices provide bibliographic coverage of the publishing output of Sweden, Denmark, and Switzerland as well as of the countries in which they are located. In addition, regional acquisitions offices are operating in Nairobi, Kenya, and Rio de Janeiro, Brazil, to obtain materials not readily available through normal trade channels.

Mr. FLOOD. What about the Orient?

Dr. MUMFORD. We would like very much to begin there. We have been unable to do so because of the limited funds for this program. In Japan there is a great deal of publication and it is very difficult to acquire copies of all the important materials. We have had discussions with the Japanese officials concerned and they are very anxious to cooperate with us.

Mr. FLOOD. What about Latin America?

Dr. MUMFORD. As I mentioned, we have an acquisitions office in Rio. The national bibliographies that exist in Latin America are not sufficiently up to date to be used in connection with our cataloging but the office in Rio is very helpful in getting the publications needed.

While we are on this point, there are other places in Europe—the East European countries—that could be helpful. We had a meeting in Vienna with six of these countries and they all expressed an interest in cooperating with us. All we need are the funds to begin programs. Poland, Czechoslovakia, Hungary, Rumania, Bulgaria, and Russia have agreed to cooperate, but it will take additional appropriations before we can begin to carry on operations in these countries.

Mr. FLOOD. What about the Arab world?

Dr. MUMFORD. Well, we are covering that under a different program to some extent. Under the Public Law 480 program we have an office in Cairo which gathers from the United Arab Republic and some of the surrounding Arab countries publications for the Library of Congress and other U.S. libraries.

Mr. FLOOD. All right.

Dr. MUMFORD. The early result of the title II–C program have been acclaimed by librarians in this country and abroad. Sir Frank Francis, the Director of the British Museum, speaking at the 1966 meeting of the International Federation of Library Associations, said that he was "electrified" at the prospect the program opened up and that "we were at last on the edge of the most important breakthrough in the realm of information since the elaboration of rules for cataloging made clear the basis on which cataloging procedures should work." The program has been described by one librarian in this country as a "little revolution," and others have declared that they can already feel the impact of it in their institutions. A preliminary survey made by the Association of Research Libraries has shown from a 10- to a 50-percent increase in the availability and utilization by various libraries of catalog cards for foreign materials. This has greatly speeded up cataloging and the availability of research materials.

If you will permit me, I would like to quote just some of the reactions of college and university librarians.

One said:

> The increase in cataloging copy through this Program has resulted in savings of thousands of dollars for the University . . . Library this year. But beyond the dollar saving, it has allowed our library to process material fully and efficiently that would otherwise form a largely unusable arrearage since we could not possibly find enough catalogers properly trained to undertake the extra burden of original cataloging.

The director of a medium-sized university library estimates that the savings in cataloging materials from countries where the title II–C program is in effect, projected over a period of 1 year, will amount to nearly $20,000. He states that with Library of Congress catalog card copy available, the savings in cataloging a single title is more than $5.

Another librarian said:

> That because of what the Library of Congress has been able to do in this first year of the program, we shall catalog with the same number of catalogers 5000 more volumes than last year, and a substantially larger percentage of the total items cataloged have been handled by nonprofessional help. These nonprofessional people, incidentally, given Library of Congress cards, can catalog three to four times as many books a year as a professional cataloger without Library of Congress cards. The 5000 additional volumes we are adding this year, if the books had come to us without Library of Congress cards, would have required four professional catalogers who would have cost us at least $28,000. When one begins to multiply this kind of savings by the number of libraries that will be affected, the significance of Title II–C to American research libraries can be appreciated.

I believe that these statements speak for themselves as to the importance of this program to the research community. To move ahead as we have planned and as we are ready to do, however, requires adequate funding. Although I am fully aware of the many financial commitments the United States must meet during fiscal 1968, I would be derelict in my duty as administrator of the program if I did not request full funding—the full $7,770,000 authorized by the Higher Education Act.

We have made a splendid beginning with most gratifying results, as the research community has attested, but unless the full amount is appropriated, the Library of Congress will not be able to implement all the programs currently under negotiation with the libraries of Eastern European countries as I have already indicated, we will have to cut back plans for expansion of the programs to Asia, and we will not be able to expand our acquisitions efforts in those areas of the world where the export book trade is not well organized or is nonexistent. Needless waste, delay, and duplication will continue and university libraries will have to spend countless unnecessary dollars for cataloging unless we can forge ahead on the program at LC. Furthermore, this program has demonstrated to us in the library community that there are many areas of the world from which the Library of Congress and other research libraries have not been receiving all of the significant research materials. Not only are our students and scholars suffering from this gap in acquisitions, but the Congress and the Government are also being deprived of information contained in this material.

The "National Policy Statement on International Book and Library Activities," issued by President Johnson on January 4, 1967, states as

Government policy the intent "to further a greatly increased inflow of foreign books and materials, including journals, microfilms, and reproductions of art, music, folklore, archival and manuscript collections, to U.S. libraries through the use of Public Law 480, appropriations under title II–C of the Higher Educational Act of 1965, and other funds." In view of this, it would seem logical to make it possible to fully implement the title II–C program during fiscal 1968.

I respectfully request that your subcommittee consider and approve this request for the full $7,770,000 authorized for fiscal 1968 for title II–C of the Higher Education Act.

Thank you for this opportunity to present the case for this truly forward-looking program. I will be happy to answer any questions you may have.

Mr. FLOOD. Thank you very much, Doctor. We are always glad to have you.

Mr. CASEY. No questions. Thank you for your statement.

Mr. FLOOD. Thank you very much, Doctor.

Dr. MUMFORD. Thank you.

THURSDAY, APRIL 20, 1967.

EDUCATIONAL IMPROVEMENT FOR THE HANDICAPPED

WITNESSES

DR. ERNEST P. WILLENBERG, PRESIDENT, THE COUNCIL FOR EXCEPTIONAL CHILDREN, NEA

WILLIAM C. GEER, EXECUTIVE SECRETARY, THE COUNCIL FOR EXCEPTIONAL CHILDREN, NEA

Mr. FLOOD. We now have Dr. Ernest P. Willenberg, president. The Council for Exceptional Children, NEA. Doctor, do you have Mr. Geer with you?

Dr. WILLENBERG. Yes, Mr. Chairman.

Mr. FLOOD. I suppose you will make the statement?

Dr. WILLENBERG. Yes, I will make the statement. Mr. Geer, executive secretary of The Council for Exceptional Children, collaborated with me on the preparation of this report which you have before you.

Mr. FLOOD. Please proceed.

STATEMENT OF DR. ERNEST P. WILLENBERG

Dr. WILLENBERG. Mr. Chairman and members of the committee:

The Council for Exceptional Children appreciates this opportunity to testify before the subcommittee which has charge of HEW appropriations with regard to implementing the major objectives in educating handicapped children which were authorized through Public Law 89–750, The Elementary and Secondary Education Amendments of 1966.

As the committee no doubt knows, title 6 of the Elementary and Secondary Education Amendments authorized a new program with grants to States designed to enable them to initiate, expand, and im-

prove programs and projects for the education of handicapped children at the preschool, elementary, and secondary school levels.

Originally, Senate bill 3046 had suggested an authorization of $150 million, for the fiscal year ending June 30, 1967, and $250 million for the fiscal year ending June 30, 1968. Since fiscal year 1967 was half over when Public Law 89–750 was enacted, the authorizations finally approved were $50 million for the fiscal year ending June 30, 1967, and $150 million for the fiscal year ending June 30, 1968. Through passage of this act, it is anticipated that great gains will be made in the education of handicapped children. The States are now busily engaged in making plans which would enable them to implement the provisions of the new title 6. As early as last December, The Council for Exceptional Children contacted the directors of special education in all 50 of the United States and asked them to indicate how they would use funds appropriated under the act in order to initiate, expand, and improve the educational services available to handicapped children in their States.

The responses indicate funds authorized in Public Law 89–750 are needed to carry out State plans for special education of the handicapped.

Listed below are the ways in which the States indicated they would like to improve their programs:

FREQUENCY OF PROGRAMS SUGGESTED BY STATES UNDER TITLE VI-ESEA AMENDMENTS OF 1966

Category	*f*
State Department personnel	30
In-service training programs	26
Extended school year and summer programs	25
Diagnostic services	24
Architectural planing, remodeling, and purchasing	19
Local instructional services	19
Local special education equipment and supplies	15
Mobile units	13
Professional resources	12
Preschool services	11
Regional services	11
Consultant personnel	11
Planning	10
Vocational training for the handicapped	9
Local personnel	8
Curriculum development	7
Subprofessional personnel	7
Transportation of the handicapped	6
Institutional improvement	5
Demonstration programs	5
Special projects—local	4
Other	23
Recruitment	3
Out-of-State instruction for the handicapped	3
Recreational programs	3
Special provisions for the multiple handicapped	2
Outdoor educational programs	2
Research	2
Parent and pupil counseling	2
Information services	1
Parent education	1
Nursing services	1
Profesional travel	1
Spanish-speaking teachers	1
Guidance center	1

It is obvious that the States even on short notice had extensive plans and ideas for the effective use of badly needed funds in the education of their handicapped children.

Since then the States have been refining their plans and by now it is quite obvious that the addition of State department personnel to provide leadership for these programs would be a first consideration. Other uses included were in-service training of existing personnel, extended school year and summer programs, architectural planning, remodeling and purchasing, et cetera. It is obvious that there are many needs and that the amounts authorized by the Congress could be effectively utilized if they were appropriated.

The budget presented to you for the Department of Health, Education, and Welfare will supply only a token appropriation compared to the amount Congress authorized for these programs. For fiscal 1967, which is now almost to an end, $2,500,000 was requested in a supplemental appropriations bill. For fiscal 1968, $15 million or less than one-tenth of the authorized amount has been requested. It is extremely important that the Congress recognize that the States are prepared for major improvements in their programs for education of the handicapped. There is no greater need for our country's welfare than that these handicapped children who deserve the proper attention of governmental agencies in this country be educated to the full limits of their ability. This not only will enable them to lead happier and more useful lives, but will also help them become tax contributing citizens as they are helped to more nearly earn their own livelihood.

We are well aware of the dilemma which confronts the administration and the Congress with regard to the allocation of available funds which must be considered in relation to the most needful and useful purposes. We are sure that the various officials of the Department of Health, Education, and Welfare have given careful attention to priorities and that the Budget Bureau likewise has tried to consider critical needs in the allocation of funds. It may be that since title 6 is a new program it is felt it can wait further for the funds needed to give it real implementation. We submit to this committee that the handicapped have been waiting in line for years for the educational services due them and for other services a responsible society should provide. The newness of the enactment of the program has, therefore, little significance when one considers that day by day these children are growing older while falling farther and farther from the grasp of the opportunities until they are beyond reach.

We know the Nation has military and defense obligations that it is currently meeting in other parts of the world. We also understand that there are many worthwhile domestic programs already started which must be continued. We, therefore, are not inclined to single out any program before this Congress for elimination or reduction so that the needs of handicapped children may be served. However, we would like to ask whether or not the appropriation for handicapped children is equitable in view of the fact that other funds in the various budgets before this committee in some instances show substantial increase. We have noted that some programs have been increased in amounts varying from 10 to 80 percent. Does it seem equitable to provide extensive increases to some programs and to starve a program which has such

great promise in bringing benefits to young handicapped American citizens by equalizing their educational opportunities so that they can at least have an even start in life.

We hope that this committee may see fit to recommend additional funds for the implementation of title 6. We believe the entire $150 million authorized for this year can be efficiently and effectively used. We believe that this country with the richness of its resources can somehow provide for this amount of money without seriously impairing its financial balance. We, therefore, urge this committee to consider carefully the responsibilities of Congress to fulfill the commitment to handicapped children which was made to them through the passage of title 6 of 89–750.

We would also like to urge that the funds for training teachers of handicapped children be provided in the amount of $34 million authorized in the budget of HEW for fiscal year 1968. During the fiscal year 1967, those who administered this program were under the mistaken supposition that the full authorization could not be effectively used and did not apply for it. Here again, one of the programs that Congress has passed and which provides great stimulation toward the recruitment and training of teachers and leadership personnel for the handicapped is not operating at its fullest capacity and efficiency because of the failure to appropriate funds needed for it. This year no increase has been suggested and the amount is pegged at $24,500,000.

In considering the appropriations for the training programs in special education, there are several facts which we would like to call to the attention of the committee.

In 1967–68, more than 12,000 students are expected to benefit from the training provisions for the handicapped in 240 colleges and universities located in every State except Alaska. In addition to the colleges and universities, all of the States, including Alaska, have training funds through which key personnel discovered by State departments of education can be trained. In addition to the States, the District of Columbia and the territories of Puerto Rico, Virgin Islands, and Guam are participating in this program.

Recently, the Office of Education made a telephone survey of all academic year award recipients for the school year 1965–66 and found that 93 percent of a sample of 75 percent of those trained that year were engaged in special education careers. Of the remaining 7 percent, some had married and were living in towns where there was no special education program. A few others were in localities where requirements such as 2 years of regular teaching experience were prerequisite to being employed in special education.

It is felt that no more than 5 percent had failed to enter the field. This is considered to be an unusually high percentage to continue in a field after training.

It is also significant to know that through this imaginative program, 140 program development grants have provided a means for colleges and universities to establish programs in one or more areas of the handicapped. Since 1964, two examples of the results of these relatively small development grants are mentioned for your information. A $12,500 development grant to train personnel in mental retardation was made in 1964 to Idaho State University. At that time, there were

no staff members in special education at Idaho State University and obviously no students majoring in the field. The university was offering only one general course in special education. In 1967, Idaho State University has 37 full-time students majoring in the education of the mentally retarded, three full-time staff members and is offering a range of 12 courses in special education. Needless to say, the 37 students are the teacher candidates who will join other Idaho forces in educating the handicapped.

Another program grant made in 1964 was to Drake University in Iowa, $13,825 was awarded in the field of mental retardation. Again, there were no staff or students. In 1967, there are 31 seniors majoring in mental retardation. There is one full-time staff member and the university is seeking a second.

Still another figure of interest to demonstrate that the present anticipated appropriation of $24,500,000 is not adequate is that during the last year, $2.60 was requested for each dollar available. While some of the requests might not have been of sufficiently high grade to earn an award, many of the requests were considered to be worthwhile and, had they been awarded, undoubtedly would have made a greater impact on the shortages of personnel than has been the case with the short appropriation of $24,500,000.

The manner in which this program has stimulated development of training programs through the use of other funds has been very obvious. The 12,000 students who will be trained under Office of Education grants comprise a minority of the students actually enrolled in training programs. State and university funds are also being deployed in the training of these students.

In one State, Illinois, we determined that 17 colleges and universities are training personnel in the education of handicapped children. These institutions have 3,572 students enrolled with majors in the field of special education. The Office of Education indicated that nine colleges and universities are training 377 students with majors in special education through Federal training funds. This indicates that 3,195 students in Illinois colleges are being supported by funds other than Federal funds. Certainly this is evidence of a stimulating effect by the Federal training program on the total development of resources for educating personnel in special education. It is obvious the Federal training program stimulates the use of funds from other sources toward a total development of resources for educating personnel in education.

The curtailment of funds for this program has occurred at a time when acceleration was needed to increase the available supply of teachers from the estimated 75,000 to 80,000 now in the field toward the 300,000 considered to be needed. In contrast we would like to acknowledge a more favorable balance between the authorization of funds and the appropriation of funds to implement the research and demonstration program for the handicapped. In this case the authorization for fiscal 1968 is $12 million while the appropriation requested amounts of $11,100,000.

We call the committee's attention to the hearings conducted by the ad hoc subcommittee of the handicapped under the chairmanship of Hon. Hugh Carey which thoroughly explored these needs and led

the President to announce the appointment of a task force in the Department of Health, Education, and Welfare to make a major study of needs for the handicapped.

We understand that this study has been completed although it has not been released to the public. We have heard of some of its recommendations and feel sure that the programs which we are discussing today are well within the range of needs described in such a study. In the final analysis, we recognize that you must weigh these matters and decide what you will recommend to the full Committee on Appropriations. In turn, the Committee on Appropriations will need to report out the bill which seems best suited for the needs of the greatest democracy in the world. We sincerely hope that the guardians of this democracy will find it possible to exercise its judgment toward a more equitable distribution of funds than now seems to be the case. We believe you will consider the manner in which the United States treats its handicapped children to be equally as important as the way it discharges its other obligations. We solicit your best judgment with regard to how the needs of the handicapped in our schools are to be met.

We pledge you our complete support in the further development of programs for the handicapped.

Mr. FLOOD. That is an excellent presentation. You plead carefully and well.

Dr. WILLENBERG. Thank you, Mr. Chairman.

Mr. FLOOD. Mr. Casey.

Mr. CASEY. I, too, want to commend you on the statement and I certainly join with you in the recognition of the need for additional trained personnel in this area. It is a depressing problem.

Mr. FLOOD. Mr. Laird.

Mr. LAIRD. Thank you very much for your statement, Doctor.

Mr. FLOOD. Thank you very much.

Dr. WILLENBERG. Thank you, Mr. Chairman.

THURSDAY, APRIL 20, 1967.

HIGHER EDUCATION

WITNESS

JOHN F. MORSE, DIRECTOR, COMMISSION ON FEDERAL RELATIONS, REPRESENTING THE AMERICAN COUNCIL ON EDUCATION

Mr. FLOOD. We now have Mr. John F. Morse, director of the Commission on Federal Relations, representing the American Council on Education. Please proceed, Mr. Morse.

Mr. MORSE. Mr. Chairman and members of the subcommittee, I am John F. Morse, director of the Commission on Federal Relations of the American Council on Education, a voluntary organization which is the principal coordinating agency for higher education in the United States. The council now has a membership of 1,261 colleges and universities and 239 educational organizations. We are, therefore, in a unique

position to address ourselves to the needs of the higher education community as a whole.

I am appearing before you this afternoon to discuss with you certain aspects of the administration's appropriation requests which give us considerable concern. Let me say at the outset that we are not unaware of the heavy pressures on the budget occasioned by the situation in Vietnam. We know it is the duty of this committee and the other appropriation subcommittees to balance resources against the military and civilian needs of the Nation. Nevertheless, we feel it our duty to call to your attention certain areas of particularly critical shortage.

To put it another way, we believe we should share with you our sense of an order of priorities as far as higher education is concerned. Indeed we believe that higher education itself should have high priority in the investment of public funds. In a paper published last January entitled "The Federal Investment in Higher Education: The Need for a Sustained Commitment," the American Council stated:

> In times of crisis it may be possible to postpone or slow down programs which, while highly desirable, are not vital to the Nation's welfare. But the duties that higher education must perform cannot be set aside. Young people must be taught; manpower must be trained; faculties must be kept intact; answers to complex problems must be found. If higher education is to plan efficiently and accomplish its tasks, it must count on a steady flow of support. The fitful turning on and off of a faucet is not a method of economy; it is a guarantee of waste, both in dollars and in human resources. . . . It has been apparent for almost two decades that one of higher education's critical problems is to expand rapidly enough to meet the pressure of numbers. Every projection made in the past has underestimated the number of young people who would seek education beyond the high school. Even more grave is the underestimation of the number of years of education required by our increasingly complex society. Graduate and other postbaccalaureate schools are the most rapidly growing segment of higher education, and there is no likelihood that such expansion can or should be reversed. Indeed, in some areas, such as medicine and health-related disciplines, the gap between demand and capacity to meet it is growing disastrously.

Our primary concern, as it has been the concern of the Congress for almost 10 years, is the increase in the number of young people who will not only be seeking but will require a college education if they are to lead productive lives and contribute their full potential to the strength of the Nation. A study conducted under council auspices and completed early this year indicates that we may expect an enrollment increase of just over 5 million students to bring us a total enrollment of 10 million by 1974. Because of the tendency for more and more students to engage in full time rather than part time study, we estimate that 3,750,000 of this increase will in fact be full time students.

We recognize that Office of Education projections set the figure somewhat lower. One projection by the Office indicates a total enrollment of 8.7 million in 1974 and another a total enrollment of 9.1 million by that date. We would point out, however, that the Office has consistently underestimated enrollment growth in the past—1 year by as much as 19 percent. We are quite confident that our own projections are conservative. Furthermore, the encouragement given to veterans to go on to higher education or resume their education under the benefits of the new GI bill will certainly stimulate additional enrollment.

Clearly then, our priorities are set for us. There is no way in the world that we can take care of these increased numbers unless we have buildings in which to teach and teachers to meet classes. Our

own estimate is that additional academic plant at a rate of at least $3 billion per year must be provided in the coming decade just to take care of increased numbers. This figure does not provide for any replacement of existing obsolete and obsolescent facilities. It is new construction. Obviously, the Federal Government cannot be expected to underwrite this whole program. We must continue to rely heavily on State support, on private and corporate philanthropy, and other sources of revenue. But we should point out that the appropriation request, $640 million, for the Higher Education Facilities Act now before you would provide for only approximately 20 percent of the need. This is against an authorization of $1.248 billion in the Facilities Act for fiscal year 1968. What concerns us even more is that the appropriation request is actually $73 million below the funds actually appropriated for the current fiscal year. The reduction amounts to $63 million for undergraduate facilities, $10 million for graduate facilities, and presumably the same level of activity for facilities loans as was carried on this year, although no new appropriations are being requested. In short, the level of construction projected for fiscal year 1968 is such that the outside observer would conclude that the situation is less acute and that we are over the hump. We believe that quite the contrary is the case, and we respectfully urge that this subcommittee increase the appropriation to something more nearly approximating the authorization of $1.248 billion.

Our second area of major concern is the supply of teachers who will be required to instruct the increased number of students. At the moment the principal Federal program that addresses itself to this need is title IV of the National Defense Education Act.

The administration has requested $96.6 million to fund this program for the coming year. We are advised that this will provide fewer new fellowships in fiscal year 1968 than were provided during the current year—in other words, something less than 6,000 new fellowships. The authorization for this year provides for 7,500 new fellowships. To fund the bill authorization of 7,500 new fellowships would require an additional appropriation of only $10 million, which could result in adding as many as 1,500 additional teachers to college faculties 3 to 4 years hence. We hope this subcommitte will give careful attention to the possibility of increasing the appropriation by that amount.

We come next to our third area of major concern, and this is to provide adequate funds for promising but needy students who are in all respects qualified and motivated to go on to higher education, but who lack the resources to pay for it. The Congress has provided a triple mechanism for meeting these needs in the form of grants, loans, and work opportunities.

The administration has proposed that the appropriation for grants be $159.6 million; for jobs (the so-called work-study program) $139.9 million; and for loans under the National Defense Education Act, $190 million. Our analysis suggests that the request for grants would just about meet the need, and we support it. However, applications for work-study funds, even after they have been carefully analyzed by panels in all regions of the country and been approved for reasonableness, total $158 million. This is well below the authorization of $200

million. We urge that the appropriation be increased to $158 million in order to meet the demonstrated need.

An even more serious situation prevails in the NDEA loan program. The authorized amount available for this program is $225 million for fiscal year 1968. When the institutions participating in the program filed applications for funds this spring, the total requested proved to be $243.1 million. Again these applications were reviewed in all regions of the country and were pared down to $230.2 million. It was the judgment of the panels reviewing the applications that they could not reasonably be cut further. Thus, if only $190 million is appropriated, there will be a shortage of over $40 million.

What makes this situation particularly critical is that the shortage will fall unevenly on the States. Because of the distribution formula, some States will receive 100 cents on the dollar of their approved requests. Other States—and they are generally those with the largest percentage of needy students—will receive as little as 60 cents on the dollar. We recognize that there cannot be appropriated for the program the full $230 million needed, but we do urge that there be an appropriation of $225 million, which is the amount authorized for fiscal year 1968.

Obviously, we wish that there could be more money made available for all of the programs which the Congress has enacted in the last several years. We are enthusiastic about the many new opportunities that this legislation provides for higher education to serve the needs of the Nation. We would view it as little short of tragic if cuts were made in the austerity funding that the administration proposes to provide for these new programs. But in these areas we do not feel justified in urging increases over what the administration has proposed. We have tried, rather, to highlight those areas which are of such critical importance that we believe the commitments that the Government and higher education have made to students now in high school or the armed services cannot be fulfilled unless additional sums are provided.

I should like to move on to one other area which concerns only a segment of higher education, but which is of vital concern to the Nation and comes under the purview of this committee. You will hear testimony in detail later on in these hearings, but I should like at this time to indicate the interest of all of higher education.

Almost without exception America's schools of medicine are identified with one or another of our universities. Organized as a group in the Association of American Medical Colleges, they form a constituent unit of the American Council on Education.

The executive council and the Committee on Federal Health Programs of the Association have recently met to consider items in the President's budget which are of immediate concern to them. Like the American Council these groups were keenly conscious of the burdens bearing on members of this committee. Knowing the demands made upon you, they have made careful and conservative estimates of the amounts and types of Federal financing which will be essential in fiscal 1968, if they are to be able to do the job which they have been specifically asked to undertake by the Congress and the President.

That job is to increase the number of doctors available to our Armed Forces and to our country by 50,000 as quickly as possible and without loss of quality.

To do this requires the building and staffing of some 15 to 20 new schools of medicine by 1975. More important, because it can be done more quickly and at considerably less expense to the Government, existing schools have been asked to increase sharply the size of their student bodies.

Medical schools have already taken preliminary steps to meet these objectives. To carry out the obligations they have undertaken they will have to have the funds authorized by the Congress when they undertook these new burdens.

Two things are obviously essential: Funds to construct the buildings in which the process of turning bright young men and women into doctors of medicine can be conducted and funds for the development of the additional faculty members and clinical services which are essential ingredients of this educational process.

Here are the items in the budget pertaining to medical education which are deficient and the amounts which should be appropriated if the schools are to be able to discharge their obligations.

[In millions of dollars]

Construction	Budgeted	Needed, fiscal 1968
Educational facilities [1]	175.0	185.0
Health research facilities [1]	50.0	100.0
Animal care facilities [1]		20.0
Library facilities [1]	5.0	10.0
For essential increased faculty and services for expanded student bodies:		
General research and support grants	56.0	61.0
Training grants	139.6	153.6
Clinical research centers	30.5	40.5

[1] All 4 types of facilities are interrelated; each is essential; no one is postponable.

The Association of American Medical Colleges will itself testify and will be very glad to provide any definitive explanation of and support for these figures the committee may request. The American Council on Education supports these requests.

Mr. Chairman, I am grateful to you and other members of the subcommittee for giving us this opportunity to express the views of higher education. We shall be glad to answer your questions or to submit further statements on questions which we are not prepared to answer today.

Mr. FLOOD. Mr. Casey?

Mr. CASEY. No questions.

Mr. FLOOD. Thank you very much, Mr. Morse.

LIBRARY SERVICES AND CONSTRUCTION PROGRAMS

WITNESS

MISS GERMAINE KRETTEK, ASSOCIATE EXECUTIVE DIRECTOR, AMERICAN LIBRARY ASSOCIATION

Mr. FLOOD. Now we have Miss Germaine Krettek, the associate executive director of the American Library Association. Her office is here in Washington and we know her quite well.

Miss Krettek, my spies tell me you have just received a very distinguished award.

Miss KRETTEK. How nice of you to bring that up. Last night I was given the Distinguished Achievement Award from Drexel Institute of Technology in Philadelphia. I am very humble about achieving this award. It is nothing personal, I have had such good support from many people.

Mr. FLOOD. Drexel is an old and distinguished institution. I happen to come from Pennsylvania and Drexel is a family name in my area. They do not make these awards casually.

Miss KRETTEK. It might interest you to know the second award was made to the late Congressman John Fogarty in 1959. I feel very honored to have received the award this year.

Mr. FLOOD. I think we should place a copy in the record.

(The citation follows:)

DISTINGUISHED ACHIEVEMENT AWARD OF THE DREXEL LIBRARY SCHOOL ALUMNI ASSOCIATION AND THE GRADUATE SCHOOL OF LIBRARY SCIENCE OF DREXEL INSTITUTE OF TECHNOLOGY PRESENTED TO GERMAINE KRETTEK

Her untiring efforts during the past ten years as Director of the Washington Office of the American Library Association have helped materially to bring about federal legislation to implement library service.

Non-partisan and independent of faction she works only for the greater good of our society, for the wider dissemination of library services, for the general support of librarianship at the national level.

Her dedication, her warm personality, her wise counsel enlist the unstinting support of legislators and profession alike.

ELIZABETH R. HARTMAN, *President.*
JOHN F. HARVEY, *Dean.*

APRIL 19, 1967.

Mr. FLOOD. You have a statement?

Miss KRETTEK. Yes.

Mr. FLOOD. Please proceed.

Miss KRETTEK. My name is Germaine Krettek. I am associate executive director of the American Library Association, the oldest and largest nonprofit professional organization of its kind in the world, with a rapidly growing membership of more than 35,000 librarians and laymen interested in the development, extension, and improvement of libraries. These agencies are essential to the progress of our Nation in educational, economic, scientific, cultural, and everyday aspects of life.

I appreciate the opportunity of presenting testimony on certain items concerning libraries in the 1968 HEW appropriations.

In presenting my testimony on the appropriations for these acts which contain authorizations for libraries, with your permission I should like to consider them in this order:

Library Services and Construction Act—Public Law 89–511.

Elementary and Secondary Education Act—Public Law 89–10 (as amended by Public Law 89–750).

National Defense Education Act, Title III—Public Law 88–665 (as amended by Public Law 89–329 and Public Law 89–752).

Higher Education Act—Public Law 89–329 (as amended by Public Law 89–752).

Higher Education Facilities Act—Public Law 88–204 (as amended by Public Law 89–752).

Medical Library Assistance Act—Public Law 89-291.
International Education Act—Public Law 89-698.
Mr. FLOOD. You did not miss many, did you?
Miss KRETTEK. Libraries are a basic part of education.
Mr. FLOOD. It is an extraordinary program. I never thought I would live to see it. Go ahead.
Miss KRETTEK. On each one, I shall present a very short statement regarding the purpose of the legislation, brief justifications and accomplishments, and our recommendation regarding the appropriation for fiscal year 1968.

LIBRARY SERVICES AND CONSTRUCTION ACT OF 1966

The purpose of this act is to assist the States in overcoming the deficiencies in public library services—title I—and in public library construction—title II. It provides also for encouraging interlibrary cooperation of school, college, university, public, and special libraries and information centers in order to bring more effective library service to the people—title III; and it gives financial assistance for library service in State institutions such as hospitals and correctional schools—title IV-A, and extends and improves library service for the blind and physically handicapped—title IV-B.
A few of the facts which show the glaring deficiencies in the public library area are, as of 1967:
No public library service: 12 million people.
Libraries with inadequate financial support serve: 169 million people.
Operating expenditure gap: $1.1 billion.
Book shortage: 100 million volumes.
Publicly owned public library buildings over 40 years old: 37 percent.
Construction gap in public libraries: $909 million.
State library agencies estimate that if Federal funds for title II are cut back to $27.185 million in fiscal year 1968—from $40 million in fiscal year 1967—the number of projects that could be approved would drop from about 400 to 250.
Mr. FLOOD. Would you have the Appalachian people prepare for the record a list of libraries that have been financed and where they are located and the dollar amount for each one under the Appalachian bill?
Miss KRETTEK. I will be glad to.
(The information follows:)

APPALACHIAN LIBRARY PROJECT

The data sheets and the summary statements were obtained from the Library Services Branch of the U.S. Office of Education. The ALA drew up the tabulations from the data sheets.
The Appalachian Regional Commission, since its inception in April 1965, has allocated six percent of its funds from Section 214 of the Act to library construction. Through fiscal year 1967, an estimated $4.1 million has been approved or is pending for library construction with a total construction value (derived from all sources) of $74 million. Public libraries have received two-thirds of Appalachian

funds spent to assist library construction. Thirty-four public library projects have received $2.7 million in Appalachian funds, in addition to $3.7 million from Title II of the Library Services and Construction Act matched by $3.4 million from local funds. The other third of the funds has been spent to assist academic library construction. For fiscal year 1967, Congress has appropriated, and there has been allocated, $30 million for programs under Section 214.

	Fiscal year 1966	Number of projects	Fiscal year 1967	Number of projects
Alabama	$31,859	1	$75,830	3
Georgia	125,000	1	128,475	3
Maryland	109,110	1		
New York	342,264	2		
North Carolina			57,953	3
Ohio	37,735	1	111,360	2
Pennsylvania	674,356	4	438,415	4
Tennessee	21,160	1	22,051	2
Virginia			69,878	1
West Virginia	249,460	1	193,532	4
Total	1,590,944	12	1,097,494	22

Miss KRETTEK. Only a start has been made in setting up systems of cooperating libraries. State agencies reported that 64 title III interlibrary cooperative projects costing $10.5 million are planned for fiscal year 1968. The largest group of projects were reported for reference and resource networks and special communications projects which will make available better reference and information services to millions of people.

In this connection, the authorization for fiscal year 1968 was $7.5 million and the budget request is $2,375,000 as against what the States have estimated they need in terms of projects planned for fiscal year 1968 in the amount of $10.5 million.

Library service in State institutions and to the blind and physically handicapped is wholly inadequate in practically all the States. Twenty-nine State agencies report that in fiscal year 1968 over 525 State-supported prisons, hospitals, and other institutions would benefit from title IV–A projects costing $5 million. About 365,000 prison inmates, hospital patients, juvenile delinquents, and others would benefit from library books and other services. Over 675,000 good books could be added and 280 persons hired to help run the libraries.

Thirty-two States reported that they have current plans in fiscal year 1968 for 53 title IV–B projects to help the handicapped who cannot use conventional library materials. Pennsylvania, for instance, states they will need $200,000 to start giving library service to the estimated 150,000 handicapped in the State who are not blind. Maryland plans to establish a unit on library service to the blind and physically handicapped to work with public libraries in assisting the handicapped. Rotating collections of materials will be placed in larger public libraries. The first year cost of this project is estimated at $90,000.

In addition to the above general items, I should like these statements, summarizing activities in a few States, to appear as an appendix for the record.

Mr. FLOOD. That appendix will be made a part of the record at the conclusion of your statement.

Miss KRETTEK. Thank you.

The association is aware of the pressure for funds and the international situation, but it feels that the best interest of the Nation requires that substantially increased appropriations above the budget recommendations be voted for fiscal year 1968.

	Authorization, fiscal year 1968	Budget recommendation
Title I—Public Library Services	$45,000,000	$35,000,000
Title II—Public Library Construction	50,000,000	27,185,000
Title III—Interlibrary Cooperation	7,500,000	2,375,000
Title IV-A—State Institutional Library Services	7,500,000	2,120,000
Title IV-B—Library Services to the Physically Handicapped	4,000,000	1,320,000

Last year was the first year for these new titles, III and IV. In the authorizing legislation there was no matching required for the first year since these were new programs and involved working with other groups which had no opportunity to provide the matching funds. So the first year was to be 100-percent Federal matching for these two titles. But last year, 1967, there was no money for acual operation, only a small amount appropriated for planning. This will create a titles. But last year, 1967, there was no money for actual operation, problem in fiscal year 1968 when there is a limited amount recommended in the budget and there are supposed to be matching funds. The States hoped this matching requirement could be changed for fiscal year 1968 so the first year of program operation would not be a matching program but from then on it would be.

The purpose is to provide funds to the States for school library resources, textbooks, and other instructional materials for the use of children and teachers. As examples of what title II is accomplishing, the following excerpts may be cited from letters and reports:

From New Mexico: "In many small schools, particularly in remote areas, this is the first time the fine books and materials now published could be secured in sufficient number to begin to meet the educational needs."

From Ohio: "The Remedial Reading, Fine Arts, Language Arts, and the Social Studies areas are experiencing a new enthusiasm because of the vast variety of resource materials which have become a part of our school life."

From Nebraska: "The Nebraska State Department of Education developed a unique school library demonstration program. Using part of its Title II administrative allocation, Nebraska purchased a mobile unit and stocked it with examples of quality print and non-print materials, and library supplies and equipment. They have used their mobile model library throughout the State for in-service education and to encourage local effort in developing school library services."

The starting of this new program was beset by delays, but these difficulties are in the main being overcome. The ESEA is accomplishing much for the students and teachers in the United States, but the need is still exceedingly great.

In view of the essentiality of the school program to the Nation, the American Library Association urges that full authorization, or at least a substantial portion of it, be granted.

Another program of particular concern to the association is title III of the National Defense Education Act (Public Law 88–665) which provides instructional equipment and materials, and has been of great value in improving educational programs in elementary and secondary schools. In fiscal year 1967, $79.2 million was appropriate. The budget recommendation for this year, however, is only $50 million, less than half of what is authorized for fiscal year 1968, even though additional categories have been authorized in other legislation.

The purpose of title II of this act is to improve college libraries and the quality of library service throughout the Nation by providing grants for: (1) acquisition of books, periodicals, and other library materials by colleges and universities; (2) training of all types of librarians—school, college, university, public and special; (3) research and demonstration projects, including the development of new ways of processing, storing, and retrieving the information; and (4) aiding the Library of Congress to acquire and catalog additional scholarly material, not only for itself, but for the benefit of other research libraries who serve the scholarly community.

In the case of the funds for part A, college library resources, there are three kinds of grants: basic, supplementary, and special purpose.

Some justifications for this act—

> Modern college instruction places great stress on the student getting his information from a wide array of library materials—not from a single textbook.
>
> Surveys have shown that 50 percent of our 4-year and 82 percent of our 2-year colleges fall below the nationally accepted minimum standards.
>
> Student enrollments have grown from 4,345,000 in 1962–63, to 5,525,000 in the fall of 1965. There is a projected figure for the fall of 1969, of 6,055,000.
>
> The shortage of trained librarians is crucial. It is estimated that 125,000 more trained librarians will be needed to meet the current minimum staffing standards of school, college, university, and public libraries.
>
> Research programs undertaken by universities in connection with national defense and space exploration require an enlarging high quality of library resources and services.

The shared cataloging project has already made great progress in assisting the Library of Congress to acquire, catalog promptly, and distribute catalog information on a much larger quantity and variety of library materials of value to scholarship than has ever been possible before. To move ahead as planned and carry out the intent of the law, the appropriation of the full authorization of $7,700,000 for fiscal year 1968 is urged. We certainly support Dr. Mumford's testimony about title II–C.

In the case of the appropriations for title II, the American Library Association urges that the authorizations for the act be allowed, be-

cause the adequate functioning of college and university libraries is essential to national progress. Accordingly, we recommend the following authorizations:

Part A. College library resources, fiscal year 1968:	
Authorization	$50,000,000
Budget recommendation	25,000,000
Part B. Library training and research:	
Authorization	15,000,000
Budget recommendation	[1] 11,800,000
Part C. Strengthening college and research library resources:	
Authorization	7,700,000
Budget recommendation	4,000,000

[1] $8,250,000 is for training and $3,550,000 is for research.

We also support more adequate appropriations for a program closely alined to the Higher Education Act—the Higher Education Facilities Act of 1963 (Public Law 88–204, amended and extended by Public Law 89–752). Only $390 million has been recommended in the budget for undergraduate facilities, while $728 million has been authorized for fiscal 1968 to carry on this important program to help institutions of higher education construct academic facilities, including libraries. Student enrollments are expected to grow from the estimated 6 million enrolled in college this year to nearly 9 million in 1975.

Similar deep cuts have been recommended in the budget for buildings for community colleges and for graduate schools. All aspects of higher education have increasing construction needs and we urge the appropriation of the full authorized amounts.

In addition, the American Library Association also urges this committee to consider favorably the adequate funding of the Medical Library Assistance Act of 1965 (Public Law 89–291). We believe that this program, designed to improve and expand the basic resources and facilities of health science libraries, as well as to train medical librarians, help compile scientific knowledge and develop a national system of regional health science libraries, is essential to the general health and welfare of the Nation.

The purpose of this act is to provide for the strengthening of the educational resources in the United States so that international studies and research may be made. As section 2 of the act declares:

> Knowledge of other countries is of the utmost importance in promoting mutual understanding and cooperation between nations . . . it is both necessary and appropriate for the Federal government to assist in the development of resources for international study and research and to assist in the progress of education in developing nations, in order to meet the requirements of world leadership.

Knowledge of other countries can best be gained through the books, periodicals, and other materials which libraries make available. On this point, the director of the University of Kentucky libraries recently wrote that:

> As part of its responsibility to educate young people for living in the 20th Century, the University of Kentucky has recently begun to supplement its traditional courses in French, Spanish, and German language and literature, history and political science, with instruction related to almost the whole world. Recognizing our country's continuing international commitments, and acknowledging

that we need to know more and more about the rest of the world, Kentucky not only offers courses in Japanese, Chinese, Russian, and Arabic, but is developing inter-disciplinary programs drawing upon such disciplines as history, political science, sociology, geography, and the behavioral sciences in an effort to offer as much about other countries and international relations as is possible. The additional stresses this puts upon a library are considerable.

The association, in view of the great significance of the international situation, urges that the full authorization be granted for fiscal year 1968:

Authorization: $40,000,000.
Budget recommendation: $36,525,000.

Mr. Chairman and members of the committee, I appreciate greatly the opportunity to present the views of the American Library Association regarding the various fiscal year 1968 appropriations which involve public, school, college, university, and research libraries. These agencies have taken on added significance and responsibilities in the progress of the United States, and I hope that you will give consideration to our recommendations for the largest possible appropriations.

(The appendix follows:)

APPENDIX

(NOTE.—The following are excerpts of summary statements from a few States regarding Library Services and Construction Act programs:)

CALIFORNIA

The Oakland Public Library has a demonstration of service to the culturally deprived with emphasis on 40,000 Spanish-speaking citizens. Oakland opened its Latin-American Branch Library in the Fall of 1966 with LSCA funds.

There are 25 library buildings in various stages of construction which have been funded under Title II from fiscal 1965 to February 1967. Five of these have been completed: the Rio Hondo Regional Branch of the Los Angeles County Public Library, the Mill Valley Public Library, the Santa Clara Public Library, the Calabazas Branch of the San Jose Public Library, and on February 19, the Santa Rosa-Sonoma County Library was dedicated.

ILLINOIS

The Federal Library Services Act program in Illinois began in the Spring of 1957. Since then, steady progress has been made in the quality of library service available to the people of the State.

To provide better and more uniform library service to the people of Illinois, regional service was developed under the Library Services and Construction Act. The first regional library was started in Carbondale for the Southern Illinois area. It brought thousands of books and other library materials to the libraries and people in the area, resulting in increased local support as well as improved library service. The project was so successful that it became a branch of the State Library.

IOWA

In 1956, there were over a million and a quarter Iowans without legal access to a public library; by June, 1966, this number had been reduced by more than one-half.

In January 1965, Keosippi, the first interstate library service program under LSCA, was begun between Iowa and Illinois with headquarters in the Keokuk Public Library. Both States supply funds for books and equipment. Iowa furnishes the administrator and the field consultant, and Illinois supplies a bookmobile. Keosippi service covers an area of approximately 50 miles from Keokuk, Iowa on both side of the Mississippi River. Through this interstate arrangement, people in both States are getting better library service than these areas could have provided individually.

KENTUCKY

"When one looks back to fiscal 1956, he can see tangible evidence of great progress in public library service in Kentucky." This statement by the State Librarian of Kentucky sums up the changes that have occurred in Kentucky during the ten years of the Federal Library Services and Construction Act program.

In 1966, there were 110 legally established libraries, in 1956, there were only 14; by 1966, 27 counties had voted or petitioned for a library tax, in 1956 no county had a library tax; and in 1966, there were 16 multi-county library federations or regions comprising 84 libraries in 71 counties giving Kentuckians better service, in 1956, there were no multi-county library federations.

NEW YORK

New York State's Deputy Commissioner of Education reports that: "In the ten years since passage of the Library Services Act, there has been an almost total transformation of New York's public library landscape. It is the result of an uncommonly common effort by local, State, and Federal agencies to achieve the goals of modern library service in the face of conditions of environment that are changing at a rate faster than in any previous time in history."

Although State aid appropriations rose to $10.2 million in 1966, the State's Deputy Commissioner for Education states that: ". . . State legislation and new State money alone would not have achieved the rapid organization of cooperative structure that was virtually complete by the end of 1961. Federal money financed new State positions, study and planning grants, regional conferences, and some demonstrations of the values of cooperation which helped foster acceptance of the basic concept and promoted system organization." However, despite total expenditures for public library services in the State of $3.50 per capita in 1965, New York was still below the minimum national standard at that time of $4.70 per capita.

PENNSYLVANIA

Under this year's program (FY 1967), the resources of the State Library are being strengthened by the purchase of thousands of books, documents, microfilms, and periodicals to be made available to the people of Pennsylvania. The State Library is continuing to provide consultant help to local libraries and is training library personnel in modern methods by holding workshops. In 1966, over 320 field visits were made to local libraries and 59 workshops were held.

The recruiting program of the State library continues to be successful in supplying trained librarians to fill some of the many professional vacancies throughout the State. Library career consultants encourage qualified college graduates to enter accredited library schools and to apply for the Pennsylvania State Library traineeship program. Nineteen trainees in the 1966 program have completed courses and are now at work in Pennsylvania libraries.

State aid to public libraries has been an incentive to obtain adequate local tax support for public libraries. Twenty-four more libraries qualified in fiscal 1966 for State aid by increasing local support than had qualified in fiscal 1965. Grants of over $2.9 million were made to 305 of the Commonwealth's 467 public libraries in 1966, and are continuing in 1967.

MISSOURI

The ten years of LSA–LSCA have produced substantial results in library development in Missouri. In 1956, the year prior to the Library Services Act, twenty-three counties were without any tax supported library; there are fourteen such counties today. In 1956, sixty-two counties were without countywide public library service; today there are thirty-eight such counties. Less than 80 percent of the State's population was served by public libraries in 1956; today almost 90 percent is served by public libraries. During this period, the county library districts of the State chose to cooperate among themselves for improved services, and the seven regional libraries of 1956 have increased to sixteen regional libraries in 1966.

State Library activities during this period include a scholarship and internship program which produced over fifty graduate librarians, most of whom are still working in Missouri libraries. In-service training programs—countless workshops, institutes and programs were also sponsored. These programs broadened

the understanding and knowledge of citizens, trustees and librarians in their efforts to improve and extend library services to the people of Missouri.

TEXAS

With funds made available through the Library Services Act and the Library Services and Construction Act, the Texas State Library has carried out for the last ten years a program of public library development throughout the State. As a result of this activity, income from public funds for library development has increased more than two and a half times from $3.9 million in 1956, to $10.3 million in 1966, the number of public libraries in Texas has increased from 276 in 1956 to 348 in 1966, and counties without any local library service were reduced from 54 to 25.

In the early years of the State Library's program bookmobile demonstrations in multi-county areas were stressed. These demonstrations of local library service with bookmobiles stimulated interest in books and reading. As a result, new libraries sprang up where none existed before. The emphasis now is the extension of service from existing libraries to surrounding areas and the greater coordination of service resulting.

KANSAS

Kansas public library systems in both urban and rural areas contract with the State agency for a large portion of the State's funds for services under Title I. The public libraries use these funds for developing reference and resource centers; for book processing centers; for extending service through the use of bookmobiles, branches, and mail service; for the education of librarians through either in-service or academic training; and for improving book collections.

The remaining funds for services are being used to strengthen the public library extension division of the State library and to develop its statewide program. This is being done by increasing the loan of books to libraries and direct mail loans to individuals.

WISCONSIN

In fiscal 1966, Federal funds are continuing to provide new or improved public library service to Wisconsin's residents in urban as well as rural areas.

Two new projects this year are concerned with library service to the disadvantaged. The Milwaukee Public Library, serving Wisconsin's largest city, is strengthening the program in the area of the Lapham Neighborhood Library, and the Dodge County Library is extending library service to migrant families through the Williams Free Library in Beaver Dam.

Mr. CASEY. Thank you for a very informative statement. I think you covered it very well and I wish to commend you on it.

Miss KRETTEK. Thank you very much.

MONDAY, APRIL 24, 1967.

CHILD HEALTH AND HUMAN DEVELOPMENT

WITNESS

DR. KERMIT E. KRANTZ, PROFESSOR AND CHAIRMAN, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, UNIVERSITY OF KANSAS MEDICAL CENTER, KANSAS CITY, KANS.

Mr. FLOOD. We are pleased to have on behalf of the Institute of Child Health and Human Development Dr. Kermit E. Krantz, professor and chairman, Department of Obstetrics and Gynecology, University of Kansas Medical Center, Kansas City, Kans. You are going to address yourself to one phase of the Institute, I suppose, Dr. Krantz.

Dr. KRANTZ. Yes, sir.

Mr. FLOOD. I presume you have a statement.

Dr. KRANTZ. I am also a professor of anatomy in the school of medicine. I hold two chairs in the university.

Mr. FLOOD. That is a good trick. So do I. They are Defense and Labor and HEW.

Dr. KRANTZ. If you can keep it up.

Mr. FLOOD. Of course, your problem is different from mine.

Do you wish to read your statement?

Dr. KRANTZ. I can read the statement to you.

Mr. FLOOD. That is up to you.

Dr. KRANTZ. I will read the statement to you for the record.

Mr. FLOOD. Very well.

Dr. KRANTZ. Mr. Chairman, the National Institute of Child Health and Human Development has been charged with the responsibility of developing and supporting programs in research and training in the biological and physiological aspects of reproduction, growth, and development; in actuality, the determination of what the human being is to be in the future.

Mr. FLOOD. How long have you held these chairs?

Dr. KRANTZ. Eight years.

Mr. FLOOD. What medical school are you from?

Dr. KRANTZ. Northwestern University.

Upon it is the responsibility for the improvement of the progeny of man. This, in addition, includes obstetrical and pediatric problems, the reduction in maternal and fetal mortality, no less than congenital defects and mental retardation. Alone, this is an overwhelming responsibility no less than to consider that this Institute also carries the responsibility for understanding the process of maturation, both physical and intellectual, as well as the social development and behavorial aspects of development culminating in the biological, medical, and behavioral aspects of aging.

Mr. FLOOD. When was the last time you delivered a child?

Dr. KRANTZ. 24 hours ago.

Mr. FLOOD. Good.

Dr. KRANTZ. The Institute of Child Health and Human Development is responsible for that which makes the human being. Every other institute, regardless of its level of sophistication and research, indirectly is related to the National Institute of Child Health and Human Development.

In the changing milieu of our society, a greater understanding of the fundamental clues to life itself have become more and more essential for the survival of our society. In a pragmatic manner, let us approach the most obvious problem—the problem of population.

It is now obvious that the indiscriminate growth of the world's population in excess of the world's economic means of support is rapidly leading man on the greatest collision course for survival that he has faced in his history. There is little question that the world's population will double within the next 25 years, especially when one considers that over 2.4 billion of the world's 3.3 billion people live in the underdeveloped areas of Asia, Latin America, and Africa with 75 percent of these people having an annual income of less than $100 and 94 percent having an increase of less than $300 in conjunction with

the world's food production measuring at a rate far behind that of the world's population growth.

Mr. FLOOD. Where do you get those statistics?

Dr. KRANTZ. From the World Health Organization.

Mr. FLOOD. Mr. Laird will be at Geneva in 2 weeks for the annual meeting.

Dr. KRANTZ. I wish I had the privilege of being with him. Accordingly, it is known that more than 4 million people die of starvation each year; approximately 12,000 per day.

The population rate of the world has grown at a shocking rate with the Philippines having doubled its population since World War II, Brazil with a 3-percent birth rate, China with an estimated 2-percent birth rate and an excess of 750 million people, and the United States with a growth rate of 1.6 percent.

Mr. FLOOD. What is the Latin American rate?

Dr. KRANTZ. Brazil is 2.3 percent.

Mr. FLOOD. The Latin American rate across the board.

Dr. KRANTZ. Three percent across the board. That means they double their population every 23 years. There is little doubt that man through modern medicine and sanitation has so vastly changed the world that he must now openly admit that unless a minimum of balanced population to resources is achieved with a minimum of delay, the prospect of a progressive degradation of a constituted society, culminating in a dark age of misery and famine shall become inevitable for mankind.

Mr. FLOOD. Do you know anything about the contraceptive program in Japan?

Dr. KRANTZ. Yes, sir; I have been there and observed it.

Mr. FLOOD. What about it?

Dr. KRANTZ. It is effective.

Mr. FLOOD. How long has it been in operation legally?

Dr. KRANTZ. Legally, for something like 20 years.

Let me point this out to you. On the way down here from Kansas City on the airplane I got to thinking as I was reading Time magazine and I took out a pencil and figured that if Red China should enter into the conflict that we are involved in now, cross the 17th parallel, and we should kill Red Chinese soldiers at the rate of 25 per minute, stacking their bodies five high and five wide, that they would arrive in Saigon in 347 days, 5 hours, and 20 minutes. We would have killed 12.5 million Red Chinese and we would not have cut their birth rate in half. The number of Chinese that would have been born in that period of time would have exceeded that number.

Mr. FLOOD. Why don't you make that statement to the press?

Dr. KRANTZ. I just figured it out.

Mr. FLOOD. I don't care when you figured it out, I just asked you the question.

Dr. KRANTZ. I just never thought of it.

Mr. FLOOD. Think of it now. That is one of the most dramatic things I have heard currently.

Their birth rate is about 2.7 million per month, you say?

Dr. KRANTZ. Yes. Ours is 4 million, in round figures, per year. So you see that if you calculated it out in round figures their birth rate

is about 35 million a year, or a little bit less. If we killed and cut it down, say that disease and famine will knock off so many, and the abortion will knock off a great number, and say it was only 24 million a year or only 2 million per month, there would be more Chinese born than we could kill off in an invasion.

Mr. FLOOD. Do you bring in the law of Malthus to describe the situation across the world?

Dr. KRANTZ. Yes. It is quite obvious; it is there, whether you like to accept it or not.

Mr. FLOOD. Would you state for the record what the law of Malthus is, generally?

Dr. KRANTZ. Well, man is in the situation where he creates more than he has and sets up a circle in which he comes around and consumes himself.

Mr. FLOOD. How long ago was this law expounded; if you recall?

Dr. KRANTZ. I think the gentleman behind me might know. In the late 1700's, I believe.

Mr. FLOOD. This is not a new idea?

Dr. KRANTZ. Oh, no. But when you stop to think that it took 1,600 years, and you think of from that point on the world doubled its population.

Mr. FLOOD. This includes the Four Horseman of the Apocalypse.

Dr. KRANTZ. That is right; it doubled itself within the next 200 years, it doubled itself in another 100 years, and then it doubled itself in 45 years, and now it is going to double itself in less than 30 years.

On this Nation with its great economic resources has been placed the awesome burden of affording leadership to the solution of these problems, less there be no survival for this or any society. Man has spent his existence tampering with death and now because of his successes must face the problem and the challenge of tampering with life. New and more significant means of understanding the basic secrets of life must be rapidly forthcoming if there is to be any chance of survival. In order to meet this challenge all areas fundamental to reproduction culminating in increased activity in family planning are absolutely necessary.

Let us carefully evaluate the recommendations that have been made by many of the scientists of this country. It has been pointed out that an aggressive large-scale program must be initiated by the Federal Government through research, training grants, and fellowships in order that enough personnel in the various scientific disciplines will be available to seek and find the answers to the riddles of life that are plaguing us.

At this time our aging population has been deeply concerned with the problems of heart disease, cancer, and stroke, yet one of the greatest paradoxes of this era of scientific knowledge and progress is the paucity of information and the number of individuals capable of understanding the very fundamentals of life itself. I ask you, who would consider building a home by putting the roof on it first? What tree was worthy, in its maturity, of bearing fruit when it came from a poor sapling? Though we have developed methods for reducing the death rate from the common diseases, human fertility and sterility remain shrouded in mystery no less than the inherited and developmental errors which

play such a significant role as the progenitors of the aging process—susceptibility to cancer, heart disease, and stroke and other well-known tragedies of later life. Prevention has been the byword of our society. As an example, we do not wait until a smallpox epidemic occurs prior to vaccination. The last great example of prevention was the development of vaccine for the crippler, poliomyelitis, and the great killer, measles.

The problem that is placed before you today is not one that can be adequately coped with on the local level. It is not one that is provincial or secular. It has become the responsibility of our entire society. No longer can the physician and the educator deny his role in affording responsible leadership and effort in developing solutions to the great social problems of our time. He cannot stand behind the cloak or mantle of academic license for long without becoming cognizant of and related to these problems; nor can the legislator ignore the fact that the issue exists; nor can he assume the role of a Pontius Pilate and abrogate his responsibility to cause a further tragedy for civilization no less than gamble with virtually its survival.

If we are to build a society, great in all of its various aspects, we cannot ignore the needs of our children yet unborn. We have not equivocated for one moment about investing money in the sums of billions to explore space, yet we stand by helplessly and watch our children die and be crippled from disease—leukemia, cancer, mental retardation, and from being, of all things, unwanted. It is altogether incongruous that this Nation so richly endowed in the face of such problems would deny they exist much less approach them half-heartedly.

There is little question that the knowledge that is required in fundamental research in the laboratories as applied to reproduction is not alone directed toward the control of population, but has brought forth an improvement of the quality of the newborn who have today a greater opportunity to develop into adulthood without the handicaps of mental retardation, congenital disease, and other tragedies. At the same time it has brought some a greater opportunity to fulfill their wish to immortality—the birth of a wanted child.

There is little question that the National Institutes of Health, specifically through the National Institute of Child Health and Human Development, must explore all the significant and scientific questions relating to human reproduction and whatever directions they may lead in order that we may offer those generations yet unborn a greater opportunity to fulfillment of the tremendous heritage that has been passed on to them. There is little question that the efforts should be appropriate to the magnitude of the problem.

On the other hand, there is little question of the magnitude of the problem of population explosion that has been placed before us by the demographers of the world. The Congress recognized this obligation when it created the National Institute of Child Health and Human Development.

Predicated upon my previous remarks, I would like to make some statements concerning the appropriations recommended in the budget of the National Institute of Child Health and Human Development.

These are my own, nobody from the Institute in any way whatsoever has influenced them. I am here because I wanted to be here.

Admittedly so, I am not an expert in fiscal policy as well as I must understand the tremendous demands made upon this committee by other agencies of the Government; however, this appropriation has a direct effect upon the responsibilities vested in me and some 300 other scientists in this country in finding a solution to these great problems that lie before us.

First, in the area of research grants, the President's budget recommends $42,931,000 which at the present time will not fund the approved grants for research in 1968. Which of these grants might hold the key for the solution of the Rh problem or drug-induced congenital anomaly or population control, cannot be predicted.

I have spent 18 years of research into the area of maternal-fetal and fetal-maternal relationships making some significant contributions and now will have to terminate these studies because of inadequate funds. Research cannot be turned on and off like a water faucet. It takes years of preparation, no less of training, to develop concepts into practical application. I cannot ask the State of Kansas to support this research for it cannot do so economically. In addition, it is the entire society that will benefit from solution to these problems; therefore, it becomes a national concern. Concommitant with this, loss of support will be the termination of opportunity for the young men and women in the research laboratories who are dependent upon grants for support to develop them adequately toward the challenges of better research and patient care of tomorrow. As a result three such graduate students as well as three postdoctorals from other parts of the world shall cease their advanced education. This is but one example which will be multiplied many times over in the field of research, in the fields of fundamental reproduction and population; the development and evaluation of means of regulation of fertility techniques; and in the reduction of perinatal and infant mortality.

Let us consider how limitation of support will reduce our opportunity to gain new knowledge in the disorders of infancy and childhood, minimize mental retardation and the genetic defects.

The field of growth and development seeks to understand the physiological development of the species, its rates of maturation, the nutrient interactions and patterns of the body and is attempting to understand the relationships between physiological and behavioral biology. This is extremely important when one considers that 45 percent of the children of the world are under the age of 15 and that 70 percent of the children of the world suffer from some degree of malnutrition, minimal to outright starvation. No less than to consider in our country the behavioral patterns on social and emotional levels of the teenager in our society that have resulted in an increased rate of crime and deterioration of moral values. These cannot be ignored; to ignore them is to destroy our Nation.

On the other hand, we cannot forget that adult development began in childhood and in order to understand it in later life, the total aspects of aging must be studied lest we face someday a nation of aged who are incompetent and incapable or so diseased ridden that their burden would be tantamount to the destruction of our society. We must understand the factors that play a role in the development of new knowledge directed for the improvement of the geriatric individual of our society.

I have already alluded to you the problem in mental retardation. The diagnostic causative and ameliorative approaches to this problem cannot be ignored. The institution in which I reside at the present time has one of the best developed mental retardation units in the United States, but what good are these buildings should I not have the funds to train the people to work in them? What good are these buildings if I cannot carry out the research to help solve the problems? This is a multifaceted program and adequate support is necessary.

I seriously ask that this committee in considering this appropriation increase it enough that we in the twilight of life will not be neglected nor see the following generations condemn us for our inadequate penurious judgment. Increased appropriations for research grants of between $7 and $10 million is absolutely necessary if our conscience is to remain free. This is less than the overall research budget of what it costs us daily to fight for our survival on the battlefields; this is the battlefield of the future.

Having been in those battlefields and visited them—I am national consultant to the Surgeon General of the Air Force—I am very much aware of it at the present time.

The further development of clinical research centers for mental retardation must be continued in order that every region of the United States may afford an equal opportunity to the solution and care for individuals so afflicted. These centers are practical in that they apply what has been learned through research. They afford a tangible means to measure the effectiveness of the research programs. An increase of $2½ million will allow the initial support of research and training in five centers that will be operational in the near future. To carry out the research within the centers, programs for training of such individuals is necessary. The University of Kansas is well aware of this, probably earlier than many others in the United States.

In 1957, the University of Kansas under the direction of the present Chancellor, W. Clark Wescoe, when he was the dean of the School of Medicine, established the first endowed chair in the world in a medical school to study the problems of reproduction and population. Mind you, this is out in the prairie. This professorship has grown to the size of a department involved in the problems of basic reproduction; a total faculty of 14 in number; and 17 individuals working for a master's or Ph. D. degree in fundamental areas of anatomy, biochemistry, and physiology. These individuals are supported in a twofold manner. American youths highly motivated are supported through training grants from the National Institutes of Health at modest sums with a commitment to enter into the field of education in research upon graduation. Individuals from South America, India, Japan, Australia, and Europe under the aegis of the Ford Foundation have been brought here to similarly achieve the necessary fundamental background to return by contract to their own countries to establish laboratories and programs to seek the answers for a better progeny and control of the inordinate population growth. The appropriations for training grants should be markedly increased; an increase of at least $3 million is necessary, yet it is only $143,000. Talented youngsters have been turned from the door of our laboratories because of the inadequacy of funding.

It should be pointed out at this time that the talent program for developing these individuals is in keen competition with industry, space science, physics, engineering and so forth. It has become so critical that we have developed programs involving talented high school and college students to interest them in the field of reproduction through summer fellowship experiences. In 1964, of the 1,745 Ph. D. degrees awarded in the biological sciences in the United States less than 10 percent were in the field related to reproduction—a minimal investment in the life of tomorrow. This is necessary, for without trained individuals we cannot hope to approach nor find a solution to these problems. I assure you a nation that has expended billions in arms and in space can easily afford a sum five times that which I mentioned with a greater assurance of a return on its investment than anything else it could do.

An increased appropriation to cover the direct research facilities of the Federal Government should be made. These funds primarily go toward making the facilities in the gerontology center in Baltimore ready for occupancy as well as to further support collaborative research programs in the fields of reproductive biology, conception control, as well as in the fields of biometry, epidemiology at the various centers of the country working on problems of mental retardation. A modest increase should be made to help review the approval of grants and for program direction to the Director of the Institute.

In summation, it is inconceivable to me that a nation so richly endowed in the face of such problems would deny that they exist, no less to halfheartedly approach them. Let us, therefore, go forth with a marked increase in this budget not less than $15 million over what has been recommended to face the population problems squarely and realistically.

Should we not recognize our responsibilities at this time, then our epitaph can be written in the words of Oliver Goldsmith when he said, "Ill fares the land, to hastening ills a prey, where wealth accumulates, and men decay."

Mr. FLOOD. Do you know the rest of that?

Dr. KRANTZ. I do not remember the rest of it.

Mr. FLOOD. I do.

Dr. KRANTZ. I have learned a lot of English poems. I do not remember all of them.

Mr. FLOOD. Now, Mr. Shriver here is from Kansas. He may wish to say something.

Mr. SHRIVER. I have been acquainted with Dr. Krantz by reputation. I have known him by reputation for some time. I certainly want to commend him upon the statement that he has just made. I know that he is considered one of the best in the scientific and medical field in our great State of Kansas. I know that he is highly regarded at the University of Kansas and is contributing greatly to our State and to our Nation. I congratulate you upon taking your time to come up here and speak in behalf of something that you are well qualified to speak about to this committee.

Dr. KRANTZ. Thank you.

Mr. FLOOD. I might say that the committee is obviously impressed by your earnestness and great sincerity.

Dr. KRANTZ. Thank you.
Mr. FLOOD. Thank you, Doctor.
Dr. KRANTZ. You are welcome.

ALLERGY AND INFECTIOUS DISEASES

WITNESSES

DR. ARTHUR P. RICHARDSON, DEAN, EMORY UNIVERSITY SCHOOL OF MEDICINE, ATLANTA, GA.; MEMBER, NATIONAL ADVISORY ALLERGY AND INFECTIOUS DISEASES COUNCIL
DR. EDMUND KLEIN, CHIEF, DEPARTMENT OF DERMATOLOGY, ROSWELL PARK MEMORIAL INSTITUTE, BUFFALO, N.Y.
LANE W. ADAMS, EXECUTIVE VICE PRESIDENT, AMERICAN CANCER SOCIETY; MEMBER, NATIONAL ADVISORY ALLERGY AND INFECTIOUS DISEASES COUNCIL

Mr. FLOOD. We now have the privilege of hearing the gentlemen on behalf of the Allergy and Infectious Diseases Institute. First we have Dr. Arthur P. Richardson, who is the dean, Emory University School of Medicine, Atlanta, Ga., and member of the National Advisory Allergy and Infectious Diseases Council. You have a statement, Dr. Richardson?

Dr. RICHARDSON. I do.

Mr. FLOOD. Proceed.

STATEMENT OF DR. ARTHUR P. RICHARDSON

Dr. RICHARDSON. Mr. Chairman, members of the committee, before I start out it seems to me what I have been asked to testify on is something which created a problem which Dr. Krantz just got through testifying about.

Mr. FLOOD. Which came first, the chicken or the egg?

Dr. RICHARDSON. I think probably we came first. We created part of the problem. So here we are back again asking you to help us even make the problem a little bit greater, perhaps.

Mr. Chairman and members of the committee, I appear before you this afternoon as a member of the Council of the Institute of Allegry and Infectious Diseases as well as chief administrative officer of one of the 90 medical schools in this country.

Mr. FLOOD. Where did you take your medicine?

Dr. RICHARDSON. At Stanford.

Before becoming involved in administrative work I was engaged principally in research on chemotherapy of syphilis, malaria, and tuberculosis. A good deal of my scientific career was devoted to pharmacological studies on penicillin, sulfonamides and antimalarial agents.

Mr. FLOOD. Any reaction to this new malaria bug we are bringing out of Vietnam?

Dr. RICHARDSON. Yes. This is part of the thing I was going to comment on in a very general way.

Mr. FLOOD. Go ahead.

Dr. RICHARDSON. My 25 years of research occurred during what was easily the most dynamic period of attack on infectious diseases. To

many of us this was the golden age of chemotherapy and we would all like to take some little credit for the dramatic decrease in mortality and morbidity of diseases caused by microbial agents.

Mr. FLOOD. Morbidity; how do you use that? It is not pleasant?

Dr. RICHARDSON. It is not pleasant, illness without death. I am afraid it is too easy to remember our successes and to think that we won a war when in fact we won only a few battles—important battles without doubt—but there is still much that needs to be done before we can assume we have conquered the problem of infectious diseases in man. We need to remind ourselves now and then that infectious diseases still rank as the third most important cause of death after heart disease, stroke, and cancer. And this is only part of the story since infectious agents are a major cause of nonfatal illness. From a purely economic point of view, any advance made in the treatment of infectious disease among the citizens of this country would result in significant economic return.

Mr. FLOOD. Is this bacteria and virus?

Dr. RICHARDSON. Yes, any microbial agent, microscopic agent. I am here, therefore, this afternoon to plead for continued and expanded support for the programs of the National Institute of Allergy and Infectious Diseases. I should like in the few minutes available to me to enumerate and briefly describe some of the areas of research which I believe require special emphasis.

From my vantage point it appears that the most important area which needs support is that of drug resistance which follows the introduction of almost every new chemotherapeutic agent. Perhaps one of the most disappointing experiences of a scientist working in chemotherapy is to discover a new class of drugs of great promise only to find that after a time microbial agents somehow become resistant to treatment. The emergence of resistant strains of malaria in Vietnam is a case in point. At the present time we know remarkably little about this phenomenon. Two kinds of research are needed for us to meet this problem: one is the continued search for new chemotherapeutic agents which have a different mechanism of action from those currently available. Second, and perhaps more important, is the need for developing a body of basic research information on the mechanism of this phenomena in the hope that perhaps knowledge may be accumulated which will permit the development of rational and practical solutions to this important problem.

Mr. FLOOD. What are you looking for, vaccines?

Dr. RICHARDSON. No. I am not referring to this as much as I am to chemotherapy, attempting to handle the problem through chemical agents. Vaccines are a different matter entirely, although they could be part of the problem.

One of the most difficult and perplexing group of micro-organisms which cause disease in man are the viruses. In spite of dramatic success which has been made on the attack on the bacterial diseases, remarkably little progress has been made in the development of chemotherapeutic or chemical agents against these organisms. Our greatest successes in the attack on virus have come through the development of vaccines, such as those that are effective in the prevention of smallpox, poliomyelitis, and so forth. We do need, however, drugs which may be

used once the infection has become established, and in the case of viruses there are only a few chemical agents available today which may be considered of practical value.

Mr. FLOOD. What is a chemical agent as distinguished from a vaccine?

Dr. RICHARDSON. Vaccine is usually a protein material which is related to something that usually comes from the organism itself and induces an immune reaction on the part of the host.

Mr. FLOOD. And the chemical is entirely an artificial creation?

Dr. RICHARDSON. Entirely. It is a direct attack on the organism itself. In order to succeed in any search for chemotherapeutic agents it is necessary to establish in the laboratory, experimental models of the infection under circumstances that large numbers of chemical compounds may be investigated. Unfortunately, this is not as easily accomplished with virus infections ordinarily as it is for bacterial and larger parasites which cause so many tropical diseases. Therefore, there is need for continued and expanded support on basic research which will give us a better understanding of viruses themselves.

I am sure this committee has been well informed of the progress which has been made in the development of vaccines for a number of virus infections. Many of the programs which the Institute of Allergy and Infectious Diseases has supported in past years are now beginning to pay dividends in a practical way. As one moves into developmental research which is based upon basic discoveries, oftentimes there is greater need for expenditure of money. I, therefore, believe we need to push more vigorously the various vaccine development programs which have been mounted in recent years.

To me, one of the most exciting developments in recent years has been the recognition that chronic long-term infection with some viruses in animals leads to conditions which resemble some of the so-called degenerative diseases in man. While it is still too early to say for sure that these diseases in man are truly caused by viruses, nonetheless, the development of experimental models in animals have given biological investigators tools with which we can for the first time begin an intelligent attack upon such diseases as multiple sclerosis and similar disorders. As the life span of our citizens is increased, degenerative illness will become a more important health problem.

Mr. FLOOD. What is the life expectancy for a male and for a female in the United States today, approximately?

Dr. RICHARDSON. For the male it is about 67 years, for the female it is 73 or so. I hope I have those figures correct.

Mr. FLOOD. You can correct the record.

Dr. RICHARDSON. That is approximately correct. It is reassuring, therefore, that there is at least a lead which may enable us to cope with the problem before it becomes more serious. This kind of work needs to be stimulated and encouraged. We particularly need to encourage basic scientists to turn their attention to this problem.

Much publicity in recent years has been given to the development of artificial organs and to the possibility of transplantation procedures. The public is easily impressed by the drama which is attached to the actual operative procedure. What is not always appreciated, however, is that the surgical techniques for such procedures have been within our

capability for many years. Recent successes have therefore not come from improved dexterity of the surgeon as much as from new and fundamental knowledge of the immune reaction which is brought into play when biological material is transferred from one patient to another. These are problems which have long concerned microbiologists and are the same kind of phenomena which are involved in the development of vaccines and natural resistance to micro-organisms. It was completely logical, therefore, that the resources of the Institute of Allergy and Infectious Diseases and those scientists which they support should become involved in cooperative endeavors with surgeons in attacking this very important problem. Further progress in this field can be made only as rapidly as the basic science of immunology develops additional tools which can be applied in a practical way in man. This program could well be supported by additional funds since it has just now reached the stage of paying practical dividends.

Last year when I appeared before this committee I recommended that $57 million be allocated for the extramural grant program. I should like to urge approval again of a similar amount since I believe this is a sum of money which is needed and which can be well spent. I believe this is needed for a variety of reasons. In the first place the cost of doing research is rapidly mounting; not only has there been an escalation in costs of personnel but as our scientists become more sophisticated they require increasingly complex equipment and material. I believe also that the success of the training program has now reached the point where there is an expanded group of scientific investigators who may themselves initiate significant research programs which will not be funded unless additional appropriations are made to the extramural program. You gentlemen are all familiar with the tremendous demand which is being made on the medical manpower pool. As rapidly as possible new medical schools in this country are being established and the older ones are trying wherever possible to expand the size of their classes. As you probably realize, the success of medical education in this country has been in part due to the fact that high-grade medical education can take place only in an environment which encourages and fosters original investigative work. If we are to succeed, then, in expanding the output of physicians in this country of the similar high quality which has characterized the educational program up to this point, it is absolutely essential that we find the means to support the additional faculty who will be staffing our new medical schools. This in turn will increase our potential to attack the fundamental problems of health which face us and we may expect, therefore, increased scientific output throughout the country.

One of the crucial areas which I feel needs attention not only in this Institute but in all institutes, is increased support in the form of training grants. These grants have been of immeasurable help in establishing first-rate training programs in all of our schools.

Last year the Congress gave the National Institutes of Health a modest increased appropriation. In my opinion this should be significantly increased in the coming year.

We all have reason to be proud of the intramural program of the Institute of Allergy and Infectious Diseases. They have not only made important contributions at the fundamental level but, in addition, are

a key resource which serves as a core for the developmental research programs which must be maintained. It is important that the budget for direct operations of laboratory and clinical research be increased. This is particularly true as the intramural program becomes more and more involved in sophisticated studies on viruses. Many of the infectious agents with which they are now working require much more expensive equipment and greater care in the manner in which they are handled. If for no other reason, additional expenditures are needed in order to safeguard the health of the laboratory personnel. The increased funds which we are requesting at this time for direct operation we feel are amply justified. In addition, careful review of the work of the collaborative research and development program justifies additional funds over those which are now being considered by this committee.

I have one final point which I think justifies the request for additional funds particularly for the extramural programs. This has to do with the changing functions of the several councils of the Institutes. Over the years that I have been a member of a council I have noted a change in their function. Originally they were more concerned with detailed review of study section actions and individual projects. In recent years, however, it is apparent the function of the council is not so much to review specific actions or specific recommendations of the study sections, but rather to examine programs, to stimulate and encourage new programs in areas for which there need to be answers. The additional money which is being requested this afternoon will enable the Institute of Allergy and Infectious Diseases to more effectively plan and guide research into specific areas. I have no difficulty in pleading the cause of the Institute of Allergy and Infectious Diseases since, in my opinion, they have many successes to their credit and there is every reason to believe that they will continue to make an outstanding contribution to the improvement of the health of the citizens of this country and of the world.

I thank you.

(The attachment to Dr. Richardson's statement follows:)

Citizen witnesses budget for National Institute of Allergy and Infectious Diseases

[In thousands of dollars]

	1967 appropriation	1968 President's budget	1968 estimated needs
Grants:			
Research	49,006	52,936	57,936
Fellowships	3,700	4,267	4,267
Training	9,103	9,251	11,251
Total grants	61,809	66,454	73,454
Direct operations:			
Laboratory and clinical research	12,488	13,746	14,246
Collaborative research and development	10,118	11,025	11,525
Biometry, epidemiology, and field studies	1,289	1,356	1,356
Review and approval of grants	1,358	1,482	1,482
Program direction	346	359	359
Total, direct operations	25,599	27,968	28,943
Total estimate	87,408	94,422	102,422

Mr. FLOOD. You plead well, Doctor. We have benefited by your visit, your advice, and your learning before. I expect we shall again. Thank you very much.

Dr. RICHARDSON. Thank you.

Mr. FLOOD. Under allergy and infectious diseases, we will continue with Dr. Edmund Klein, who is the chief, department of dermatology to Roswell Park Memorial Institute, Buffalo, N.Y.

Will you proceed, Doctor.

STATEMENT OF DR. EDMUND KLEIN

Dr. KLEIN. I am Edmund Klein, chief of the department of dermatology at Roswell Park in Buffalo. I am very grateful for the opportunity to be able to summarize for you some of the recent advances that have come out of your support for the Institute for Allergy and Infectious Diseases.

Mr. FLOOD. Where did you take your medicine?

Dr. KLEIN. University of Toronto, and then at Harvard. These recent advances may be of benefit to millions of people. I would also like to point out very briefly some of the additional far-reaching possibilities which have grown out of this particular type of work. I will confine my remarks to new methods of treatment which we have developed. These treatment methods make use of allergic reactions which until now were known only to cause diseases or prevent the treatment of diseases. We are now able to produce and utilize specific allergic reactions for the treatment of diseases.

Mr. FLOOD. How do you establish the allergy?

Dr. KLEIN. We use great care to establish a particular allergic reaction for the purpose of treating the patient. If I may, I would like to show you some examples of our approach. In effect, we are using a disease process, as it were, to treat another disease under controlled conditions. This represents a new concept in medical treatment.

Mr. FLOOD. Sending a thief to catch a thief, are you?

Dr. KLEIN. Exactly, sir.

So far, most of our experience has been in cancers and precancerous lesions of the surface of the skin, but the basic principle: namely, the use of an allergic reaction for the control of diseases extends to many other diseases quite apart from cancer.

Mr. FLOOD. What is a lesion?

Dr. KLEIN. A lesion is an abnormal structure or function of a part of the body.

Mr. FLOOD. It isn't necessarily a breach or a break of any kind?

Dr. KLEIN. Not necessarily, sir. It is an abnormal function or process or an abnormal structure.

Mr. FLOOD. Would a mole be a lesion?

Dr. KLEIN. Yes sir. It would usually be a benign lesion; but it would nevertheless be a lesion. Cancer would be a lesion, to take the other extreme, but a malignant lesion.

The type of therapy that we are talking of utilizes allergic reactions which are due to the immune mechanism of the body. We may therefore consider this a new form of immunotherapy. Since we are using immunotherapy on a local or topical basis, a further totally new ap-

proach is introduced into medical treatment. Now, Mr. Chairman, may I show you some pictures which will illustrate this.

Mr. FLOOD. What do you mean by local? With reference to part of the body?

Dr. KLEIN. Yes, part of the body. This is a patient with multiple skin cancers.

Mr. FLOOD. The witness now shows me a photograph of the back of a human being from the neckline to the waistline, covered with rashes of various sizes, apparently of reddish-brownish color covering almost the entire back.

Dr. KLEIN. This patient had 140 individual skin cancers on his back alone and had numerous others on other parts of his body.

This patient was made allergic by taking a drug known as 2,3,5,-tri-ethylene-imino-benzoquinone. We will abbreviate the name of this chemical to TEIB. An ointment containing TEIB was prepared. A small amount of the ointment containing a very small amount of the drug; namely, five parts per 10,000, was applied to a small area of the patient's skin.

Mr. FLOOD. Can these become progressively worse; is that the danger?

Dr. KLEIN. Indeed. They will become worse. This man has so many lesions that all of them cannot possibly be removed with the established methods of treatment generally available at this time. The area involved by the cancers is too large to be treated by surgery or X-radiation.

Mr. FLOOD. What could have produced that very advanced condition?

Dr. KLEIN. There are many, many causes for it, sir.

Mr. FLOOD. What would be two?

Dr. KLEIN. The sun, arsensic.

Mr. FLOOD. Too much exposure to the sun?

Dr. KLEIN. Yes.

Mr. FLOOD. What would be another one?

Dr. KLEIN. Arsenic.

Mr. FLOOD. Well, now, people just do not go and take arsenic.

Dr. KLEIN. Not very long ago arsenic was used in several types of medical treatment.

Mr. FLOOD. What would be a good reason today other than arsenic?

Dr. KLEIN. X-ray or nuclear radiation exposure, a number of other chemicals which are becoming known as carcinogens; that is, chemicals which can produce cancer.

Mr. FLOOD. With good there comes the bad.

Dr. KLEIN. I am afraid so.

Now, we take a small amount of an ointment which contains one of several allergy-producing drugs, we place it on the patient's skin and we wait usually for 2 to 3 weeks. In this case it was 3 weeks and the drug was TEIB. Nothing overt happened during the first 3 weeks. Then at the end of the 3 weeks or whenever the patient has become allergic there is a sudden onset of a reaction which takes maybe 3 or 4 hours. The area becomes red, swollen, and forms a blister. At that point and from then on the patient is allergic to this particular drug. When we take that drug and apply it in ointment form all over

the patient's back this is what it looks like. This is the patient at the height of the allergic reaction.

Mr. FLOOD. The doctor now shows me a second photograph following the topical administration of TEIB ointment after he had shown hypersensitivity reaction to this specific agent, and from the photograph I would describe it as being almost totally encrusted as though it had been baked and browned in an oven.

Dr. KLEIN. A graphic description, sir.

Note, however, Mr. Chairman, and gentlemen, that there are areas on the patient's skin that have not erupted. The reaction is limited to the areas where cancerous or precancerous conditions are present. Note that even scars from previous treatments have not reacted although these areas of scarring are usually weaker; many things can cause scars to break down which do not hurt the normal skin. So this destructive effect of the allergic reaction is quite specific for the cancerous or precancerous process. Note also the tiny little areas less than a millimeter in diameter, every one of these areas is an early cancer which we would not have been able to detect by ordinary means. The drug causing the allergic reaction is smarter than we are and it picks up the cancerous or precancerous areas. It does so by producing an inflammation, which caused the involved areas to turn red, thus rendering the undiagnosed cancers apparent. In the process of detecting the cancers, the allergic reaction also destroys the cancers.

Mr. FLOOD. What is the prognosis on that patient?

Dr. KLEIN. Ordinarily not very good. But with the new treatment this is what the patient looked like 3 months later. Actually, this picture was taken a year later.

Mr. FLOOD. The witness shows me figure 3, the same patient as in figures 1 and 2, 1 year following the application of TEIB. To me it looks miraculous, it looks almost completely clean and devoid of any very obvious lesions, marks, or scars of any kind.

Dr. KLEIN. Here is a closeup within 4 hours of applying the ointment. The areas involved with cancerous or precancerous conditions have reacted. What you see are the blisters that have formed. Note how sharply demarcated they are; they are separated from the normal skin.

Mr. FLOOD. Figure 4, as the witness has described it and I examine the photograph, looks like the craters of the moon, I would say, in a closeup.

Dr. KLEIN. Here is the next picture. This is about 24 to 48 hours later. Where the blisters have broken, crusts have formed and now contain the dead remains of the cancer cells. Note again that the normal skin immediately adjacent to the area involved has not undergone any marked changes.

Mr. FLOOD. Figure 5 is heavily crusted and resembles, again I use the analogy, a closeup picture of a series of craters on some planet, heavily encrusted, totally.

Dr. KLEIN. Mr. Chairman and gentlemen, this is a picture of the patient when he recovered 5 or 6 days later. You can see that the skin is growing in and covering the areas that were scabbed, so he ends up looking like this very soon thereafter.

Mr. FLOOD. Figure 6 shows a very clean and marked cleansing of the entire area. The incrustation has almost been completely removed.

There seems to be a series of scabs upon the surface, white skin predominately shows through. This is followed by figure 3 to which we referred before, showing almost a complete cleansing.

Dr. KLEIN. Now, Mr. Chairman, this patient had been developing hundreds of lesions, as you have seen. Subsequent to this course of immunotherapy, applied in ointment form, he has developed only four lesions over the successive 3 years.

Mr. FLOOD. How many times a day did you apply it?

Dr. KLEIN. Once a day in this patient.

Mr. FLOOD. Over what period of time?

Dr. KLEIN. Over a 3-day period. That is all it takes.

Mr. FLOOD. After you had established the allergy?

Dr. KLEIN. Yes.

Mr. FLOOD. How long did it take to establish the allergy?

Dr. KLEIN. Three weeks in this patient, but it will vary. It looks like this: (a) allows us to eradicate cancers or precancerous conditions, (b) serves as a diagnostic tool to allow us to detect them, and (c) possibly and probably acts to prevent cancer, in addition.

Now, this is of considerable importance because skin cancer is the most common cancer in the white race.

Mr. FLOOD. Because of what?

Dr. KLEIN. Because the most common cancer in the white race is cancer of the skin. The precancerous skin conditions are even more frequent. They are sometimes known as farmer's or sailor's disease, because they occur in people who are exposed to the sun and work outdoors. There are 5 million Americans, conservatively estimated, and some authorities estimate 20 million people in the country who have precancerous skin conditions which are called solar keratoses. Again, we have been able to apply the principles of allergic reactions to the treatment of precancerous skin lesions. This may be more important even than the treatment of cancer—thought that in itself is important enough—since it indicates that the principles of this form of treatment may be extended to other conditions under the proper circumstances.

Mr. FLOOD. Out of what glass bowl did you pick that figure? How are you certain of the 5 million figure? Why not 10 million?

Dr. KLEIN. It is very difficult to offer a closer approximation because we don't have the full detailed incidence. We have to extrapolate from the data we obtain from small areas. One source of data collected by the M. D. Anderson Institute for Cancer Research was obtained from a small area in El Paso County, Tex. Another source of information comes from Ireland.

Mr. FLOOD. From where?

Dr. KLEIN. Ireland, which is a latitude even farther north than ours.

Mr. FLOOD. In the North Atlantic, one of the misty isles?

Dr. KLEIN. Yes.

Mr. FLOOD. Where is the sun there? My people come from there. Look at the color of my skin, it is like tuna fish. We have never been exposed. We have nothing in our skin to protect us from the sun. The Latins do.

Dr. KLEIN. That is right.

Mr. FLOOD. I would not dare stay in the sun 10 minutes. Can you imagine that skin in the sun?

Dr. KLEIN. I have seen it many times. It is not a matter of imagination as far as I am concerned.

Mr. FLOOD. What is the relationship between the misty isle of the Northern Seas and Texas? Do you have a problem of climate?

Dr. KLEIN. Oh, yes; very much so. The incidence of skin cancer and precancerous conditions goes up very rapidly the farther south you move.

Mr. FLOOD. If you go far enough south and you get the black people, they have been protected by Almighty God from the sun.

Dr. KLEIN. Or selected.

Now, what we have been able to do therefore is to take the allergic reaction, a capability of the body, and use it for therapeutic purposes. When unharnessed, this capability to produce an allergic reaction is the cause of disease or prevents treatment of diseases. I would like to refer to allergic skin diseases which are some of the most common examples of allergic disorders. They are important because they are very common expressions of the allergic process and because they started us off on this track. Eczema, for example, can be one of these allergic skin diseases. Other examples are reactions to drugs such as penicillin. Now, the importance of this may apply to diseases other than cancer. The allergic reaction, hopefully, after it is better understood at a more fundamental level may be applicable to a number of diseases that fall within the scope of the Allergy and Infectious Diseases Institute. The complex problems of allergy and of cancer can be studied very well in the skin. This is particularly important when we are dealing with inherently complex problems.

Mr. FLOOD. Did you use that in the conjunctive, allergy and cancer?

Dr. KLEIN. I am using them as different examples.

Mr. FLOOD. They are two different things.

Dr. KLEIN. Yes, they are. I am just referring to the fact that our observations were made on the skin for reasons of accessibility and ease of control, simply because you can get to it, look at it, see what is happening. You can change the factors that you bring to bear on the skin, much more easily than you can if the studies were carried out inside the body.

These new methods, therefore, are of significance to several areas and are not limited to the skin. Other types of lesions such as cancer of the mouth, of the tongue, of the larynx, of the esophagus, arise from cells very similar to those from which skin cancers arise. These types of cancer are objectives of our proposed studies since they arise from cell types; namely, stratified squamous epithelium, which are very similar to those on the surface of the skin, from which skin cancers arise. So far we have some preliminary indications that precancerous lesions of these areas may be amenable to this approach of utilizing the allergic reaction.

Mr. FLOOD. What you do is refer to cancer and precancer. What do you know about a precancerous condition? It is either a cancer or it isn't, isn't it? What makes you think a precancerous condition is going to be a cancer?

Dr. KLEIN. Statistically we can tell.

Mr. FLOOD. What are your odds?

Dr. KLEIN. I cannot give you the odds on this particular type of lesion.

Mr. FLOOD. Do the odds differ with lesions?

Dr. KLEIN. Yes, they vary with the lesions. They vary with the location of the lesion, they vary with the causes. This photograph shows a condition known as leukoplakia. It is a precancerous lesion of the inside of the mouth. In the picture you can see the lips and the white patches of leukoplakia on the inside of the cheek.

Mr. FLOOD. What would do that? Trauma, irritation from false teeth?

Dr. KLEIN. Trauma, dentures, precisely. This patient was made allergic to the same drug TEIB. Here you can see the skin reaction.

After the patient had been made allergic, the cream containing the allergy-producing drug was applied by means of a special dressing. This dressing has been recently developed. It keeps the cream in place on the wet surface. You can see in the next illustration that the precancerous lesion has disappeared. This lesion disappeared after one single application lasting 12 hours. Within 4 to 6 weeks, however, this lesion returned. We now are keeping this patient and others under control by applying the medication daily or sometimes twice or three times a week.

So this indicates that there are extensions of these findings that can be applied to other problems. It is much too early yet to consider this a treatment, for instance, for premalignant lesions of the mucous membranes. We have been working on this particular problem for only a year and a half. It is much too early to draw conclusions. Our results, however, indicate that it will be worth while to pursue this area further.

Now, the basis for these new treatment methods has been the allergic reaction. Allergic types of reaction have been of great interest to the Institute for Allergy and Infectious Diseases and has been pursued both within its own laboratories and by its grantees throughout the country for many years. These studies have provided the background for our own work that has now been applied to the treatment of patients. So we have here an example of research that was started in one area that gave us some basic information and was then applied to medical treatment and provides leads in another area, namely, allergy. We feel that this may be of significance to other areas in allergy such as asthma, hay fever, allergic skin diseases, drug reactions and a number of other types of disease.

Mr. FLOOD. Emphysema, especially?

Dr. KLEIN. A number of causes of emphysema could be included. There are millions of victims of allergic diseases who have only partial or emergency relief or no relief at all. Perhaps of equal importance are the questions raised by our studies; for instance what blocks some types of allergic reactions? This may teach us something about tissue transplantation. These studies may also be significant for some of the infectious diseases in which the immune mechanisms as we have known them have not been adequate to provide protection or effective treatment. We have already established a joint program with the laboratories of the Institute for Allergy and Infectious Diseases. We are also

working with other research groups in this country who are receiving grants from the Institute for Allergy and Infectious Diseases.

So, much more additional work seems to be justified in these areas of research. I hope, gentlemen, that you will provide the funds for this additional work in the budget for fiscal year 1968. At a level of support of $3 million a hope for progress along these lines may be fulfilled. At a rate of $5 million more work will be done with greater hope of fulfillment. The decision then is in your hands. I hope I have made clear the considerations that are involved.

Mr. FLOOD. That was one of the best presentations we have had.

Dr. KLEIN. That is very kind of you, sir.

Mr. FLOOD. Thank you, Doctor.

Mr. Adams is next under the Allergy and Infectious Diseases section. Mr. Adams is executive vice president of the American Cancer Society and a member of the National Advisory Allergy and Infectious Diseases Council. He will speak with reference to the Institute of Allergy and Infectious Diseases. You have a statement?

STATEMENT OF MR. LANE W. ADAMS

Mr. ADAMS. I do, Mr. Chairman, and gentlemen. I am pleased to be here. I came as a substitute witness for the distinguished Dr. Sabin who was scheduled to appear but, unfortunately, circumstances beyond his control prevented his being here. You may think it is rather strange that a layman would be chosen to come in this scientific setting. I do so based on my background as the administrator of a medical society which has a large part of its activity in the medical research field. I have served several years ago as a volunteer member of the National Advisory Cancer Council and have served in the past as a citizen member of a hospital board in my former home town of Salt Lake City, Utah. So over the last several years I have been exposed to this subject of medical research.

I would like first to address myself to the subject of the overall budget of the Institute. This Institute has, in my opinion, for several years been without adequate funds. In fiscal year 1966, approximately 40 percent of the new approved research projects were left unfunded. This was remedied to some extent in fiscal year 1967—when only 25 percent of approved projects remained unfunded. But the rejection of one-fourth of those projects considered scientifically sound does not seem to offer the protection through research that the public should receive.

The Congress has demonstrated a truly laudable interest in medical research and training, and the United States has moved ahead rapidly in the conquest of disease. The support of the Congress has spurred the Nation to greater efforts, and has encouraged thousands of young people to enter careers in scientific research. The scientists will, in time, develop means for the control of those diseases which remain a problem, but they cannot do this without greater support than is now available.

I would, therefore, recommend that this committee increase the Institute's research grants budget by $5 million more than that suggested by the President. This would make a total of $57,936,000 for this category.

I am equally concerned with the Institute's training program. To maintain its present level of training operations, the Institute will need more than was included in the President's request. To anticipate even modest growth, even more funds will be required. I recommend, therefore, an additional appropriation of $2 million, which will make $11,251,000 available for this category.

This is a total increase of $7 million above that suggested by the President for the grants program. In addition we agree the Institute requires an additional $1 million for its direct operations. This is a total of $102,422,000, or an aggregate of $8 million more than the President's request. Attached is a table depicting these figures in more detail.

I wish now to speak on the subject of hepatitis. Hepatitis is thought to be caused by a virus.

Mr. FLOOD. Primarily seafood in this country?

Mr. ADAMS. Seafood and shellfood. The epidemiologists think it is one of the principal causes of this disease. It is still baffling to the scientific community. This is one reason why I am here, because research in this particular area is woefully inadequate, in my opinion.

Mr. FLOOD. There is no doubt that shellfish, under certain conditions, if and when grown in polluted areas, is a cause? You mean there are others that you are not sure about; is that it?

Mr. ADAMS. That is my opinion from what I read. As I say I am not a scientist, but I just recently read in the press a report of infectious hepatitis thought to be traced to the eating of shellfish.

Mr. FLOOD. This has been so for some time.

Mr. ADAMS. Yes; it has. This is one of the most important of the infectious diseases, and it happens also to be one in which little research is being conducted. Because of personal involvement, I have explored this field with experts, and would like to share some data on this disease with you.

Mr. FLOOD. Did you ever have hepatitis?

Mr. ADAMS. I have not had it. My wife had serum hepatitis which followed surgery. She was very seriously ill and for many years debilitated by the ravages of this disease. I have had many personal friends who had it. So I speak not from my own personal experience but from observation of friends and loved ones.

Dr. Thomas C. Chalmers, of the Lemuel Shattuck Hospital, in Boston, reports that more than 70,000 cases of hepatitis were reported in the United States in our last peak year, 1961, and more than 33,000 in 1966.

Mr. FLOOD. Does this move in cycles?

Mr. ADAMS. I will be reporting on that. It is estimated that only 10 to 20 percent of all cases are actually reported, so that the disease is much more prevalent than is generally recognized.

Mr. FLOOD. Why would there be a problem of reporting? I can see it in the case of venereal disease but why a problem of reporting hepatitis?

Mr. ADAMS. I should turn to my distinguished doctor friend back here.

Dr. RICHARDSON. It is not always recognized.

Mr. FLOOD. It is a matter of diagnosis.

Dr. RICHARDSON. Jaundice might not be hepatitis.

Mr. ADAMS. He estimates with what appears to be extreme conservatism, that 100,000 Americans contract this disease each year, and that 400 of these will die.

In addition, we must consider posttransfusion, or serum hepatitis. Approximately 6 million transfusions are administered in the United States each year.

Mr. FLOOD. I have heard that the only recognized current treatment is simply rest.

Mr. ADAMS. I can report in my wife's case that that was the only treatment except at one point it became so serious she did use cortisone.

Mr. FLOOD. I am sure there are treatments, but I meant this is widely said to be the case.

Mr. ADAMS. That is true, as I understand it, rest and reduction in the fats which are consumed in the diet.

Mr. FLOOD. Yes; diet.

Mr. ADAMS. Yes. I am informed that the attack rate of serum hepatitis is about 0.4 percent and that the death rate is approximately 12 percent. This means that 2,880 patients with serum hepatitis die each year. Therefore, at least 3,000 deaths from all forms of hepatitis occur each year.

I would like to supplement Dr. Chalmers figures with some from another source—the morbidity and mortality tables of the National Communicable Disease Center of the U.S. Department of Health, Education, and Welfare. In 1965, the incidence of hepatitis—infectious and serum—was 33,856, and this was exceeded only by measles, streptococcal sore throat, and scarlet fever, tuberculosis, syphilis, and gonorrhea.

Mr. FLOOD. Would you please have the record show what the difference is between infectious and serum hepatitis?

(The information follows:)

Infectious hepatitis is a naturally occurring disease generally passed by contaminated food and drink with an incubation period about three weeks. Serum hepatitis is passed by inoculation of contaminated material such as blood transfusions. The incubation period is much longer, from 6 weeks to 6 months. Serum hepatitis presents a more serious clinical picture.

Mr. ADAMS. In that year, 745 deaths were reported from infectious hepatitis alone—and I must remind you that this figure refers only to reported deaths from this illness. Of the diseases listed above, only tuberculosis and syphilis exceeded hepatitis as a cause of death.

In addition to its toll in lives, hepatitis takes a severe toll as a debilitating illness. From the standpoint of man-hours lost, only one communicable disease is more devastating. This is tuberculosis. The length of illness and convalescence from hepatitis is from 30 to 60 days, on the average. When 30 to 70 thousand people lose an average of 45 days each year, the disease becomes one of major economic importance.

That the disease is of importance to the military is attested by the hospital admissions during World War II and the Korean conflict.

Mr. FLOOD. No distinction between the attack on male or the female that you know of, is there? Would you supply that information for the record?

(The information follows:)

There appears to be no sex distinction in the attack rate.

Mr. ADAMS. During the Korean conflict, there were 17,840 hospital admissions. There were only 33 deaths among these cases, but the cost in manpower is astronomical. If one assumes only a 30-day illness, this amounts to 535,200 man-days lost.

If the epidemiological cycle continues, we may expect another peak year for hepatitis in 1968 or 1969.

Mr. FLOOD. Then there is a cycle?

Mr. ADAMS. There is thought to be a cycle by the experts in the field. April and May of 1967 is much too late—except for routine hygienic measures—to do anything about such an anticipated epidemic of hepatitis in 1968 and 1969. However, April and May of 1967 are not too late to take measures which may reduce the incidence of hepatitis for 1970, or 1971, or 1972.

Mr. FLOOD. Those are pretty short cycles.

Mr. ADAMS. I am not meaning to state the time of the cycle.

The research problem in hepatitis is difficult. No satisfactory experimental laboratory model has been developed, and experimentation with humans is difficult, even if one ignores the legal and moral questions. A basic problem which must first be solved, therefore, is the problem of methodology.

In recent medical research history, special programs designed to deal with unusual difficulties have been developed. One instance I may cite is that of the special appropriation for a leukemia task force. This group was developed to place all possible research pressures on this disease, and has proven that this kind of concentrated attack can bring results. Leukemia is still among the incurable cancers; but the newly developed treatment methods are enabling thousands of patients to survive for 1, 2, 3, and even 5 years or more after starting treatment.

Mr. FLOOD. Of course, there are many kinds of leukemia.

Mr. ADAMS. Yes, many. If you will pardon my reference to the American Cancer Society, I would like to cite the society's recent action in expanding its research program in recognition of the necessity for a focused research attack on cancer and for the development of a research strategy aimed at key objectives. Under a recent reorganization, the American Cancer Society has established a department of research analysis and projection, whose responsibility it will be to search out significant leads which have been inadequately pursued, and then to promote their exploitation. This departments will also strive to enhance the development of new insights and new lines of inquiry in critical areas where progress has been slow or where it has come to a standstill entirely.

It is my opinion that the research attack on hepatitis requires this kind of approach, and I recommend a special additional earmarked appropriation of $2 million for a concentrated attack on this disease.

I am encouraged to make this proposal by the news that a scientist in Chicago has isolated a virus which seems to fit the characteristics of the virus being sought in hepatitis. This is the kind of lead that requires special attention and exploitation. Such exploitation can be

rapidly and efficiently pursued within a program such as I have described.

Being here, as I say, a layman, not as a scientist, I wish to make the point——

Mr. FLOOD. This can be refreshing.

Mr. ADAMS. I hope so. I have been exposed to scientists and physicians, administrators of research programs for several years.

Mr. FLOOD. Sometimes you know they get so close to the trees they cannot see the forest.

Mr. ADAMS. I have the greatest respect for them. When I served on the Institute of the National Advisory Cancer Council, at which time I was a banker in Salt Lake City also——

Mr. FLOOD. You have lived that down, I am sure.

Mr. ADAMS. Yes; I have overcome that.

My concern then and now is the very conservative approach in the scientific community to such problems as this one of hepatitis. As I understand it, the grants made last year by the Allergy and Infectious Diseases Institute were less than $100,000 for this very serious problem. There was more money than that available but there was a lack of interest on the part of the scientific community because it is such a difficult, discouraging, unrewarding area for medical research. So the purpose of my plea today is to suggest that the committee appropriate, earmarked funds that can be used only for this purpose. I would like to thank you and the committee for receiving me as a substitute witness. As a layman I appreciate the importance and the stimulus that the Congress has given to medical research. I urge you to devote your energies now to attacking this most serious disease of hepatitis.

Thank you.

Mr. FLOOD. Dr. Sabin has big shoes. You fill them well.

Mr. ADAMS. You are very kind.

Mr. FLOOD. Thank you.

(The attachment to Mr. Adams' statement follows:)

Citizen witnesses budget for National Institute of Allergy and Infectious Diseases

[In thousands of dollars]

Activity	1967 appropriation	1968 President's budget	1968 estimated needs
Grants:			
Research	49,006	52,936	57,936
Fellowships	3,700	4,267	4,267
Training	9,103	9,251	11,251
Total grants	61,809	66,454	73,454
Direct operations:			
Laboratory and clinical research	12,488	13,746	14,246
Collaborative research and development	10,118	11,025	11,525
Biometry, epidemiology and field studies	1,289	1,356	1,356
Review and approval of grants	1,358	1,482	1,482
Program direction	346	359	359
Total, direct operations	25,599	27,968	28,968
Total estimate	87,408	94,422	102,422

MONDAY, APRIL 24, 1967.

CHILD HEALTH AND HUMAN DEVELOPMENT

WITNESS

DR. LEWIS THOMAS, DEAN, SCHOOL OF MEDICINE, NEW YORK UNIVERSITY; MEMBER, NATIONAL ADVISORY CHILD HEALTH AND HUMAN DEVELOPMENT COUNCIL

Mr. FLOOD. Now we have under the heading of "Child health and human development," Dr. Thomas, Dr. Lewis Thomas, who is dean of the School of Medicine, New York University, and member of the National Advisory Child Health & Human Development Council.

You have a statement, Dr. Thomas?

Dr. THOMAS. Yes.

I am Dr. Lewis Thomas, dean of the school of Medicine of New York University, formerly professor and chairman of the Departments of Medicine and Pathology at New York University, and formerly professor of pediatrics at the University of Minnesota.

Mr. FLOOD. Where did you take your medicine?

Dr. THOMAS. Harvard.

Mr. FLOOD. How old are you?

Dr. THOMAS. Fifty-three.

Mr. FLOOD. You do not look it.

Dr. THOMAS. I am a member of the National Child Health & Human Development Council, and a former member of the National Advisory Health Council of the National Institutes of Health.

I wish to speak in support of the research and training programs of the National Institute of Child Health & Human Development. During my several years as a member of the Council I have watched with growing admiration the rapid maturation of this young Institute.

Mr. FLOOD. How do you define maturation?

Dr. THOMAS. Development and growth to a stage of biological success.

I have been especially impressed by the breadth of scope which it has already achieved in the areas of biological science for which it is responsible, and the strength and productivity of the programs already launched. It is well under way. However, as the youngest of the Institutes, special care must be taken to see that its programs continue to develop fairly rapidly, in an orderly fashion. This is certainly not the time for any leveling off in its support. It still has some distance to go, if its goals are to be achieved.

I should like to speak first about what seems to me the area of greatest need for all the programs of the Institute. This is the national shortage of qualified, talented, young scientists with the special training required for research in the new areas already being opened up by the Institute's activities. The National Institutes of Health as a whole has demonstrated conclusively that its research training programs are remarkably successful in preparing new cadres of young scientists for specialized work. It is safe to predict that the training programs of the National Institute of Child Health & Human Development will be equally successful, but the present needs are much greater than the present allocations of funds.

The President's budget for next year provides far less than will be needed. I recommend that the amount of increase for 1968 be increased to at least $2 million.

The research projects supported by the Institute include all aspects of human development, from fertilization all the way to senescence. The process of development has only recently been recognized as a very special kind of problem in itself, and the field of developmental biology is a newcomer on the scene in biology. As the dean of a medical school, I can assure you that it is here to stay.

Mr. FLOOD. Is the condition of sensescence possible to establish by age brackets or is that an individual problem?

Dr. THOMAS. Both, I should say. I am going to say something about aging in a moment.

The information now at hand concerning developmental mechanisms is meager, but enough is known to make it clear that this new field has tremendous implications for the education of medical students for the future. Fetal development, the crucial period around the first days of life when life is at greatest hazard, especially in premature births, the issues of survival in infancy and childhood, the turbulent changes in adolescence, maturity, aging and death itself—all these are not separate episodes detached from each other but a continuum, and the very quality of human life is at stake at every moment in the earliest stages. Developmental biology is now a field of science in its own right, and one with much to offer for the future of mankind. In sponsoring this field, and assuming responsibility for its development, the National Institute of Child Health and Human Development has assumed a splendid task.

The process of aging is no longer a matter for interesting speculation on the part of biologists. Aging, and the degrees of human disablement associated with the process, have become the most difficult, urgent, and demanding problems confronting medical practice today. We have simply got to find out, and soon, how to separate—and then eliminate—the diseases which appear with aging from the (probably) benign process of aging itself. If we do not, and soon, we will find western civilization, with its pride in increasing longevity, plagued by more incapacitating disease problems than we can cope with. For human beings, aging ought to be another kind of adventure, like adolescence—not a disease. It becomes a disease only because it carries vulnerabilities which we do not yet understand. We tend to think of the examples among us of healthy aged people—like Hoover, or Adenauer, or Shaw, or Methuselah—as though they were very old child prodigies. More likely, they are the normal aged, and the rest of us, who lose our senses and capacities early in the process, are beset by preventable things. We have got to find out more about this, and we have no time to lose.

Mr. FLOOD. Wouldn't you include President Harry Truman and Jim Farley?

Dr. THOMAS. Yes.

Mr. FLOOD. I would feel better if you did.

Dr. THOMAS. With high marks, for the record.

I do not imply that developmental biology or gerontology should be favored over other fields of endeavor in this Institute. Equally good cases can be made for strengthening our support of family planning,

behavioral science, mental retardation, and other programs. This is an Institute with a very large and important assignment, and its total growth should be sponsored.

I have several specific recommendations to make, based on my own study of the present budgetary support and what has been recommended in the President's budget. In full awareness of the budgetary difficulties caused by the war in Vietnam, and the need for tightening of the national belt, I recommend the following increases over the President's budget:

(1) Five million dollars for research grants, for a total of $47,931,000 to support all five of the program areas. This will not be enough to fund all approved grants, but it is a beginner.

(2) Two million dollars for training grants, for a total of $11,962,000. I have already mentioned the real shortage of scientists with the specialized training needed for the Institute's programs.

(3) One million dollars and 50 new positions, for the direct operation of the Institute, which includes the needs of the new gerontology building in Baltimore under the direction of Dr. Shock.

I am grateful for the opportunity to appear before you, and to give testimony in support of this excellent enterprise.

Mr. FLOOD. Thank you very much, Doctor.

Dr. THOMAS. Thank you, sir.

Mr. FLOOD. We know something about this subject, as I suppose you gathered.

Dr. THOMAS. Yes, indeed.

Mr. FLOOD. But we always need the help of you professionals in your specialties or we would not go very far here. You help us. Thank you again.

MONDAY, APRIL 24, 1967.

EMPLOYMENT SECURITY APPROPRIATIONS

WITNESSES

JACK B. BROWN, EXECUTIVE DIRECTOR, PENNSYLVANIA BUREAU OF EMPLOYMENT SECURITY

JOHN M. P. McHENRY, DIRECTOR FOR PROGRAM AND RESEARCH, PENNSYLVANIA BUREAU OF EMPLOYMENT SECURITY

Mr. FLOOD. We have Mr. Jack B. Brown of the Commonwealth of Pennsylvania, the department of labor and industry. You are executive director of the bureau of employment security. What is the subject to which you speak?

Mr. BROWN. Congressman, I speak to the subject of appropriations under HEW-Labor appropriations for the employment security program. I would like to introduce to you also an associate of mine from Pennsylvania, Mr. John M. P. McHenry, our director for program and research in the bureau of employment security.

Mr. FLOOD. What part of the State are you from?

Mr. McHENRY. Philadelphia.

Mr. FLOOD. You are directing your attention to that part of the budget which deals with the Department of Labor rather than HEW?

Mr. BROWN. Yes, sir.

Mr. FLOOD. Do you have a statement?

Mr. BROWN. Yes, Mr. Chairman.

Mr. Chairman and committee members, I am Jack B. Brown, executive director of the Pennsylvania Bureau of Employment Security.

I come before you today to ask for action on your part to preserve our basic employment security system and to assure an equitable balance between the respective roles of the Federal and State Governments in the allocation of resources for that system.

The availability of resources for the effective administration of the basic employment security system of this country is in severe disrepair. Because of stringent limitations on resources, it becomes critical that your committee assure that what is available be judiciously distributed by your act of appropriation.

To set the background for the petition I bring before you today, permit me to ask your indulgence in certain historical facts and then some views and experiences that I know are shared by a great majority of the associate State administrators of employment security programs, and which I can venture to say are also shared by some of our associates in the Federal Government.

I speak to you from a history of personal employment and involvement in the employment security system from the year that Pennsylvania paid its first unemployment compensation checks to its hundreds of thousands of workers who were depression unemployed, almost 30 years ago. Truly I am State-oriented in this program, yet I have on many occasions, served as a State consultant to the Federal Bureau of Employment Security, have been active on many of its special work committees and task forces, as well as on committees of the Interstate Conference of Employment Security Agencies. I am currently chairman of the Administrative Grants Committee of the Conference, and thus, this year, more intimately aware of the total problems of budgeting and financing of the entire program, nationally and interstate.

I do not come before you today at the behest of the interstate conference but on behalf of the basic employment security program with the approval of Gov. Raymond P. Shafer, and even more specifically as directed by our State secretary of labor and industry, the Honorable William J. Hart. We share these concerns to which I speak.

As you know, the basic provisions of the Federal Unemployment Tax Act have been practically unchanged since 1939. The taxes derived are collected as a basis of financing the unemployment security program, with appropriations limited to those funds, 95 percent of which can be grants to the States and the other 5 percent can be available for Federal purposes as well as for replenishment of the loan fund (the borrowing source for any State's unemployment insurance fund if its fund for paying benefits is insufficient at any particular time).

This tax has been levied since 1939 on only the first $3,000 paid to each covered worker during a calendar year. When initially levied at that level, it was contemplated that it would be amended upward periodically as wage levels grew, and as the wage base for social security was raised, which was at $3,000, also, in 1939. All efforts by the States to encourage the Federal Government to seek legislation pointed specifically to an increase in this Federal tax base have failed.

Mr. FLOOD. Why?

Mr. BROWN. The position of the administration, as I understand it, has been——

Mr. FLOOD. What administration?

Mr. BROWN. The present administration, in Washington.

Mr. FLOOD. Has this not been the case for a period of years?

Mr. BROWN. It has been for previous administrations, too. I would say it is a position that has carried since as early as 1951, the attitude of those administrations.

Mr. FLOOD. What is the problem?

Mr. BROWN. The attitude, as I understand it, is that any bill that would update the unemployment insurance system would have to be considered in terms of adding into the system, Federal standards for the States. This is, of course, a very highly controversial issue. As far as I know, Secretary Wirtz currently takes that position, that a single-purpose bill for financing would not be sponsored by the Department. We States who depend on 95 percent of this tax resource have much more at stake as to tax revision than does the Federal interest in the 5-percent remainder. In seeking its resources, the Department of Labor, its Manpower Administration, and even its Bureau of Employment Security, can call on certain general revenue sources and engage funds from other Federal programs; also, as dispenser of the 95-percent resource for the States, the Department can so direct its disposition as to generously serve its pleasure as to when, where, and how much of this money is to be spent.

Mr. Chairman, permit me to remind you of a good example of this applied latitude of the Federal authority. If you would refer to pages 248 and 249 of part 1 of the hearings before your committee for this program in 1966, you would be reminded of your inquiry to the Department as to what it was doing with the $10 million your committee approved for last year for Employment Service improvements and staff training, for which Pennsylvania had submitted supplemental requests for over a million dollars of that resource. Not to belabor that exchange, I hope you did notice when the record was included in the printed hearings at your insistence, that, at that moment, Pennsylvania had not received $1 of that Employment Service improvement money (it was then February, two-thirds of the way through the fiscal year. We had submitted our supplemental requests shortly after your appropriations were made in 1965.). Then, on February 18, 15 days after you put the question, and as the record shows in small print, Pennsylvania did get $132,948, a pittance of a share of the $7.5 million supposedly available for Employment Service improvement, and as compared to our over $1 million in requests. (A normal share of $7.5 million for Pennsylvania would have been at least $450,000, and we believed the time had come for more than a normal percentage.)

Justified, we believe, on a substantial change in our Pennsylvania economy and for the reason that we did want to build up a better employment service which we had long been denied. So we thank you for the $132,948 worth, Mr. Flood. But I ask you—Is this the way?

I'm sure your committee is well aware of the expanded responsibilities and additional programs delegated to the Employment Security System by legislation and by assignment in Manpower Training, in Great Society programs, etc. We States accept these duties and respon-

sibilities and we pursue the best application of these programs with whatever resources we are provided to do so. But when we compound these added assignments with diversion of Employment Security program resources away from long-established basic responsibilities, especially when these resources continue unduly restricted, something has to give. And it is to this point I am particularly instructed to appear before you today.

Just 6 years ago, the Pennsylvania Bureau of Employment Security had a personnel complement of 5,535 employees almost entirely devoted to basic employment security matters. Today, our complement is 4,209, a reduction of 1,326, or 24 percent. Now, some persons might want to compliment us on such an outstanding feat of efficiency and contradiction of what is going on in Government; namely, growth; yes, with 1,300 fewer personnel, we are trying to do our share to deliver service to our people in all the new program areas and still conduct a basic program of public employment services and unemployment insurance administration. I'm sorry to report we are not efficient enough, we cannot be complimented.

The principal cause of our lesser personnel complement, I will frankly admit, is the substantial reduction in insured unemployment in Pennsylvania over the past 6 years. Certainly, we need fewer personnel now in administering the claims and benefit payment functions. But the extent to which we have been subject to reduction in force in this phase of our program has been almost disastrous. It is a violation of simple commonsense and it hurts. How does it hurt? When unemployed claimants find themselves backed up in long lines, having to wait as long as 2 hours to be serviced, having to travel longer distances to be served, having to go to one office to file a claim, and then some other office to register for work, having to face short-tempered overworked claims interviewers; then when their claims interviewers have to come in over weekends when offices are closed to clean up each week's work, when our employees' union files a formal grievance not against us as State administrators, but against known unfairly limited resources, then it hurts. It hurts the validity of the program, too, because the thorough inquiry and adjudication of the unemployment insurance claim and expenditure must necessarily become perfunctory. When Secretary Hart and I held a hearing on this grievance I mentioned, although he had only served 2 months in Government, he immediately recognized these basic shortcomings and determined we should "stake our claim" for application of commonsense before you.

This claim is based, as I say, on a commonsense. Certainly, anyone should agree that when an employment security agency is involved in taking and processing hundreds of thousands of claims from unemployed workers during a recession such as 1960–61, with many thousands all laid off from single establishments, all for the same reason—lack of work through lack of business—sheer volume plus the obvious facts demand beltline taking of claims and paying of benefits. We did $351.6 million of this in fiscal year 1961 alone. In contrast, when taking claims and disbursing benefits in the present type of economy, the layoffs, separations, the lack of work are isolated, spotty, frictional, seasonal, part-time factors, and demand information retrieval of an individualistic nature, both from claimants and employers. Yet we are

currently budgeted, financed, and complemented with personnel on the same unit-time factor in 1967 as we "earned" or "experienced" in 1960. (Attached exhibit No. 1 is a further detailing of this issue.) Why are we so shortchanged for the obvious? Because the application of this time unit formula has served as a vehicle for the Department to siphon off thousands of jobs and resources to pursue other programs which the Department seeks to pursue at its discretion.

Adding to the injury, another event this fiscal year resulted in the Department shortchanging the Pennsylvania Bureau of Employment Security to the tune of about $150 per job as approved. This equaled over 100 jobs on an annualized basis, further compounding shortages in personnel in basic program areas.

With this fiscal year three-quarters of the way through I finally did obtain an adjustment of this particular issue for the last quarter of the fiscal year. So we obtained one-fourth of this resource previously denied.

In addition, we were told that we were assigned fewer jobs for our fraud and overpayment prevention activities, as well as for collection of delinquent taxes from employers. This was done under the guise of "a relatively high-cost activity" as compared with the other States. Yet for years before, our State's programs in these areas had been held up by the Department as models for other States to entertain.

Then, the straw that breaks the camel's back came in an arbitrary $13.6 million across-the-board reduction in grants to the States under the guise of management improvement-cost reduction. Exactly what your committee suspected would occur did occur. On page 412 of the aforementioned hearings, Mr. Farnum of your committee said to the Department witness:

> You are really facing this (the $13.6 million reduction for Management Improvement-Cost Reduction) on the basis that you are going to find the method * * * if not you are going to act arbitrarily.

The answer was "Yes." The result was arbitrary, and the $13.6 million involved in the reduction was and has been at the disposal of the Department—the pleasure of the Secretary. The money has been in their hands.

Yes, your respected last committee chairman was prophetic when, as recorded on page 385 of the hearings, he said:

> This is one of the worst budget estimates I have seen up here in a long time. What do you think the states are going to do?

Ironically, the answer was:

> We are going to encourage them to restructure their programs and do the more essential things.

Gentlemen, we weren't encouraged, we were restructured and we are undoing essential things.

What is needed? We think your committee should place on the record your legislative intent. Is it your intent that basic employment security program responsibilities be shortchanged, already limited resources reassigned elsewhere, due grants to the States reserved for "demonstration" projects, "special" research, and "spot" actions by the Department? We ask for your specific direction of

adequate funds for basic operations—and where are they—in the States.

We also ask for your pointed advice to the Department to retain the entity and reasonable autonomy of our counterpart, the Bureau of Employment Security. If we States are to be effective in this program, we need an identical Federal partner. If we must get lost in the sprawl of responsibility of the Manpower Administration and the Department, we will find the going even rougher; we'd be going to one shop for budget, another for program, another for policy, another for regulations, another for rules, another for procedures, and so on. Two years ago, your late chairman pointedly informed the Department that appropriations were being then granted with the understanding that a reorganization involving the decimation of the Bureau of Employment Security was not to be undertaken. Last year, Mr. Fogarty again inquired (see p. 158 of pt. 1 of last year's hearings) and was reassured as follows:

"Do you currently have any plans for reorganization?" Secretary Wirtz replied:

"None at all."

Word has it that substantive reorganization affecting the Bureau of Employment Security may be in the making again.

Incidentally, Mr. Chairman, I cannot leave untouched a bit of the dialog you had last year with a Federal witness (see pp. 247–248).

The inference developed therein was that the Wilkes-Barre office, of which you were rightfully proud, was relatively "on its own" in terms of its evaluation, review and, in effect, supervision, and that the necessary, badly needed cure was more resource for the Federal agency. This was in complete contradiction of the facts; that is, that the Pennsylvania Bureau of Employment Security has a reliable program of constant evaluation, periodic review, and effective supervision of offices such as Wilkes-Barre. The local manager you were "lucky" about was one with whom I have been associated for almost 30 years, and who has been under my direction for the past 4 years prior to his recent retirement. We are planning to provide as his replacement another highly capable, long-career manager who we have assured ourselves will build on that service in Wilkes-Barre—that is, if we can provide him with adequate resource, adequate personnel, and respectable facilities. They have become less adequate as to basic program operations in the Wyoming Valley. If our petition for Pennsylvania and for program essentials bears some weight with your committee, we assure you letters of complaint to you and to us from your district can be substantially less frequent.

As you may know, the States were not made aware of what this year's budget request is all about until sometime after its submission, although we're supposed to be responsible for 95 percent of its valne to the public. But from some of the content of a statement by Secretary Wirtz to your Appropriations Committee, we assume that:

1. The Manpower Administration's budget appears to have grown from 0 in 1964 to 410 positions for 1968—quite a growth.

2. The Federal BES basic personnel complement is apparently up 23 percent, from 1,141 in 1964 to 1,399 for 1968.

In an additional position complement, the BES appears to have gone from 0 in 1964 to 207 for 1968.

This combined exhibit shows an apparent increase in the Federal BES from 1,141 positions in 1964 to 1,606 positions for 1968, up 40 percent.

Thus a combined Federal BES and Manpower Administration exhibit appears to develop personnel complement of 1,141 in 1964 to 2,016 for 1968, a 77-percent increase.

Overall grants of positions to the States have grown from 56,265 in 1964 to 58,466 for 1968, an increase of 4 percent.

I remind you then that Pennsylvania had 4,767 personnel in 1964, has 4,209 as we approach 1968, a decrease of 11.7 percent.

The severity of our personnel complement shortage in basic unemployment insurance operations has been matched by a denial of deserved added personnel complement in our basic employment service program, which could be of great service to our long-delayed, but now greatly improved, State economy. We should be doing much more to recruit for our new and expanding industries and helping Pennsylvanians to find jobs at their highest skill levels. The added resource in this regard has not been found by us here in Washington.

In an effort to make this testimony as brief as possible, and yet to distill our concerns in many areas, I would like to present to you a roundup of a consensus of the views of the senior staff of our Pennsylvania Bureau of Employment Security that was prepared recently in connection with a visit to our State by former Governor Ferris Bryant and a group of representatives of Federal agencies for a meeting with our Governor, Raymond Shafer, and key State officials involved in Federal-State relations. These BES senior staff members who prepared this are veterans in this program, averaging well over 25 years of service, and responsible for program, operations, administration, fiscal affairs, tax accounting, claims, and benefit functions of our agency. Here is their consensus:

Machinery

The Federal-State machinery for the Federal-State employment security system has stood the test of 30 years' experience, and in general has proven to be an effective instrument. It is not suggested that basic enabling laws need major overhaul, but should be improved in three important aspects:

1. The existing revenue resource for financing the employment security program is inadequate, and the Federal unemployment tax needs amendment in this respect.

2. The right of judicial review of any rulings of the Secretary of Labor to the effect that a State employment security agency is out of conformity and may be denied funds to operate needs to be enacted into law.

3. Annual appropriations acts of the Congress as to fiscal year appropriations for the employment security system need to be more directive as to the allocation and use of the available funds, and should be based on requests by the States as well as by the Federal department.

Methods

It is the methods by which the employment security program and related programs are administered by the Federal Government that need a considerable overhaul. Specific examples of these problem areas are summarized:

1. The Federal department's Bureau of Employment Security does not consult with the respective States' employment security agencies in developing budgetary requests as submitted to the Bureau of the Budget, nor does the Bureau of the Budget consult the States. Thus the appropriations request to the Congress is a unilateral document.

2. Program objectives contained in Federal budgetary requests and the moneys appropriated by the Congress, accordingly, are totally "national" and generally devoid of varying stateside considerations as to needs, objectives, desired distribution and use of funds to be allocated. (Some improvement may develop in this regard as the result of a management study recently completed by Cresap, McCormack & Paget for the Federal authorities, and if these Federal authorities accept the recommendations of the study, which it seems thus far they are hesitant to do.)

3. Rigidity of Federal control of allocations of funds within a State, by specific program areas, places State employment security administrations in straitjacket environments, difficult to adjust to changes in stateside economic shifts and social and manpower aspects, State policy and local interest shifts. The social and economic climate nationally is thus applied to each State regardless of its individual social and economic weather (with minor exceptions), and even its political climate.

4. Reliability of the State employment security agencies' personnel costs, workload factors and experiences are subordinated to national norms, federally conceived State cost and workload factors; thus allocations are devoid of practical adjustment for State differences in employment, personnel, fiscal, and procurement practices and experiences.

5. Administrative fiat is exercised, instead of specific authority by law, to force State employment security agencies to accept, adopt, and change major important operational practices; the emphasis and the force for this is implemented by refusal to grant or earmark funds no matter the objections.

6. Funds appropriated by Congress are withheld, diverted, and expended in ways and programs not divulged in the budgetary requests, testimony, and appropriations acted upon by the Congress.

7. Encroachment upon the States' employment security agencies basic responsible relationships with local governments, their organizations, industry, labor, and others in the manpower field is actively underway, emulating in our program the antipoverty program concepts, and even beyond, thus essentially bypassing State government and creating confusion, duplication, overlap, waste, and gradual breakdown of a longstanding, originally, and basically well-conceived, Federal-State partnership in employment security program services to the people.

8. Rapid expansion of the operations of the Manpower Administration within the U.S. Department of Labor has come at the expense of resources that could better be applied and expended through State employment security agencies in direct services to the people in employment services, unemployment insurance services, manpower training services, and other appropriate labor market services.

9. Critical limitations upon minimal basic unemployment insurance services are forcing current public unrest and serious inconveniences in

services to industry and the unemployed, including claimants. These limitations are bringing collateral serious inefficiencies especially in administration of fraud prevention, collection of delinquent taxes, and other basic practices in administering State unemployment insurance laws.

Thank you for your attention and I am available at the pleasure of you and your committee for any questioning or clarification of this petition to you for a declaration of intent in making the appropriation to the employment security system.

(The attachments to Mr. Brown's statement follow:)

[EXHIBIT NO. 1]

FINANCING CLAIMS-TAKING FUNCTIONS—PENNSYLVANIA

As a result of an arbitrary decision made at the national level for the preparation of budgets for fiscal 1962, the Pennsylvania agency of the Bureau of Employment Security has since been faced with a problem of underfinancing claims-taking functions which has never been rectified at the national level.

The instructions for the preparation of these 1962 budget requests made it mandatory for all states to request time factors for the performance of claims-taking functions based on their calendar year 1960 experience. The calendar year 1960 experience for the Pennsylvania agency for claims-taking functions was 14.75 percent less than the criterion time factors for claims functions that were established as a result of time factors based on national office time studies. The reasons why Pennsylvania's experienced time factors were so low for calendar year 1960 are as follows:

1. Although the Pennsylvania agency earned $2,662,136 for contingency workloads based on the national office formula for the fiscal year 1960, we were reimbursed in an amount equivalent to approximately fifty cents (50¢) on every dollar we earned for benefit workload increases over actual accomplishment during fiscal year 1960. Naturally, since we were reimbursed at a much lower rate than our entitlement, the proper amount of claims staff could not be added to handle the workload.

2. The high rate of insured unemployment in 1960 (6.7%) which was 1.9% higher than the national average (4.8%) made it virtually impossible to add staff in relation to the workload on a timely basis.

The method used by the national office for financing claims activities starting in fiscal year 1962 and for each year since is based on our 1960 experience. As a result, the quality of the performance on claims functions suffered and continues to suffer since the Pennsylvania agency has not since been able to get any restoration of the 14.75 percent reduction made by the national office to the units of time allocated to Pennsylvania for claims-taking activities.

Although numerous contacts have been made by the Pennsylvania agency to the national office regesting a validation of the units of time presently being allocated for claims-taking functions, we have been unable to get any relief from our national office.

Instead of relief, the national office makes comparisons of positions allocated to the various states for claims-taking functions based on the number of positions allocated each state per 1,000 insured unemployed. Making an analysis on this basis is meaningless since the national office does not take into consideration any of the following factors:

1. The difference in the complexity of the Unemployment Compensation Laws in the different states.

2. The difference in the emphasis placed on fraud and overpayment functions by the various states.

3. The difference in the net working hours in the various states.

4. Grouping of certain benefit functions by the national office for comparative purposes without giving any consideration to states that have Electronic Data Processing equipment which are "high cost" when analyzing equipment rentals, as compared to states that do not have this type of equipment.

Comparison of time factors for claims functions, fiscal 1960, fiscal 1962 through 1964, and present factors which were adjusted for 1964 amendments

	1960	1962-64	Present factors
Monetary determinations	28.08	25.2	26.15
Nonmonetary determinations	63.8	52.2	54.4
Benefit payments	[1] 3.5	[2] 4.3	[2] 4.58
IB-1's liable	14.7	12.5	15.28
IB-2's liable	7.9	6.7	8.09
Initial claims, intrastate	10.3	10.0	11.9
Continued claims, intrastate	4.8	4.27	4.61
IB-1's agent	28.7	24.5	24.5
IB-2's agent	11.2	9.5	9.51
Appeals	627.3	638.3	468.0

[1] Did not include chargebacks.
[2] Includes chargebacks.

Comparison of net working hours, fiscal 1965

National	1,761
Pennsylvania	1,660
Difference (5.7 percent less)	101

Mr. FLOOD. Mr. Smith? Mr. Smith is from Iowa, Mr. Brown.

Mr. BROWN. Yes, sir.

Mr. SMITH. I do not know that I really have any questions. It is just that we constantly get argument that you should make the system carry itself but every time there is much unemployment they want us to appropriate from general funds to help pay the bill. I have no questions.

Mr. FLOOD. This is a classic situation. Of course, we know that Mr. Brown who has just testified has been with this agency since its inception. It is unlikely that any State in the United States would be able to present a more experienced or more competent witness on such an extremely difficult and highly controversial subject between the Federal Government and the several States and between this committee and the executive branch of the Government.

As you are aware, much of what you have said has been said by different members of the subcommittee over a period of years and will continue to be said. From your long experience in Government you are aware that this is an appropriations committee, not a legislative committee, and we, of course, could not concern ourselves with some of your testimony because that would be in the jurisdiction of the legislative committee.

There are ways and means, however, of bringing to the attention of the powers that be many of the things you have said, with which this subcommittee is not in disagreement. I think you should feel confident that every one of those means will be exercised within the rule of reason.

Mr. BROWN. Thank you. I felt that you, as our Pennsylvania Congressman, needed our State's assurance that we do look upon the past efforts of this committee as being in the area of order that we think we ought to be in. We are most pleased that you became chairman of this committee.

Mr. FLOOD. You realize that you are not alone in many of these objections. This comes to us from all over the country and I say, as a spokesman for your brothers, this has been well presented.

Mr. BROWN. Thank you very much, sir. We are pleased to have seen you today.

Mr. FLOOD. Thank you.

TUESDAY, APRIL 25, 1967.

NATIONAL HEART INSTITUTE PROGRAMS

WITNESSES

DR. MICHAEL E. DeBAKEY, PROFESSOR OF SURGERY, BAYLOR UNIVERSITY SCHOOL OF MEDICINE, HOUSTON, TEX.

DR. ELIOT CORDAY, ASSOCIATE PROFESSOR OF MEDICINE, UNIVERSITY OF CALIFORNIA AT LOS ANGELES

DR. JOSEPH A. WILBER, CHRONIC DISEASE CONTROL SECTION, GEORGIA DEPARTMENT OF PUBLIC HEALTH, ATLANTA, GA.

Mr. FLOOD. With reference to the Heart Institute and heart generally, we now have Dr. Michael E. DeBakey, professor of surgery, Baylor University School of Medicine, Houston, Tex.

We are very glad to have our distinguished friend back with us. We are happy to have him advise and consult with us as he has so many times.

I suppose you have a statement, Dr. DeBakey.

Dr. DEBAKEY. Yes.

Mr. FLOOD. How do you wish to proceed?

Dr. DEBAKEY. May I simply ask you to accept this for the record?

Mr. FLOOD. We will insert the statement in the record.

(The prepared statement follows:)

STATEMENT OF MICHAEL E. DEBAKEY, M.D., PROFESSOR OF SURGERY AND CHAIRMAN, CORA AND WEBB MADING DEPARTMENT OF SURGERY, BAYLOR UNIVERSITY COLLEGE OF MEDICINE, HOUSTON, TEX.

Mr. Chairman and members of the Committee: I should like first to express my grateful appreciation for the opportunity to speak today in behalf of some of our national health programs and to point up significant financial needs, both to initiate certain of these programs and to advance others more rapidly.

Let me state at the outset that what I will say here today, the points I will emphasize, can by no means touch upon *all* those health programs which merit and deserve support. Yet the urgent need in certain areas, the support of certain programs, seems at this time to be more acute than could be justified by a simple plea for across-the-board support. Therefore, I should like primarily to direct your attention to particular programs of the National Heart Institute, Division of Research Facilities and Resources, and the National Institute of General Medical Sciences.

Both in terms of death rate and economic cost to the nation, disease of the cardiovascular system continues to maintain its number one position. This is clearly demonstrated by recently available mortality figures showing the causes of deaths according to the National Center for Vital Statistics in the year 1965. Thus, cardiovascular diseases caused one million, or about 54%, of the approximately 1.83 million deaths reported from all causes in 1965. While these diseases struck hardest among the aged, accounting for two out of every three deaths among Americans over 65, they also claimed 261,000 lives among those under 65, or 35% of all deaths in this group. Of particular importance is the fact that 560,000 deaths were attributed to atherosclerotic heart disease and another 201,000 to strokes, leaving atherosclerosis and its complications as far and away the major killer in our population. Moreover, the overall death rate from atherosclerotic heart disease rose about 11% over the decade 1955–65, and this rise was apparent in all age groups over 45.

However, a comparison of death rates over the ten-year period 1955–65 provides also some grounds for cautious optimism. With the exception of atheroscle-

rotic heart disease, death rates declined in every major cardiovascular-disease category during this period. These reductions were most striking in the case of hypertension (down 46%) and rheumatic heart disease (down 33%). But they were also substantial for stroke (down 11%), particularly among those under 65 (down nearly 20%). As a result, the overall death rate from cardiovascular disease fell by 5% during this period.

These declines in death rate have occurred particularly in those categories of cardiovascular disease where significant improvements in treatment have come about as a result of earlier research efforts. Specifically, the declining death rate from hypertension assuredly reflects the introduction of drugs effective in the reduction of high blood pressure. But this encouraging progress in treatment should not obscure the continuing enormous economic costs of cardiovascular disease. These costs are reflected in the appended table (Attachment A). This table was made up almost entirely of calculated losses from future income for individuals dying from cardiovascular diseases. They are based on standard formulas for use of such purposes. Adding to the table of $19 billion of such estimated costs the direct and indirect costs of hospitalization and care, one comes to a round figure of approximately $25 billion annually for the cost of cardiovascular disease in the United States. These facts clearly emphasize the great need to maintain and strengthen our research efforts on those problems through the National Heart Institute.

You will recall the history of the development of the Artificial Heart Program, since I had the privilege of discussing the potential value of this program during its initial phase several years ago. You will be pleased to know that considerable progress has been made since that time, and we have now developed and successfully used clinically an artificial heart pump to provide temporary assistance to the heart for periods ranging from days to weeks. It has been determined that the overall thrust of this program should be altered in two ways: (1) Concentration upon an immediate objective of development of ventricular assist devices, as opposed to full-scale and all-out development of a permanently implanted total heart replacement; and (2) broadening of the program to include acceleration and coordination of studies leading to increased understanding of myocardial insufficiency. This latter has taken the immediate form of the myocardial infarction study program.

This program is thus a two-pronged attack with similar objectives, concentrating in the short and medium range view on reduction in mortality from myocardial infarction, both through improved medical care and the intervention of temporary ventricular assistance. Research efforts, however, will also be directed toward the general areas of physiologic controls, methods of transmitting energy into the body, energy storage and conversion, physiological effects, and on oxygenators.

Budget.—The appropriation requested in 1968 of $13.7 million for this overall program remains the same as the amount apportioned in 1967. The NIH maintains a firm position, and Dr. Shannon has recently testified to the effect that the program can continue to develop at this level and that such an amount in 1968 will permit opportunities to further plan and consolidate the program such that realistic increases may be requested in the 1969 budget. This approach is further dictated by the request of the Bureau of the Budget that all obligations of '67 funds under this program not be made until the last two months of this fiscal year, i.e., May, June, 1967. It is anticipated that all such funds will be obligated; they will be distributed roughly as $5.8 million to the Myocardial Infarction Program and $7.9 million to the Artificial Heart Program.

At present the Myocardial Infarction Program is involved in both program definition and implementation.

On the basis of extensive study, the first major activity to be supported will be a small number of myocardial infarction study centers. These facilities are intended to provide a means of bringing to bear on the problem of myocardial infarction the most advanced techniques and concepts of the biologic and physical sciences in a setting conducive to the development of new concepts and treatments. Each of these research facilities will consist of a small number of beds in a coronary care unit especially staffed and equipped to provide for careful and critical clinical investigations and optimal patient care. In addtion, the centers will provide laboratories and staff for basic research which is related directly to the clinical problems under investigation in the unit. The first announcement of this activity was made in January, 1967. I have been informed that

forty-three proposals were received from distinguished research institutions and are presently undergoing review. Six of these proposals are expected to be funded during fiscal 1967 and, with additional opportunities for others to apply, six more are expected to be established in 1968 and 1969. The high level of interest and great distinction of the groups which have responded attest both to the need for such advanced research programs and to the likely success of the effort.

Ethical and practical considerations limit the range of clinical studies of acute myocardial infarction, and the lack of an appropriate animal model of human myocardial infarction has restricted animal studies. For these reasons, the Myocardial Infarction Program will support research intended to develop improved animal models of myocardial infarction. Such models will allow more effective applications of several disciplines and techniques to the problem and would provide a means for expeditious and appropriate testing of new treatment.

It seems likely that several scientific fields not presently involved might make important contributions to the study of myocardial infarction. The MI Program will support surveys of promising fields targeted on applicability to myocardial infarction to provide both guidance and stimulus for further pertinent research. For example, the study of metabolism of the heart has advanced considerably in recent years, but these studies and techniques have not been extensively applied to acute myocardial infarction. The MI Program is supporting a research study contract to review the field of myocardial metabolism as it applies to myocardial infarction. This study should produce leads for the further studies that promise to contribute to understanding of the biochemical chances of myocardial infarction. Most of the present treatment of myocardial infarction is designed to prevent or minimimize complications of the illness. Hopefully, these biochemical studies will provide a basis for new types of treatment directed toward the injured heart muscle itself.

The largest single group dying of myocardial infarction are those who die so suddenly that it is unlikely that definitive medical care can be instituted even under optimal circumstances. It is estimated that 40-60% of the total deaths due to myocardial infarction are in this category. A large number of these people are young, vigorous, and otherwise in good health. It is in this group that the greatest human salvage might be realized. Since these patients usually die unattended, it is very difficult to conceive or design critical research programs to study them and to attempt treatment. There are, however, several potential avenues of approach; such as detailed analysis of sudden deaths which occur while patients are being observed for other purposes, meticulous and detailed recordings of the recollection of the events which preceded deaths, and intensive study of populations known to be at high risk such as those with diabetes, or hypertension in the expectation that some will experience "sudden death" while being studied. The Myocardial Infarction Program is presently evaluating the alternative approaches to this important problem.

ITEM 1—CARDIOVASCULAR RESEARCH AND TRAINING CENTERS

The Congress is very much interested in the progress of the Center Program which was initiated late in '66 by a supplemental appropriation derived from the recommendations of the President's Commission on Heart Disease, Cancer and Stroke. The Heart Council at its last meeting agreed upon a specific definition of these centers, making it possible to proceed to operational grants.

To date eight planning grants have been awarded and two requests are awaiting action of the Heart Council in June. If approved, these will bring the total of planning grant awards to ten. The Institute hopes to establish approximately twelve such centers in the next five or six years. It should be possible for enough institutions to meet the standards of excellence and other defined requirements to permit establishment of these centers on a wide geographical distribution across the nation. Although their scope and reputation will be national or even international, obviously they will have a broad and important impact on cardiovascular research and care in the regions in which they are situated. It is clear that with the greatly limited number of cardiovascular research and training centers currently planned, namely 12, there cannot be a one-to-one coupling of such units with the Regional Medical Programs. However, such coupling should be accomplished in every instance where a research and training center is established, and the number of research and training centers ultimately should be

increased to such degree as is essential to optimal functioning of the Regional Medical Programs.

Each center will cost up to $4 million per year in stable support and initially may require as much as $4 million in construction funds. The President's budget as currently constituted provides no source either for operational funding or construction funding of these cardiovascular research and training centers. Because of the exceedingly limited funds available for growth of research and training programs under the proposed budget, the cardiovascular research and training centers will be competing directly with ongoing project research grants and graduate training grant programs for dollar support. Certainly it is unlikely that adequate funding of the newly constituted centers will be forthcoming in the face of such competition. As regards construction funds, these might be obtained on a matching basis through grants from the Division of Research Facilities, but here also the competition for research funding will be so intense as to render unlikely adequate funding of the centers program. The 1968 President's budget does contain $800,000 for additional planning grants for such centers. However, I would point out that planning grants awarded in 1966 have been ably prosecuted in certain universities; and, in these situations, availability of operational and construction funds will become critical within the next twelve months. To lose the momentum which has been generated for the development of these cardiovascular research and training centers would indeed be folly. I would propose, therefore, for the year 1968 a line item addition to the President's budget of $10,000,000 in support of cardiovascular resarch centers, and that serious planning be undertaken now to provide construction funds for these centers in the 1969 budget.

ITEM 2—NATIONAL BLOOD RESOURCE PROGRAM

As you will recall, this program was initiated this year by an appropriation of about $1.9 million for a survey in depth of the projected needs of our population for blood, for acceleration of development of large-scale efficient preparation of blood fractions, development of better inventories of donors, and improved methods of blood storage and handling. The 1968 appropriations contains a request for an additional $1.1 million to further implement this program. A program director has been appointed (Dr. James Stengle, a hematologist, long associated with the blood program in the Heart Institute, and one who is knowledgeable and highly accepted by the national and international community dealing with these problems).

There seems to be no question that in the United States the organization and efficiency of utilizing blood is far short of that developed in many other countries, and there is a tremendous need for systematic improvement in the use of this resource. Due to outdating on the shelf, it has been estimated that 20%–25% of whole blood is lost. Some of this is salvaged for plasma and albumin, but the overall utilization of blood can be much improved. There is further a great shortage of some blood fractions and a need for large-scale preparation and storage of antihemophilic globulin, platelets, and other derivatives. The NHI program will dovetail with that of other organizations, including the platelet program initiated by the Cancer Institute.

I would regard the Artificial Heart-Myocardial Infarction Program and the National Blood Resource Program as two of the most significant biomedical research opportunities in our time.

ITEM 3—THE CORONARY DRUG STUDY

This study is going along well. Nearly all the necessary clinics have been enrolled and patient recruitment continues. Funds in the 1968 Budget are adequate for continuing this program at its projected level.

Summary

Without attempting to elaborate upon other program opportunities, I think it is fair to say that the position of the Heart Institute and is programs is one of limited resources and great needs. From the knowledge of normal growth requirements and the extent of accommodations that will be required by the 1968 President's Budget, it is not difficult to forecast what would happen if there were any *reduction* in this budget. I appreciate the pressures placed upon NIH as a

whole and upon all other Government health activities in a year of fiscal stringency. Certain needs can only be deferred, however, and not dissipated, and we can only hope that the need for this deferment will be quite temporary. There is so much we do not know and must learn that basic or undifferentiated research simply must continue to be expanded. At the same time, the research that has been done continues to expose increasing opportunities for exploiting new knowledge and applying it to the care of the ill. It is only through this development and application, of course, that the original long-term investments in research can ever be recaptured. The opportunities for such repayment in the field of cardiovascular diseases have never been greater than they are today.

A major responsibility of this nation's health effort must be the application of fundamental biological knowledge to the cure of human disease. Great advances are being made in the laboratories—the problem is to transfer these advances to patient care. This has not yet adequately been effected. A most important vehicle to meet this gap is the Division of Facilities and Resources of the National Institutes of Health. This division has the prime responsibility in providing the resources for the implementation of application of the fundamental knowledge. The Resources Section of this Division is more important today than ever before. These resources deal with the general clinical research centers, the computer centers, the primate centers, and the animal research resources.

The specific resources that are furnished by this Division provide the necessary facets for the implementation of the scientist's work. I trust that we all clearly understand the need for computers in the overall medical endeavor. They offer the tremendous hope for the future that we can store our data and immediately retrieve it for the benefit of multi-programs. It further offers the great hope of being able to make predictions in the many diseases that we are all studying. A real need exists in providing funds for an integrated system in computer technology for the universities and medical centers in coordinating and publishing quickly their results from these scientific investigations.

It is, I am sure, evident there is need and a continuing need for funds for animal resources in support of the medical research endeavor.

One of the most important branches of the Division of Research Facilities and Resources of the National Institutes of Health is the function of the General Clinical Research Centers. In 1959, Congress recommended that these general clinical research centers be established on a national scale to improve and encourage the study of human disease and associated fundamental biological problems. Before the advent of general clinical research centers, programs in clinical sciences were limited in their efficiency and productivity by a shortage of funds for research patients, a lack of laboratory support, and little opportunity for laboratory and clinical scientists to combine their efforts. This program provides an avenue for communication between the investigator and the practicing physician by demonstration in grand rounds, ward rounds, research seminars, and conferences in the medical community. Patients of these general clinical research centers are being heavily utilized for these purposes. Community relationships have already been strengthened as a result of the use of these centers to improve the local practice of medicine. Any future national programs of continuing medical education will depend heavily on these centers of excellence, not only for dissemination of knowledge but for demonstration purposes as well. In essence, the prime objective of the clinical research centers program is to provide stable research resources whereby the clinical investigator may work. At the present time there have been established approximately 92 clinical centers in 73 institutions with approximately 1,100 hospital beds available solely for clinical research purposes. An orderly growth of this program is planned for the establishment of centers in 12 new medical schools and in 10 established medical schools.

One important aspect of the General Clinical Research Centers Program is the effect of the multi-disciplinary approach and the results have been excellent. Major disease areas where funds have been expended and excellent results obtained are aging, blindness, cancer, heart disease, infant mortality, pharmacology, toxology, stroke, and transplantation of organs.

The Division of Research Facilities and Resources has proven to be an invaluable tool to all aspects of the research community. With the demonstrated need for increasing the establishment of more Clinical Research Centers and the need for computers and animal resources expansion, plus the complexities of infla-

tionary costs that we now face, I would urge your strong consideration for approximate appropriations as recommended by the Division for 1968 as follows:

	Million
General clinical research centers	$43.6
General animal resources	8.0
Primate centers	12.0
Special resources, computers	19.0

These requests for appropriations are vital, and I commend to you the great work of this Division of the National Institutes of Health.

Mr. Chairman, at this point I wish to take the opportunity to testify on the behalf of the National Institutes of General Medical Sciences (NIGMS), since its activities have an important relationship to all of medical science and provide basic supportive programs bearing upon cardiovascular as well as other diseases.

More than 50% of all predoctoral graduate students in the health sciences, for example, are supported by General Medical Sciences. The facts are that this Institute is the main source of funds for the training of all basic or preclinical science professors that will be turned out in the next five to seven years. No other Institute has this responsibility nor capability.

In addition, the Institute has a significant and little-appreciated role in the training of research surgeons, anesthesiologists, and radiologists. The *only* programs designed to provide for basic science indoctrination as well as clinical training on a long-term basis for these three critical specialties are a special concern of this Institute. The basic research training of these medical scientists is essential to the development of research programs in cardiovascular diseases.

Further, a new program for specialized clinical training in anesthesiology has been started with funds ear-marked for this purpose in fiscal year 1967. The program was funded by $1,000,000 by the Congress; however, it was over-subscribed by four and a half times through high-grade applications submitted by our leading anesthesiologists. There is no greater need today in the health manpower field than for anesthesiologists. We surgeons in the cardiovascular field are dependent on their skill; and, without their strong support and skillful assistance, cardiovascular surgery would be limited in its scope and ability to aid patients who need this intervention.

So much for these clinical areas where the national needs for trained physicians are clearly and admittedly great. In the preclinical areas, the needs are equally acute. We are faced with the need to add scientists and teachers to all present medical faculties in our more than 85 medical schools. Increased enrollments are already facing each school; and each school is trying to discharge its moral and national responsibility, within acceptably high standards, to educate as many new doctors as possible.

But what of the 15 new schools now being built or just admitting their first classes? Where will their faculties be recruited? What of the ten additional schools being planned; what hope do all of these 25 schools have to recruit acceptable teachers? The training grant and fellowship funds for this Institute now support only a part of the *present* demand—as represented by young men and women in training. The demand of new schools for teachers and scientists are not even being planned for. The situation is critical and easily understood. For the fourth consecutive year, funds requested in the Executive Budget are insufficient to support the previous year's number of trainees. Simply put, we are training fewer men each year, not more. During FY 1968 these programs will train some 800 fewer men than during FY 1965. In the meantime, the Institute's training grant and fellowship backlog of scientifically approved requests has approached a total of $14,000,000 more than can be supported. Admittedly, small absolute increases have come about each year, but they are far from adequate to meet the increasing need.

In order to do more than make a token gesture, these programs must have a substantial increase in funds. I strongly recommend that appropriations for NIGMS in training grants be raised from the present figure of $45,729,000 to at least $55,000,000 and that of this amount $1,000,000 be ear-marked for clinical training in general surgery and in radiology, respectively. This would be in accordance with the precedent set for clinical training in anesthesiology last year by the Congress.

The fellowships program has been held to an absolute increase of $1,510,000 over last year's amount and totals for FY 1968 the amount of $20,910,000.

A $7,000,000 backlog exists. The needs are for a minimal increase of at least $3,500,000 over FY 1967. Therefore, I recommend that $22,900,000 be appropriated for fellowships in the MIGMS account. These two training programs, training grants and fellowships, supplement each other and operate as an integrated whole. Without these recommended increases, both programs will grind to a halt and will once again support fewer men in training than last year. The increases in the present Budget are not enough to pay the necessary costs of doing business from one fiscal year to the next.

This Institute's needs in its research grants are pointed up by the fact that it has a current backlog of about $18,000,000. The Budget requests $85,763,000 for research grants, which is an increase of about $10,000,000 overFY 1967. This would allow paying a little more than half of the *present* backlog and thus leave no funds in the new fiscal year (1968) for new research grants. Accordingly, I strongly urger that the increase be $20,000,000 in research grants, totalling some $91,000,000, of which $1,500,000 be earmarked for the support of trauma research centers; $2,000,000 be set aside for radiology and radiobiology centers; and lastly that $1,500,000 be limited to anesthesiology research and training centers and large-scale research programs.

Again, let me say to you that I count it an honor and privilege to appear before your committee to give you my views as to the need of some of our health programs. Emerson said, "Health is a man's first wealth," and I firmly believe that our funds as requested will be a benefit to our health and to our wealth.

ATTACHMENT A

Mortality and indirect economic costs, 1965 for diseases of concern to the National Heart Institute

Disease	Deaths in 1965			Future earnings lost		Percent change from 1955	
	Number	Rate per 100,000	Percent of total	Amount (millions)	Percent of total	Number of deaths	Death rate [1]
All causes of death	1,828,000	943.3	100.0	$50,234.5	100.0	+19.6	−3.6
Cardiovascular diseases	1,000,000	516.0	54.7	19,406.2	38.6	+21.9	−5.1
Arteriosclerotic heart disease	559,000	288.6	30.6	11,417.8	22.7	+40.2	+11.1
Cerebrovascular disease	201,000	103.7	11.0	3,150.5	6.3	+15.5	−10.9
Hypertensive disease	66,600	34.4	3.6	1,288.6	2.6	−31.1	−45.8
Rheumatic heart disease	15,500	8.0	.8	649.6	1.3	−20.7	−32.8
Congenital heart disease	10,000	5.1	.5	542.2	1.1	+6.6	−5.4
Other cardiovascular diseases	147,700	76.2	8.1	2,357.5	4.7	+21.3	−12.8
Bronchitis and emphysema	23,400	12.1	1.3	498.1	1.0	+302.1	+241.2
All other causes of death	805,000	415.2	44.1	30,330.3	60.4	+16.0	−3.8

[1] Adjusted for change in age distribution of the population.

STATEMENT OF DR. MICHAEL E. DE BAKEY

Dr. DEBAKEY. We are here primarily in support of the National Heart Institute.

I would like to say at the outset, Mr. Flood, that I think all of us here would like to again pay tribute to the memory of the chairman who preceded you, who gave so much of his time and effort to the advancement of these programs. And we are deeply appreciative of the opportunity to be with you again and to know that you are carrying on in the very high tradition, for this Appropriations Committee, I think, has done more to advance the cause of heart disease control than perhaps any other group in the Nation.

We are deeply appreciative of the support that has been given in the past. I think it is fair to say that more progress has been made during this period of time, perhaps in the last decade and a half to

two decades, than in all of previous recorded history in the whole field of cardiovascular diseases.

It is interesting to note during the past decade, that while mortality statistics indicate an increase in total deaths from all forms of heart disease, there is some evidence to indicate that we can be optimistic in certain areas.

For example, we have reduced the death rate from hypertension by almost one-half just in the past decade. We have also been able to reduce the death rate from rheumatic heart disease by a third. Particularly noteworthy in this regard, too, is the fact that the death rate from strokes has been reduced by 11 percent in the past decade, the first time there has ever been any such statistical evidence to indicate that we are beginning to attack this problem more effectively. Indeed, in the younger age group, under 65, the figure is about 20 percent. So there is good reason to hope that we can continue this trend, even though the magnitude of the total cardiovascular problem is still tremendous. Cardiovascular deaths account for more than half of all deaths, indeed, 54 percent of these reported this past year. Moreover, a significant percentage of these cardiovascular deaths occur in persons under age 65: 35 percent. So this is a problem of great magnitude. It certainly deserves high priority in our efforts to support the attack upon it.

There are certain areas I think we would like particularly to emphasize in terms of supporting activities and programs. One of these is called the artificial heart-myocardial infarction program. One of the reasons this has been combined within the programs of the Heart Institute is that an effort is being made not only to develop new ways of attacking this problem, in terms of newer knowledge and technological developments, but also to determine whether heart-support devices may enable us to attack this problem more effectively in the very early stages of acute heart attacks when a high percentage of these patients die. Many heart-attack deaths are sudden, and many others occur within the first few hours after onset.

Dr. Corday will talk a little later about some of the developments in this area and some of the very effective developments which are being applied today in coronary care units.

I might mention in regard to this artificial heart program that the emphasis more recently has been placed on the development of ventricular assist devices rather than upon an all-out effort to develop a true artificial heart.

You will recall that, when I testified before you last year, I showed you an experimental model of the heart pump which we have developed and worked on. I thought today you might be interested in seeing a model of the pump that we are now using clinically as an assist device. Now, this is really a very simple model, but we have now used it successfully to support a failing left ventricle. It consists, as you see, of a plastic globular mechanism containing a pumping chamber with a diaphragm that moves up and down to force blood out of the chamber.

It is an air pressure device that forces this diaphragm up and down. Now, the trick in the development of this, and the reason we have been able to use it successfully, has been the development of this lining, which consists of a dacron velour. This dacron lining provides the

means of developing an autologous lining, that is, a body tissue lining, which blood will accept. This is really a breakthrough and makes it possible to use this pump clinically. Let me show you how it looks and feels. I will put it together in a moment. These are the connecting tubes. You see everything is lined with this dacron lining. What happens is that the blood will produce a lining enmeshed in this surface; a lining which the blood will accept. It is the blood interface that creates a problem in any mechanical device.

It is interesting, too, that this idea came from our previous research work in the development of artificial arteries. Here is the type of artificial artery which we use quite successfully. In fact, it is used all over the world in the replacement of diseased arteries. So what the artificial heart program is attempting to do now is to develop and refine this type of artificial pump for assisting the failing heart.

This stems from the research support which, you will recall, this committee appropriated funds for about 4 years ago when this program was initiated. You see now at least a part of the ultimate effects of that program. It is being pursued very vigorously and rapidly in many centers all over the country. It is through this program that I am sure we will see the day when these pumps will be used on a more permanent basis in the support of failing hearts.

Now, in addition to this type of program, of course, there is the general research grants program, which is the mainstay of the total drive towards new scientific knowledge. I think that this research grants program constitutes the basis for the attack on heart disease, since it is the base for which support is needed to develop new knowledge in all of the phases of heart disease.

You will recall that this committee also initiated the program for the development of special cardiovascular research centers some years ago. It was the thrust of this program that I think ultimately led to the development of the regional medical programs in heart disease, cancer, and stroke. It was on this basis that the President's Commission developed its recommendation for the establishment of regional medical programs. They constitute, in a sense, the center of new knowledge for these area and the focal point for efforts to extend this knowledge much more rapidly from its base in the center, from the research laboratory, and clinical research programs, to people with heart disease.

This, of course, is the main goal of the regional medical programs. In this regard, I might say, parenthetically, it has been very gratifying to see how well this program is proceeding.

We now have awarded more than 44 planning grants. It is hoped that within this coming year four operational grants will be available. I think the way the program has gone we can be quite pleased with the progress that has been made.

I do not think we could be this far along with the program were it not for the progress that has been made in the whole area of heart disease and, for that matter, cancer and stroke. This progress really stems from the support that has been given the National Institutes of Health with respect to the categorical institutes: in particular, the Heart, Cancer, and Neurological Institutes. It is this very progress that creates in a sense, the need for the more rapid application of this knowledge to the people. I think the whole basis for the existence of the regional med-

ical programs derives from your strong support of the National Institutes of Health which have, in turn, provided the knowledge for this application.

So it indicates, you see, how the flow of knowledge from a basic area to the applied can be, in a sense, dynamically pushed by the Institutes and by the support that you give the Institutes.

Since time is an element here, I would like to summarize my requests and my testimony in support of this by simply indicating to you that I do not think that at any time in the past has there been a more exciting period, a more optimistic period in the approach to these problems. I think we are right on the verge of developing many new breakthroughs in knowledge that will help us develop ways and means of controlling these very great health problems. I think it is important, for this reason, to continue the dynamic support that has been given so far. If we were to hold back on the support at the present time, we would not only delay these developments but, in a sense, we would considerably reduce the dynamic drive that exists in the medical centers today. This, of course, is related to the support not only of research grant projects but support of fellowships, training, facilities construction, and so on.

I think I would wind this up simply by saying that I think that the need in the total budget for this area is closer to $200 million than to the amount which is being proposed by the administration. Now, if you like, Mr. Flood, we could go on with the other witnesses or perhaps you would like to ask some questions.

Mr. LAIRD. I did not quite understand the last statement, Mr. Chairman, the statement which Dr. DeBakey made.

Dr. DEBAKEY. I said I thought that the figure in the budget should be closer to $200 million than that of, I think, $167 million, which is now proposed.

Mr. LAIRD. Approximately $168 million, $167,954,000.

Dr. DEBAKEY. That is right. This is based upon knowledge that I have about some of the backlog that exists today in funding approved research grants and training grants and the projections for the next year, including, as well, the special heart centers which are fairly expensive. We may look forward to an annual operating budget for any one of these centers of about $4 million. Yet I regard them as extremely important because thy constitute the basis for the flow of new knowledge, particularly from the laboratory into the clinical area. It is the link between the basic research work that is being done and the clinical application.

Mr. FLOOD. Dr. Corday.

STATEMENT OF DR. ELIOT CORDAY

Dr. CORDAY. Arteriosclerosis continues to kill about 1 million Americans each year because it plugs up the arteries supplying nourishment to the heart and brain. Although the public has been alerted to risk factors which are believed to contribute to deterioration of the blood vessels, cerebral strokes and coronary occlusions continue to be the leading cause of death. Deaths due to coronary attacks increased by 10 percent from 1955 to 1965. Last year they claimed our beloved Con-

gressman Fogarty and Robert Grant, the Director of the National Heart Institute, both at a young age.

But if the public has been alerted to the risk factors of arteriosclerosis, one might ask, shouldn't this have reduced the mortality rate? The answer is, we cannot win the battle yet, because we still don't know the cause of coronary and cerebral artery disease. The situation is analogous to what is happening in Vietnam. We provide our combatant soldiers with a list of risk factors to avoid being injured, but it appears the casualty rate of 1,000 per week will continue in Vietnam until the battle is won. Unless we provide heavier ammunition in the form of a more aggressive research and applications attack, the battle against arteriosclerosis cannot be won.

Although we cannot yet prevent the gradual deterioration of the blood vessels (which, by the way, is already well advanced at the tender age of 20 years), research scientists have provided many dramatic concepts for repairing the damaged tissue. One of the most dramatic developments of our era, which promises to have 50,000 Americans per year, is the coronary car unit. A handful of research scientists working at various centers across the Nation have demonstrated that if resuscitative measures are taken within 4 minutes after the heart stops beating many can be brought back to life. They have proved beyond a doubt that if each patient who has just sustained a coronary occlusion is monitored with electric circuitry which can signal instantly when the heart stops beating, that 70 percent of these can be restored to life. Simply stated, a patient in a coronary care unit is wired with electrodes to an alarm system. This system flashes a warning that the heart muscle is ready to undergo a crisis. Two hundred and fifty hospital have already set up such coronary care units across the Nation, but before we can save the 50,000 per year, we need to train the staffs for another 6,000 hospitals.

For some years, Dr. Claude Beck, of Cleveland, has insisted that most of those who succumb after a coronary attack have hearts that are just too good to die. The amount of heart damage which sets up the fatal disturbance in rhythm is often so slight that, if we could just restart the heartbeat, many could make a complete recovery. Four years ago the actor Peter Sellers, after a brutal coronary attack had eight episodes of heart arrest. I was one of the attending physicians. Each time, an electrical pacemaker automatically restored his heartbeat. Today, 4 years after an episode that would have killed him if he were not protected by the coronary care concept, he is alive and well enough to perform his antics before the camera.

Hundreds of others have been salvaged, including Prof. Robert Williams, of the University of Washington, whose life, 5 years ago, was similarly restored, and who now maintains dynamic leadership in medical education and research for this Nation.

Now, one of the key persons in the daily operation of a coronary care unit is the nurse. There are too few physicians to have one constantly at the bedside of each acutely ill patient; and yet death due to cardiac arrhythmia is an almost instantaneous phenomenon, which must be corrected within minutes if the patient is to survive. The responsibility to recognize the complication and to institute corrective measures in this short period of time, therefore, falls to the person in attendance, ussually the nurse.

Recognizing an arrhythmia and beginning treatment in a life and death situation is a new role for the nurse, and one for which the usual nursing school does not prepare her. It is therefore necessary that nurses who work in coronary care units receive intensive postgraduate training in theory, as well as in the practical aspects of these new therapeutic techniques.

Staffing of these units remains the problem in the successful establishment of coronary care units across the Nation. The hardware, the electronic monitors have become adequate and are not expensive, but the software, the nursing staff, must yet be trained if we hope to man the some 6,000 units.

The Bethesda Conference on Coronary Care, conducted in December 1965, noted that if the nurse was given authority to countershock the heart back to normal immediately following a cardiac arrest, about 70 percent of these patients could be revived. But at hospitals where she did not have this authority, the number of survivors was about 5 percent. In order that the nurse may use the new electronic gear to revive the heart, she must be trained razor sharp:

(1) to read the electrocardiograph constantly moving across the cathods ray screen, and

(2) to institute the specific type of treatment.

Congress provided $1 million last year to set up 12 training schools across the United States. But 12 schools can provide training for only 1,000 nurses per year. We will have to train about 41,000 nurses if we wish to save the estimated 50,000 lives each year.

The heart disease control program of the National Center for Chronic Disease Control is to be congratulated because it was the stimulating force which encouraged clinical investigators to carry out this dynamic concept. I would strongly recommend that more funds be provided to set up sufficient training schools in various regions to supply the health needs of the Nation. I estimate that this will require $10 million per year for a 4-year period. This $10 million will save 50 to 100,000 lives each year, which is a small price for human life.

In the past year $13,600,000 was voted the NHI for an artificial heart program, and about half of this was later appropriated to fund a vigorous pump assist program, the other half to the myocardial infarction study centers, which we call the MISC program.

A word about the pump assist project. In spite of all other modern developments, we will still be losing 250,000 lives a year from shock and heart failure which supervene after a coronary attack.

If I could show you this photograph, sir, or rather, this graph. We are losing 550,000 Americans from coronary attacks each year. We estimate that 50,000 to 100,000 can be save with the coronary care unit concept. We are still losing 250,000 because of shock and heart failure. We are still losing 250,000 that drop dead.

Mr. FLOOD. What do you mean, "drop dead"?

Dr. CORDAY. They have no warning. They drop dead on the street, or in their home, or die during their sleep. We must do something to reduce these sudden deaths and to reduce the 250,000 deaths from shock and failure.

Dr. DEBAKEY. For clarification here, if I may, what Dr. Corday is saying is that this group that die of shock and failure happens to be

a group that is more likely to be in the hospital and therefore more available for the application of the technological developments he is going to talk about.

Dr. CORDAY. If we could just tide these hearts over a period of minutes or hours until the heart is able to recover some of its own power, many of these patients might recover. We have developed such a pump in our laboratory and tested it on over 500 animals. We have done this initial work with private support, and now have been awarded a contract to transfer this knowledge to the treatment of the human. This pump provides a practical approach, because it can be inserted at the bedside within a 10- or 15-minute period to provide a circulation to the brain and heart and thus give them a chance to recover.

With the other half of the artificial heart budget, the National Heart Institute will fund 12 centers across the Nation to learn exactly what happens to the human when a coronary artery becomes blocked and shuts off blood to the heart muscle. This MISC program promises to provide many of the missing links in our present knowledge, and through such basic research we stand a good chance of developing new methods of treatment. The artificial heart and MISC programs, which cost the Nation about $13 million, might save some of the 250,000 people each year who succumb to heart failure and shock immediately following a coronary attack. I would urge that these two programs be funded for at least a 5-year period, because it should take at least 5 years to provide the answer. Also the strategic personnel which must be attracted to such studies require assurance of a sufficient period of employment to join in the crusade.

We are aware that Surgeon General Stewart has demanded more applied research so that the fruits of basic research will be more rapidly available to the clinical practitioner. I endorse this completely. This should not be done at the expense of the basic research programs of the National Institutes of Health. I also agree, therefore, with having the Bureau of Disease Prevention through its National Center for Chronic Disease Control, assume the responsibility of community operational research and development for the conquest of certain dreaded heart disease, since this Bureau has already proven itself eminently capable in proving the practicality of the coronary care concept. The Chronic Disease Center is trying to institute many novel concepts, including one to apply the principles of coronary care management to the treatment of the cerebral stroke.

I would encourage that this Bureau receive funds to help prove many new dynamic concepts, such as the coronary reception area or "atrium," where patients with minimal symptoms which might be developing into a full blown attack, might be admitted into a halfway house. Here, their heartbeats could be monitored for a few days until the crisis is over.

They would not have to be admitted to the formal hospital surroundings which are rather depressing.

Patients who note premonitory symptoms of a coronary attack could admit themselves into informal retaining quarters, where they could relax and receive surveillance. If an electrical event should threaten to terminate their life, they could receive the lifesaving treatment. While we cannot say for sure that this will turn out to be a practical

solution to this problem, pilot projects stand a good chance of proving this to be a lifesaving technique for helping those who now drop dead outside the hospital.

For this type of applied research, a budget in the Bureau of Disease Prevention should be provided. I estimate that $20,000,000 will provide the funds to start such targeted research. I would encourage it, sir.

I note in the President's message to Congress that a $4 million increase is proposed for the National Heart Institute to budget the Institute for this year. I was shocked to note that this $4 million will not allow for an increase in research projects. Because of the increasing cost of labor and supplies, the total number of different projects will actually be reduced from 2,081 in 1967 to 1,820 in 1968.

If I may show you this graph, sir. These are the heart projects. In 1966, 2,171 projects were funded. Because of the increased costs this had to be reduced to 2,081 in 1967. It is proposed that it would have to be reduced to 1,820 in 1968.

For the past 10 years, cardiovascular research in the United States has been moving forward dynamically, making it preeminent in the world. But it now appears to me that heart research has plateaued out in this country. Therefore, I appeal to you to recognize the fact that there has been a possible 16-percent reduction in all heart projects in the past 2 years, and that we must increase the heart budget if we are to save lives.

Mr. Flood. Thank you very much, Dr. Corday. Dr. Wilber.

STATEMENT OF DR. JOSEPH A. WILBER

Dr. Wilber. I would like to talk to you about a study which we did in Georgia with a new approach in the treatment of high blood pressure, on a community basis, and then to suggest that we try this nationally, scattered over the Nation to see if we can reduce the deaths and sickness from high blood pressure by this means.

As you probably know, high blood pressure is probably the commonest disease diagnosed by the physician. I spend 80 percent of my time as a family physician in Atlanta and 20 percent of my time with the health department. High blood pressure was the reason for more than 33 million visits to physicians' offices in the United States in 1964. It accounts directly for 5 percent of all deaths in the United States and contributes substantially to the cause of death in another 13 percent by the role it plays in accelerating death from stroke and heart disease.

The national health survey found an estimated 17 million adults in the United States to have definite high blood pressure and an additional 16 million to have borderline high blood pressure. The Framingham and other community studies clearly indicate that high blood pressure is a major factor in increasing the risk of heart attack and stroke. The suffering and economic loss from these common major illnesses are enormous and cannot be accurately estimated.

Prior to 1950 we had no effective treatment for high blood pressure. Now we have many effective drugs to lower the blood pressure safely and comfortably. As Dr. DeBakey said, this is one of the few areas of heart disease which has shown a drop in the death rate.

Probably as a result of drug treatment, the death rate from high blood pressure has declined—one of the few major categories of death that has declined rather than increased—in recent years.

Public health measures have made great conquests in the field of infectious diseases such as typhoid, malaria, smallpox, and polio. Now is the time to bring our new knowledge about high blood pressure to the general population. The tools have been discovered and tested, and we must now make available modern treatment for the entire community.

In our study in a small county in Georgia, Baldwin County, we surveyed the county first. We surveyed 3,000 people. We found 630 of them had high blood pressure when the nurse came to the door that day, at home, and measured it three times, 59 percent of them had been told they had high blood pressure some time in the past, but the other 41 percent had never been told they had it. Of this 59 percent that knew, making that 100 percent now, 30 percent were taking medicines that day for their high blood pressure. The other 70 percent were on no treatment. They had been treated in the past but had stopped it. In those 30 percent that were being treated that day, the blood pressure in 14 percent was low enough—when the nurse measured it—to make us think it was effective treatment. In the other 16 percent, it was still high even though they had taken their pills that day. So we felt that about 14 percent of the hypertensives in this sample, and probably it was a good sample of the community, 14 percent of the problem was being treated in this community.

This is a good average community with good medical care. We then asked the 11 doctors in the town if we could look through their records and they were very agreeable. Of the 630 patients we found with high blood pressure that day, we found in the records in the doctors' offices only 352. Probably the rest had never been to the doctor in the period that they kept records. We looked back 3 years. The doctors agreed with us that about half of these patients had high blood pressure; the other half did not realize they had high blood pressure. So the doctors had treated 176 of our 630 hypertensives. Eighty-one percent—or 138 of the 176—doctors had put on drugs, a good treatment we felt. Of these 138, only 34 percent came back more than once or twice to have their blood pressure checked again to see if it had come down, and came back at all regularly over the next 2 years. This is typical of my practice, too. I treat a lot of people for high blood pressure, but I lose them even though I tell them they must take care of it and come back and keep a check on it. Some of them do but most of them do not. So we felt that if we showed that there was a need for treatment of all these people, it would help to prevent strokes and heart attacks and kidney failure.

We then put on a little program. We chose a small sample, 200 of these 600 hypertensives, and we put them on a program where a nurse worked with their private doctor. She came to their homes once a month, checked the blood pressure, asked if they were taking their medicine, and if they had any problems; we pointed it all to the family physician. Sometimes he would see the patient had a blood pressure which had gone up, and he would increase the medicine by just telling the nurse. About a third of these patients we found could not afford the

drugs. We supplied the drugs free of change. So in the beginning in our smaller sample of 200, 25 percent of them were on treatment before we did anything, of whom we felt 15 percent of the total had fairly good treatment in terms of blood pressure reduction.

By this door-to-door survey and publicity, and this campaign, and by working with schoolteachers, county agents, and so forth, the survey alone increased this number of people on treatment in our sample in this community to 50 percent. When we went back 2 years later and checked their blood pressure, they had fairly good results: Lowering of the blood pressure in 34 percent.

In the other group, where the nurses worked with the doctor, going to the house once a month or once every 2 months, making sure they took their medicine, telling them what their blood pressure was, teaching many of them to take their own blood pressure, we got 86 percent under treatment, of whom 80 percent had good blood pressure control.

So it seemed that the major problem was persuading and educating these people to the fact that they did need to take their pills and to take them regularly and that they took them whether they felt good or felt bad. Well, we thought then we had demonstrated that there were two needs. If you are going to try to treat a whole community for high blood pressure, if this is a public health problem that needs to be controlled, then, first, you must find the cases. There are a lot of people walking around with high blood pressure who are not aware of it. Then, we must find some method to help the physicians to follow these patients, to educate them and persuade them to take their medicines.

What we would like to propose, then, is that a larger study be done. We would like to propose as our goal to try measuring the decrease in suffering and death caused by high blood pressure by controlling the pressure in, say, four selected communities all over the country. We would choose urban and rural communities and mixed racial communities as well. We would try to survey them and to find the cases, help their private physicians to treat them, or help clinics to treat them, and provide free or low-cost medication to those that are unable to pay for it.

The most important aspect of this is public education. In order to do this, you have to inform the whole community of what you are doing and what high blood pressure is. It takes a continuous education program throughout your study, working with newspapers, health groups, city groups, doctors, schoolteachers, everyone in the community. We think the door-to-door survey is the best way to find unknown cases of high blood pressure. We think other methods should be tried as well. When you do find a patient with high blood pressure, he should be screened again because blood pressure fluctuates, and it often takes several readings before you can be sure someone has a significant problem. Then we will offer our personnel to work with the private physicians to help follow these patients, to see that they take their medication, and to see that they understand the problem. Our paramedical personnel would report back to the doctor after each home visit.

We think that approximately a third of the patients will have difficulty paying for medication and that we should find a way to furnish drugs free of charge or at low cost to them.

How could we measure the results of this program? First, we could see if we can decrease the deaths from high blood pressure and related disorders. We could check and see if we could decrease the hospital admissions for stroke, for heart failure, and heart attack related to high blood pressure; we could see if we can increase life expectancy and working days; we could check the decrease in economic loss as measured by health insurance, disability claims and rehabilitation referrals. Of course, there is no way to measure the expected decrease in the grief to the families who have lost a breadwinner from a stroke, and so forth.

Studies from large clinics have shown, after following patients for 7 years on treatment, that heart failure can be reduced by four-fifths by keeping the blood pressure down; strokes by a half, and heart attacks by perhaps a quarter. Most of the patients in these clinics had had high blood pressure 10 or 15 years before they were started on treatment. They were 55 years of age and above. No one knows what the early treatment of the younger ages of this asymptomatic, seemingly harmless problem might achieve. But we feel that starting treatment early, on hypertensive people who think they are well, may produce even better clinical results.

It is estimated that the economic loss from heart disease alone in the United States during 1962 amounted to approximately $22.4 billion. We do not know the loss from strokes, but it must be enormous. I think we can conservatively estimate that if we could control high blood pressure in 80 percent of the Americans with hypertension, we would reduce this economic loss by at least a fifth and probably more, by $4.5 billion per year.

One of the secondary objects of the program would be to train paramedical personnel, to take high school graduates or even those of lower educational levels and train them to do this high blood pressure follow-up work. We have demonstrated that we can teach them to do the blood pressure work, to take the blood pressure accurately and to understand the disease and the need for medication, so that they can do this home visit program.

The average cost of a home visit is approximately $3. We would see our patients once a month. The cost of blood-pressure medication by buying it wholesale is approximately 20 cents per day for the patient. If we did four communities of 100,000 people each, such a program would cost $1 million the first year for organization, training, and finding these hidden cases, and approximately $2 million each succeeding year for followup treatment. This would be 400,000 individuals in our community study. Estimating the saving in manpower and decreased hospitalization and medical care, I think it might be $24 million per year annually when the program is going.

In my opinion the time is now to organize this program; it should be organized and programed and evaluated on the national level. It is equally essential that the local medical communities, private physicians, and health departments plan the technique of an approach to their own community; for it will require close cooperation and communications on both levels.

I would like to urge that careful consideration be given to the possibility of specifically directing that funds be earmarked for this

new approach in public health to the community control of this disease. We know what we can do for high blood pressure. Twenty percent of the patients—a few, conscientious, well-informed patients—are getting this kind of medical care because they take care of themselves. I think we should make it available to all.

Mr. FLOOD. Mr. Natcher?

Mr. NATCHER. No questions.

Mr. FLOOD. Mr. Casey?

Mr. CASEY. Dr. DeBakey, I was interested in your statement about raising the level of future instructional personnel for the new medical schools which are under consideration. We all know that if we are going to even attempt to keep abreast, new medical schools must be constructed.

Dr. DEBAKEY. That is right.

Mr. CASEY. The faculty is the main thing that concerns a lot of us on this committee. Do you feel that the programs here would be something that would contribute to furnishing the faculty for the schools, as and when they are completed?

Dr. DEBAKEY. I would say in many ways the fellowship and research training programs through the National Institutes of Health constitute perhaps the most important program providing faculty membership and faculty development. Indeed, I think that this has been perhaps the most important element over the past two decades in providing support to the medical schools and the educational program today. I think it is extremely important. That is one of the reasons that I am very much concerned about the restriction of funds for this purpose.

Mr. CASEY. How is it operating now? Have you had some of those who have trained in your center become faculty members elsewhere?

Dr. DEBAKEY. Oh, yes. We have a training program, a National Heart Institute training program, and we are training men in the field of cardiovascular diseases. We have approximately 45 in training now, at different stages.

Mr. CASEY. These are not just to bolster Baylor's faculty?

Dr. DEBAKEY. No, no.

Mr. CASEY. That is what I want to find out, where they go to.

Dr. DEBAKEY. In fact, we are providing international training as well. We have 20 international fellows that come to us from all over the world in addition to those from different parts of this country. Obviously, we do not absorb those. In fact, the majority of the people that we train go to other medical centers. These are the core for medical centers all over. Like many other medical centers, they are doing the same thing across the country. This is why this program is so extremely important because without the trained personnel we could not move ahead in this area. I think we have expanded our training programs and I think it is extremely important to continue to do so. We are not able to actually meet the growing population today in terms of output of physicians. Were it not for the fact that we actually absorb something like 15 percent by foreign import of physicians, we would not be able to meet the current ratio which many people feel is quite inadequate, that is, the ratio of physicians to the population.

There is no prospect of the development of new medical schools meeting that ratio. This is one of the reasons, of course, that the training of additional paramedical personnel is so important. The training of people, for example, as indicated in this high blood pressure program. The training of people who can do some of the things a physician does not have to do, is extremely important. This development is just beginning today. It is not far enough along to say that it is going to have an impact yet, but I hope it will because it is the shortage of health manpower and personnel in all areas that really restricts our ability to do many of the things we need to do. This, of course, is one of the great values, I hope, to come from the regional medical programs through its cooperative arrangements and better utilization of personnel in the region. I would hope we would be able to use our professional knowledge in a much more effective way, in its application to patients and the prevention of disease.

Mr. CASEY. Thank you. Mr. Chairman, you can readily understand why we take great pride in having Dr. DeBakey in our community.

Mr. FLOOD. Yes, I do.

Dr. DEBAKEY. Thank you.

Mr. FLOOD. Thank you, gentlemen.

Dr. DEBAKEY. Thank you very much. I simply would like to say we are very appreciative of the opportunity to meet with you in this committee. You have done so much to support these programs.

Mr. FLOOD. The committee considers itself very fortunate to have your advice and suggestions.

Dr. DEBAKEY. Thank you very much.

MENTAL HEALTH

WITNESSES

MIKE GORMAN, EXECUTIVE DIRECTOR, NATIONAL COMMITTEE AGAINST MENTAL ILLNESS (BUDGET)

SISTER MARY AMELIA, DIRECTOR, COMPREHENSIVE COMMUNITY MENTAL HEALTH CENTER, ST. JOSEPH'S HOSPITAL, HOUSTON (CENTERS PROGRAM)

DR. FRANCIS J. BRACELAND, SENIOR CONSULTANT, INSTITUTE OF LIVING, HARTFORD (AMERICAN PSYCHIATRIC ASSOCIATION)

DR. JOSEPH MATARAZZO, CHAIRMAN, DEPARTMENT OF MEDICAL PSYCHOLOGY, UNIVERSITY OF OREGON MEDICAL SCHOOL (NATIONAL ASSOCIATION FOR MENTAL HEALTH)

Mr. FLOOD. We will now hear testimony with reference to the National Institute of Mental Health. We are pleased to have with us Mr. Mike Gorman of Washington, D.C., who is the Executive Director of the National Committee Against Mental Illness; a member of the National Advisory Mental Health Council; executive secretary of the International Committee Against Mental Illness; a fellow of the American Psychiatric Association, honorary; and a fellow of the American Public Health Association.

You have a statement, Mr. Gorman?

Mr. GORMAN. I do, sir.

Mr. FLOOD. Please proceed.

STATEMENT OF MIKE GORMAN

Mr. GORMAN. If I may introduce my prepared statement for the record and make a brief statement or two.

Mr. FLOOD. Without objection Mr. Gorman's statement will be made a part of the record at this point.

(The statement follows:)

TESTIMONY OF MIKE GORMAN, WASHINGTON, D.C. EXECUTIVE DIRECTOR, NATIONAL COMMITTEE AGAINST MENTAL ILLNESS; MEMBER, NATIONAL ADVISORY MENTAL HEALTH COUNCIL, U.S.P.H.S.; EXECUTIVE SECRETARY, INTERNATIONAL COMMITTEE AGAINST MENTAL ILLNESS; FELLOW, AMERICAN PSYCHIATRIST ASSOCIATION (HONORARY); FELLOW, AMERICAN PUBLIC HEALTH ASSOCIATION

Mr. Chairman and members of the committee, progress in the fight against mental illness has been most heartening in the year since I last testified before this committee. In fact, I think there is general agreement among all of us in the mental health field that in 1966 more headway was achieved than in any year since the establishment of the National Institute of Mental Health in 1946.

Most significant was the record breaking drop of 24,000 patients resident in our state mental hospitals. This was the first year in which we reached President Kennedy's goal of a reduction of at least five percent per year in the number of people hospitalized in these institutions.

In the eleven years since the introduction of a variety of psychotropic drugs, we have achieved an over-all reduction in state mental hospitals of 106,000 patients. This is close to 20% below the 1955 patient population figure; it brings us within sight of the 50% reduction in state hospital populations by 1973 which President Kennedy envisaged in his historic 1963 mental health messsage to the Congress.

Mr. Chairman, I think it is important to recall that in the period prior to 1955, we were *adding* 13,000 patients a year to our already over-crowded state hospitals because we had no effective therapies to reverse this seemingly inevitable trend. If this pattern had continued, we would now have more than 700,000 patients in our state mental hospitals this year, as against the 452,000 who are now in residence. At a very conservative estimate, this would cost the states an additional $2.5 billion in patient care expenditures and $4.5 billion for the construction of new hospital beds.

This is the era of benefit-cost ratios, cost-effectiveness and systems analysis. We are frequently reminded, in a tight budget year resulting from commitments abroad, that we must be prepared to justify every dollar which is requested. We are happy to do so. The billions of dollars we have saved the states over this eleven-year period exceed the total budgets of the National Institute of Mental Health over this same period by a ratio of more than five to one—in other words, for every dollar we have received in these mental health programs, we have returned more than five dollars in terms of hospital construction and operating savings and in the additional productivity of thousands upon thousands of our people.

This committee, and its sister committee in the Senate, have played a major role in these accomplishments, frequently going beyond inadequate Administration budget recommendations. The Congress has supported drug research and evaluation programs and accelerated manpower training efforts which together have made the real difference in transforming dreary custodial institutions into therapeutic hospitals which return 80% and more of first admissions to society within six months to a year.

As the capstone of this dramatic revolution, we are now making the big move into community mental health. Aware of the fact that only one in five patients today is treated in a state mental hospital—as against three out of four just two decades ago—we are in the early stages of building a network of mental health centers designed to provide early, easily accessible treatment to those of our citizens who require it. But we cannot achieve our objective without more research knowledge and a vastly increased reservoir of trained professional and non-professional workers.

Mr. Chairman, we therefore propose a carefully worked out budget of *$293,860,000* for the National Institute of Mental Health during the coming year—an

increase of approximately $45 million over the very restrictive budget recommended by the Administration.

At this point, I would like to highlight the major items in our proposed budget:

RESEARCH

Regular grants

The Administration proposes an increase of less than $5 million to encompass all of the far-flung research activities of the Institute.

In sending up such an inadequate recommendation, the Administration ignores a number of carefully documented reports over the past several years which indicate that the level of research support must be increased by at least 15% a year to handle both rising salary and equipment costs and to allow for a small percentage of new research projects. As last year's House Appropriations Committee report noted, the non-governmental National Academy of Sciences, after a fifteen-month study, reported to a House Committee that a 15% annual increase was the minimum needed for any forward momentum. Furthermore, a Task Force of the President's own Science Advisory Committee corroborated the conclusion reached by the National Academy of Sciences.

A careful analysis of the budget indicates that the President's so-called "increase" will allow for only 14 entirely new research projects in fiscal 1968. As one who is now serving a second term as a member of the National Advisory Mental Health Council, I very frankly dread the consequences if this budget is sustained. We will have to go through the painful motions of approving scores of applications on scientific merit, and then informing the respective investigators that although we all make speeches about the need for more psychiatric research, we must turn down their projects because we lack the funds.

This tight research budget is all the more puzzling since, with the achievement of Bureau status by the National Institute of Mental Health, it has been asked to either initiate or expand a number of specialized mental health endeavors. For example, the Institute is now exorted to develop comprehensive programs in the fields of alcoholism, narcotics and drug abuse, suicide prevention, childhood mental illness, crime and delinquency, metropolitan mental health problems, and so on.

Mr. Chairman, these are all important areas, but how can we take any meaningful steps with the Administration budget restricting us to 14 new projects for the coming year? Let me illustrate by citing just a couple of specialized areas where we should, but will not be able to, make any major advances:

Alcoholism

The Administration budget proposes $4.5 million in research and demonstration projects in the field of alcoholism for the coming year. This is $212,000 over this year's budget—hardly enough to finance even one of the many regional alcohol research centers which the Institute has been urged to activate in fiscal 1968.

There are many who contend—and I find it difficult to disagree with them—that alcoholism is the biggest public health problem in this country today. It is estimated that there are between five and six million alcoholics in the United States; if one includes their families, more than twenty million people are caught up in the web of this malady. It is almost impossible to give a full rendering of of the human suffering, the families broken up and the fantastic economic cost of this disease to industry.

Recent studies indicate that the life expectancy of the alcoholic is ten to twelve years less than that of the average person. W ehave figures from some states which indicate that communities spend $50,000 to $100,000 in support of an alcoholic and his family during his lifetime.

In an enlightened departure from past views, the medical profession now proclaims that alcoholism is a disease. However, we know precious little about treating this sickness. In some jurisdictions, courts now require chronic alcoholics to be treated rather than jailed, but in actual fact this treatment consists largely of drying out the alcoholic and getting him back on his feet until the next bout of alcohol and the next re-admission.

There is a consensus among leading investigators in the field that we need chemical agents effective against this addiction. Despite the cries of skeptics, research investigators have developed a number of chemical agents against the most refractive kinds of mental illness, including schizophrenia. Despite the cries of the skeptics, a new core of investigators is making initial inroads upon various forms of mental retardation.

All of these problems were previously considered hopeless. We are just beginning to lift the cloud of hopelessness surrounding alcoholism; we must therefore have funds to support widespread investigations.

At the present time, Rutgers University has the only multi-disciplinary research center for the study of alcoholism. It is my understanding that over the next year or so, the Institute will be asked to finance an additional ten to twelve regional alcoholism centers.

A careful assessment of the need, combined with a touch of realism concerning the present fiscal climate, limits us to requesting an additional $4 million over the budget for research and demonstration projects in alcoholism during fiscal 1968.

Narcotics and drug abuse

We are faced here with a problem of inadequate data on the extent of addiction to narcotics. The estimate of 60,000 users of narcotics is generally regarded as very low, since it is drawn almost exclusively from reports by law enforcement agencies. New York State, which is now developing a comprehensive program in this field, estimates that there are 40,000 narcotic addicts in that state alone.

As most of you know the Congress, upon the recommendation of the President, enacted the Narcotic Addict Rehabilitation Act of 1966. It provides for fairly liberal authorizations for various approaches to the problem of narcotic addiction, but the actual budget recommendations for both the current year and fiscal 1968 are grossly inadequate in terms of meeting the objectives of the new legislation.

At the request of the Administration, the National Institute of Mental Health set up a new Center for the Studies of Narcoic and Drug Abuse. The mandate is fine, the title of the Center is impressive, but the funds for the studies are not there. For fiscal 1968, the Administration recommends $3,900,000 for drug addiction—only $664,000 over the current year.

In combing the literature and in talking to the small band of scientists interested in this field, I find general agreement that constructing a network of facilities to get the addict off the streets is not the answer. Even if he is successfully withdrawn from the drugs while confined, there is overwhelming evidence that he soon returns to the habit when he is released. New York State is currently planning to spend approximately $250 million to construct and operate these detention camps for addicts. Years ago, New York did the same with the mentally ill, and it is today saddled with a number of monstrous human warehouses in the 5,000 to 10,000 bed range.

Buildings weren't the answer for the mentally ill then, and they are not the answer for drug addicts now.

The small amount of research conducted on drug addiction over the past few years has resulted in the development of several drugs which show promise as antagonists to the harmful and powerful narcotics—they either substitute for them or reduce the craving of the addict for them. There is considerable hope that intensification of this research can, and will, produce agents powerful enough to break the addictive process.

We therefore recommend an additional $4 million over the Administration budget to transform the Center for the Studies of Narcotic and Drug Abuse from a hollow shell into an exciting reality.

Depressions

Depression is one of the most difficult and most disabling forms of mental illness. While there are no really precise statistics on the number of people suffering from depression in this country today, there is a fairly widespread view among the professionals that depressions not only claim a vast number of our hospital beds, but are also one of the most refractory problems confronting both psychiatrists and general practitioners of medicine.

I had the privilege of attending the 4th World Congress of Psychiatry in Madrid last year; I heard papers from distinguished psychiatrists in all parts of the world emphasizing the point that depression was not only the most common form of mental lilness, but also one of the most costly health problems in terms of reduction of human productivity.

Over the past year, in an effort to mobilize a research offensive against this illness, the National Institute of Mental Health called in experts in this field who now compose a task force charged with devising new research approaches

effective against depression. It is my understanding that the task force has recommended the sum of $4 million as an initial step in achieving its objective; we therefore recommend that this amount be added to the research budget of the National Institute of Mental Health to get on with this very imporant work.

The problem of suicide prevention is closely related to the aforementioned endeavor in the field of depression. On the basis of incomplete reporting, it is estimated that there are 20,000 suicides each year—the tenth leading cause of death in our country. In recognition of this fact, the National Institute of Mental Health last year set up a Center for Studies of Suicide Prevention. Its budget during the current year is $2,335,000; the Administration proposes an increase of only $265,000 for the coming year.

The new Center hopes in the next several years to develop a number of regional centers, connected with universities, to serve as both research and training facilities. With the money currently available to it, the Institute has been able to plan for only one additional center in the coming year. We therefore recommend an additional $1 million so that more of these desperately needed centers can be started.

In summary, Mr. Chairman, we recommend an additional $13 million over the Administration budget to finance manifest research needs in the fields of alcoholism, narcotics and drug abuse, depression and suicide prevention.

HOSPITAL IMPROVEMENT GRANTS

As originally envisioned in 1963, this program was designed to lift the quality of care for the forgotten patients in every one of our state mental institutions. Under the original Kennedy program, we were to reach a level of $36 million in the third year of this program. However, the Administration recommendation for the coming year is only half of this sum, of which $10,610,000 is allocated to the National Institute of Mental Health and the remainder to the Division of Mental Retardation.

Under present fiscal limitations, we are only able to reach about half of all state hospitals. Those hospitals which cannot be reached are being deprived of an enormous set of resources. For example, figures on the first three years of the program indicate that those hospitals which have received awards have increased their discharge rates significantly and have added thousands of additional personnel who are doing a magnificent job with elderly patients, children and adolescents, alcoholics and many other groups previously neglected because of shortages of staff and funds.

If the Administration recommendation is sustained, we will not be able to add a single hospital to this exciting program in fiscal 1968. We therefore recommend $6 million over the budget figure so that this highly successful program can reach thousands of additional mental patients.

TRAINING

This committee has been constantly concerned with critical shortages of mental health manpower. Over a period of years, it has appropriated monies over and above Administration budgets to see to it that the mental health field would be in a position to recruit and train the enormous numbers of people needed for service activities in hospitals, clinics, and the community at large.

Last year, emulating the discouraging pattern of the two previous years, the National Institute of Mental Health was unable to finance the training of close to 2,000 willing recruits in the mental health disciplines, even though their qualifications had been screened and scientifically approved by technical study sections.

On the basis on this evidence, this committee ordered the National Institute of Mental Health to present to it this year a realistic assessment of mental health personnel needs over the ensuing five years. May I quote the committee language in this matter?

"A major problem confronting mental health programs all across the country is the critical shortage of trained manpower in the mental health fields. In 1963, the Committee was told that the Nation would require 87,000 mental health professionals by 1970, and that annual increases of $15,000,000 for training activities would be required if this goal was to be attained. Not once in the ensuing three years has such an increase been requested, although no one has seriously questioned the wisdom of investing such sums in training. There also seems to have

been no serious question about the availability of persons to be trained. The Committee feels that it is now a matter of some urgency that those concerned with developing estimate for the training programs should concern themselves with the possible consequences for future victims of mental illness and for the community at large if sufficient numbers of trained professionals are not available to meet the expected needs. At next year's hearings, the Committee will expect a fresh assessment of the requirements for mental health personnel, by professional and sub-professional categories, five years hence and a realistic plan, including estimates of the funds required, for meeting these requirements."

After a thorough, year-long study in which it gathered statistics from the major professional groups and from every mental health facility in the 50 states, the NIMH developed a factual answer to the committee directive. It reported that there were approximately 67,000 people working in the four core mental health disciplines—psychiatry, clinical psychology, psychiatric nursing and social work—at the present time; it projected the need for 100,000 of these workers by fiscal 1972. In order to achieve this increase in manpower, it estimated that $114,150,000 would be needed in fiscal 1968 and that, in the fifth year of the program, approximately $187 milion would be required.

The Administration seems to have paid little attention to this Congressionally directed report. It recommends only $100,762,000 for all of the training activities of the NIMH—a claimed increase of $8 million over this year. However, mandatory increases in the costs of training projects begun in previous years are $11 million higher than a year ago so that, in actual fact, the NIMH will be able to award 110 *less* new training grants for the coming year than in the current year.

But statistics hardly tell the story. Just a few weeks before his untimely death, Congressman John E. Fogarty, who had done more than any member of the House to increase funds for mental health manpower, received a letter from Mr. William Forrester, Director of Personnel for "The Pittsburgh Press". Congressman Fogarty shared this letter with me, and I would like to quote a few comments from a dedicated person who sees the stifling effect of manpower shortages at the grass roots level:

"This struggle against mental illness has been my major avocation in recent years, and indeed I suspect there have been times when I have been more concerned with it than the problems I face in handling labor relations and personnel problems for my fortunately understanding employer.

"I have served Mayview State Hospital as a volunteer for the past 12 years, have been a member of its Board since 1961 and chairman since 1963. I am a member of the Boards of the county and state mental health associations, and of the newly-appointed Allegheny County Mental Health Mental Retardation Board. I served the state as a regional chairman of the Comprehensive Planning Program for a 10-county area.

"These things are cited as background to emphasize one fact which has dominated all of the activities in which I have engaged: to do even a reasonably adequate job the supply of professional manpower just has to be expanded far beyond the present potential.

"There is no more frustrating problem for our Board at Mayview. Some of the members are well informed on the mental health field, others are relatively new. All are shocked at the paucity of manpower, and we keep writing letters to our Commissioner of Mental Health and our Governor and our legislators. The theme is always the same: 'We believe our hospital is doing a reasonably good job under present conditions of inadequate staffs and budgets. How much better a job these dedicated people could do if you gave them the tools!'

"As our County Mental Health Board begins it work of planning mental health centers, the enthusiasm of the members is certainly tempered by the knowledge that all of the fine plans in the world will collapse if we can't get the staff. And this won't be easy.

"I can't think of any more glaring example than Western State School and Hospital near Pittsburgh. It was built for 500 retarded children and 200 emotionally disturbed ones. It is the *only* facility in Western Pennsylvania which could accept deeply disturbed children. The beds for retarded children were filled quickly (the waiting list for them is another dismal chapter in our state), but Western has accepted only 30 or so disturbed children, some of them also retarded. Why? It has been unable to get staff.

"This could go on and on, but I'm sure I've made my point.

"That's why those of us in the hinterlands, facing these problems constantly, are indeed grateful that there are men in powerful positions in our government

who do understand and support these measures which are so vitally needed to provide some day, somehow, the manpower necessary to give at least adequate care to the mentally ill.

"My earnest thanks to you for all that you are doing."

In the field of psychiatry alone every issue of "Psychiatric News", the official publication of the organization, is filled with hundreds of job listings, some of which have gone begging for a year or more.

In the field of psychology, the situation is even more critical. In a recent letter to Secretary Gardner, Dr. Arthur Brayfield, Executive Director of the American Psychological Association, estimated that the NIMH training support program in psychology would have to be increased at least five-fold to fill existing demands for services.

It is obvious from the foregoing that we cannot meet demands for mental health professionals in the traditional areas of work, much less provide the added manpower to staff the new community mental health centers, furnish psychiatric services under Medicare, supply mental health workers for Head Start, and so on.

We therefore recommend $114,150,000 for the training programs of the National Institute of Mental Health during fiscal 1968. This is the exact sum recommended in the five-year study ordered by this committee, and is only a modest beginning toward recruiting and training an additional 33,000 mental health workers in the next five years.

RESEARCH FELLOWSHIPS

The Administration recommends $9,859,000 for research fellowships in the coming year, an increase of only $726,000 over the present level of support. Under this restrictive budget proposal, we will be able to support ten *less* fellowships than we did last year.

We are constantly reminded of the shortage of research investigators in the field of mental health, and we are chastised for not coming up with basic solutions to such simple problems as schizophrenia and alcoholism. We cannot move forward unless we have a large cadre of research investigators.

We therefore recommend an additional $2 million over the Administration budget for the research fellowship program of the NIMH.

DIRECT OPERATIONS

A year ago, I pointed out to this committee that the very restrictive Administration recommendations for the many intramural activities encompassed in this item seriously hampered the National Institute of Mental Health in its efforts to meet the fantastically increased requests for technical help from states and localities. For example, the initiation of the community mental health center program has resulted in staggering demands upon the under-staffed regional field offices of the NIMH. An individual application from a locality for a center frequently necessitates hundreds of hours of staff time in the initial development and subsequent revision of the proposal.

We therefore recommend an additional $4 million for NIMH regional and field activities to provide increased technical assistance to states and localities and also to state hospitals requiring consultation in the development of patient care improvement programs.

As the Institute moves into a number of specialized mental health programs outlined in previous portions of this testimony, it obviously must have a larger number of planning and development personnel in the central office. The Administration recommendation for fiscal 1968 provides only two additional positions for this central planning, development and administration. We therefore recommend an additional $2 million so that the Institute can provide effective technical leadership in the fields of alcoholism, drug addiction, suicide prevention, and so on.

On an over-all basis—in order to expand many other necessary activities in the central office—we recommend a total appropriation of $61,764,000 for NIMH Direct Operations during fiscal 1968.

COMMUNITY MENTAL HEALTH

I am happy to report to this committee that enormous progress has been achieved in a very short span of time in launching the new era of community mental health centers.

As of March 27th of this year, 49 states, the District of Columbia and Puerto Rico have had state plans for the construction of community mental health centers approved. In the year and a half since the first grant was awarded in August, 1965, 173 centers have received construction aid, staffing aid or, in a few cases, both. Currently, 28 million persons either have community mental health services available to them, or have centers slated for construction and/or staffing in their communities.

It is estimated by the end of the current fiscal year—June 30, 1967—we will have supported 286 centers serving 47 million people.

The most heartening aspect of this program has been the vigorous participation by states, local governments and private organizations in supplying the bulk of the monies necessary to build these centers. At the present time, state, local and private funds are providing support within a range of two to three dollars for every federal dollar in the construction of these centers.

Those of us who were associated in one way or another with the pioneer 1963 Kennedy legislation take the greatest satisfaction in noting that community mental health center financing efforts have often grown from the deepest roots of the community—from the citizenry itself. Time does not permit the citing of scores of examples of the most dramatic kinds of local initiative. For example, in Lane County, Oregon the citizens of 17 counties have worked together to raise the funds for a center which will serve residents in an area reaching from the Pacific Ocean to the summit of the Cascade Mountains.

In Daytona Beach, Florida the local mental health association initiated a campaign to raise money for the construction of a center; the largest corporation in the county contributed the services of its public relations department to promote the drive. Civic groups and hundreds of individuals participated—physicians, bankers, lawyers, housewives; one resident contributed the income from an orange grove to the project; the clergy sponsored a Mental Health Sabbath. Most important, the total effort brought all the interests within the county together for the first time in its history.

It is also important to realize that these centers are reaching the very people for whom the Kennedy legislation was principally designed—low income groups, people in rural areas, and other hard-to-reach segments of our population. For example, the Temple University Center in Philadelphia serves a predominantly low income area in the Northeast part of that city where more than one-fourth of the families are below the poverty level, and where there is a 60% rate of unemployment for youths between the ages of 15 to 21 who are not students.

Among the sparsely populated states, North Dakota has developed a program which seems miraculous to those of us who have been familiar for years with its one under-staffed state mental hospital at Jamestown. With a population of only 630,000, North Dakota has established three centers, and two others will probably be functioning within the next year. The three established centers have received only $258,000 in federal money, as against state and local contributions of close to one million dollars. There was tremendous popular support behind the centers program in North Dakota. In 1965, the state passed a Community Mental Health Services Act which, for the first time in North Dakota's history, permits the counties to levy taxes to establish and support mental health and retardation services. In the short time since the passage of the act, the voters of five counties have approved an extra millage levy in special referenda.

Last year, several states adopted community mental health legislation. The National Institute of Mental Health describes the 1966 Pennsylvania Act as the "boldest approach to date". The Pennsylvania act ensures that the localities of the Commonwealth will provide a wide range of mental health services; it provides for 13-member County Mental Health and Mental Retardation Boards composed of physicians, county commissioners, and citizen representation from voluntary health organizations in the field. The counties will operate the mental health centers, but the state will be responsible for up to 90 percent of any deficit incurred in serving citizens who are unable to pay. The state will pay the full deficit for inpatient care in a community mental health service up to 60 days, and partial hospitalization up to 120 days.

In addition, the state will also provide up to 20% of the total cost of the construction of the centers.

It is no wonder that Pennsylvania is one of the three leading states in the country in terms of number of centers in relation to total population. At the present time, twelve centers have been started in Pennsylvania; it is my under-

standing that the eventual goal planned by more than 3,000 citizens in 1963 and 1964 is the operation of a minimum of 78 centers.

Mr. Chairman, we will not build the additional 66 centers planned for Pennsylvania, or the hundreds upon hundreds of centers planned for other parts of the country, unless we increase the very inadequate sum provided in this Administration budget for the construction of centers. This committee was told in 1963 that our objective was the construction of 1,000 centers, reaching approximately half of our population by 1972. In keeping with this objective, the Congress authorized $65 million for the construction phase of the community mental health center program during the third and final year of the present law. However, the Administration recommended only $50 million last year and, as a consequence, we are falling behind in reaching the projected goal of 1,000 centers. For the coming year, the Administration recommends a similar restrictive ceiling of $50 million in its request for renewal of the legislation.

We submit that this is not keeping faith with the people on this issue. As this committee knows, more than 30,000 citizens in every walk of life have been involved over the past two to three years in planning for these centers. They have not only planned, but they have *acted*—they have been catalytic agents in bringing about state, local and private support for this program far in excess of the federal contribution. If the Administration recommendations continue to be significantly below the levels originally envisaged for this program, we will be faced with the unpleasant task of telling these dedicated citizens that they must wait many years for the realization of the dream of mental health centers in their respective communities.

We therefore recommend $65 million for the construction of community mental health centers during fiscal 1968. This is a very modest proposal—it is the exact sum authorized by the Congress for this program in fiscal 1967.

STAFFING OF COMMUNITY MENTAL HEALTH CENTERS

Mr. Chairman, our most pressing and critical need right now is for additional funds for the staffing of community mental health centers.

The mental health center staffing bill (PL 89-105) received the *unanimous* vote of both Houses of Congress in 1965. For the third year of the staffing program—fiscal 1968—the bill authorized $30 million in *new* staffing grants. The Administration's *legislative* proposal for a three-year renewal of staffing grant authority, introduced as H.R. 6431 by Chairman Staggers of the House Interstate Commerce Committee on March 1st of this year, carried over this same $30 million authorization for what amounts to the third year of our center staffing program.

Now comes the catch. In its *budget* request for new staffing grants for fiscal 1968 the Administration, for some inexplicable reason, asked for only $20 million. Ignoring this strange budget request, the House Interstate Commerce Committee on April 20 unanimously voted the whole $30 million in authorization for staffing.

If the Administration budget request is sustained, we will not be able to provide essential psychiatric services to several million people who need it right now. From the inception of this community mental health center legislation in 1963, we have insisted that the staffing portion of the legislation is more important than its construction phase. As the famed psychiatrist Karl Menninger put it, you can cure people in a barn with adequate psychiatric personnel, but you can cure no one in the most magnificent edifice if you lack that personnel.

Mr. Chairman, with your indulgence, I would like to quote from an observation on staffing which I made in an address to the 120th Annual Meeting of the American Psychiatric Association three years ago:

"Those of us who participated in the drafting of the Kennedy mental health legislation were careful to place the greatest emphasis upon limited federal support in the initial staffing of these centers. We envisioned these centers as primarily serving the low and middle income groups not now receiving adequate psychiatric care. We knew that patient fees could not support these centers, and we knew quite well that many of these people did not have health insurance.

"We expressed our hope to the Congress that the health insurance industry would some day broaden its coverage to include the ambulatory mental health center patient, but those of us who have been struggling for the past 15 years to persuade these same insurance carriers to cover the hospitalized mental patient for an adequate number of days, knew what a time-consuming battle we faced. In the interim, how could we ask the local community, or private organizations, to finance both the matching money for construction of these centers in addition

to 100% of the operating costs from Day One, when the centers opened. *We therefore opted for brains over bricks.*

"As a consequence, the 1963 Kennedy Administration bill, guided by Lister Hill to a fantastic 72-1 victory in the Senate, provide two dollars in federal staffing aid for every day of construction money."

Mr. Chairman, we have a current backlog in staffing applications which would choke a horse. It is estimated that by June 30th of this year, we will be more than $6 million short of having the necessary federal monies to match *approved* applications from local communities throughout the country. Furthermore, I want to stress this point—these are not paper applications. In every case, the local communities have had to submit a plan guaranteeing that local funds will not only be increased as the federal percentage declines from 75% in the first 15 months to 30% in the last year, but they have also had to include in this plan details as to how they will finance the centers *locally* when no more federal money is available.

It is well to remember that we are at the very beginning of the staffing program—the first staffing grant was awarded in March of last year. At the state and local level, the planning and tooling up process is not even completed. Furthermore, a majority of the 200 centers which will have received *construction* aid by June 30th of this year have not yet received comparable staffing monies, but in the coming fiscal year they will naturally request it in order to transform empty buildings into live treatment centers.

Mr. Chairman, your own state of Pennsylvania, which is one of the leaders in the country in the community mental health center program, serves as a dramatic illustration of just how hard the shoe will pinch. At the present time, the federal government has provided matching money for 12 new community mental health centers in Pennylvania; this money has been matched *better than two to one* by the localities. Of these 12 center grants, only five include staffing money. Right now—April 25, 1967—we have already said "No" to more than $1,200,000 in staffing applications submitted from Pennsylvania. By the end of this fiscal year, it is conservatively estimated that in Pennsylvania alone, we will be close to $4 million short of funding approved staffing applications for which local matching money is available.

It was this committee which in 1962 voted the funds so that citizens all across the country could plan for the network of 2,000 community mental health centers which President Kennedy envisaged in his historic mental health message of 1963. The Pennsylvania plan—one of the finest in the nation—calls for 78 centers by 1975. This is no idle dream—3,000 citizens in all parts of Pennsylvania were involved in this planning process. Yet the Administration now says to these citizens: Forget your plans. Forget your dreams of a new day for the mentally ill when patients will be treated in the heart of the community, rather than shoved off to massive institutions far from their loved ones.

In light of these facts, I beseech this committee to vote the full $30 million for new center staffing grants unanimously authorized by the Congress in 1965, and reaffirmed by the unanimous vote of the House Interstate Commerce Committee on April 20th of this year.

NIMH fiscal 1968 budget increases proposed by citizens

	1968 President's budget	Citizens' budget
Research	$76,477,000	$89,477,000
Hospital improvement	10,610,000	16,610,000
Training	100,762,000	114,150,000
Research fellowships	9,859,000	11,859,000
Direct operations	50,764,000	61,764,000
Total	248,472,000	293,860,000
Total increase requested		45,388,000
Community mental health services:		
Construction grants	50,000,000	65,000,000
Center staffing	46,168,000	56,112,950
Narcotic facilities	4,000,000	4,000,000
Total, community resources	100,168,000	125,112,950
Increase for community mental health services		24,994,000

Mr. FLOOD. Do you have anybody with you you would like to introduce?

Mr. GORMAN. Yes. I have at my left Sister Mary Amelia from Houston, Tex.

Mr. FLOOD. Where?

Mr. GORMAN. Houston, Tex., a little city of 1½ million people.

Mr. FLOOD. That is the second largest State, is it not?

Mr. GORMAN. Sir, with Mr. Casey here I will take a lot of amendments, including the fifth.

To my right is Dr. Francis J. Braceland, who is past president of the American Psychiatric Association. He has countless medals and honors and is presently with the Institute of Living in Hartford. He appeared many times before this committee when Mr. Fogarty was chairman.

To my extreme left is Dr. Joseph Matarazzo, chairman of the department of medical psychology at the University of Oregon Medical School.

Mr. Chairman, I have appended to my statement the budget figures. We are asking that the budget for the National Institute of Mental Health, which is now a Bureau, for 1968 be $293,860,000, which is about $45 million over the administration recommendation. And in a separate mental health program to which we are all dedicated—for community mental health services—we are asking an additional $25 million, and I want Sister Amelia to speak particularly of that program.

May I say this, Mr. Chairman: I know you have heard from the department and I know you know something—quite a bit in fact—about the personnel shortages and the manpower training program. We have to have more training activities to staff these hospitals if we are to make any progress in this field. But rather than give a lot of statistics, if I could read this one thing:

Just a few weeks before his untimely death, Congressman John E. Fogarty, who had done more than any Member of the House to increase funds for mental health manpower, received a letter from Mr. William Forrester, director of personnel for the Pittsburgh Press. Congressman Fogarty shared this letter with me, and I would like to quote a few comments from a dedicated person who sees the stifling effect of manpower shortages at the grassroots level.

I think this one letter catches what we are trying to do in mental health more than all the statistics and all the graphs and all the films I could bring before this committee. I quote from Mr. Forrester:

> This struggle against mental illness has been my major avocation in recent years, and indeed I suspect there have been times when I have been more concerned with it than the problems I face in handling labor relations and personnel problems for my fortunately understanding employer.
>
> I have served Mayview State Hospital as a volunteer for the past 12 years, have been a member of its Board since 1961 and chairman since 1963. I am a member of the Boards of the county and state mental health associations, and of the newly-appointed Allegheny County Mental Health Mental Retardation Board. I served the state as a regional chairman of the Comprehensive Planning Program for a 10-county area.
>
> These things are cited as background to emphasize one fact which has dominated all of the activities in which I have engaged: to do even a reasonably adequate job the supply of professional manpower just has to be expanded far beyond the present potential.
>
> There is no more frustrating problem for our Board at Mayview. Some of the members are well informed on the mental health field, others are relatively new.

All are shocked at the paucity of manpower, and we keep writing letters to our Commissioner of Mental Health and our Governor and our legislators. The theme is always the same: "We believe our hospital is doing a reasonably good job under present conditions of inadequate staffs and budgets. How much better a job these dedicated people could do if you gave them the tools."

That is our plea today.

Now to continue with Mr. Forrester's letter:

As our County Mental Health Board begins its work of planning mental health centers, the enthusiasm of the members is certainly tempered by the knowledge that all of the fine plans in the world will collapse if we can't get the staff. And this won't be easy.

"I can't think of any more glaring example than Western State School and Hospital near Pittsburgh. It was built for 500 retarded children and 200 emotionally disturbed ones. It is the only facility in Western Pennsylvania which could accept deeply disturbed children. The beds for retarded children were filled quickly (the waiting list for them is another dismal chapter in our state), but Western has accepted only 30 or so disturbed children, some of them also retarded. Why? It has been made unable to get staff.

Thiis could go on and on, but I'm sure I've made my point.

That's why those of us in the hinterlands, facing these problems constantly, are indeed grateful that there are men in powerful positions in our government who do understand and support these measures which are so vitally needed to provide some day, somehow, the manpower necessary to give at least adequate care to the mentally ill.

My earnest thanks to you for all that you are doing.

This was a letter written to the distinguished late chairman of this committee.

I would like to skip from this and, with the perverseness of the Irish, go to a problem which I think affects every member of this committee.

As a result of the 1963 Kennedy legislation enormous progress has been achieved in launching the new era of community mental health centers. Our problem is additional funds for the staffing of these centers. I could cite many examples. I might cite a little city called Wilkes-Barre where a noted psychiatrist, Dr. J. Franklin Robinson, died a year ago and they have to this day not been able to get a new psychiatrist to replace him at Childrens Center in Wyoming Valley. This is a problem of personnel.

Mr. Chairman, we have a current backlog in staffing applications which would choke a horse. It is estimated that by June 30 of this year, we will be more than $6 million short of having the necessary Federal moneys to match approved applications from local communities throughout the country. In other words, the localities have put money up by sweat, blood, and tears. They have the money but we now say at the Federal level we cannot match their local contributions. Furthermore, I want to stress that these are not paper applications. In every case the local communities have had to submit a plan guaranteeing that local funds will not only be increased as the Federal percentage declines from 75 percent in the first 15 months to 30 percent in the last year, but they have also had to include in this plan details as to how they will finance the centers locally when no more Federal money is available. That is, the decline is rather abrupt. I think Sister Amelia will want to say something to that. Maybe other people have come before you and said this is a temporary program and I know the old gag about nothing being more permanent than a temporary Federal program, but in this case, the money runs out after 51 months.

If I could make one other statement about the citizens. I have seen as I travel about with my carpetbag each year the most moving evidence that citizens at the local level many times have put up this money. I thought the States would do a much more impressive job of putting up money matching the Federal money, but they have not and it has been up to the localities in many cases to match every cent of the Federal money. I think that is true in Texas. I do not want to criticize the empire of Texas, but I think Sister Amelia will tell you there has been no State money and the localities have had to get the money approved through other means. For example, in Dr. Matarazzo's State of Oregon the citizens of 17 counties banded together to raise the funds for a center which will serve the residents in an area reaching from the Pacific Ocean to the summit of the Cascade Mountains.

In Daytona Beach, Fla., the local mental health association initiated a campaign to raise money for the construction of a center. The largest corporation in the county contributed the services of its public relations department to promote the drive. Civic groups and hundreds of individuals participated—physicians, bankers, lawyers, housewives, and so on. One resident contributed the income from an orange grove to the project. The clergy sponsored a mental health Sabbath. Most important, the total effort brought all the interests within the county together for the first time in its history. Everyone says everybody comes to the Federal trough, but that is not true in this area.

It is also important to realize that these centers are reaching the very people for whom the Kennedy legislation was principally designed—low-income groups, people in rural areas, and other hard-to-reach segments of our population. For example, the Temple University Center in Philadelphia serves a predominantly low-income area in the northeast part of that city where more than one-fourth of the families are below the poverty level and where there is a 60-percent rate of unemployment for youths between the ages of 15 to 21 who are not students.

Among the sparsely populated States, North Dakota has developed a program which seems miraculous to most of us who have been familiar for years with its one understaffed State mental hospital at Jamestown. I remember a time I was in North Dakota when they had only four psychiatrists, all imports from Canada. Now with a population of only 630,000, North Dakota has established three centers and two others will probably be functioning within the next year. The three established centers have received only $258,000 in Federal money, as against State and local contributions of close to $1 million. There was tremendous popular support behind the centers program in North Dakota. In 1965, the State passed a community mental health services act which, for the first time in North Dakota's history, permits the counties to levy taxes to establish and support mental health and retardation services. In the short time since the passage of the act, the voters of five counties have approved an extra millage levy in special referendums. That is not an easy thing to do.

Last year, several States adopted community mental health legislation. The National Institute of Mental Health describes the 1966 Pennsylvania Act as the "boldest approach to date." The Pennsylvania act

insures that the localities of the Commonwealth will provide a wide range of mental health services; it provides for 13-member county mental health and mental retardation boards composed of physicians, county commissioners, and citizen representation from voluntary health organizations in the field. The counties will operate the mental health centers, but the State will be responsible for up to 90 percent of any deficit incurred in serving citizens who are unable to pay. The State will pay the full deficit for inpatient care in a community mental health service up to 60 days, and partial hospitalization up to 120 days. It seems again this is a partnership. The counties are running the centers, the Federal Government is contributing a limited amount, and the State, if there is a deficit, will pay up to 90 percent of any deficit incurred in serving citizens who are unable to pay.

I think the important thing in what I am saying is that we have to keep faith with the people. In 1962, this committee voted the first planing money so the citizens could go out and plan the centers. We said to the citizens in every locality: "You go plan these centers," and that has been the hole philosophy of these centers. They planned and they dreamed. In Pennsylvania they planed 78 centers, all carefully planed with priorities. The same is true in Kentucky, Mr. Natcher; the same is true in Missouri, Mr. Hull; the same is true in Texas, Mr. Casey. They have to show they are covering low-income groups and that they will cover the most needy first and the least needy last, so it has been a very impressive program.

Now we have this backlog of $6 million in staffing grants which we cannot pay this year and obviously there will be a large amount in the next year which we cannot pay. For example, again in Pennsylvania, there is matching money for 12 new centers. This money has been matched better than 2 to 1 by the localities. Of these 12 center grants, only five include staffing money. Right now, April 25, 1967, we have already said "No" to more than $1.2 million in staffing applications submitted from Pennsylvania. By the end of this fiscal year it is conservatively estimated that in Pennsylvania alone we will be close to $4 million short of funding approved staffing applications for which local matching money is available.

What we are saying in essence not only applies to the people of Pennsylvania but the people in Kentucky, Illinois, Texas, Missouri, and so on.

I am going to conclude, Mr. Chairman, and I know you are glad. I have figures from practically every State represented on this committee. In Texas, where we have funded five community health centers, only two staffing ones including the one in St. Joseph's, the deficit this year will be $673,000. They have the matching money on the barrelhead. The money is there. In other words, the applications from Texas are 139 percent of available funds.

The most depressing picture, Mr. Natcher, is Kentucky at the present time because Kentucky has been so active in starting community health centers. Four have been started, two construction and two staffing. We know, on the basis of a June 1967 projection, we will have applications which reach 382 percent of available funds. In other words, we will be short $1 million for Kentucky in staffing grants alone to match the localities.

I could go into the figures for the rest of the States represented on this committee, but maybe you get the thrust of it. I could talk about manpower and alcoholism and depressions and the state of the partition in Ireland, but I won't. I am interested in the $30 million authorized for center staffing by this Congress unanimously in 1965 and authorized unanimously by the Committee on Interstate and Foreign Commerce on April 20. I want that $10 million. That is what I ask of this committee.

Now if I could turn this discussion over to Sister Amelia.

STATEMENT OF SISTER MARY AMELIA

Sister AMELIA. Mr. Chairman and members of the committee, I think I shall share with you many of the things that have been going on during the past 6 months with us. We were given a staffing grant in September 1966. Since then we have been able to take care of over 300 patients in the outpatient department who would normally have to go to Austin or seek services elsewhere. We have also had inpatients, about 36 or so. We have a very small inpatient service because we are working with the families to keep them out of the hospitals and have them on an outpatient basis or in a day hospital.

We have found increased beds is not the answer. There are many beds and facilities in the community in which we work. We serve a population of 178,000. At our last check, 82 percent of the people we were servicing had an income of less than $1,000 a year. So you see we have a very impoverished section of Houston. The sad thing is there are 10 other centers planned for Houston and we are the only one going right now. Unless we get further funds and staffing moneys I do not think the other facilities will be able to pick up this tab.

One of the things we are finding out is that early detections, particularly among children, are very important. We have moved our staff to some of the neighborhood centers and have sent a staff for screening, observation, and teaching of the health center staff. We provide consultation services to the public health nurses, the visiting nurses, and teachers. We are particularly interested in the preschool child because prevention, as you know, is the keynote in mental health. We are working with all the agencies dealing with the preschool child.

I think another item I would like to talk about is the adolescents. We are dealing with a very close knit area and have moved our staff to a neighborhood store front to work with adolescents in this area. We also have sent some of our staff to a predominantly Spanish-speaking community here, again screening child problems and teacher control.

One of the things I found out when we started is what poverty means. We have set up an arrangement with our State hospital that people return to the community are given an appointment with us before they are returned to Austin. Many people, we found, could not keep the appointment and when we sent our team to find out why they were not coming in we found they did not have a bus token to come in. This was really a revelation.

Another thing we found was that in our day center patients were unable to buy food. They came without breakfast and without any

opportunity to buy lunch. So we have been finding out many more things than we knew in the beginning, though we felt we had well researched the locality we were going to serve.

We are setting up management groups for mothers with children who are problems in school and out of school. We are working with preschool education people and actually using the preschool education program as another avenue to help mothers speak English, because we are dealing with a large population of Spanish-speaking people.

We are trying to center our approach to service centers with some kind of a realization of reality. For example, showing people how to use surplus foods they have received. We see as one of our big problems coordinating the already existing services in our area. We need a better prepared staff and we need to complement the already existing services. We have demonstrated that we can work with patients coming back from State hospitals because we work with the families and help the families support the people who are ill.

We know we can cut down the $2 million Houston is spending on alcoholic rehabilitation. Now the person is picked up, taken to the prison farm, and returned to the same environment. We are intervening here with some of the judges and we have already demonstrated in the last 3 weeks what we could do. At least 12 people are again fully employed. They are phased in our program and we have found a place for them to live. Here we need halfway houses and other accommodations and moneys to take care of these facilities. We traced one person through 50 agencies to help just this one person.

We are preventing people from going to the State hospitals because we can make plans to take mental patients. It is much better to detect this kind of illness before a person is committed because many times when a person is committed the families have already agreed to send the person to a State hospital.

We have had excellent cooperation from our local regional office and a very good relationship with the national office, so we are very, very pleased to be in this program, but it needs imagination and leadership of the other agencies and if we had this most of the problems could be kept in our community and many problems could be prevented.

In the last 3 months we have met with 500 city organizations trying to help them understand what is meant by the community health centers.

Mr. GORMAN. Mr. Chairman, could I say one more thing? I had the privilege of visiting Sister Amelia's center in St. Joseph's. Until recently, there was not a single bed for mentally disturbed children in a city of 1 million people. What Sister Amelia is doing makes me very hopeful as a parent.

When I was talking about the staffing increase of $10.1 million—I want to clarify this—the administration request which I have in the last page of my statement includes $46,168,000 for center staffing. That is made up of both the new requests plus the accumulations of the last 2 years. So it a combined figure and when I am requesting $56,112,950, I am requesting $10 million additional in new starts plus the accumulation. What I am asking for is the new starts that are authorized, $30 million authorized by the Interstate and Foreign Commerce Committee. It does not affect the earlier starts.

Now, I would like to turn this discussion over to Dr. Braceland, a most distinguished gentleman.

STATEMENT OF DR. FRANCIS J. BRACELAND

Dr. BRACELAND. Mr. Chairman, with your permission I would like to submit a statement for the record and with your permission speak from it so as not to take the time of the committee.

Mr. FLOOD. Without objection, your statement will be made a part of the record at this point.

TESTIMONY ON FISCAL 1968 BUDGET FOR THE NATIONAL INSTITUTE OF MENTAL HEALTH BY FRANCIS J. BRACELAND, M.D.

I am Francis J. Braceland and I have been a psychiatrist for nearly 36 years. I graduated from Jefferson Medical College in 1930 and was an intern and Chief Resident at Jefferson Hospital. I began my psychiatric fellowship training at the old Pennsylvania Hospital in Philadelphia in 1932. I was then a Rockefeller Fellow in Psychiatry in Zurich, Switzerland, and at the National Hospital, Queen Square, London. I returned to be Clinical Director at the Pennsylvania Hospital until 1941, when I was appointed Professor of Psychiatry and Dean of the School of Medicine, Loyola University.

I have since occupied the following positions:

1942–46—Special Assistant to the Surgeon General, U.S. Navy, and war-time Chief of the Psychiatric Section. I am a Rear Admiral, Medical Corps, USNR, Retired.

1946–51—Head of the Section of Psychiatry, Mayo Clinic, and Professor of Psychiatry, Graduate School, University of Minnesota.

1951–65—Psychiatrist-in-Chief, The Institute of Living, Hartford, Connecticut; since 1965 Senior Consultant in that institution; also Clinical Professor of Psychiatry, Yale University; since 1960, Lecturer on Psychiatry, Harvard Medical School.

I have been in the past:

President, American Board of Psychiatry and Neurology, 1953.

President, American Psychiatric Association, 1956–57.

President, Association for Research in Nervous and Mental Disease, 1957.

President, Board of Examiners for Certification of Mental Hospital Superintendents, 1955.

Chairman, American Medical Association, Section on Nervous and Mental Disease, 1956.

Chairman, National Health Forum, 1958.

Vice-President, World Psychiatric Association, 1961–66.

I am now Editor of *The American Journal of Psychiatry*, the official organ of American Psychiatry, and am a psychiatric consultant to the Surgeons General of the Army, Navy, and Public Health.

Mr. Chairman and members of the committee, I am appreciative of your willingness to hear me. I appear before you as a representative of the American Psychiatric Association; the official body of American psychiatry which numbers approximately 17,000 psychiatrists. I am here to express the support of that association for the citizens' budget for the National Institute of Mental Health, the budget detailed for you by a tireless, dedicated worker for the betterment of the condition of the mentally ill—Mr. Mike Gorman.

With few exceptions, I have had the privilege of appearing before this committee annually over a span of 20 years, appearing first in a navy uniform as Chief of Navy Psychiatry in World War II, fresh from first-hand knowledge of the havoc wrought by emotional and mental disorders in our nation's youth detected as we mobilized for war. Disorders which led to hundreds of thousands of rejections for military service and an equal number of psychiatric casualties abroad and on the home front. You may recall that so serious was this situation that at one time General Marshall complained that we were sending more men home with psychiatric diagnoses than we were sending abroad to fight the enemy.

Each year as we come before this committee, we have hopes of bringing to you information regarding some remarkable breakthrough in our work which, like

polio vaccine, will solve many of our problems. But, the mental and emotional make-up of man is much too complex to allow for a simplistic advance such as this. Meanwhile, however, there has been a slow steady advance in our knowledge due largely to the research and training funded by this committee which has consistently recognized our problems and many times has helped us even by markedly increasing the budget recommended by the administration in doing so.

Though neither the NIMH nor psychiatry are brash enough to claim credit for it, there is one bit of good news for today in the Vietnam conflict, namely, the obvious paucity of losses from the military service due to psychiatric causes. A number of factors have combined to make this highly desirable situation possible. I shall not take your time to expand upon these factors but, certainly, psychiatric insight gleaned from two world wide holocausts contributed to this welcome turn of events. To be rejected by, or surveyed out of military service for psychiatric reasons, is a traumatic event which has deleterious effects which even reach into a man's life in his civilian capacity. This says nothing of the effect on the serious drain upon the nation's military manpower supply.

I have been a psychiatrist for 35 years, a clinician and a teacher who has lived mostly in the mental hospital milieu and it is my hope that I may address you on one or two clinical aspects of mental illness, for that is my only competence. Some of the things I say here today have been said before but they seem even more pertinent here and now. One of those things is to note that I had the privilege of writing the mental health portion of the Hoover Commission Report. I said then and want to repeat now that, were it not for the foresight of this committee and its counterpart in the senate in furnishing the NIMH with sufficient funds and the wisdom and skill of the NIMH officials in distributing them for training and research, the mental health picture in this nation would be in chaos.

However, Mr. Chairman, we are appearing today in a different psychiatric world than the one in which we began our testimony 20 or even 10 years ago and I repeat that much of the progress which we have made over that period was aided, abetted, encouraged, and financed by your assistance. Apropos of this fact, the March 1966 issue of *The American Journal of Psychiatry*, which I have the honor to edit, had a special section of 10 papers on community psychiatry and an editorial by Dr. Robert H. Felix, which is entitled "Community Mental Health, A Great and Significant Movement." I quote two short statements taken from Dr. Felix's commentary, for I know that you know he played an important part in our mental health advances. He said:

> (1) It is not a dream but a reality. More progress has been made in psychiatry in the last 30 years than in all the span of recorded medical history before that time.
>
> (2) Now mental illnesses and their prevention have become in fact the community concern we have said for so long they should be. Mere words cannot express the great debt the American people and, in fact, people everywhere owe to the late President Kennedy and the Congress of the United States for translating the findings and recommendations of the Joint Commission on Mental Illness and Health into law, thus making possible action at the community level.

When President Kennedy expressed the hope that our state hospital population might be halved within a decade, I was one of those who did not believe it could be done, but, gentlemen, it is beginning to lok like it might be done.

The Joint Commission he spoke about, you will remember, was made up of representatives of numerous and varied national organizations and, after a careful study of the mental health situation, issued a report, the now famous Action for Mental Health, which had been called the magna carta of the mentally ill.

The figures Mr. Gorman has given you regarding mental hospital statistics are dramatic indeed; they are worthy of careful study. Prior to the new lease on life which the advent of new concepts and new drugs gave us in the middle of the last decade, we were in a fair way to have to continue to build new mental hospitals and continue to increase the size of those already extant. With the more than 700,000 patients in state hospitals that he mentioned, plus nearly an equally large number in private hospitals, general hospitals, and combined institutions, we would have been in serious trouble as the population continued to expand.

Instead, today these institutions house only half the number who might have been incarcerated, but that is still too many. With 452,000 individuals in these

institutions at present, some of them in places hardly conducive to recovery or rehabilitation, it is obvious that our work is far from being completed. Therefore, though I shall in the interest of time only touch upon certain aspects of the overall program, we in the profession heartily endorse the request in the citizens' budget that $45 million be added to the administration's budget request, for a total of $293,860,000.00, in order that good work already started may continue.

It is probable that in no year but this present one has the progress of the national mental health program been so specific, nor has there been an immediate future in which the decisions of the Congress will be more crucial in making possible a continuity of effort on the part of all concerned toward solving what has been called the nation's No. 1 health problem. The money which Congress has appropriated thus far, in addition to its prime purpose, also has acted as seed money and called forth appropriations by the various states far in excess of those provided by the federal government. An article in one of the journals published by the American Psychiatric Association notes the progress made by one state in meeting its problem. Undoubtedly, seed money for training and research spurred the initiation of this work and the resourcefulness of its citizens and community interest carried it to fruition. Since 1946 the resident state hospital population in Iowa has dropped 75%, from more than 6,600 in that year to 1,683 in October 1966.

This notable change is due largely to Iowa's effort to get the patients out of large institutions, to decentralize and treat sick people in clinics, half-way houses, mental health centers and institutes. The active workers in the mental health field give a large number of people credit for this change—governors, state senators and representatives, U.S. congressmen, county supervisors, clerks, auditors, psychiatrists, family doctors, clergymen and others.

The citizens in all states are not quite so fortunate, however, and it will be a long time before some of them will be able to leave the grim fortresses which house them. Plans were made in 1963 to improve these institutions in all of the states and, hopefully, this year was to see a budget of $36 million to accomplish this. You have before you the administration's budget and know that the hopes for bettering the lot of these patients vanishes. It is our hope that an additional $6 million will be added to the administration's request in order to continue good work already begun and start in some hospitals which are badly in need.

For nearly two years now the grant support program in aid of both construction and staffing of community mental health centers has been in full operation. As a result, more than 120 centers' grants have been funded. The year 1967 marks the turning point at which the concept of high quality care and treatment of sick people changes before our eyes from a hope to a reality for hundreds of thousands of our fellow citizens. When the plans were made originally, Congress authorized $65 million for construction of these centers for fiscal 1967 and fiscal 1968. It is a severe blow, therefore, to note that the $15 million cut from last year's budget is again recommended for this year. Thus, the national fervor which was worked up with the hope that people would receive treatment near their homes and loved ones, is to end in disappointment.

It is in these centers that various agencies, clergymen, family doctors and mental health personnel were to labor, and in them the blue collar worker was to receive treatment instead of being shipped off to a distant institution. We urge that the $65 million originally authorized by Congress for the construction of comprehensive community mental health programs be appropriated in the FY 1968 budget.

Congress has before it a proposal to extend the provisions of the Community Mental Health Centers Act into the next five years in order that additional communities may be served. We are wholeheartedly in the hopes that the proposal will meet with favor. But I wish here to discuss several parts of the NIMH responsibility already assigned by the Congress which must be expanded, extended and adequately funded as foundations, without which further progress in centers or in hospitals cannot be made.

As your committee reported to the House last year, the progress being made by the Institute in its continuing efforts to improve the mental health of the American people is impressive. That progress must be accelerated in 1968, in my opinion, if we are to maintain our momentum.

Therefore, my initial request is urgent; it concerns manpower. There continues to be a critical shortage of trained manpower in the mental health fields.

This has been said time and again; but we can now add something else to this statement. In the past two or three years, the potential of universities and other training facilities has grown to the point that knowledgeable men in his field believe that manpower *can* be trained in sufficient quality and quantity to meet the public demand for services—*if* sufficient funds in support of training are made available immediately.

All of us are acutely aware of both the manpower shortages in all the mental health professions and the unequal distribution of this manpower throughout the country. When I ponder the manpower problem today, I am reminded of a quotation from Abraham Lincoln. Lincoln said: "The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty and we must rise with the occasion. As our case is new, so we must think anew, and act anew."

While training programs in the core mental health disciplines are increasing in number and capacity, their total output continues to fall short of demand, even for the limited mental health facilities now in operation. It is estimated, gentlemen, that by 1970 we will require at least 87,000 workers in the core professions of psychiatry, clinical psychology, psychiatric social work, and psychiatric nursing. About 22,000 of them will be needed to staff the community mental health centers we hope to see built by then. It is obvious that we will not be able to provide the mental health personnel we will need in the next decade—or even in the next two decades—unless we can greatly increase existing training programs for which NIMH is the major source of support. A lack of yearly increases in training appropriations for NIMH can seriously hamper the efforts to reach the projected manpower goal.

The President's budget, now before you, includes $100.7 million for the training program of the NIMH. This is an increase over last year's training appropriation which totaled $94.5 million. But it is still some $8 million short of the $15 million annual increase in training funds accepted by the Congress at the outset of this program as a minimum requirement to meet the projected goals of the nation's mental health program. In fact, due to increases in costs, the NIMH will be able to award even fewer training grants than in this present year.

That $15 million annual increase is not a mythical figure, I submit. It was arrived at thoughtfully and accepted generally. But only in FY 1963 was it actually appropriated. I would sincerely hope, Mr. Chairman, that the FY 1968 budget could be increased by this amount and I would like to present to you some of the reasons why it is vital this year.

Translated into actual manpower, the loss of even ten million dollars means the loss of one year's training for about 1,425 people and produces a shortage almost impossible to make up. It also can have a profound effect upon the quality and stability of training centers which are forced to reconsider their goals if funds are not forthcoming at the national level.

The impact on persons needing treatment is greatest of all. According to recent calculations, a shortage of 1,000 professionals makes it impossible to provide direct clinical services to about 100,000 patients. A loss of 1,000 trainees for one year would mean that about 39 community mental health centers could not be staffed and that services would not be available to nearly four million people in areas the centers are designed to serve.

The health legislation of the recent past gives us an opportunity to establish new, experimental and special training programs to provide mental health services for the people. The profession of psychiatry is rapidly accepting and practicing the precepts of treatment within the community and treatment based on public health methods.

To work with psychiatrists, we must train more persons as allied health personnel, to meet new needs and to carry out new treatment methods. It is time, now, to introduce training programs of this type even in the junior colleges of our land and to support their initial efforts.

In today's complex world, mental health professionals must also have available opportunities to continue their education. For a number of years now, the Institute has established as a solid base for its Continuing Education Program, the means of providing postgraduate training in psychiatry for general medical practitioners and other medical specialists. All the other mental health professions are now in need of similar programs and a Continuing Education Branch has recently been established within the Institute to support these activities.

Professionals and non-professionals alike can update their skills with this sort of federal support. Any public or private non-profit institution, including hospi-

tals, community mental health centers, professional organizations, state and local agencies, and universities and colleges can request aid in establishing such programs. But the amount of aid to be forthcoming will depend explicitly on the amount of funds available. In 1968, I feel that funds for continuing education should have an exceedingly high priority.

Of course, the major portion of funds in support of training will be expended to continue expansion in the core professions of mental health. But we now know that the number of professionals must be augmented by allied personnel. If the nation does not provide for this kind of team approach to mental illness and its proliferating problems of poverty and stress, funds expended to train professionals will not be spent to maximum effectiveness.

A survey done in 1963 indicated that almost 30 per cent of the psychiatrists and 16 per cent of the psychologists are providing services in more than one institution, moonlighting if you will, and the proportion of psychiatrists working in out-patient departments who have multiple jobs is 46.1 per cent for psychiatry, 23.8 per cent for psychology, 22.4 per cent for nursing. Unless additional core personnel to cover the psychiatric aspects of Medicare, community centers, psychiatric wards in general hospitals and psychiatrists for other burgeoning needs are provided, the mental health situation will be in a sorry state.

Due to the demands of the times, the once neglected medical discipline which I represent, has slowly come from behind hospital walls and spread its influence and attracted the interest and help of the community. It now makes contributions to its sister medical disciplines, to military medicine, to industrial medicine, to religious counseling and to education and these demands are bound to continue to increase as new services are demanded of this already overworked medical specialty.

As to psychiatry's growing importance in education, let me quote a few statistics for you. Federal figures indicate that in 1966 six million students were enrolled in our colleges and universities, 68% of them in publicly controlled institutions. It is to these students that the nation will look for its future leaders. Yet Farnsworth, Harvard's Director of Student Health, probably the most knowledgeable and experienced of college psychiatrists, points out that surveys indicate that for every 10,000 students 1,000 will have emotional conflicts of sufficient severity to warrant some professional help. Three to four hundred will have depression severe enough to impair their efficiency, and of the five to twenty who will attempt suicide, one to three will succeed. Fifteen to twenty of these students will become ill enough to require treatment in mental hospitals. These statistics have serious connoations and one of the wisest and most understanding comments on the subject that I have heard was made by Harvard's Dean of Freshmen, Dr. F. S. von Stade, who said: "When so many capable youngsters are on the beach, it makes good sense to have expert lifeguards when some of they go beyond their depth."

This, gentlemen, is one of the important roles of the college psychiatrist and this is only one of the services performed by one group of men who are trained by means of governmental funds.

This committee, last year, communicated to the House its concern that mental health research efforts continue to expand. I concur in that concern and I sincerely hope that research funds will be appropriated for FY 1968 in an amount not only necessary but as generous as possible.

The light shed by research can be illusive and flickering. There are periods in which that light seems shadowed and uncertain. But mental health research is today providing some exciting and hopeful findings. It would be catastrophic to tell the research investigators to hold still, or at best to tread water. Service, training and research must proceed simultaneously, benefiting one from the other.

With your permission, I shall not go into detail regarding overall mental health research here but, rather, will comment upon that mental illness known as depression which has fascinated me since my advent into the profession.

I gave one of the scientific papers on depression in Madrid, that Mr. Gorman mentioned, and in fact was chairman of that section of the World Psychiatric Congress. Also I was a member of the NIMH Ad Hoc Committee appointed to investigate this illness and it is true that depression is one of the most painful and tragic diseases known to man. Strangely, too, it often seems to be an accompaniment of greatness. Many great men in world history and in our own nation's history were depressed and some lost their lives during periods of depression. I am sure you can recall the sad histories of some of them.

Presently in our own nation approximately 20,000 deaths by suicide are reported annually, but that is only part of the story for there are many accidents which are well thought out and contrived and basically are suicidal acts. Most of these individuals are depressed; a number of them psychotically depressed.

Approximately 200,000 individuals in this country were treated last year for depression and there were equally as many depressed people treated under other diagnoses because of accompanying physical symptoms. The illness occurs in individuals of both sexes, all ages, all income levels and in all parts of the country. The predominating, and often all enveloping feeling in these patients, is one of despair, often so intense that it leads to suicide. Strangely, now it is the psychiatric diagnosis most often made and, strangely too, it often is found in men in middle life—good, conscientious, hard working individuals.

In earlier years, depression in middle life was thought to be the exclusive property of the female; now it is known that it affects many men particularly those in their fifties in the so-called prime of life. In this period, there is a lessened ability to tolerate loss, frustration, or disappointment as one notes the beginnings of declining physical powers and personal resources.

It should be noted that even the man of achievement in middle life may also suffer severe depression. The statesman, the editor, the business executive, the professional man, all are prey to the onslaughts of this illness. You can recall instances well known to you I am sure, and you know that in these periods society loses worthwhile and capable individuals. Occasionally a man in this age group goes through a so-called "success" depression, a feeling of being pushed beyond his powers, a frightened look-down from a high position from which there is always a danger of falling. Severe depressions occurring in women at the time of middle life, when youth is fading, family leaving home, and husband preoccupied with work, have long been known and are well documented.

Finally, severe depressions often occur in the older age groups. Some of these people make suicidal attempts; some succeed. Often these illnesses appear to be due to senile change, but closer inspection reveals that they are due to depression and, if the illness is caught in time, it will respond to treatment.

This impact and urgency of this problem is better understood when one realizes that over the next five years in the range of one million people will be seriously affected by feelings of depression and despair, much more than the ordinary attack of hives, and that more than one hundred thousand Americans, most of whom are depressed, will take their lives in the same span of time.

The issue of suicide is even more distressing in that it is the fourth most frequent cause of death in the productive ages of 18 to 45. It is said to be the third but it is more likely the second cause of death in college students. Serious depression, unrecognized or untreated, has a high risk of suicide and in a real sense is a malignant disease that kills. Depression and suicide are inexorably linked together.

The toll of depression in our society, however, goes far beyond the malignant illness we have just mentioned. It is often an intermitten and recurrent disease; many individuals suffer from it and are unable to function, or function at a minimal level during the depressed period. Within a given year, 150,000 individuals are hospitalized for psychotic or psychoneurotic depressions in the United States. Another serious concomitant result of depression is the psychological impact of the illness on the family of the individual sufferer, particularly if the illness culminates in tragedy. The toll of depression in our society is further reflected in time lost from work and in students who drop out of high school or college. Some of the well known loss of interest and apathy in students, so frequently reported, is due to depression. There is also repeated evidence suggesting a close relationship of depression with other medical problems such as alcoholism and drug addiction.

I have no desire to dwell at length upon further clinical aspects of this or other illnesses, nor can I presume further on your time. The fact is that now, with careful planning, intelligent utilization of resources and recently developed methods and hypotheses, it is possible for the first time to launch an attack on this illness and to make inroads upon it and the quiet desperation and suffering that accompany it. Three bodies of data in the basic sciences, the areas of catecholamines, the electrolytes, and steroid metabolism, have progressed to a point where they may be immediately applicable to the understanding of the biochemical abnormalities in depression. I would like to urge, there-

fore, that a special NIMH laboratory for the study of depression be created and that the Ad Hoc Committee's recommendations regarding it be followed. They have already been presented to you.

This laboratory could be the center for the collection of all information extant upon this subject. It will have intra-mural and extra-mural components and will coordinate all research material upon the subject, in addition to training necessary personnel. I would strongly urge this committee to add $4 million to the present research budget in order that this important project may be gotten under way.

As an instance of the possibilities of advances in the immediate future, on Friday, March 31, 1967, the NIMH published a bulletin outlining a potentially effective drug treatment for manic-depressive psychoses. This drug is thought to control the recurrence of this devastating illness, a problem which has plagued doctors and patients alike for more than a hundred years. Apparently it checks the intense manic excitement, and overactive patients are said to become calm under its influence. More importantly, it seems to act as a preventive of both manic and depressive attacks. Heretofore we have been able to treat and wait out individual attacks of this illness but we were never able to prevent recurrences, and patients and their families lived in dread of their reappearance.

The drug is lithium carbonate. *It is no miracle drug.* It requires expert care in its administration and in the handling of the patient. It needs much more research. It has promising possibilities; it is a prototype of the drugs which are in the offing which hold hope for greater relief of motional disorders and for the possibility of treating patients without having to hospitalize them.

I shall say nothing about alcoholism, narcotic addiction, or drug abuse; they have been covered by Dr. Yolles and Mr. Gorman. I, too, urge that an additional $13 million dollars over the administration's budget be added to finance research needs against these destroyers of men.

There are numerous other aspects of the program I would like to discuss with you, but it is not fair to take up your time. You have heard Dr. Yolles and Mr. Gorman and we all agree on the needs.

If I seem a bit enthusiastic or intense in my statements or efforts, I would ask your indulgence. Please remember that I have watched this situation for over 35 years and I have seen people neglected, humiliated and otherwise badly treated, and now with the present new enthusiasm and community interest, we may be pardoned for wanting their lot to improve. We live in dread that the clock will strike 12 and the royal coach which has carried our Cinderella of medicine to its present knowledgeable heights will turn into a pumpkin. I know that this committee will not allow that to happen.

In back of the various jokes about psychiatrists, mental hospitals and sick people, and beneath the cartoons in which couches and men with beards are prominent, there is still a certain amount of dread about these illnesses. In the present partnership of the professions, the government and aroused citizens, we are sure we can remove most of that. It is our sincere hope that we can do so soon.

Thank you, gentlemen, for allowing me to come before you.

NIMH fiscal 1968 budget increases proposed by citizens

	1968 President's budget	Citizens budget
Research	$76,477,000	$89,477,000
Hospital improvement	10,610,000	16,610,000
Training	100,762,000	114,150,000
Research fellowships	9,859,000	11,859,000
Direct operations	50,764,000	61,764,000
Total	248,472,000	293,860,000
Total increase requested, citizens budget		45,388,000
Community mental health services:		
Construction Grants	50,000,000	65,000,000
Center staffing	46,168,000	46,168,000
Narcotic Facilities	4,000,000	4,000,000
Total, community resources	100,168,000	115,168,000
Increase for community mental health services		15,000,000

Dr. BRACELAND. I am appreciative of your willingness to hear me. I appear before you as a representative of the American Psychiatric Association, the official body of American psychiatry which numbers approximately 17,000 psychiatrists. I am here to express the support of that association for the citizens' budget for the National Institute of Mental Health, the budget detailed for you by Mr. Mike Gorman, a tireless, dedicated worker for the betterment of the condition of the mentally ill.

With few exceptions, I have had the privilege of appearing before this committee annually for the past 20 years, starting with Representative Percy Priest. I appeared first in a Navy uniform as Chief of Navy Psychiatry in World War II, fresh from firsthand knowledge of the havoc wrought by emotional and mental disorders in our Nation's youth detected as we mobilized for war, disorders which led to hundreds of thousands of rejections for military service and an equal number of psychiatric casualties abroad and on the homefront. The situation was so serious that at one time General Marshall said we were sending more men home with psychiatric diagnosis than we were sending abroad to fight the enemy.

Each year as we come before this committee we have hopes of bringing to you information regarding some remarkable breakthrough in our work which, like polio vaccine, will solve many of our problems. But the mental and emotional makeup of man is much too complex to allow for a simplistic advance such as this. However, there has been a slow, steady advance in our knowledge, due largely to the research and training funded by this committee which has consistently recognized our problems and many times has helped us even by markedly increasing the budget recommended by the administration in doing so.

Though neither the NIMH nor psychiatry are brash enough to claim credit for it, there is one bit of good news for today in the Vietnam conflict; namely, the obvious paucity of losses from the military service due to psychiatric causes. A number of factors have combined to make this highly desirable situation possible. I shall not take your time to expand upon these factors but, certainly, psychiatric insight gleaned from two worldwide holocausts contributed to this welcome turn of events. To be rejected by, or surveyed out of military service for psychiatric reasons, is a traumatic event which has deleterious effects which even reach into a man's life in his civilian capacity. This says nothing of the effect of the serious drain upon the Nation's military manpower supply.

I have been a psychiatrist for going on 36 years, most of it spent around mental hospitals, and with your permission I would like to speak on several clinical problems because that is my only competence. It is wonderful to hear Sister Amelia speaking of the preschool children and adolescents. When I began working in the field of mental health we were confined behind the high walls of a mental hospital. Once you got in you stayed. Mental hospitals do things to people. Then Sister Amelia came up and put him in a mental hospital, but when he comes home he goes back into the same environment unless there is somebody to see that he takes his medicine, and somebody to help

him get a job, the only place the poor fellow is comfortable is back where he was.

Some of the things I am saying today have been said before. Dr. De Bakey and I served on a medical task force, and I said then that were it not for you gentlemen and your counterpart in the Senate the condition of mental health in this country today would be in complete chaos, but we are appearing in a different psychiatric world today than the one in which we began our testimony 20 or even 10 years ago. Among the tasks I have, one is to edit the American Journal of Psychiatry, and last year, in the March 1966 issue of that Journal, we published a statement by Dr. Robert H. Felix, and I would like to quote two short statements taken from his commentary. He said:

> It is not a dream but a reality. More progress has been made in psychiatry in the last 30 years than in all the span of recorded medical history before that time.
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> Now mental illnesses and their prevention have become in fact the community concern we have said for so long they should be. Mere words cannot express the great debt the American people and, in fact, people everywhere owe to the late President Kennedy and the Congress of the United States for translating the findings and recommendations of the Joint Commission on Mental Illness and Health into law, thus making possible action at the community level.

It used to be, you know, gentleman, that we were not very highly regarded, not only in the community but by our own colleagues in the practice of medicine. There were some questions about us and there were a few statements that used to be made which I do not need to repeat to you about the kind of people who would go in and live in mental hospitals. However, the situation has changed. The joint commission Dr. Felix spoke about was made up of representatives of numerous and varied national organizations including various religious groups and we hammered out a report that came to be known as the Magna Carta of the mentally ill.

Prior to the new lease on life which we received from the advent of new drugs, we were in a fair way to having to build a great number of mental hospitals. There were more than 700,000 patients in State hospitals, plus nearly an equally large number in private hospitals, general hospitals, and combined institutions, and with the population expanding we would have been in trouble. Instead, today these institutions house only half the number whom might have been incarcerated, but that is still too many. With 452,000 individuals in these institutions at present, some of them in places hardly conducive to recovery or rehabilitation, it is obvious that our work is far from being completed. Therefore, though I shall in the interest of time only touch upon certain aspects of the overall program, we in the profession heartily endorse the request in the citizens' budget that $45 million be added to the administration's budget request, for a total of $293,860,000, in order that the good work already started may continue.

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This notable change is due largely to Iowa's effort to get the patients out of large institutions, to decentralize and treat sick people in clinics, halfway houses, mental health centers, and institutes. The active workers in the mental health field give a large number of people credit for this change—Governors, State senators and representatives, U.S. Congressmen, county supervisors, clerks, auditors, psychiatrists, family doctors, clergymen, and others, a real community effort.

The citizens in all States are not quite so fortunate, however, and it will be a long time before some of them will be able to leave the grim fortresses which house them. Plans were made in 1963 to improve these institutions in all of the States and, hopefully, this year was to see a budget of $36 million to accomplish this. You have before you the administration's budget and know that the hopes for bettering the lot of these patients vanishes. It is our hope that an additional $6 million will be added to the administration's request in order to continue good work already begun and start in some hospitals which are badly in need.

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I shall not talk any more about the community mental health centers. There is a much more impressive representative here with us. We are all acutely aware of both the manpower shortages in all the mental health professions and the unequal distribution of this manpower throughout the country. When I ponder the manpower problem

today, I am reminded of a quotation from Abraham Lincoln. Lincoln said:

> The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty and we must rise with the occasion. As our case is new, so we must think anew, and act anew.

The health legislation of the recent past gives us an opportunity to establish new, experimental, and special training programs to provide mental health services for the people. The profession of psychiatry is rapidly accepting and practicing the precepts of treatment within the community and treatment based on public health methods.

To work with psychiatrists, we must train more persons as allied health personnel, to meet new needs and to carry out new treatment methods. We realize there are many things the doctor cannot do and should not do that can be done by other people, and we are reaching out in the high schools and junior colleges to introduce training programs of this type to support the initial efforts with these youngsters.

We continue to train family doctors in things psychiatric. They bring their own problems and are brought up to date on the latest things in psychiatric treatment.

A survey done in 1963 indicated that almost 30 percent of the psychiatrists and 16 percent of the psychologists are providing services in more than one institution, moonlighting if you will, and the proportion of psychiatrists working in outpatient departments who have multiple jobs is 46.1 percent for psychiatry, 23.8 percent for psychology, 22.4 percent for nursing. Unless additional core personnel to cover the psychiatric aspects of medicare, community centers, psychiatric wards in general hospitals, and psychiatrists for other burgeoning needs are provided, the mental health situation will be in a sorry state.

But we have come from behind hospital walls, we are out in the community and in industry, because more than 70 percent of the people who are dismissed in industry are dismissed not for technical inability, they are dismissed for emotional inability to get along with others. Our task is that of recommending and helping and as advisers. We are in the schools, we are working with the chaplains in various institutions, and working with chaplains in counseling and also doing much more in the military.

As to psychiatry's growing importance in education, let me quote a few statistics for you. Federal figures indicate that in 1966, 6 million students were enrolled in our colleges and universities, 68 percent of them in publicly controlled institutions. It is to these students that the Nation will look for its future leaders. Yet Farnsworth, Harvard's director of student health, probably the most knowledgeable and experienced of college psychiatrists, points out that surveys indicate that for every 10,000 students 1,000 will have emotional conflicts of sufficient severity to warrant some professional help. Three to four hundred of that group will have a depression severe enough to impair their efficiency.

Fifteen to twenty of these students will attempt suicide and three will succeed. Suicide is the second most important cause of death in our colleges today, the first being automobile accidents. Fifteen of the twenty of these students will become ill enough to require treatment in mental hospitals and these statistics have serious connota-

tions, but there is a statement by Dr. von Stade, who is the dean of freshmen at Harvard, who says "When so many capable youngsters are on the beach, it makes good sense to have expert lifeguards when some of them go beyond their depth." This is our task, to supply psychiatrists, psychologists, to work with chaplains in institutions and try to catch these kinds before they get too far.

This committee last year communicated to the House its concern that mental health research efforts expand. I concur and certainly hope that these funds will be appropriated in an amount not only necessary but as generous as possible because the light shed by research is elusive and flickering. There are periods when it has shadows, certainly, but mental health research today is providing exciting and hopeful findings. With your permission, I want to go into detail about one illness which we encounter because we encounter it in the young and in middle-aged men, middle-aged men who are capable and who have done a great deal already and now are coming down with depression.

Hospitals like my own usually have eight to 10 men, clergy, eight to 10 men who are physicians and large numbers of men who have done excellent jobs already, but they are depressed. Also, it seems strange, too, that depression seems to be an accompaniment of greatness. Many great men in world history and in our Nation's history were depressed and some lost their lives. Our job is to pick them up and catch them before they destroy themselves. I know that you can recall the sad history of some of these men even in Government.

At present it is said that there are 20,000 deaths by suicide in the United States but really it is 10 times that many because they are concealed by accidents and by somebody who wants to spare the family.

Two hundred thousand individuals were treated last year for depression. There are equally that many more people who are depressed and the predominating feeling in depressed people is one of despair. It tends to lead to suicide. Strangely, it is the psychiatric diagnosis that is most frequently made in the country today and, strangely, it is found that it used to belong to women in middle life but now it is found to be the property of men, good, conscientious, hard-working individuals. It ought to be noted that the man of achievement in middle life also suffers severe depression. The statesman, the editor, the business executive, the professional man, all are prey to the onslaughts of this illness. Occasionally a man in this age group has what is known as a succes depression. He makes the grade and then gets fearful as he looks down, that he has a long way to fall.

Finally, depressions occur in older age groups in great numbers, mostly because of the way the culture treats them. Many of the illnesses appear to be senile changes and it turns out they are not, they are depressions. The incidence of suicide in this group is large, and also the most frequent cause of death in the productive ages of 18 to 45.

Well, the toll of depression goes far beyond these things. It is often intermittent, recurrent, and some individuals suffer from it and are unable to function, and are being treated for some physical ailment similar—a physical symptom which accompanies it. Well, I do not want to dwell any longer or bother you with the clinical details. The fact is that now with careful planning, intelligent utilization of resources and recently developed methods and hypotheses it is possible

for the first time to launch an attack on this illness and the quiet desperation and suffering that accompanies it. Three bodies of data in the basic sciences, the areas of catecholamines, the electrolytes, and steroid metabolism have progressed to a point where they may be immediately applicable to the understanding of the biochemical abnormalities in depression. I would like to urge, therefore, that a special NIMH laboratory for the study of depression be created and that the ad hoc committee's recommendations regarding it be followed.

Those recommendations have already been presented to you by Dr. Yolles. This center will be the center for the collection of all information extant upon this subject. It will have intramural and extramural components and will coordinate all research material upon the subject in addition to training necessary personnel. This will come to about $4 million added to the present research budget in order that this important project be gotten underway.

Now, as an instance of what this will do, as I come to the close of this, on Friday, March 31, 1967, the NIMH published a bulletin outlining a potentially effective drug treatment for manic-depressive psychoses. That is an intermittent mania and depression, and it takes a circular form which is most distressing to families. It goes on down through the years. This has plagued doctors, patients, and families for more than a hundred years. Apparently this new drug checks the intense manic-depressive psychosis, the intense manic excitement and overactive patients are said to become calm under its influence. It seems to act as a preventive of both manic and depressive cycles. Heretofore we have been able to treat and wait out individual attacks of this illness but we were never able to prevent recurrences. You always had to say to a family that the prognosis is good for this attack, but after a certain number of months we cannot say anything about the future. Well, this is no miracle drug, Mr. Chairman, it is lithium carbonate. It requires expert care and administration and handling of the patients and it needs a great deal more research. This is what this center would do. I will say nothing further about that except that it offers the possibility of treating patients without having to hospitalize them.

I would like to go into detail about alcoholism and narcotic addiction, but Dr. Yolles and Mr. Gorman have covered them in their statements. There are numerous aspects of the program I would like to discuss with you. It is not fair to take up your time. You have heard these gentlemen and they all agree. If I seem enthusiastic or intense in my statements or efforts I would ask your indulgence. Please remember that I have watched this situation for over 35 years and I have seen people neglected, humiliated, and otherwise badly treated and now with the present new enthusiasm and community interest we may be pardoned for wanting their lot to improve. We live in dread that the clock will strike 12 and the royal coach which has carried our Cinderella of medicine—and that is what it is—to its present knowledgeable heights will turn into a pumpkin. I know this committee will not allow that to happen. I wish I had the time to go into the fact that the mental health populations have changed and we are inundated now with young people. Those young people do not have the mental diseases that we saw years ago. They have some character, some personality disorders and they are good kids. They are misguided. They are having a great deal of trouble and we are able to get at them providing we get the personnel to work with them.

To show you that they are good kids, these drafted ones when they get to Vietnam, General Westmoreland and General Hollingshead have said that they all see what is going on back here but when they get these men and they get an ideal and something to work for, they have become the bravest and the best soldiers that General Westmoreland has seen in 26 years. So in back of the various jokes about mental hospitals, about psychiatrists and about sick people and the cartoons, there is still a certain amount of dread about these illnesses. In the present partnership of the professions, of the Government, particularly backed by this committee, by aroused citizens, we can certainly do something about that. I do appreciate the courtesy of allowing me to come before you. Thank you very much, Mr. Flood.

STATEMENT OF DR. JOSEPH MATARAZZO

Mr. GORMAN. Our final witness is Dr. Matarazzo.

Dr. MATARAZZO. With your permission, I would like to submit a prepared statement for the record and talk from it.

Mr. FLOOD. Yes. Without objection, we will do that.

STATEMENT OF THE NATIONAL ASSOCIATION FOR MENTAL HEALTH ON FISCAL 1968 BUDGET FOR THE NATIONAL INSTITUTE OF MENTAL HEALTH BY DR. JOSEPH D. MATARAZZO, PORTLAND, OREG.

Mr. Chairman and members of the committee, my name is Joseph D. Matarazzo. I am a resident of Portland, Oregon, and I am Professor of Medical Psychology, and Chairman, Department of Medical Psychology of the University of Oregon Medical School in Portland.

I am appearing today in behalf of the National Association for Mental Health. I serve on the Board of Directors of the National Association for Mental Health and am Chairman of the Program Committee of that Association. I have been a citizen volunteer in mental health association work since 1950. At that time, while working at the Washington University School of Medicine in St. Louis under a fellowship, I was a Mental Health Association Bell Ringer (that is, a door-to-door campaign worker). More recently during 1962 and 1963, I served as President of the Oregon Mental Health Association, an affiliated Division of NAMH, and I also have been, and still serve, as a member of the Board of Directors of our Oregon Division. I greatly appreciate this opportunity of presenting our views before this Subcommittee.

The National Association for Mental Health is a volunteer, non-profit organization with one million members and associated volunteers in more than 800 affiliated Divisions and Chapters throughout the United States. We, the NAMH and its State and local Mental Health Associations speak in behalf of the more than one and one-half million patients in the hospitals, and for the uncounted other millions being treated as out-patients.

You will have heard from the professional societies representing the professional sector and from state and federal agencies representing the public sector. I speak for yet a third sector, the concerned, informed citizenry in towns and cities across the country.

Mr. Chairman, it is our hope that by appearing here today we can, in some measure, alleviate the misery and suffering of the 1 in 10 of us who at one time or another in our lives fall prey to mental illness. I do not have to describe to this Committee the magnitude of the mental health problem in this country. I would, however, like to submit for the record this fact sheet prepared by the National Association for Mental Health which more fully describes the problem.

For a number of years now representatives of the National Association for Mental Health have appeared annually before your Committee to testify in respect to the budget for the National Institute of Mental Health.

Again this year, as in years past, we urge that the Congress appropriate funds in sufficient amounts to enable that agency to carry on and expand its vital work.

Accordingly, we respectfully propose that the Congress appropriate for the Fiscal 1968 Budget of the National Institute of Mental Health the sum of $413,038,000, an increase of $64,398,000 over the President's budget of $348,640,000.

General inadequacy of the President's budget

The President's proposed budget, exclusive of community mental health services, totals $248,472,000, or $21,000,000 over the $227,000,000 budget for 1967. This is approximately a 9% increase. In terms of the dimensions of the problem, and the government's declared commitment to a truly national program to combat that problem, a 9% increase is so modest as to be inadequate.

I do not wish to leave the impression that the National Association for Mental Health is not grateful to the President for recommending his proposed increase. We are deeply grateful for this. We are mindful of the grave problems confronting the President and the Congress. We are therefore grateful to this Committee and to the Congress for the steady increase in the yearly appropriations for the NIMH, which show that the Congress is indeed mindful of the importance of that agency's central role in the fight against mental illness. It is only because those increases have not kept pace with fast-moving developments and opportunities for service, particularly during the past three years, that we earnestly ask for the increases we propose.

When President Kennedy delivered his unprecedented message to the Congress in 1963, he not only called for a declaration of war against mental illness and mental retardation, but he also provided a set of carefully conceived and well documented battle plans designed to lead us to ultimate victory in that war.

I speak, of course, of the detailed, five-year budgetary projections which accompanied his memorable 1963 message.

Our hopes for realizing the promise of President Kennedy's "bold new approach" were restored and bolstered when President Johnson, in his first statement to the Congress late in 1964, laid before Congress and the entire nation the goals of "launching an all-out attack on mental illness" in fulfillment of one of the American dreams to which the late President had dedicated himself.

However, according to any of the indices by which progress toward achieving that goal may be measured, we are falling behind because of failure to meet the long-term budgetary goals set by President Kennedy in 1963.

This is not to say that no progress has been made for we have indeed moved ahead—in numbers of psychiatrists trained; in numbers of psychologists, social workers, nurses and other allied professionals trained; in training of non-psychiatric physicians; in reducing the average annual number of patients in state mental hospitals and in other areas as well. This progress only reminds us of how much further along we might be today if President Kennedy's realistic, long-term budgetary goals had been met, and if the annual increases he projected had been provided. One can take little or no comfort in the knowledge that in some very important areas we have barely maintained the same level of funds appropriated in preceding years for that is the same as standing still. In the desperate fight against mental illness, to stand still is to slide backward.

Before its hearings are concluded, your Committee will have heard from many witnesses—officials, professionals and private citizens—and rather than burden the record with cumulative testimony, I shall confine myself to the following budget items which the National Association for Mental Health deems of the utmost importance.

Research

In the President's budget only $76,477,000 is allocated for research. This is less than one third of the total operating budget (excluding community mental health services) of $248,472,000 and less than 20% of the overall budget of $348,932,000.

Mr. Chairman, we believe that this dollar proportion to the total hardly seems appropriate or adequate for an attack on a set of problems for which we acknowledge we have so few answers. While we have learned a great deal in recent years about better ways of treating the mentally ill, the fact remains that there still are wide gaps in our knowledge which can only be filled by research. We still need basic research in brain function and behavior which cannot be advanced with the inadequate appropriations provided in the President's budget. For example, there is a critical need for basic research in how humans can most effectively function in society as individuals and as members of social groups, and in other such specialized areas.

Moreover, while there is a token increase of 6.8% for research in the proposed President's budget for Fiscal 1968 from $71,631,000 in 1967 to $76,477,000 in 1968, the General Research Support Program is to be cut by 12% from $6,434,000 in 1967 to $5,667,000 in 1968. General Research Support, the most innovative concept in research financing in a long time, has proven to be the most valuable

type of research support which medical schools and other research institutions can have. It is used entirely for research and for imaginative pilot studies and gives fluidity to the research operation not possible with more rigid project grants.

We request that the amount for General Research Support be increased from $5,667,000 to $7,720,000 representing an increase of 20% over the 1967 budgeted amount of $6,434,000, or an increase of $2,053,000 over the $5,667,000 called for in the President's 1968 budget.

We recommend that the balance of the proposed item for research, $70,810,000 be increased to $82,847,000 in order that other research programs carried on by the National Institute of Mental Health may be supported at an adequate level.

In summary, we are requesting that the total research budget for Fiscal 1968 be increased to $90,567,000 or an increase of $13,757,000 over the figure of $76,477,000 in the 1968 President's budget.

Training

In no other aspect of the total NIMH program is it more important to provide the fullest possible measure of financial support than in the critical area of training to meet current and anticipated manpower needs.

Here, especially, are we reminded by the progress already made with limited funds of where we might be today if we had provided support at the five-year levels projected by President Kennedy in 1963. Only in 1964 was the Kennedy projection achieved. The appropriation for 1965 was $10,000,000 below and in 1966 it was $14,000,000 below President Kennedy's projections. The budget for Fiscal 1967 provided a total of $92,266,000 for training, against the Kennedy projection of $114,000,000 or $21,734,000 less.

While we cannot make up for the loss of the $45,734,000 in Fiscal 1965, 1966 and 1967, we surely cannot afford to aggravate a critical and serious situation by continuing to under-finance this vitally important program.

The National Association for Mental Health, therefore, urges that there be appropriated the sum of $116,500,000 for training, an increase of $15,738,000 the amount provided in the President's budget. This would still be far below the realistic projection for Fiscal 1968.

An item-by-item breakdown of our Budget proposals is appended to this statement. This shows the various activities, including those discussed above, for which the National Association for Mental Health proposes increases over the President's budget. In singling out the items above, I do not intend to convey the impression that we are less serious about the need for the other increases we propose. Rather, I do not wish to burden the record with cumulative testimony. I am confident, having heard Mike Gorman's eloquent and detailed presentation, that your Committee has heard the best possible comprehensive statement of the case for our proposed budget increases.

Mr. Chairman, and members of the Committee, it is a privilege for me to have had this opportunity to present this statement in behalf of the National Association for Mental Health, and I thank you.

Proposed increases, NIMH budget, fiscal 1968

	1968 President's budget	Citizens [1] budget
Research	$76,477,000	$90,567,000
Hospital improvement	10,610,000	16,610,000
Training	100,762,000	116,500,000
Research fellowships	9,859,000	12,429,000
Direct operations	50,764,000	61,764,000
Total	248,472,000	297,870,000
Community mental health services:		
Construction grants	50,000,000	65,000,000
Center staffing	46,168,000	46,168,000
Narcotic facilities	4,000,000	4,000,000
Total, community resources	100,168,000	115,168,000

[1] National Association for Mental Health.

Dr. MATARAZZO. I am a resident of Portland, Oreg. I am a professor of medical psychology and chairman of the Department of Medical Psychology of the University of Oregon Medical School at Portland. However, I come to you today as a citizen representing the National Association for Mental Health and its 800 affiliated divisions and chapters throughout the United States and its 1 million dedicated volunteer citizens.

We speak, of course, for the many millions of patients who at one time in their lives will have mental illness and for the 500,000 who are now hospitalized in the State hospitals, not counting the private hospitals.

You have heard from our colleagues and I will not repeat or highlight the points that they have already covered. Let me just say on a personal note, however, and underscore something that Dr. Braceland has said. I think that it will cover what Sister Amerlia and Mr. Gorman have also said. I graduated from college in 1946. In 1947 I began as a graduate student in the field of psychology. I visited State hospitals of the type that Dr. Braceland has talked about.

In my training, which was subsidized I might add by a Government fellowship, I was told that there was nothing we could do for the mentally ill and for the mentally retarded. I visited these institutions and was very discouraged as a youngster. I began teaching in a medical school 5 years later and began to teach medical students that there was nothing we could do for the mentally ill, nothing we could do for the mentally retarded. However, an aroused citizenry, well ahead, I believe, of the professionals, my teachers and myself as a teacher, began to demand that this not be the case. We know what Mr. Gorman's efforts have been, but people like Mr. Gorman and many like those of you on this committee said, along with a few professionals, that this would not have to remain the case and in just a few years in my own professional lifetime I have seen hope introduced into the field of mental illness.

I now lecture to medical students with considerable enthusiasm about what we can and are doing and will do in the field of mental illness. I train residents in psychology and psychiatry, and I am involved in the training of nurses and social workers. We speak with renewed hope. I did not believe it would be possible in my lifetime that I would see such a dramatic change come over the cloud, replace the cloud that really had covered this particular condition for centuries and centuries.

I have taken the time to give you this personal statement because I believe it is so important to see in me, a man of 41, an individual who today, in his short professional lifetime of 15 years, has witnessed a tremendous revolution.

We are asking, the NAMH and its 800 affiliated divisions, that the President's budget for fiscal 1968 be increased by $64 million. The details and the breakdown point by point are given in the prepared statement and I will not cover them. The $64 million, in my opinion, will continue the progress that has been made in the last 15 years. I want to highlight just three points that are of interest to us.

The first has to do with the amount of moneys for research. In the President's budget for fiscal 1968 there is an increase of only 14 new research projects which can be funded. Mr. Gorman is on the Mental

Health Advisory Council which will eventually pass on those. Fourteen is a mere pittance. There are, in my department alone, 14 investigators, 14 psychologists, any one of whom could make a major contribution with these funds alone; yet 14 is all the new positions we have for the country as a whole.

I have been privileged to be invited to lecture at many universities and medical schools and in the last 6 to 12 months I have found a growing depression especially among young investigators that they are receiving from Mr. Gorman and his Council the statement:

> Your research application was brilliantly designed; the Council is interested in exploring an entirely new and important area. However, while we passed it with a high priority, we cannot fund it for lack of funds.

You heard that from Sister Amelia, and from others several times today. But imagine the impact on young investigators just beginning in this field to learn that their application was awarded but not funded. The situation is sufficiently serious that the permanent faculty of Yale University, just a month ago, passed a resolution that the Government must not allow this to happen, that funds must be diverted from other sources if these young investigators are to be given the help, lest we kill the very sense of continued progress in this field. Fourteen new research projects is not enough in the whole field of mental health.

In addition, if you will study the proposal carefully you will find an increase of five career development awards, from 137 career development awards for this year to 142 in fiscal 1968. The career development awards was one of the most innovative ideas of the NIMH and of all the Institutes. We have not had in the field of mental health the investigator, as Dr. Braceland said, who has made the major breakthrough in the field of mental illness as we have had in measles and polio in the past decade. These two scourges have been wiped out by people who began young and in a decade of building on their own work and on the work of others have wiped out these two scourges. The five new career awards in the field of mental health is grossly insufficient for training the kind of young man and young woman, who has the research background and the research skills and dedication to make the breakthrough that we so desperately need. Lithium carbonate, I am sure, as a treatment of mental illness—to follow up on what Dr. Braceland said—has come from an investigator who began young and has been working in this field. We must have more than five such career investigators.

In addition, training grants, this year if you study the budget you will find there is a decrease in the number of new training grants that are being requested over fiscal 1967. I can speak quite passionately about the need for more money in the field of training grants for I, beginning a new Department of Medical Psychology, biopsychology, designed to train new workers in the field of biopsychology, pharmacology, physiology, biochemistry, and psychology in combination to meet the needs of man as he faces the new challenges of the space age, man on the moon, and in other unknown environments, we began such a Department of Medical Psychology in 1961. By 1966 we had attracted a cadre of 12 excellently chosen graduate students from the major universities in the country to come and take a new Ph. D. in this new field. By then we thought we were ready to apply for a train-

ing grant. We applied for a training grant and I received one of these wonderful letters that I have just told you about. We were approved with a very high priority, but not funded. You can imagine how it is for me as a department head to face these 12 young people and tell them that our training grant was approved because it is a wonderful training grant but there is no money to fund it.

Lastly, let me talk about another area which I would like to highlight which has not been highlighted this morning, and that is general research support.

General research support was another one of those innovations which was extremely important in the fight against mental illness. The 1968 budget calls for a 12-percent decrease in general research support over the 1967 budget. General research support is fluid money given to heads of institutions, medical schools, and research institutions to use at their discretion and to use in ways that will allow them to help a new investigator who is just getting started, or buy a new piece of equipment at a critical point where you need it, and in many other ways to help out in situations which at his discretion indicate he will be able to better meet the responsibilities of such an institution.

This budget which heads of medical schools all over the country were so happy to receive when it was introduced a couple of years ago is being reduced by 6 percent this year. Mr. Chairman and members of the committee, I could go on with many more items but time is short. Let me say that the $64 million that the NAMH is asking for as an increase in the President's budget is a mere pittance compared to what will be accomplished with these funds. This committee and its counterpart in the Senate really has the citizens' voice along with the National Association for Mental Health and many other groups, and decided long before the professionals did that something could be done for mental illness and should be done. The professionals—and I now wear the hat of a professional—took a little longer but the citizens demanded this and the demands of the citizens, funded by money from this committee and others like it, have really produced a startling revolution. It is a privilege for me to be both a citizen volunteer in the field of mental health and a professional worker. There is an excitement and a ferment in mental health today that we must not allow to die.

Thank you.

Mr. FLOOD. Mr. Michel.

Mr. MICHEL. Mr. Gorman, if I might apologize for my tardy entrance this morning, I did not hear too much about my home State of Illinois. There were others singled out here. I am curious to know how we stack up here. I know we, at the State level, have embarked on a $60 million or $80 million bond issue to build a number of community health centers.

Mr. GORMAN. Exactly.

Mr. MICHEL. We have one practically completed in my home community of Peoria.

Mr. GORMAN. Right.

Mr. MICHEL. It is a fantastic-looking structure and facility.

Therefore, I am very interested in your comments about the number of people actually being housed in these facilities as against what we were led to believe a few years ago.

So what you have cited here today is very interesting, but I would like to have a little bit of an observation from someone on the outside as to what they think about what we are doing in Illinois. If there are any bad errors we ought to know about it.

Mr. GORMAN. The people of Illinois passed, in 1960, when William Stratton was Governor, a bond issue which provided for really eight zone centers, community mental health centers. Illinois was the pioneer State in the country. This was totally, at that time, State-financed, no Federal money, no conception of Federal money because the Joint Commission had not even made its report. Now, as a result of that, two are open in the Chicago area, one in Peoria, one in Decatur, and I think four more are in the conception stage. Illinois has taught us a great deal about this. In fact, we have studied their centers to see what kind of centers we would build. People from other States have gone to the zone centers and studied them. Now, Illinois is going beyond the State zone centers, the eight, and will use their Federal money for subzone centers to intensify further the reach of the zone centers.

Now, the first two that have come in, one in Chicago from the Presbyterian St. Luke, we are funding at about $1 million in Federal money and the second one from Rock Island. I do not have the complete pipeline details. Three or four are coming, I understand. Illinois, along with Missouri, were the first two States. Missouri was much later, not until 1963. But they were the first two that actually said "We are going to put an end to putting all our people in State mental hospitals." Let us take places like Kankakee, Elgin, Manteno, I have been to all of them. Now, we are going to cut that out, let us put people in the small centers. I used to dream about this. Like Joe Matarrazzo, I was a young man, too. In 1945, when I toured my first State hospital in Oklahoma I dreamed there would be an end one day to this kind of thing. Being a nonprofessional, I was smart enough to know that naivete paid off. Professionals told me that it could not be done. But I knew it must be done. Our record in reducing State hospital populations by 106,000 is only a beginning, but what a beginning. People said "You will never do it." They said that they were going up by 13,000 a year between 1945 and 1955. I had Governors say to me—both Democratic and Republican—that it is inevitable, you have to put them away somewhere. I said "Why do you have to send them away 182 miles? What crime did they commit?" Now, it was the Illinois experiment, one of the early efforts proving that this could be done. I think there will be many other efforts in the years to come. Does that answer your question?

Mr. MICHEL. It does. I was interested in your testimony, too, Sister Amelia.

Incidentally, yesterday, the reason I was not here is we turned the first spade of earth in my home community for what we will call the allied agencies project where, for the first time, we are putting into one complex the mentally retarded, cystic fibrosis, celebral palsy, and crippled children, trying to get these organizations to cooperate and work together under one roof and still maintain their individual identities. It will provide diagnosis, clinical, rehabilitation, education, the whole business under one roof. It was a significant development for us at home and most interesting in connection with what you have

to say about the folks who really are working with the people, right down there at the level where it counts.

Mr. GORMAN. Eight of the counties in Illinois, I am now informed, have now passed levies again for what I was talking about, for the operational support of these centers. Now, this is tough to do. I know something about county commissioners. You do not convince them easily.

Mr. MICHEL. Could you put a list of those eight counties in the record?

Mr. GORMAN. Yes.

(The information follows:)

GOVERNMENTAL UNITS IN ILLINOIS (COUNTIES, TOWNSHIPS AND MUNICIPALITIES)

Zone I:
LaSalle County, November 1966.
Carroll County, April 1967.
DeKalb County, April 1967.
Stephenson County, April 1967.
Zone II:
McHenry County, April 1967.
Rolling Meadows (city), April 1965.
Zone VI:
Coles County, April 1964.
Macon County, June 1966.
Moultrie County, November 1966.
De Witt County, April 1967.
Zone VII: Madison, November 1967.
Zone VII:
Massac County, November 1964.
Williamson County, November 1964.
Jackson County, November 1964.

All of the counties listed above, except three, levied the full one mill. The three exceptions are: Stephenson, ½ mill; McHenry, ½ mill and Williamson, ⅛ mill.

Mr. MICHEL. Thank you, Mr. Chairman.

Mr. FLOOD. Mr. Casey.

Mr. CASEY. Your grant was on the basis of a 5-year program; is that correct, Sister Amelia?

Sister AMELIA. Yes, sir.

Mr. CASEY. Is there any indication that you are not going to get the amount that you have been expecting? If we do not increase this appropriation request is there any indication that the amount that you have been expecting is going to be reduced?

Sister AMELIA. No. Actually, if it is not increased I do not think we will be able to continue or that the centers will be able to go into operation.

Mr. CASEY. That is the distinguishing point I want to get, whether or not this will affect your center or whether you are here to support and show us what you have been able to do and to encourage the establishment of others.

Sister AMELIA. I am here for both, and also to ask for furthering funds because at the end of 4½ years, we will not be able to demonstrate what we can really do. It takes sufficiently longer time to educate the public to prove that we can take care of people within the community. For example, we have proven that 19 days of acute service in a local hospital is equal to 444 days in the State hospital. These are the types of figures that we can prove. This takes time, it takes time

to change the attitude, to change what has been done before, the fears, and so on. Also, in order to provide this coordinaion that we are talking about, to get agencies to work together, this takes time.

Mr. CASEY. Of course, I think the education of the public is a vital thing because without public support you do not accomplish anything. As you well know, for 8 years it was my responsibility to pass on the admissions of those who went into the State institutions. The quarters we had there for holding them until they were properly adjudged admissible to State hospitals were deplorable. I had a very difficult time getting not only my commissioners but also the public sufficiently interested to even give me money to clean those up. I have some pictures that I finally made the newspapers print and, as a result, we did get a bond issue passed but it was incorporated with a courthouse bond.

Before I knew it, they spent all that money on the courthouse. A new courthouse and a new jail, too. So I took the old jail and cleaned it up. Now, this does not sound real good, but you should have seen what I took them out of. It was handsome quarters compared to what they had been in. Fortunately, we do now have them incorporated in the new county hospital, but the public still is not aware of the work that can be done in this field. I believe the work that you are doing, Sister, and I am sure it is being done in other centers that have become operational, will generate more support because they can start seeing some of the results.

Mr. GORMAN. Could I make just one emendation on your question? What you are asking is really two questions: one about Sister Amelia's particular program——

Mr. CASEY. And I am very interested in her program. I want to know if her program is not going to continue if the additional funds that you say are needed are not forthcoming.

Mr. GORMAN. No, sir. I say as a member of the Advisory Mental Health Council, when we make a grant we make it for the full 51 months. St. Joseph's has received the money. The only inhibition that I have, and I will be very frank with you, is that due to the wisdom of the Congress that percentage drops rapidly.

Mr. CASEY. I understand the program. Is she going to get the full amount that she thought she was going to get, to start out with?

Mr. GORMAN. Absolutely.

Mr. CASEY. Under the existing law?

Mr. GORMAN. Right, absolutely, every cent of it. The only worry is that the other 10 centers that are applying in Houston and other parts of the country will not get it. That is, the $6 million backlog I am talking about.

Mr. CASEY. I know. We have another application pending right now from Houston.

Mr. GORMAN. That is right. I think, forgetting all the rest of my budget, if they just give us the $10 million additional that was authorized for staffing the new centers, in other words, $30 million instead of $20 million, all the rest of it could go down the drain. That was in the legislation passed by the House Interstate and Foreign Commerce Committee, and we would be satisfied with that.

Mr. FLOOD. Thank you very much. Two o'clock, gentlemen.

TUESDAY, APRIL 25, 1967.

NEUROLOGY AND BLINDNESS

WITNESSES

DR. CHARLES KANE (NEUROLOGY), PRESIDENT, AMERICAN ACADEMY OF NEUROLOGY; NEUROLOGY SECTION CHIEF, PERMANENTE MEDICAL GROUP, HAYWARD, CALIF.
DR. MURRAY BORNSTEIN (NEUROLOGY), ASSOCIATE PROFESSOR OF NEUROLOGY, ALBERT EINSTEIN COLLEGE OF MEDICINE, NEW YORK CITY
DR. JOHN STIRLING MEYER (STROKE), PROFESSOR AND CHAIRMAN, DEPARTMENT OF NEUROLOGY, WAYNE STATE UNIVERSITY COLLEGE OF MEDICINE, DETROIT; MEMBER, NINDB ADVISORY COUNCIL
DR. JOHN E. BORDLEY (SPEECH/HEARING), ANDELOT PROFESSOR AND CHAIRMAN, DEPARTMENT OF LARYNGOLOGY AND OTOLOGY, JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
DR. A. EDWARD MAUMENEE (VISION), PROFESSOR OF OPHTHALMOLOGY; DIRECTOR, WILMER INSTITUTE OF JOHNS HOPKINS UNIVERSITY

Mr. FLOOD. We now will be pleased to have a presentation with respect to neurology and blindness. Specifically, on neurology at this time we will hear from Dr. Charles Kane, who is president of the American Academy of Neurology, and the neurology section chief, Permanente Medical Group, at Hayward, Calif.

We have had the benefit of Dr. Kane's advice for several years and I see no reason why we should not have it again. Do you have a statement, Doctor?

Dr. KANE. Yes, sir.

STATEMENT OF DR. CHARLES KANE

Thank you, Mr. Chairman. I am pleased and honored to reappear before this committee as a representative of the American Academy of Neurology and spokesman for the American Neurological Association and 20 voluntary health groups concerned with crippling neurological disorders which affect more than 10 million individuals in these United States. I will not take the time at this point to read the list of members of the Citizens' Committee. What I would like to do, with your permission, is to present a prepared statement and speak from some notes concerning the overall budget, and three items of particular interest, head injury, epilepsy, and the problem of the child with minimal brain dysfunction. Then I would like to have my associates discuss other aspects of the program.

Mr. FLOOD. The prepared statement will be placed in the record at this point.

STATEMENT OF THE NATIONAL COMMITTEE FOR RESEARCH IN NEUROLOGICAL DISORDERS FOR THE NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Mr. Chairman and members of the committee, I am Charles A. Kane, President of the American Academy of Neurology; Section Chief, Neurology, Permanente

Medical Group, Hayward, California; and co-chairman of the National Committee for Research in Neurological Disorders.

I am pleased and honored to reappear before this Committee as a representative of the American Academy of Neurology and spokesman for the American Neurological Association and 20 voluntary health groups concerned with crippling neurological disorders which affect more than 10,000,000 individuals in these United States. Also represented on the National Committee are three other professional societies: American Laryngological, Rhinological, and Otological Society; National Committee for Research in Ophthalmology and Blindess; and the Society of Neurological Surgeons.

The voluntary health groups represented are: Association for the Aid of Crippled Children, The Deafness Research Foundation, Epilepsy Association of America, The Epilepsy Foundation, Muscular Dystrophy Associations of America, Inc., Myasthenia Garvis Foundation, Inc., National Association for Retarded Children, National Council to Combat Blindness, Inc., National Foundation for Eye Research, National Health Education Committee, Inc., National Multiple Sclerosis Society, National Paraplegia Foundation, National Society for Crippled Children and Adults, Inc., National Society for the Prevention of Blindness, National Tay-Sachs Association, Inc., New York Association for the Blind, Paralyzed Veterans of America, Inc., Parkinson's Disease Foundation, Inc., Research to Prevent Blindness, Inc., and United Cerebral Palsy Associations, Inc.

The recommendations of the Citizens' Committee represent the consensus of the appointed representatives of each of these groups. The fiscal recommendations are made only after careful study in consultation with scientists and experts, both in research and training. The budget is meant to be one which will not only permit the NINDB to pursue present plans, but, hopefully, one which will guarantee a strong impetus to the realization of expanded goals for the future.

I have previously pointed out that, largely through the efforts of this Subcommittee and its counterpart in the Senate, the annual appropriation authorized by the Congress for the Neurological Institute has increased steadily from $4,500,000 in 1954 to $116,296,000 last year. Even this remarkable expansion, however, is not enough to take care of the pressing needs for neurological and sensory research and training currently and to provide for future planning.

The National Committee for Research in Neurological Disorders proposes, therefore, an overall budget for FY 1968 of $146,000,000 which represents a 2.7 increase over that recommended a year ago. This is in keeping with our awareness of mounting responsibilities in other areas of the Federal budget.

I would like to insert a detailed statement of this budget in the record with some supporting data.

Since my distinguished colleagues will speak on a number of other areas of our concern, I should like, with your permission, to confine my further remarks to three specific topics. Following this, I would be pleased to try to answer any questions concerning the proposed overall Citizens' Budget.

Head injury

A recent Government study indicates that the economic cost to the Nation of illness, disability, and death for the year 1963 was $93 billion. It is probably safe to estimate that, for this year, this shocking figure is well in excess of $100 billion or equivalent to about one-sixth of the gross national product. By no means currently available can we hope to eliminate many of the separate categories of illness contributing to this total. However, we can, or rather should be able to, reduce appreciably both the economic impact and the human woes involved in head injuries.

"Scare figures" are of dubious impact, but one must be impressed with three simple statements about head injuries:

(*a*) *half* of all accident fatalities (100,000 in the U.S.A. in 1965) are due to automobile crashes;

(*b*) *three-fourths* of these victims die from central nervous system trauma;

(*c*) our *soldiers in Vietnam* are *much more likely to survive* a less-than-lethal head injury *than a citizen-victim* of an injury of comparable severity in any of our large cities.

Since 1965, the Neurological Institute has had a vigorous Section on Head Injury which is investigating the complex biophysical events which make up trauma to the nervous system. From these studies and those going on elsewhere with support from the NINDB, a more rational approach to the multiple factors involved should be forthcoming.

Studies already have shown the importance of sudden bending or stretching of the neck in causing "concussion", the prime feature of closed head injuries. Better designed crash helmets and protective devices will be dividends of this important work.

Last year, the Institute sponsored a conference in Chicago which reviewed the entire field of head injury and recommended guidelines for basic and applied research.

Subsequently, eight programs have been set up by the Institute, three of which are already under way. Further support of additional programs is needed, especially in the area of graduate training of clinical investigators who will feel competent to deal with the many disturbances of body physiology induced by serious head injury.

Epilepsy

Over one million of our fellow Americans are suffering from recurrent lapses of consciousness, with or without convulsive seizures—a condition familiarly called "epilepsy". In a large proportion of these individuals the precise cause of the disorder is unknown and only symptomatic treatment can be given to try to prevent the attacks.

As you know, Mr. Chairman, it was the expressed hope last year of your predecessor, the late Mr. Fogarty, that a "Special Task Force on Epilepsy" be established to coordinate the diffuse activities of both scientific and voluntary health agencies in the field. Guidelines for this program had been outlined in an excellent "review" of the field of the epilepsies in the comprehensive monograph published by my colleague and associate in the American Academy, Dr. Preston Robb of the Montreal Neurological Institute. Thanks to the support of this Committee and its counterpart in the Senate, there has now been established an HEW Departmental Committee on Epilepsy and a comparable PHS Advisory Committee on the Epilepsies appointed by the Surgeon General. Dr. H. Houston Merritt, Dean and Professor of Neurology at Columbia University Medical School, and an internationally-known authority on epilepsy, is chairman of the PHS Committee.

The Neurological Institute currently has four major clinical research centers in epilepsy: University of Washington, University of Wisconsin, U.C.L.A., and the new research center at Yale University in New Haven, Connecticut. Neuropharmacology—of key importance in treatment—is being pursued at the University of Utah; a computer-center for brain-wave (EEG) analysis is operative at Los Angeles; and four medical centers (Marquette University, University of Virginia, Montreal Children's Hospital, and Tufts-New England Medical Center) are mounting an intensive study of one drug (ethosuximide) in the petit mal type of epilepsy which afflicts children chiefly.

Future plans at the Institute call for an expanded program in neuropharmacology. The development and evaluation of drugs to treat epilepsy and various forms of spasticity and dystonia is urgently needed. Other plans include epidemiological studies, the formation of an "epilepsy information center", and further explorations in the complex chemical changes which occur within the cells of the brain. All these efforts should bring closer the day dreamed of by Mr. Fogarty when epileptic patients can be managed more rationally and helped to a more productive life in our society.

Minimal brain dysfunction

If the Nation's greatest resource is a healthy populace, its greatest treasure lies in the promise inherent in its children. In the past two decades beginning with the pioneer work of Strauss and Lehtinen in 1947, we have come to appreciate that a significant proportion of children in our school-systems are handicapped by *specific learning disabilities*. I am referring, of course, to the "lost child who can't read", children with delay in speaking, and the even more complex deficiencies found in a large proportion of school failures.

These children are characteristically overactive, have a reduced ability to concentrate, show impulsive behavior, emotional lability, and, as a result, do poorly in the rigid learning pathways of most of our elementary schools which are geared to the average or "middle-of-the-road" student.

There is no argument about their disabilities; there *is* considerable controversy about whether all or most of these dysfunctions can be attributed to "minimal brain dysfunction". Suffice it to say that these children, who defy the physician's traditional, unilateral approach, offer a pressing challenge to us.

Fortunately, a philosophy advocating a *multidisciplinary approach* is gaining favor. Thus, the broad range of abilities and competence provided by the pediatric neurologist, the child psychiatrist, the pediatrician, the educational psychologist, specialists and technicians in the communicative arts, the linguist, even the computer-programmer may be necessary to help unravel the tangled skein of these children's disturbances in perception, symbol-formation, and learning.

This need for a total multidisciplinary approach to the many problems of learning and adjustment to normal living is one of the most cogent reasons I personally believe it would be unwise to dissociate research in vision, hearing, or speech from the broader field of neurological investigation.

The Citizens' Committee recommends strongly that the Neurological Institute be urged to develop a broad-based, coordinated program to investigate the causes and to prevent and treat the results of "minimal brain dysfunction". The magnitude of the problem can be appreciated from the conservative estimate that *about ten percent* of all children attending elementary school in this country have a significant degree of learning disability in the presence of normal intelligence. Our Nation can no longer afford or justify neglecting these children with learning handicaps.

Mr. Chairman, I should like to express my appreciation for the opportunity to appear again before you as spokesman for the National Committee for Research in Neurological Disorders.

Thank you!

Appendix

National Committee for Research in Neurological Disorders

Proposed 1968 budget for National Institute of Neurological Diseases and Blindness

[In thousands of dollars]

Program by activities	1957 appropriation	1968 Presiednt's budget	Proposed NCRND 1968 budget	Increase over 1967 appropriation
1. Grants:				
(a) Research projects	71,496	84,416	92,900	21,404
(b) Research fellowships	3,675	3,805	5,000	1,325
(c) Training	18,633	18,780	22,000	3,367
Total extramural	93,804	107,001	119,900	26,096
2. Direct operations:				
(a) Laboratory and clinical research	8,485	9,997	10,095	1,610
(b) Collaborative research and development	5,565	5,980	8,968	3,403
(c) Biometry, epidemiology and field studies	2,268	2,305	3,487	1,219
(d) Review and approval	2,180	2,389	2,500	320
(e) Training activities	71	72	100	29
(f) Administration	871	889	950	79
Total direct operations	19,440	21,632	26,100	6,660
Total obligations	113,244	128,633	146,000	32,756
Unobligated balance reserve	2,482			−2,482
Transfer to General Services Administration	12			−12
Comparative transfers, NIH management fund	558			−558
Total appropriation	116,296	128,633	146,000	+29,704

Research grants:

1967 appropriation	$71,496,000
1968 President's budget	84,416,000
Proposed NCRND 1968 budget	92,900,000
Increase over 1967 appropriation	21,404,000

The additions proposed by the Citizens' Budget would be particularly helpful in the following areas:

(1) Stroke: A much greater emphasis should be placed on the evaluation of therapy for stroke patients. Significant advances have been made in treatment and rehabilitation, but thousands of stroke patients lie helpless in nursing homes.

New therapy must be developed, carefully evaluated, and instituted as soon after stroke as possible. There is also an urgent need for more precise methods to diagnose incipient stroke and aneurysms. A coordinated program for the development of techniques and instrumentation should be instituted.

(2) Blindness: Multidisciplinary eye care research centers are needed. Located in diverse geographic areas, these would make possible the immediate application of research findings to individuals at the community level and provide needed facilities for basic and clinical research.

(3) Early Recognition of Sensory Disorders: There is a growing awareness of the need for early childhood recognition of speech, language, hearing, and vision problems, as well as possible minimal brain dysfunction. Present studies point to the need for these examinations to be conducted during the 3- to 5-year period in the life of the child, or earlier, in order that necessary thearpy may be instituted and the child readied for a normal school environment.

(4) Evaluation of Therapy: In addition to the need for an expanded program for the evaluation of therapy for stroke patients, there is a large unmet need for the development and evaluation of drugs to treat epilepsy, Parkinsonism, and various forms of spasticity and dystonia. Also, a controlled study should be instituted to evaluate therapy and develop new therapy for children with motor deficits such as cerebral palsy and with various forms of learning disabilities caused by minimal brain dysfunction and related disorders.

Fellowships:

1967 appropriation	$3, 675, 000
1968 President's budget	3, 805, 000
Proposed NCRND 1968 budget	5, 000, 000
Increase over 1967 appropriation	1, 325, 000

The proposed Citizens' Budget would make possible expanded and more intensified programs of research in selected critical areas of national need. To provide for the effective conduct of these programs in the future, appropriately trained scientist-clinicians and investigators are needed. By further increasing the number of research fellows, patricularly those eligible for Research Career Development Awards—a broader based research attack on the problems of the nervous system and special senses could be undertaken.

Training:

1967 appropriation	$18, 633, 000
1968 President's budget	18, 780, 000
Proposed NCRND 1968 budget	22, 000, 000
Increase over 1967 appropriation	3, 367, 000

Because of the Institute's carefully laid program planning and development activities, many strong training centers have evolved, particularly in the clinical research disciplines of neurology, pediatric neurology, ophthalmology, and otolaryngology. These centers now have highly developed facilities and a full complement of able faculty and supporting staff. They are able to accommodate an increased number of scientist-physicians for training as teacher-investigators in the neurological and sensory fields. An additional investment in training stipends would capitalize on these facilities.

In addition, the Institute could launch a number of new training programs designed to prepare candidates for careers in research and teaching and the community service aspects of neurology, ophthalmology, and otolaryngology. For example, in neurology, additional training sites can be developed as focal points for training in cerebrovascular disease. In ophthalmology, adequately prepared physicians are being turned away because of a lack of available training environments. Pediatric neurologists continue to be a critical area of national shortage in programs aimed at the brain-injured child. In the preclinical sciences such as auditory physics, speech pathology, and sensory physiology, additional training programs at the post-masters and post-doctoral levels can be initiated to provide the essential science base for continuing development.

Direct Operations

Intramural research:

1967 appropriation	$8, 475, 000
1968 President's budget	9, 997, 000
Proposed NCRND 1968 budget	10, 095, 000
Increase over 1967 appropriation	1, 610, 000

Additional funds are required for the expanding Laboratory of Perinatal Physiology, in Puerto Rico, for the development of a program for the study of deafness, and for the strengthening of studies of head injury and of regulatory mechanisms of the nervous system.

Collaborative research and development:	
1967 appropriation	$5, 565, 000
1968 President's budget	5, 980, 000
Proposed NCRND 1968 budget	8, 968, 000
Increase over 1967 appropriation	3, 403, 000

The Institute's Collaborative Perinatal Program has entered a new phase. The obstetrical portion was completed last September with more than 55,000 babies born to mothers registered in the study. The needs now relate to funds to continue the follow-up studies of the children, including periodic testing for physical and psychological development and the constant awareness of warning signs of neurological deficits.

The preliminary data have provided important information, but this is largely in the form of clues or trends which must be pursued in greater detail. Huge stores of data must be analyzed before definitive findings will be available concerning such influences as infections during pregnancy, use of drugs, accidents suffered, and the circumstances surrounding birth and early childhood.

Significant progress has been made in establishing the head injury program this past year. This is the initial stage, however, and additional funds will be needed to move this program forward.

Biometry, epidemiology, and field studies:	
1967 appropriation	$2, 268, 000
1968 President's budget	2, 305, 000
Proposed NCRND 1968 budget	3, 487, 000
Increase over 1967 appropriation	1, 219, 000

Needed research information relating to stroke and Parkinsonism is being developed through new epidemiological studies now under way, and other epidemiological studies in the area of blindness have been extended. Also, the Model Reporting Area relating to blindness statistics now includes 14 States.

This year for the first time all four centers of the Neurological Information Network (Parkinsonism, Brain Research, Human Communication, and Vision) are in full operation and are providing valuable information to the research community. The continued support of these programs is important.

The research program relating to chronic diseases of the nervous system made substantial progress this past year with the transmission of a degenerative neurological disease of humans to laboratory animals. This successful transmission from man to animal and, more recently, from animal to animal suggests a link between the slow-acting viruses and a number of neurological diseases such as multiple sclerosis and Parkinson's disease. This development should be pursued as rapidly as possible.

Review and approval, intramural training and administration:	
1967 appropriation	$3, 122, 000
1968 President's budget	3, 350, 000
Proposed NCRND 1968 budget	3, 550, 000
Increase over 1967 appropriation	428, 000

Adequate funds are requested for these activities essential to the maintenance of staff and the effective administration of this program.

Dr. KANE. The citizens' committee this year, after careful consideration and with expert advice from scientists and other experts in the field, are recommending for your consideration an overall budget for fiscal year 1968 of $146 million. This represents a 2.7-percent increase over the citizens' committee recommendation of a year ago.

In breaking down this budget, which is summarized in detail in the other part of the prepared statement, one sees that two-thirds of

this budget is suggested to be appropriated for research grants and approximately one-third for fellowships and training grants. It is suggested that 80 percent of the total budget be appropriated for extramural endeavors and one-fifth, or 20 percent, for intramural endeavors. I believe perhaps it would be worthwhile to consider first some of the separate items in the overall budget and then the three topics which I previously mentioned.

We are recommending a sum of approximately $93 million for research grants. We are recommending $5 million for fellowships, and $22 million for training grants; a total, approximately, of $120 million for extramural research grants, fellowships, and training grants.

For the intramural program, we are recommending a total of $26 million, of which $10 million is for research and $12 million for collaborative activities. The remainder, approximately $3.5 million, is for training, review and approval, and program direction.

The overall total, then, Mr. Chairman, is $146 million.

There are three topics which I would like to discuss in more detail. Of these, I would like to begin with head injury. I am aware of the fact that other aspects of this topic are being considered by the Congress, but I believe that the Neurological Institute can and has already started to play a unique role in dealing with this problem.

A Government economist, Dorothy Rice, has estimated that the economic cost to the Nation from illness in terms of functional disability, deaths, and illness is in excess of $100 billion a year. I would not suggest that even a majority of this can be eliminated because certain disease processes are irreversible, and we can do little about them. But I believe we can do much better with regard to certain illnesses which cause a significant proportion of this great economic cost to the Nation. One of these certainly is head injury. Figures are oftentimes boring and perhaps one can manipulate statistics, but I believe a few figures with regard to the impact of head injury on the Nation might be worth pointing out. Last year, there were 100,000 deaths due to accident. Half of these were due to motor vehicle accidents. Of these 50,000 deaths, it is estimated by experts who have made epidemiological studies in the field that approximately three out of four are due to head injury.

It is regrettably true, Mr. Chairman, that if you were to sustain a sublethal head injury in Vietnam, your chances of survival would be much better than on the streets of New York City at this particular time. Our military has done a superb job in transporting injured soldiers to where they can receive definitive neurological care. Unfortunately, even in our metropolitan centers there may be a delay of 2, 3, even up to 6 or more hours between the time a citizen is struck down by a taxicab, or otherwise injured in a motor vehicle accident, and the time he is seen by a competent neurological consultant. We might ask ourselves what the Neurological Institute is doing about this problem? In 1965, a Section on Head Injury was established in the Institute under the direction of a good friend and colleague of mine, Dr. Bill Caveness, who has had personal experience in Korea with treating military head injuries. As a result of some work already sponsored by the Neurological Institute in the very common problem of concussion—some call it traumatic unconsciousness following a closed head injury—

the Neurological Institute research has already demonstrated the extreme importance of rapid stretching or bending of the neck in provoking this period of unconsciousness. This work has led to better design and manufacture of crash helmets and better protection both to civilian and military personnel from safety belts such as lap belts and shoulder belts. Since these injuries are much easier prevented than treated, we can expect even greater advances.

In February of last year the Institute sponsored a conference of international experts on the subject of head injury at the University of Chicago. The entire field was reviewed and guidelines set forth which were summarized in an excellent monograph which the Institute has published with Bill Caveness as coeditor. The Institute has eight programs for head injury. Of these, three are currently under way and five are projected. The Cornell Aeronautical Laboratory in Buffalo is one of those best known. I would see the needs in this particular area as follows:

Actually we have amazingly little data considering the economic impact and the number of individuals involved and reliable statistics are just not available to us. If available, these data would certainly differ for urban and rural accidents. We also badly need reclassification of head injuries. It would appear, for example, that the old standard classification of head injuries—the terms of concussion, laceration of the brain, and so forth—are probably imprecise in their implications. Generations of medical students, including my own, have been brought up to believe that these are fairly definite entities, when it would appear they are far from that. We actually know very little of what is going on in the brain. We know very little about the result of a concussion, whether it is from a knockout or a crash of the head through the windshield in an automobile accident.

It would also appear there is a need for clinical centers where people can be trained to recognize the multiple aspects of head injury. When a man is projected through a windshield or thrown out of a car—which, incidentally, is 10 times as hazardous as remaining in the car with your lap belt hopefully fastened—clinical centers are needed where people can be taught to recognize if the nervous system is involved if multiple soft tissue injuries have occurred and if there are injuries in the pulmonary or heart action as a result of impacting the body on the steering wheel.

Such centers are obviously critically needed, and none are operational at the moment. Basic studies are needed on the mechanism of concussion, among other things, and what happens to soft tissue of the nervous system as a result of an injury—for example, the swelling which may kill the patient after the actual accident has occurred. Most of the physical damages that occur in an automobile accident—which has been described by Dr. Mosely of the Harvard group as a system failure, where the vehicle and the environment and the driver of the vehicle all come together in a second—is done in a second. We know almost nothing about what happens in the next several hours. This may determine whether the patient lives or dies.

We feel that this is an area where multidisciplinary efforts of the engineers, of the physicists, even the mathematical experts in producing models of head injury, can do a great deal to help us understand what goes on.

There is a need for exchange of information between the various disciplines involved in managing people with head injuries. We know very little actually about the incidence of convulsions that follow closed head injuries, about what can be accomplished in rehabilitation, and about the curious phenomena that occur in the posttraumatic syndrom when patients are either dizzy, or have difficulty in concentrating and are functioning much below their level for months or even years after what appears to be a relatively minor head injury.

This is a major area of mystery and certainly requires an intensive reinvestigation and definition of terminology. These are some of the needs that we think the Neurological Institute should be stimulated to consider. They are already aware of them.

In the excellent monograph which was published this year by the Institute, they have shown us what can be done. We hope that the support will be provided for them to carry out this work.

The second topic I would like to speak about briefly is one involving somewhere in excess of 1 million, possibly 2 million of our fellow citizens. This is the problem of recurrent episodes of convulsive disorders, epilepsy, of which are unrecognized. Even when recognized the cause is often obscure. Our treatment at the moment, I think, to be charitable could be called almost entirely empirical. We use certain things because they seem to work but we have very, very little basic understanding as to why they work. It would not be exaggerating, I believe, to say that the pharmacological, or drug therapy of epilepsy, which the main basis upon which we treat these patients, is less than satisfactory.

If we had a more scientific basis we could perhaps accompilsh a great deal more. On the hopeful side of the picture, we feel that we can treat somewhere on the order of three out of four patients with epilepsy to a point where they may successfully run their household or hold jobs. Obviously, percentage can be improved.

I am sure you are aware, Mr. Chairman, that your predecessor, the late Mr. Fogarty, before whom I have had the great honor and pleasure of testifying in the past, was particularly interested in this program and suggested a special task force to coordinate the various diffuse lay and professional activities in this field. Two years ago, Dr. Preston Robb actually laid out guidelines as to how this could best be accomplished. Dr. Robb is with the Montreal Neurological Institute. As a result, I am sure you are aware of the fact that there is now a Public Health Service Advisory Committee on the Epilepsy and another committee under HEW which is concerned with coordinating these activities. The Institute is doing several things in this particular field. There are at the moment four clinical research centers throughout the country: one at the University of Washington, one at the University of Wisconsin, one at UCLA, and one at Yale University in New Haven. There is also a center specifically directed to understanding the pharmacology of the 20 or 30 agents or drugs which we use in epilepsy at the University of Utah. There is a computer center in operation at UCLA for coordinating statistical data on patients with epilespy. In addition, within the last year four medical centers have begun studies of one of the more predictable types of epilepy. For example, in a form which occurs in children chiefly, the petit mal type of epilepsy, where

the child will have a brief lapse of consciousness, attacks may occur as frequently as 200 or 300 times a day. So if you multiply that by even 10 seconds, you can understand why these children are often thought to be daydreaming by their teachers or inattentive or just stubborn by their parents. There are four such centers looking into the effect of one particular drug, ethosuximide. These are: Marquette University, the University of Virginia, Montreal Children's Hospital, and Tufts-New England Medical Center in Boston.

Future plans of the Institute call for further expansion in the understanding and investigation of the epidemiology of epilepsy, its distribution throughout the country by various age groups, the establishment of an information center, and stimulation of industry, particularly the drug industry, to develop new drugs. It is very difficult for me to understand why in the past decade there has only been one really effective anticonvulsant put on the market—the one which is now being investigated. Why do certain cells in the nervous system fire off electricity-producing seizures with or without convulsion? If we knew more about the detailed microchemistry of the brain cell, we could perhaps understand why it fires at indiscriminate intervals with the electrical fireworks which we call a seizure or convulsion. I would hope very fervently that the day dreamed of by Mr. Fogarty when a task force would result in more rational, more effective treatment for these 1 to 2 million of our fellow citizens would dawn before too much longer. Perhaps then they will be able to live much more productive lives.

Finally, Mr. Chairman, I would like to say a few words about the subject of minimal brain dysfunction. This is, in my own mind at least, not precisely equivalent to the term which is often associated with it, minimal brain damage. Perhaps I can just spend a minute to try to define this. If we would grant that our greatest resource in the Nation is healthy citizens, certainly our geatest treasure is our children.

This problem that I am speaking about, minimal brain dysfunction, it is estimated, affects conservatively 10 percent of the children in the school system. One scientist in New York, surveying some of the schools in New York City, has estimated that between one-third and one-half of the children in the New York City school system have specific learning disability, either in spelling, reading, or writing. Now, the important point I would like to make is that these are not youngsters who are mentally retarded. They are, as far as we can determine by the usual tests, normal, intelligent children. Their IQ's are at least average and oftentimes better than average. So what we are dealing with here is a specific block in the learning process. Regrettably, up to this point at least the lock-step tradition of our elementary school system, where the school is geared to the middle-of-the-roader, fails completely to deal with these particular children. We know, therefore, that this is a subject of great interest, that these children are suffering not from lack of intelligence but from some specific dysfunction. Presumably, it is of a very high order of neurological disorganization. Their characteristics are reasonably predictable, they are often overactive, they show diminished concentration and attention span. The teachers or parents will complain that they are continually rest-

less, they just cannot sit still. Their behavior is impulsive, they do things without thinking about the consequences.

They are often emotionally labile. Most interesting is the frequent confusion of laterality. They do not know their right hand from their left hand. If you were to ask one of them to put his left thumb in his right ear, he would probably get all mixed up. They are, therefore, reasonably definable. It seems perfectly clear from the work of the last two decades, beginning with the classical papers of Strauss and Lehtinen just about 20 years ago, that all of our standard approaches, unidirectional approaches, have failed miserably to help these children. It seems again perfectly clear that a multidisciplinary approach by the pediatric neurologist, the child psychologist, and psychiatrist are necessary to tackle this extremely complex problem.

As an aside, I might say this is one reason why I feel very strongly that we should not disassociate the research of the eye, ear, nose, and throat. It is perfectly clear that these children do not just need a pair of glasses or a hearing aid, or a frenulum clipped under the tongue. These will not help much. But they do need understanding and a great deal of intensive work. The field of basic research in this particular category of minimal brain disturbed children is new territory, a virgin territory practically unexplored.

Mr. FLOOD. Is there any physical damage to the brain?

Dr. KANE. We have not been able to define it by the most precise techniques known, such as the electroencephalograph. I am not aware that anyone has ever studied in any detailed microscopic way the neuropathology of these children. This does not mean that a disturbance cannot occur without visible damage with an electron light. I would summarize by saying that we can no longer afford to neglect these intellectual cripples in our school system. In only one out of 84 normal schools throughout the country was there any special attention given to this particular category of illness among the school population. So if one takes the figure usually quoted by the experts of 10 percent of the school population with specific learning disabilities, the need for doing something about this in a multidisciplinary way is perfectly apparent.

I will close my formal statement at this point, Mr. Chairman. Thank you very much.

Mr. FLOOD. Thank you, Doctor.

We will now hear from Dr. Murray Bornstein.

STATEMENT OF DR. MURRAY B. BORNSTEIN

Dr. BORNSTEIN. Thank you, Mr. Chairman.

Mr. FLOOD. Dr. Bornstein is an associate professor of neurology at the Albert Einstein College of Medicine in New York City.

Is this your first appearance before this subcommittee?

Dr. BORNSTEIN. Yes, sir; it is, and I feel very priviliged to be here.

May I read my statement, sir?

Mr. FLOOD. Whatever you wish.

Dr. BORNSTEIN. I would like to express my support of Dr. Kane's proposal for an appropriations increase for the National Institute of Neurological Diseases and Blindness.

Mr. FLOOD. Where did you take your medicine?

Dr. BORNSTEIN. In Switzerland, Geneva.

Mr. FLOOD. Oh, yes.

Dr. BORNSTEIN. I do not formally represent any organized group. On the other hand, I am sure my experiences in medical research are representative of a large number of professional, medical, and paramedical workers and teachers. And it is these activities of research, teaching, and clinical practice on which the health of our Nation depends. A brief presentation of part of my story, therefore, may help you to understand the tremendous present needs in medical research, the great demands being made on the medical community, and the assistance the Federal Government can offer to meet these needs.

Ten years ago, a few scientists in a modest laboratory began to apply the relatively new technique of tissue culturing to the problems of health and disease of the nervous system. Once we had established the living, developing, and functioning model of the brain tissues, could manipulate its environment and continuously watch and photograph its actions and reactions through a microscope, we determined to exploit it in a specific effort. We decided to use it to understand those diseases which have been characterized by a loss of the sheath around the nerve fiber, called myelin. Multiple sclerosis is the prime example of this type of disease. It attacks people in their early adult years, incapacitating many young wage earners and young mothers, and puts a large economic burden on families and communities.

In the blood of animals with an experimentally induced demyelination, and in the blood of the majority of patients with multiple sclerosis, we found substances which produced a typical pattern of myelin destruction. This destruction could be observed in the cultured tissues through the microscope.

Mr. FLOOD. Is it a virus?

Dr. BORNSTEIN. No, sir; but a virus may play a role in triggering this mechanissm. We are not sure. I will come to that. By enlisting the efforts of an immunologist, we were able to show that the factors in the animals' blood are antibodies and that those in the human are probably the same. Thus, strong support was found for the proposed allergic mechanisms involved in the disease.

We then observed an entirely new phenomenon. For over a hundred years, it had been thought that the loss of myelin in the central nervous system of a mammal could not be reversed. This was one of the main reasons for physicians' bleak prognoses for patients with multiple sclerosis.

Mr. FLOOD. Do you mean it could not be restored?

Dr. BORNSTEIN. It could not be restored. Once it was lost it was thought that it was lost forever, but these opinions were based on the study of fixed and stained tissues. In these tissues, loss of myelin could not be reversed. But when we observed living tissue, we were lucky to find that there are two, or possibly three, stages of the disease process which are reversible. We found that the brain and spinal cord tissues possessed the ability to reform its myelin once the offending factors had been removed from their environment. These results have since been confirmed in two laboratories working with animals and by two pathologists examining human post mortem tissues.

Mr. FLOOD. What factors?

Dr. BORNSTEIN. These antibodies, substances, which produce demyelination.

This, of course, has led to further research in attempts to find ways of treating patients by interrupting the progression of the disease and augmenting the rate of recovery. One such means of treatment is now being given a preliminary clinical trial and may soon lead to a full clinical experiment.

Meanwhile, the laboratory work has progressed into other areas which may be important in the understanding of mental retardation and aging. Let me refer to one. This is in reference to your question, I believe. So far, we have examined the allergic state as part of the mechanism producing the disease, but we have not yet looked for a triggering mechanism to produce the allergic state. I am certain that you have been made aware of the important animal studies of the slow, latent, or inapparent virus infections. These and similar factors may, in fact, be involved in the production of multiple sclerosis and other prolonged, degenerative diseases of humans. We are just now beginning a line of work which, we hope, will show us how the cultured nerve tissues will behave when they are exposed to the influence of these agents. Apparently they do not kill the cells outright but, rather, take up their living with them and affect their long-term economy.

Mr. FLOOD. Can you make a culture of this myelin outside of the body?

Dr. BORNSTEIN. Yes. This is exactly what we are doing. We take tissues from young animals or embryos; we culture them over long periods of time, sometimes up to 6 months. During this period we maintain these tissues under glass and observe the formation of myelin and the other significant community relationships which take place among these cells. These cultures provide us with a model of what may occur in the brain. This area of investigation appears all the more significant since it is almost surely related to some of the problems of mental retardation.

In terms of operational cost, the annual budget of this active laboratory endeavor of ours in New York has multiplied fourfold in the course of its 10 years of growth. The increase has permitted an intensification of our studies on multiple sclerosis and an extension of the application of this technique to other neurological diseases. It has also allowed us to supply material to other investigators whose collaborative efforts have greatly enhanced the value of our own studies. In addition, I have been able to train three postdoctoral fellows. They have now established their own laboratories at other faculties and, hopefully, will expand their investigations in a similar manner. We are, of course, continuing to train and encourage properly qualified investigators.

I have mentioned the clinical applications of our investigations. I would, also, like to tell you of the environment in which this development is taking place. Dr. Saul Korey, an outstanding scientist who unfortunately died at 45, was particularly interested in a group of diseases of which multiple sclerosis is an example. He gathered about him an impressive array of neurochemists, anatomists, physiologists, and other scientists to work in close collaboration with the clinical neurolo-

gists. This team approach represents a general trend in medicine and offers greater scope for the study of multiple sclerosis and related disorders. Not only have the investigators worked together formally, but they meet together, eat together and, occasionally, as during our recent blizzards, even sleep together. This constant interchange represents a unique force in the mutual inspiration it provides for new and exciting ideas in addition to the steady progression of research from day to day. Moreover, the continuity of the years of clinical experience offers a firm background on which to test promising therapeutic agents.

But all our research laboratories, lecture halls ,and teaching hospitals need many investigators, clinicians, teachers, and their assistants. And this brings me to my point of major concern. We are continuously exposed to expanding demands for our services. Not only is the population increasing, but the average age of the population is shifting to the older groups where neurological disorders are more frequent. In view of the growing need from which there is no escape, it seems to me that the proposed provisions for training teachers, clinicians, and investigators in the neurological sciences are unrealistic and inadequate.

In 1967, 262 training fellowships were granted by NINDB. In 1968, the executive request is for 264 fellowships, an increase of only two, whereas Dr. Kane's nationwide estimate would suggest an increase to a total of about 350. The number of training grants in support of graduate students is being reduced from 296 to 227 while the funding has remained about the same, $18,633,000 for 1968, not enough to even meet the increase in real cost. And, finally, the number of traineeships for teachers and clinical investigators requested in the executive estimate has been reduced from 295 in 1967 to 288 in 1968. I submit that if we continue at this rate, we will not be able to man the presently existing medical facilities and certainly not those being established in response to an increasing need for doctors. We will not be able to respond to the dynamic growth of our research efforts to find the cause and cure of disease. We will not have enough physicians to treat our citizens in hospitals and clinics throughout the country.

I trust the committee will find it possible to make these adjustments in the budget of the Institute. Thank you, again, for the privilege of appearing before you.

Mr. FLOOD. Thank you, Doctor.

STATEMENT OF DR. JOHN STIRLING MEYER

We will now hear from Dr. John Stirling Meyer on the subject of "Stroke." Dr. Meyer is professor and chairman, Department of Neurology at Wayne State University, College of Medicine, in Detroit, and a member of the NINDB Advisory Council.

Dr. MEYER. Mr. Chairman and members of the committee, I am John Stirling Meyer, M.D., professor and chairman, Department of Neurology, Wayne State University, Detroit, Mich. It is a privilege to appear before you as a citizens' witness in behalf of the needs of the National Institute of Neurological Diseases and Blindness. I am a neurologist, a medical specialist concerned with diseases of the brain, the nerves to the eye, the functioning of the intellect, and disorders of nerves, muscles, and spinal cord. One of these disorders is stroke,

the third most common killer in the United States and probably the leading disabler. Others include such common disabling and killing diseases as brain tumor, virus and bacterial infection of the brain, Parkinson's disease, multiple sclerosis, muscular dystrophy, epilepsy, cerebral palsy, mental retardation, head injury, the problems of paraplegia, and many other handicapping disorders affecting vision, speech, and hearing.

Mr. FLOOD. Where were you born?

Dr. MEYER. England.

The Director of the NINDB, Dr. Richard Masland, has already defined the enormous economic burden of these diseases.

In order to carry out a program of patient care, research, and prevention, as well as the needed teaching in this specialty, a large manpower reserve of trained clinical neurologists and neuroscientists is necessary. This need is being met, to some degree, by the training programs in clinical neurology and the neurological sciences that are supported by the Institute. When the National Institute of Neurological Diseases and Blindness was created, there was a tremendous shortage of neurologists. There is still a shortage, but the results of the training programs supported by the NINDB have been significant.

For example, in the past 4 years, from 1963 to 1967, there has been a 43-percent increase in the total number of physicians specializing in neurology, an increase from 2,772 to almost 4,000, a gain of 1,183 doctors. The increase is Board-certified specialists has gone up 23 percent in the last 4 years.

The training programs supported by the NINDB also provide training for neurosurgeons, ophthalmologists, and otolaryngologists. A critical manpower shortage exists in all these specialties dealing with the neurological and sensory disorders. However, as a result of the training programs supported by the NINDB, each of these specialties has shown an increase in the number of trained physicians in the past 4 years. Neurosurgery has increased 39 percent. Ophthalmology, which deals with all the problems of blindness and eye diseases, has shown a 25-percent increase. Otolaryngology, the specialty that deals with disorders of the ear, nose, and throat, has shown a 23-percent increase. These increases are proof that the taxpayer's investment in the training programs of the National Institute of Neurological Diseases and Blindness is paying off. Although these training programs are expensive, they are well worth the investment. They must not be reduced. They must be preserved and developed further to meet the tremendous health needs of the Nation.

What exactly does a training program provide? After a young doctor has completed 4 years of college, 4 years of medical school, and 1 year of internship, the training program provides him a stipend of about $5,500 a year while he is learning the detailed knowledge of his medical specialty. The average time that he must spend in this specialty is 3 years, and it is customary to give each trainee a promotion in salary of $500 a year. The training program also provides funds for part of the faculty to teach these men patient care in the various universities and community hospitals. These men are the backbone of the postgraduate medical educational system—a system which has proved to be the best in the world.

In the fall of 1966, a national conference on education in the neurological sciences was sponsored jointly by the NINDB and the two leading neurological societies, the American Neurological Association and the American Academy of Neurology. At this conference, Dr. Aura Severinghaus reported the results of a 3-year summary of the needs for research and training in neurology and the neurological sciences. This excellent study reported the advances made through NINDB-supported training and stressed the increasing needs for training in this area in the years to come. Guidelines were set up for neurological education all the way from medical school through internship and residency training, as well as research training in the neurological sciences.

In addition to the increase in practicing neurologists, there has also been a gratifying increase in research specialists and teachers in this important area. This increase has made possible a greatly expanded research program dealing with the prevention of some of these previously hopeless disorders. For example, the number of trained neurologists now in laboratory or full-time research has doubled in the past few years. As a result of the Institute's support, we have been able to set up new centers and training programs all over the United States, particularly in areas in which facilities did not previously exist.

There is still a great shortage of neurologists. If one neurologist were available for a population of 150,000, including children, he would have to take care of 4,000 patient visits per year and about 80 patient visits per week. However, there are only 13 States and the District of Columbia which meet even this minimum requirement.

With the explosion of modern technical skills and new knowledge, the diagnostic facilities and new treatment now available to the neurologist have increased enormously in the past few years. As a result of the recent conference on neurological education, guidelines have been well established for rapidly and efficiently transmitting this knowledge to the young men in training.

I should point out to this committee, Mr. Chairman, that these NINDB training programs also support special trainees in highly technical areas. For example, in the past 2 years a program for stroke trainees has been mounted in this country, supported by the NINDB. As a result, these trainees are already teaching practicing physicians how to provide adequate care for stroke patients.

I have been emphasizing the continuing support which the NINDB will need in the future for its training programs. Now I would like to turn your attention to plans, now underway, for an exciting new development in medicine—a laboratory of neurological control. In this laboratory, at the Institute's Bethesda facilities, techniques will be studied for the development of new means of control of movement for the physically handicapped and paralyzed and for such new mechanisms as an artificial eye, or hearing device for the deal. Advances in electronics now make it possible to convert the electrical energy of a nerve impulse coming from the brain to restore the paralyzed functions of limbs or move artificial limbs.

I would also like to review briefly NINDB's stroke program. As you know, I served as chairman of the Stroke Subcommittee of the President's Commission on Heart Disease, Cancer, and Stroke. In ad-

dition to a basic core program in stroke at the NINDB, there are now 17 active stroke centers located in major population centers around the country. Funds should be provided to add additional stroke centers, as well as to provide support for existing ones. Within these centers, research is being conducted on improved methods of treatment and prevention of stroke. Already significant advances have been made which indicate that prevention of stroke is possible. With the control of high blood pressure, the incidence of cerebral hemorrhage and cerebral thrombosis, the two most common causes of stroke, has been reduced in the past 10 years. A national study, supported mainly by the Veterans Administration Hospitals and the NINDB, is now underway. It is concerned with the control of blood cholesterol and the prevention of stroke and the drug being investigated is ATROMID. Fourteen centers are cooperating in this project. This work should be expanded and I recommend that $4 million be appropriated for the purpose.

Mr. FLOOD. Are you duplicating the proposed regional centers on Heart, Cancer, and Stroke?

Dr. MEYER. No, sir; we are not.

Mr. FLOOD. Why not?

Dr. MEYER. The stoke centers are primarily designed for research and development of new methods of treatment and for training experts in the stroke area. The regional medical programs concern themselves mainly with applying the results of research and with the better application of available knowledge in heart disease, cancer, and stroke, and in continuing education in the community to pass this information along to the doctors. I would like to say a word about cooperative studies.

Another cooperative study is concerned with the effects of the control of high blood pressure on patients suffering from stroke. In my own institution we have already shown that cerebral blood flow in stroke patients is actually improved if hypertension and high blood pressure are controlled with drugs. There are several other centers which are screening methods of treatment by scientific measurements of cerebral flow and metabolism before and after various trials of treatment.

As you know, the term "stroke" refers to a loss of brain function resulting from an interference with blood supply to the brain. Recent studies from our stroke centers have shown that about 75 percent of patients have warning episodes before some catastrophic paralysis occurs. Diagnosis can be made by arteriography and, in some cases, surgical reconstruction of diseased vessels is possible. In others, medical treatment can be lifesaving and certainly, in some cases, complete recovery can result.

In addition to research in medical and surgical treatment, and in prevention of stroke, the NINDB is also supporting an epidemiological survey of stroke. In this study, 69 communities will provide incidence of the morbidity and mortality of stroke. Also, extensive information about associated diseases and precipitating factors will provide even more efficient prevention of this disorder.

From what I have told this committee, I am sure that it is apparent that cooperative studies supported by the NINDB have been very important in the advance of our knowledge in the stroke area. I have

already made reference to the cooperative study on the control of hypertension in stroke. Previously, cooperative studies on anticoagulant therapy have been supported, and, in addition, the NINDB is supporting a cooperative study of intracranial aneurysms and acute subarachnoid hemorrhage. This cooperative study includes 24 universities and has been supported since 1958. As a result of the findings of this group, it was found that ruptured aneurysm was the most common cause of subarachnoid hemorrhage and was responsible for 51 percent. Furthermore, this type of cerebral hemorrhage occurs in a younger group, reaching a peak incidence between the ages of 50 to 54 years of age. In 92 percent of the cases, diagnosis can be made by arteriography. Some forms of therapy have proved to be effective in certain types of cases.

Contrary to public opinion, occlusive cerebrovascular disease or stroke due to blockage of vessels or rupture of them is a disease of people in the most effective years of life, the highest incidence occurring between the ages of 55 and 65.

Research in stroke by NINDB is carefully correlated with the activities of the National Heart Institute through a joint council subcommittee. I am a member of that committee and can assure you that the expenditures of effort and finances are not duplicated.

There is still a sad lack of manpower for research and clinical work in the field of stroke, and it is hoped that the training programs on stroke supported by the NINDB will close the gap. If there are to be the right sort of activities in all communities across this country—including, for example, your own Wilkes-Barre, Pa., Mr. Chairman—we must provide adequately trained manpower to meet these needs. These stroke centers provide, if you will, the brood mares from which the racehorses and workhorses of the future will be provided. The men trained in these programs will staff the regional medical program in the stroke area across the country.

In summary, Mr. Chairman, I have reviewed for your committee areas of utmost importance that I believe must be supported if NINDB is to continue to give leadership in the neurological and sensory area. I have emphasized to you that the key, and possibly the most important single activity of the NINDB, has been support of the training programs. I have also given you some astounding figures of the effectiveness of this program in the past few years. As a graduate of the U.S. Public Health Service training program in neurology, I can tell you from personal experience that it is highly effective. I have also discussed with you the possibility of developing new techniques of neurological control for artificial organs and control of movement in absent or paralyzed limbs. Finally, I have reviewed with you the needs in the area of my own special interest, cerebrovascular disease, and I have asked that you continue to support the research and training activities in this field, along with the support of centers for excellent treatment of stroke.

Thank you.

Mr. FLOOD. Thank you very much, Doctor.

We will now hear from Dr. John E. Bordley, Andelot professor and chairman, Department of Laryngology and Otolaryngology, of the Johns Hopkins University School of Medicine.

STATEMENT OF DR. JOHN E. BORDLEY

Dr. BORDLEY. Mr. Chairman and members of the committee, I am John E. Bordley, M.D., Andelot professor and chairman of the Department of Laryngology and Otology of the Johns Hopkins University School of Medicine, a member of the national committee for research in neurological disorders and the national examining board for otolaryngology, past president of the Society of University Otolaryngologists and of the American Laryngological, Rhinological and Otological Society, and a member of the committees on oto-laryngic-pathology and conservation of hearing of the American Academy of Ophthalmology and Otolaryngology. I would like to express my appreciation for the privilege of testifying before this committee. I would also like to emphasize my wholehearted endorsement of the proposed citizens' budget for the National Institute of Neurological Diseases and Blindness for 1968. I feel that the citizens' budget is realistic and necessary to the work at hand.

Today, I would like to address myself to the problems in the field of the communicative disorders. Human communication, or man's ability to exchange ideas with his fellow man, is as far as we know, uniquely limited to man. Such an exchange of ideas requires hearing, language, and speech, or some special synthetic substitute. Modern civilization has been built on man's ability to store, recall, and integrate old knowledge with new knowledge; this has allowed man to develop ascendancy over the other earthly species. Scientific achievement, like history, grows step-by-step, building on accumulated knowledge, adding new ideas as they are developed. Disorders interfering with such an orderly process can be devastating to those individuals in our civilization suffering from them. They can be costly to our society, as well as to its individuals, by inhibiting progress and requiring the development of special aids and education to somewhat alleviate the individual's condition.

This problem is well illustrated by the recent epidemic of German measles (rubella) in Baltimore during 1963, 1964, and 1965. Pregnant mothers who developed German measles, especially during the first month of pregnancy, have borne children, 50 percent of whom have shown serious communicative disorders. As a result of this tragic epidemic, the school system of Baltimore is faced with creating 1,100 new slots for special education to accommodate these handicapped children. Eighty-eight hundred student years of special education is no mean load to be added to an educational system. This has been repeated time and time again throughout the United States since the onset of this recent epidemic.

There are no really good figures on the number of people suffering communicative handicaps in this country. Approximately 4 percent of our adult population suffers from serious hearing disability. Hearing impairment affects more than 800 of every 10,000 adults between the ages of 55 and 65 years. Among those 75 and over, 25 percent have hearing impairments of some degree. In the field of language and speech, 500 of every 10,000 children suffer some type of speech disorder. Voice problems among children are estimated at 60 per 10,000. Half of the children and daults suffering from cerebral palsy have serious hearing, language, and speech problems.

Mr. FLOOD. What is a voice problem?

Dr. BORDLEY. To put it simply, they speak a jargon that people cannot understand. In other words, they are cut off from others because of their inability to express themselves properly.

It is safe to say that many millions of our citizens have communicative problems. The causes of these disabilities include blood incompatibilities of the parents at the time of conception, viral infections during pregnancy, birth injuries during delivery, mumps in childhood, genetic diseases such as otosclerosis, and in later life, damage due to strokes, suffocation of nerve tissues from arteriosclerosis and brain tumors.

A carefully coordinated medical attack upon the communicative disorders has not long been in existence. Even 6 or 7 years ago, there were extremely few institutions in the world organized to study in depth the conditions causing communicative disorders. When the national importance of this problem was recognized and the Congress, through the National Institutes of Health, began to lay plans to learn how to relieve or prevent these conditions, there were very few trained people with laboratory backgrounds and clinical expertise in this field. In fact, manpower was in such short supply that it was found impossible to use all the funds appropriated by Congress for research in this field. This was changed in 1957 when national support was developed for training programs for scientists in the field of communication. These programs were designed to support training on a doctoral and postdoctoral level and later to make it possible for the young trainee to enter academic medicine through a series of grants and awards. Much of the research progress in human communication is due to the support and expansion of these training programs during the past 9 years. Our manpower needs have certainly not been filled, and our training programs are still much too small, but great strides have been made.

In the field of research, it might be well to cite some recent progress. Among the accomplishments have been a vast increase in our knowledge of the effect of virus infection during pregnancy on the offspring. It has been shown that viruses attack the inner ear as well as other neurological centers of a fetus. Such attacks not only injure the hearing, but also result in delayed language development and seriously retarded speech.

Language development occurs as a child learns that certain words will bring certain rewards. The first thing he usually learns is that "DaDa" will bring attention and aid from a man. That is an example of how speech and language develop.

Another advance has occurred in our earlier recognition of brain tumors. By using new techniques to study hearing, by developing precise methods to evaluate the condition of the organs of balance, and by applying new X-ray methods to study the course of the eighth nerve (hearing nerve) it has become possible to discover tumors along the hearing nerve before they cause major damage. New types of microsurgical procedures have been developed which permit removal of these small tumors, and minimize or eliminate damage to the other nerves lying near the tumor. Such tumors, in the past, either caused death or left patients totally deaf and with a paralyzed face. This type of tumor comprises more than 10 percent of all brain tumors.

Mr. FLOOD. Not necessarily malignant?

Dr. BORDLEY. No. They kill the nerves by expansion but they do not spread in the body.

Otosclerosis, a genetic disease occurring in about 5 percent of the white race, is a frequent cause of deafness because new bone forms in the area the disease invades. This new bone encroaches upon the moving parts of the middle ear and acts as a weld to stop all movement. In the past few years, great success has been achieved in restoring hearing to many persons through microsurgery which frees these moving parts. However, some individuals suffering from otosclerosis, in spite of such surgery, eventually lose their hearing because bone continues to grow, involves the inner ear, and damages the auditory nerve. During the past year, an interesting concept relating to this problem has been tested. Fluoride salt has been used with some patients, and there are indications that it can retard or stop the progress of the disease. This is the same thing you use in your water system but in much greater concentrations. As yet, we do not have the final answer, but this research shows promise.

Studies are underway on the development of language about which very little is known. This research, however, is just beginning and must be greatly amplified, but at least a start has been made.

The information explosion, which now results in more than 10,000 published articles a year in the field of hearing, speech, and language, has caused a very serious problem relating to the dissemination of scientific information. During the past year, an information center for hearing and speech and disorders of human communication, supported by the National Institute of Neurological Diseases and Blindness, has been developed at Johns Hopkins. This center is indexing, in depth, the world's literature in this field. Abstracts are being prepared, and the information is being put on magnetic tape. The center also supplies on request current awareness notices to scientists. Through an overview of this field, the need for seminars and conferences can be determined, and they can be set up to disseminate information or encourage research in areas especially needing such services. What such a center means in terms of readily available information and in timesaving for the scientist is illustrated in these exhibits that I would like to pass to the committee.

If I may, I would like to pass out an illustration concerning such a center. You will see on the first page that there is a contrast in the time it would take a scientist using the classic library approach and in using the information center. In a hypothetical search the scientist using the information center required only 15 to 20 minutes as against 11½ hours had he used the classic library approach. This is the time required to determine what he is going to really use. Using the information center, it takes 5 to 10 minutes to call and request a search. It takes 10 minutes for the scientist to look at the list of located references to see if he wants them. The titles and descriptions tell him what the articles contain and where they may be found. The total elapsed time is 15 to 20 minutes opposed to 11½ hours using the classic library approach. There is a further dividend because this material is put on computer tape and it will be available to other scientists.

Mr. FLOOD. I think at this point in the record we will insert the first page of this document.

(The page follows:)

from the Information Center for Hearing, Speech, and Disorders of Human Communication

IT WOULD TAKE A SCIENTIST

Using the classic library approach

5 – 10 minutes to walk to the Library

8 hours to search through 22 years of indexes

(10 mins./ vol.
2 vols./ yr. 22 yrs.
6 issues for the last 6 mos.)

1 hour to obtain 18 references
if they're in the Library

longer if they're not.

If journals are not available
they must be requested on
Inter-Library Loan forms
3 day – 6 weeks wait for
the articles to arrive.

2 1/2 hours to look at the located articles
to see if he wants them.
(approx. 8 min./ art.)

Total Scientist Time: 11 1/2 hours

Using the Information Center

5 – 10 minutes to call the Information Center
and request a search

wait 24 hours for
completion of search

10 minutes to look at the list of located references
to see if he wants them.
Titles and descriptions tell him what the articles contain
and where the article may be found

Total Scientist Time: 15 – 20 minutes

Dividend: material permanently available
for anyone else to use.

Dr. BORDLEY. The second and third pages are a sample bibliography. The last page takes one reference 19 pages long, and you will find it takes 30 seconds to read it. The other reference is 111 pages long, and the reading time is 1½ minutes. This meets the requirements, I believe, of an information center.

Many other advances have been made during the past year. The problems, however, facing the field of human communication are far from solved. I would like to review briefly a few of the most urgent needs in this area. In the field of speech, much needs to be learned about how it develops and the centers of the brain responsible for speech. Since there are as yet no common terms for speech based on its anatomy, neurology, and physiology, international classifications are necessary. Longitudinal studies must be carried out to learn the effect of various conditions on speech development and to determine the best type of treatment and rehabilitation for its disorders. The physiology of the larynx, man's voice box, is not well understood. Research on the physiology of the muscles of the larynx and the action of related nerves should be undertaken. Methods must be developed to correct many defects in the larynx through the application of modern surgical reconstructive techniques.

There is, also an urgent need for a research center, where studies can be initiated in the neurology of the broad field of otolaryngology. The hearing relay stations of the brain remain one of the great stumbling blocks in our knowledge of the total process of hearing. A research program, developed at the National Institutes of Health laboratories,

would make possible such needed research and could train manpower for distribution to our great medical centers.

A number of outpatient clinical research units should be set up next year. These should be attached to institutions where laboratories have been developed and training programs established to produce doctors expert in clinical and basic research. In such centers, long-term clinical studies can be carried out, early recognition of communicative disorders can be made, and paramedical, as well as medical trainees, can be taught.

One can never speak of research needs in the field of human communication without urging firm support for the ongoing training programs and for their further expansion. Since 1962, when our newly designed federally supported programs first began to turn out young doctors, the total number of physicians in otolaryngology has increased from 5,100 to 6,300. This increase is not enough to keep up with our national needs. We need half again that total by 1970.

The new training programs have paid off in another way—by recruiting well-trained men for the field of research and teaching. In 1963, there were only 66 people in the United States in full-time teaching and research in our specialty. Today, there are 121. The number of residents in training in otolaryngology has jumped from 431 in 1963 to 699, an increase of almost 62 percent. It is from this group that we will recruit our full-time teaching and research faculty members. Last year, a total of $3,840,000 was granted in support of the training programs in otolaryngology, audiology, and speech. There were 67 such training grants. Two hundred and forty thousand dollars was spent for the support of advanced fellowships, and $270,000 was appropriated to support the career development of 13 promising young teachers and researchers. This career development program is critically in need of support.

We must expand our training programs if we hope to continue our progress in research. In the President's budget for 1968, the funds requested for support of all of the training programs in the neurological sciences show an increase of only $350,000. Such a small increase in funds could result in an extremely dangerous situation in our program. These programs must have a larger increment than this. We are still desperately shorthanded in the field of teaching and research in all of the neurological sciences, and it will take some time, even with accelerated programs, to ease the manpower situation. In the field of human communication, we suffer a greater shortage than in most of the other areas. And this is particularly urgent here.

That portion of the citizens' budget for NINDB allocated for the support of the communicative disorders is not large, and it does not represent any radical budgetary change from the citizens' budget requested for this field a year ago. It is designed for the support of a modest increase in the fields of research and training. The principal sums in our proposed budget are as follows: $16,750,000 for the support of research grants, research centers, and the proposed clinical research centers; $6,300,000 for the support of training and for career development awards for young teachers and researchers; $330,000 for the support of an information center for hearing, speech, and communicative disorders, and $250,000 to start the development of a neuro-otolaryngology intramural precinct of NIH.

It is my hope, and I speak for our entire specialty, that this committee will see fit to appropriate these basically necessary funds so that the research and training in the field of human communication can be continued at a proper pace.

Mr. FLOOD. Thank you, Dr. Bordley.

(The following was submitted for the record:)

PROPOSED CITIZENS' BUDGET FOR CUMMUNICATIVE DISORDERS FOR THE FISCAL YEAR 1968

1. Research grants	$12,500,000
Centers (10)	2,500,000
Clinical research centers (6 to 7)	1,750,000
Total	16,750,000
2. Training:	
Training grants	5,500,000
Special fellowships	300,000
Postdoctoral fellowships	100,000
3. Awards: Career development awards	400,000
Total	6,300,000
4. Information Center for Hearing, Speech and Communicative Disorders and Neuro-otolaryngology Intramural Center	580,000
Total	23,630,000

Mr. FLOOD. We will now hear from Dr. A. Edward Maumenee, professor of ophthalmology and director of the Wilmer Institute of Johns Hopkins University.

STATEMENT OF DR. A. EDWARD MAUMENEE

Dr. MAUMENEE. Mr. Chairman, it is a privilege to testify before this committee. I wish to thank you for your interest, your patience and your endurance in listening to the testimony for the National Institute of Neurological Diseases and Blindness. I am here to support the citizens' budget as requested for the coming year. We are particularly interested in the field of ophthalmology.

Mr. Chairman, I would like permission to have my prepared statement made a part of the record.

Mr. FLOOD. Without objection it will be inserted in the record at this point.

STATEMENT OF A. EDWARD MAUMENEE, M.D.

Mr. Chairman and members of the committee, I am Dr. A. Edward Maumenee. I am Chairman of the Department of Ophthalmology at The Johns Hopkins University School of Medicine and Director of The Wilmer Institute and the Alan C. Woods Research Laboratories at that institution. Within the past several years I have served as Chairman of the Section of Ophthalmology of the American Medical Association and President of the Association of University Professors of Ophthalmology, in addition to membership in various other professional groups. I mention these only to indicate to you that I have broad relationship with, and experience in, the clinical, research and teaching aspects of ophthalmology, and that I speak with current knowledge of the manifold problems that beset this specialty and which must be dealt with realistically if we are to move ahead in the prevention of blindness.

It is obvious to all of us in the profession that much more effective action must be taken than we have been able to initiate in the past, due in part to the lack of adequate funds for visual research and training. I would preface my

remarks by stating that without the splendid interest and financial assistance of this Committee and the Appropriations Committee of the Senate in recent years, it would not be possible for me to appear before you today and say that we are now ready for a concerted nationwide effort to find and eradicate some of the causes of blinding diseases. As recently as 1950 there were only five full-time investigators in eye research in the entire country. Through the establishment of the National Institute of Neurological Diseases and Blindness within the National Institutes of Health, and the annual allocation of Federal funds to the field of visual research, we can point with considerable pride to a tremendous growth of scientific interest in blindness prevention. There is now among our medical institutions a splendid nucleus of capable, imaginative and dedicated ophthalmic investigators, many of them young men, who are anxious to move out toward the new goals that they have set for themselves.

I must emphasize, however, that until now we have been working only upon the foundations. We have established the nucleus and created the potential. The time has come to build, to build programs that will put us well on the way to solving the fundamental problems of visual failure, so that we may save the sight of millions of Americans who will otherwise be forced to live with severe visual disability. We are ready to build at this moment. But we do not have enough manpower, enough laboratory space, enough equipment, and certainly not enough money to realize the magnificent opportunity that confronts us. I appear before you today to urgently plead for increases in the Federal appropriation well beyond those which serve an initial purpose in the past, but which cannot sustain the full-scale effort of which we are now capable.

I ask you first to consider the need in terms of the number of human beings whose lives may be affected by your action, and the extent of their disability. Both as a person and as a physician, I am deeply concerned with the fact that the problem of blindness is not a static thing, which always reaches into a certain, unchanging proportion of our population. We must face the fact that blindness in this country is increasing, year after year, and at an alarming rate that is far out of proportion to our population growth. In the two decades between 1940 and 1960, while our general population increased by 36 per cent, the blind population increased by 67 percent! There are now somewhere between half a million and more than a million blind persons in the United States, depending upon which definition of blindness we choose to use. Among these, hundreds of thousands live in total darkness—the complete absence of light. Others can sense the presence of light, but have no useful vision. In addition to these, there are three and one half million Americans who suffer from serious, permanent, non-correctable visual defects. There are one and a half million who are blind in one eye, with no depth perception and living in constant jeopardy of total loss of sight should the good eye be damaged by disease or injury.

With an extension of the human life span, our inability to prevent diseases of the eye will present the aged with the unhappy prospect of living their latter years in darkness. By age 60, some type of lenticular opacity (cataract) is present in 60 percent of our people; and by age 80, the incidence is almost 100 per cent. Fortunately, these lens opacities are not always in the line of vision so they do not impair sight, but the causes of these opacities are the same as those which require cataract extraction. Increasing blindness is by no means restricted to the aged. We are now saving the lives of infants whose physical weaknesses will be manifested in a host of visually disabling conditions. Eighty per cent of all blindness is the result of diseases whose causes are unknown to science.

When we think in terms of vision, rather than blindness, and the needs of our people in terms of preserving their sight, the figures are astronomical. Some 90 million people—almost half our population—have some ocular malfunction. More than 10 per cent of all patients seen in our medical institutions are eye patients. Reports indicate that some 127,000 major eye operative procedures were performed in the past year at only 35 of our medical school hospitals. Millions of diabetics whose lives are now being prolonged through the introduction of insulin are threatened by diabetic retinopathy, which now causes 15 per cent of all new blindness, where it once was the causative factor in only 1 per cent of newly reported cases. We cannot yet prevent these retinopathies. We do not know the causes of cataract and glaucoma, the two major causes of visual loss in the United States.

We should not be surprised, then, that a recent Gallup public opinion survey, sponsored by Research to Prevent Blindness, Inc., indicated that, with the single

exception of cancer, the American people fear blindness more than any other physical affliction. Nor should it amaze us that the financial cost of blindness to the nation, in terms of care and treatment for those already blind, exceeds one billion dollars each year.

There is no question then, that we are dealing with a major health problem, and that we have been very late in giving adequate thought to the means of solving it. Until the inception of the National Institutes of Health and the subsequent establishment of the National Institute of Neurological Diseases and Blindness, there was virtually no governmental or private effort to support the necessary scientific research to prevent this terrible waste of human and financial resources. The results that have been achieved with the relatively small Federal funds allocated to vision over the past five to ten years have fully justified this investment. But, more than that, I believe these results should indicate to this Committee and to the Congress that here is an area of medical science that is coming alive with activity and whose potential is so great as to warrant the allocation of vastly larger amounts to finance the natural development of the programs that have been generated.

With your permission, I would like to review briefly some of these advances, so that you may know where we are and where we hope to go. The leading cause of blindness in the United States today is cataract. While we do not know what causes most cataracts, and cannot prevent them from occurring, we have been perfecting our techniques for the surgical removal of the cataractous lens to the point where this has become a safe and highly successful procedure. We have learned that opaque lenses can be successfully aspirated through a small needle in patients up to the age of 30 years. We have discovered that an enzyme called alpha-chymotrypsin will dissolve the attachments of the cataractous lens and permit its easy removal, thus increasing the safety of surgery. Cryosurgery, a freezing technique, is among the newly developed techniques that are increasing our capacity to extract cataracts with minimal danger and discomfort to the patient. We remain acutely aware, however, that surgery cannot be considered an adequate solution to disease problems. We must learn a great deal more than we now know if we are to find the causes of cataracts and prevent them from forming. Our goals in cataract research must involve knowledge of the aging process of human cells, the mechanism of membrane transport systems and the biochemistry of the metabolism of cells. Meanwhile, we must consider surgery a necessary expedient, but never an ultimate answer, especially when we are faced with an ever increasing population of the aged who are justifiably demanding that their health needs be met.

Glaucoma is the second leading cause of blindness, often not diagnosed until the optic nerve has been irreparably damaged. It is estimated that some two million Americans have glaucoma, and about half of them are not aware of it. While we have discovered some new medical methods of therapy which have greatly reduced the need for surgery in glaucoma, it is obvious that much must be done in the area of detection and prevention. In recent years we have learned how to detect some of the prodromal symptoms of this condition, and that it occurs in about 20 per cent of the immediate family of an affected person. But the exact inheritance pattern is not clear. President research is deeply involved in exploring the basic mechanism of aqueous secretion and absorption, which is still poorly understood despite the fact that many fine physiologists, biochemists and biomathematicians are hard at work on the glaucoma problem.

We have learned to manage retinal detachments with a high degree of success over the past several years. This condition a short time ago was an almost certain prelude to blindness, but we have greatly reduced the numbers who suffer loss of vision. Among recent advances in retinal detachment are the application of plastic bands to encircle the globe of the eye, the use of photocoagulation or the laser beam, and the application of cryosurgical techniques. We look forward to further advances in surgical techniques to improve the percentage of operative cures. But again, this is not the ultimate objective, for we are confident that many retinal detachments could be prevented if we had a greater knowledge of the biochemistry and physical properties of the jelly-like material, or vitreous body, in the eye. Teams of scientists are working on these problems today, and their work invites much greater support than they are presently receiving.

Uveitis is a major ocular disease that is poorly understood by ophthalmologists and is practically unknown by the general public, although it accounts for a good deal of visual loss and blindness. Uveitis differs from purulent abscesses in that

it does not respond to presently known antibiotics. It may well be a form of autoimmunity, and comparable in some respects to rheumatoid arthritis and some types of kidney and thyroid disease. In recent years it has been discovered that the parasite, toxoplasma gondii, is responsible for a number of cases of uveitis in which the posterior part of the eye is involved. Unfortunately, we have no adequate medication for the treatment of this parasite. Advances in this field will depend on increased investigation in the areas of immunology, microbiology, parasitology and virology, as well as pharmacology.

It has been said that the eye is the window to the body. There is probably no greater evidence of this than in the field of diabetes, where the ophthalmologist may be the first to detect the presence of this disease which so often progresses for many years before it is diagnosed. Diabetic retinopathy is one of the major complications of diabetes, producing lesions in the vascular system involving all of the smaller blood vessels in the body, often leading to blindness, kidney disease, heart disease and stroke. It is these changes in the blood vessels of the eye that permit the ophthalmologist to diagnose diabetes. Unfortunately, the development of controls for this disease, with a reduction of mortality, has not had a similar influence upon the course of retinopathy. Ophthalmic investigators are therefore becoming increasingly involved in exploring the nature of changes in the vascular system and the retinal blood vessels. This research has been hampered by the lack of a good experimental model in the lower animals. Recently we have found that dogs with spontaneous diabetes, and possibly those with induced disease, undergo vascular changes that are identical to those found in man. It is now hoped that with the cooperation of veterinarians, endocrinologists, electron-microscopists and biochemists, we may eventually find the basic cause of these vascular changes and thus prevent blindness and other lesions that lead to early death of the juvenile diabetic patient.

While I have dwelt at some length upon a few of the problems that concern us in this explosive field of investigative ophthalmology. I can assure you that I have merely skimmed the surface of the problems and the opportunities that we are now attempting to meet. Such conditions as mascular degeneration, tumors of the eye, strabismus or crossed eyes, corneal transparency and the homograft reaction, virus infections of the eye, and the newly-found anti-viral agents have not been mentioned for the sake of brevity.

To do what must be done in the immediate future we need researchers, we need teachers, we need laboratory space, we need equipment, and we need money—very much more than is now being allocated to this important work. The total allocation to vision research and research training within the National Institute of Neurological Diseases and Blindness in the past fiscal year was in the neighborhood of $18 million. I ask you to reflect upon the extent of this investment in the light of our annual cost of one billion dollars for care and treatment of those already blind.

In endorsing the Citizens Recommendation for fiscal 1968, I would ask that much consideration be given to the expansion of the training program of the National Institute of Neurological Diseases and Blindness, including the establishment of Career Teacher-Investigator Awards in ophthalamology for the purpose of attracting full-time people to academic work. Such awards might guarantee remuneration over a specific period of time, thus providing incentive to the young ophthalamologist who might otherwise be lost to private practice.

I have mentioned that more than 10 per cent of all patients treated at our large medical centers are eye patients. With the advent of Medicare, we know that this percentage will increase. Yet a recent report indicated that we are training only 3.3 per cent of our physicians for ophthalmology. During the past five years, almost 98 per cent of all approved residency positions in ophthalmology have been filled, while in other fields the percentages of positions filled ranges from 46 to 91 per cent. This would indicate that a residency in ophthalmology is one of the most desirable positions in the specialties. In spite of this desire for ophthalmic training, the total number of full-time positions in this specialty has not increased at a rate comparable to other fields. We will not begin attracting the necessary full-time manpower until we begin to give all aspects of the vision problem the kind of attention, interest and financial support that we give to other areas in which widespread and extremely serious health problems are being acted upon with intelligence and vigor.

It is therefore my urgent request that this Committee give full support to Citizens Recommendation that $36,600,000 be allocated to vision research and re-

search training, within the total request for a $145,000,000 appropriation to the National Institute of Neurological Diseases and Blindness for fiscal 1968. The following is a financial breakdown of the funds requested for vision research and research training:

Intramural	$3,000,000
Extramural	18,782,000
Total research grants	21,782,000
Training grants, traineeships, and fellowships	9,000,000
Clinical centers	3,000,000
Institutional grants	2,818,000
Total	36,600,000

I am very grateful to you for permitting me to testify before you today. I sincerely fear that if research and research training opportunities are not permitted to grow, we will lose both the opportunities for valuable research today, and the scientists in this rapidly developing field who must do the research and training in the future. The health and happiness of millions of Americans are involved in the decisions of this Committee. I am confident that you will act upon this urgent request with all the wisdom you have shown in promoting the total health and welfare of our people. Thank you.

Dr. MAUMENEE. Blindness is one of the major illnesses in this country. The cost of the care of persons who have lost their vision to where they are industrially blind has been variously estimated at between $1 billion and $2.5 billion a year. In a recent Gallup poll survey of citizens of this country, a number of dread diseases were listed and blindness was second only to cancer as a fear among the citizens of this country.

Mr. FLOOD. Will you list them?

Dr. MAUMENEE. I do not know that I can list them all.

Mr. FLOOD. Not now but supply them for the record.

Dr. MAUMENEE. Yes, sir, I certainly will.

(The list follows:)

	Percent		*Percent*
Cancer	62	Tuberculosis	1
Blindness	18	Loss of limb	1
Heart disease	9	Deafness less than	1
Arthritis	3	Couldn't say	2
Polio	3		

Dr. MAUMENEE. In spite of this, blindness is increasing more rapidly than our general population now. From 1940 to 1960 the population has increased by some 36 percent and the number of blind people have increased by some 67 percent, so that blindness is certainly a very major health problem in our country.

We have had some notable accomplishments. Through the generous support of this committee in the past we have been able to progress.

In the field of retinal detachment, a condition that occurs when the retina becomes detached from its normal base in the back of the eye and when there is not sufficient nutrition to the cells so that the person goes blind, we have been able to increase our success from about 50 percent to around 80 or 85 percent. However, we do not know the basic causes of retinal detachment which we want to find out.

In cataract surgery, advances also have been made.

Mr. FLOOD. What is a cataract?

Dr. MAUMENEE. That is when the lens of an eye, like the lens in a camera, become opaque. This opaque lens in the eyes has to be removed. A cataract patient must wear a thick glass to correct for the lens that has been removed from the eye.

Among other advances in the field of research is an exciting one which may or may not prove to be true. One ophthalmologist, Dr. Lawton Smith, has found in patients who have had a history of syphilis but have been treated and apparently cured that by tapping the front part of the eye he has found spirochetes in spite of the fact the patient was thought to have been healed. Spirochetes have been found in the past in a number of diseases. Dr. Smith's work has been confirmed by Dr. Goldman at Boston. This discovery has created so much interest that syphilologists have met to discuss it with Dr. Lawton Smith.

In the field of uveitis, which has been in the past a major cause of the loss of vision in the aging, we have been able to find leaks from the choroid through the use of intraveenous dye and to seal off these leaking areas, thereby save some persons from the disease.

If an animal or a person does not see, say, during their third year of life, they can never learn how to see. Recent studies on monkeys and cats have proved you can find a certain organic change when their eyes can only see diffused light for the first few years of their life. To stimulate vision, we hope to work on techniques for giving them glasses or contact lens in the first year of life.

These are but a few of a long list of things I could cite. The problems of vision were interesting enough to the National Institute of Neurological Diseases and Blindness that in 1964 Dr. Masland appointed an ad hoc committee on vision to prepare a plan for programing, planning, and budgeting. We have tried to prepare such a plan for planning, programing, and budgeting the field of ophthalmology for a period of 10 years. A summary of this work is now being produced in three volumes by the National Institute of Neurological Diseases and Blindness. I would like to mention that if any member of the committee is interested they may obtain copies. In this summary we list in some detail the various aspects of blindness and the projected cost to carry out future research in this field.

There are three specific areas for which we would like support in the citizens' budget. The first is a development award for a teacher investigator grant. In the field of ophthalmology, we are desperately in need of teachers. In spite of the fact that we have about 90 percent of our program filled in contrast to some 60 percent in other programs, we still are not getting full-time teachers in ophthalmology because there is such a demand for them in private practice. Although you may not have too much trouble getting an appointment with an ophthalmologist, many people must wait up to 3 months to see one. We would like to get more of these people into the academic field.

We would like also to get support in setting up centers for research to investigate the many different types of diseases involving the eye. One teacher of ophthalmology was said to pass a student if he could name five diseases that did not involve the eye. So we feel that we need centers to study these many diseases. We are asking particularly for centers and for a further extension of our training grants.

Mr. FLOOD. Thank you very much, Dr. Maumenee.

TUESDAY, APRIL 25, 1967.

GENERAL MEDICAL SCIENCES

WITNESSES

DR. EMANUEL M. PAPPER, PROFESSOR AND CHAIRMAN, DEPARTMENT OF ANESTHESIOLOGY, COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY

DR. JONATHAN E. RHOADS, PROFESSOR AND CHAIRMAN, DEPARTMENT OF SURGERY, SCHOOL OF MEDICINE, UNIVERSITY OF PENNSYLVANIA

Mr. FLOOD. Now we go to the "General medical sciences" and we will hear first from Dr. Emanuel M. Papper, professor and chairman of the Department of Anesthesiology, College of Physicians and Surgeons, Columbia University.

STATEMENT OF DR. EMANUEL M. PAPPER

Dr. PAPPER. Thank you, Mr. Chairman. It is a great privilege to be allowed to come before you to tell you something about the National Institute of General Medical Sciences. Before I begin, Mr. Chairman, may I say I have prepared a written statement and with your permission I would like to have it inserted in the record.

Mr. FLOOD. We will insert it in the record at this point.

(The statement follows:)

A STATEMENT IN SUPPORT OF THE NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES OF THE NATIONAL INSTITUTES OF HEALTH

(By Emanuel M. Papper, M.D., chairman of the department of anesthesiology, Columbia University; director, anesthesiology service, Presbyterian Hospital, New York; director, anesthesiology and visiting anesthesiologist, Francis Delafield Hospital; chief, section on anesthesiology, Torney, Dibble, and Walter Reed Hospitals, 1942–46; cofounder and first chairman, section on anesthesiology and resuscitation, New York Academy of Medicine, 1961–62; president, New York State Society of Anesthesiologists, 1952; cofounder, 1953, and first president, 1954, Association of University Anesthetists; member, American College of Anesthesiologists; Chairman, National Research Council, National Academy of Sciences, Committee on Anesthesia; member, National Advisory Heart Council, National Institutes of Health, 1962; member, President's Commission on Heart Disease, Cancer, and Stroke, 1964; principal consultant, National Institute of General Medical Sciences, National Institutes of Health, 1965–66; Chairman, General Medical Research Program-Project Committee, National Institute of General Medical Sciences, National Institutes of Health)

Mr. Chairman and honored members of the committee, I should like to thank you for the privilege of appearing before this Committee to speak in behalf of the programs of the National Institute of General Medical Sciences. At the outset, I wish to express my good wishes to Chairman Flood and to the new members of this distinguished Committee which has done so much to improve the quality and to increase the availability of medical care in this country.

My knowledge of the Institute of General Medical Sciences dates back to the time when it was a Division of the National Institutes of Health. I have known the Institute as a grantee and as a consultant. Just about a year ago, I completed a six-month's tour of duty with the Institute in Washington. During that time, my office was next to Dr. Frederick L. Stone's, the director, and I assure you that I became very well acquainted with the Institute's programs and problems, not

merely the anesthesiology program which was my prime responsibility at the time, but with other programs Dr. Stone was giving special emphasis to at that time.

Today I should like to talk to you about four of these programs which I think should be brought to your attention: one program because of the serious problem confronting it, two others because of their great biomedical potential, and the fourth because it is of particular concern to me and because it is always gratifying to report good tidings.

The first program I wish to discuss is the Institute's training program. This program trains thousands of young men and women who are working toward the Ph. D. degree in the health sciences or those who have already received doctoral degrees and are being trained to biomedical research.

The purpose of this program is to develop a corps of young men and women who are well trained in one or more of the major biomedical sciences. It is through these young scientists that the quality of research in this country will be improved and expanded.

This training program also improves the intellectual and physical environment in which the research training takes place. The grants provide funds for additional teaching staff and for equipment, laboratory animals, and other essentials in the conduct of research.

Different from the research project grant which generally is expected to produce information within a fairly well-defined period, the training grant is in a *time sense* open-ended. A training program that continues to meet the high standards and conditions set forth in the grant is renewed every five years, the average time for training a Ph. D. Until recently, the directors of these programs have felt a sense of stability about their training programs that has contributed to their excellence; now there is doubt.

The Institute's training program supports more than half the young people who are working toward Ph. D.'s in basic health sciences. This responsibility the Institute has carried out with striking success. But for the past four years the program has been jeopardized by a steady decrease in the number of people due to the lack of appropriations to train them.

This decrease seems at odds with the administration's emphasis on alleviating shortages in the health professions. Now in another Bureau, for Health Manpower Educational Services, the 1968 budget shows an increase of $36,270,000 in training grants, a 70 percent increase over the previous year. This increase indicates a practical understanding of the very long-term solution to much of the non-medical manpower shortage. But there has not been a similar understanding in regard to the research training programs of the National Institutes of Health which, while they are training the biomedical scientists, are also preparing these young scientists as the teachers of the health professionals. Especially is this the case with the academically oriented physicians who have received research training which qualifies them for careers in academic medicine—patient care, teaching, and research.

In the current year, the Institute is supporting about 620 training programs There are about 4,850 young people working for their Ph. D. degrees and some 1,070 trainees who have already received their Ph. D., M.D., or other doctoral degree. A significant number of the research M.D.'s are anesthesiologists, radiologists, surgeons, and pathologists.

This figure of trainees may seem sizable, but I should like to give you some comparative figures to indicate what is happening to this program which is the keystone of basic health science training for all the research programs of the National Institutes of Health.

Last Fiscal Year (1966), there were 6,500 trainees supported through the Institute's program. This year, there are 5,920. The proposed 1968 budget will bring about another cut, making the total number about 5,700. The reduction in the number of trainees is not apparent from a cursory glance at the budget figures for each of the three years I have mentioned. Those figures are consecutively: $41 million, $42 million, and $44 million.

For Fiscal Year 1967 the increase is 3.2 percent and for Fiscal Year 1968, 4.6 percent. The point is, that to maintain the programs at current levels, the increase must be at least 8 percent a year. Let me give you a few reasons for this besides the obvious one of the general rise in the cost of living.

The costs of training increase as the number of trainees increase each year in all of these programs. That is, a program may start with three trainees the

first year. The next year, to those original three, another three will be added, and so on, until the fourth year when the total will be twelve trainees in the program. The more trainees, the more equipment will be needed. In those four years, it is likely that some who were not married when they began the training get married before the end of the training and some have children. For those dependents, there are special allowances.

One item that increases the cost of biomedical research training and one that is just now being felt is the rise in the cost of laboratory animals and animal care as a result of recent legislation. One training program director recently requested an additional $2,000 to meet the increased cost of research animals used in the research projects that are part of the training program.

It would be unfortunate indeed if this superb training effort of the National Institute of General Medical Sciences continues to be systematically dismantled by insufficient funds. We could very well find ourselves in the same regrettable position that all of science was in during the 1950's in this country when young people were trained for "yesterday's research." Modern techniques and instruments alone require highly specialized training over and above the learning of a particular area of science itself. This is not the time to cut down on biomedical research training, but rather the time to support it strongly.

And now I should like to discuss two programs that, by their positions at the extremes of biomedical research, indicate the breadth of the Institute's responsibility. The first of these is genetics, once considered an esoteric subject having little or no relation to the practice of medicine. Within the past decade, however, genetics has emerged as a major biomedical science. About 300,000 babies born each year in this country have some sort of genetic handicap. One out of every four human embryos carries a genetic defect or later develops a clinically recognized symptom arising from an altered genetic situation.

One of the most widely known genetic defects that can be predicted is in the Rh factor. Until some twenty or so years ago, most babies born of parents with this blood incompatibility died. Now it is possible to diagnose and treat this disease as a direct result of apparently unrelated basic research.

During the past year, geneticists established the linkage between several syndromes and chromosomal aberrations. One of these syndromes is characterized by mental retardation, impaired hearing, and abnormal facial development. Another aberration was related to the "cat-eye" syndrome which manifests itself in a vertical coloboma of the iris, resembling the pupils of a cat. Not so long ago, the genetic relationship was established for Down's syndrome, or mongolism, as it is commonly called. Prenatal tests are now possible for forecasting genetically related abberations.

Last September, the Institute of General Medical Sciences brought together some of the world's most renowned geneticists, among them, Dr. Widukind Lenz of Germany who first established the fact that thalidomide damaged the foetus, his findings resulting in that drug being removed from the German market; Dr. Jerome Lejeune of France who identified Down's syndrome as a genetic defect; and Dr. Victor A. McKusick of Johns Hopkins University who this past year published a book in which he listed some 500 diseases and disabilities that have been linked to genetic factors. These and other distinguished geneticists discussed the major areas that needed support and made recommendations to the Institute.

As a result of their recommendations, the Institute has vastly encouraged increased activity in human genetics research. To assist in this research, the Institute has contracted with Oak Ridge National Laboratory for studies of methods of producing the biological materials needed for genetics research in the purest form obtainable in the world.

This genetics program of the Institute, if strongly supported, will contribute significantly to diagnostic and preventive medicine as well as to treatment. Clinical genetics is of vital interest to physicians who today are called upon for genetics counseling by their patients. Tests have already been developed for detecting genetic defects in prospective parents, and enable physicians to predict certain anomalies that could cause death or disability in children or for detecting possible abnormalities in the early stages of pregnancy.

The entire field of clinical genetics, including these tests, is one that should be vigorously developed and supported. Without a doubt, genetics is a science from which we can expect some of the truly exciting advances in medicine.

From genetics, I should like to go to the subject of automating clinical laboratories. About the turn of the century, the family doctor tested urine by shaking

the bottle, looking for yellow foam to detect bile, and tasting the urine to detect sugar. By 1920, only four quantitative chemical tests—for sugar, urea, creatinine and choloride—could be carried out routinely on body fluids.

The modern clinical chemistry laboratory today may be called upon to perform any of 50 to 100 different types of analyses and even that many may be inadequate to give the physician the information he needs for correct diagnosis or treatment. Close to a billion clinial diagnostic tests are performed annually. In 1965, Veterans Administration hospitals alone performed 44 million tests.

Not only the number but the variety of tests has increased enormously. Whereas at one time a few tests might be ordered by the physician when a patient enters the hospital, now it is fairly common to order batteries of tests. A few years ago the average laboratory could perform some eight to ten chemical tests on blood or other body constituents. Today dozens of tests involving complicated techniques and highly specialized instruments are routinely carried out for the proper diagnosis of coronary heart disease, endocrine malfunction, and various metabolic disorders.

The quality in performance in clinical chemistry laboratories is far below acceptable levels in many hospitals. There are no universal standards of comparison of the normal and the sick individual in terms of specific tests.

So great is the present disparity in the quality of laboratory tests that a man with diabetes, for example, could be tested in different cities as he traveled across the country and find totally incompatible results in the tests.

The National Institute of General Medical Sciences this past year launched a major effort in research in the automation of clinical laboratories. One of the objectives of the program is to develop new methods of performing existing tests more quickly, more accurately and less expensively, using smaller specimens.

The need for speed and accuracy can best be illustrated by the tests for appendicitis where an error or delay in an ordinary blood count could result in a serious complication or rupture of the appendix before surgery. An example of the need for reducing costs of certain tests is that for some complicated chronic diseases such as unstable diabetes and nephritis, the cost of laboratory tests may be many times more than the cost of medication.

The Institute is supporting research in all aspects of clinical laboratory automation, including multiple tests on extremely small samples of blood, an important technique for critically ill patients and newborn infants because large amounts of blood cannot safely be taken from them for diagnostic purposes.

Success in this program of integrated basic and applied research will, even if limited, markedly reduce the costs of diagnoses, simple or complicated, will reduce hospital days for the patient, and increase the efficiency of hospital laboratory personnel in a spectacular manner.

I should like to conclude this presentation with a few words about the progress in anesthesiology. This Committee has given anesthesiology a tremendous impetus by its interest as well as the funds it authorized for the support of research and training.

I have spoken of this before, but I should like to repeat that in recent years anesthesia has become even more hazardous than it originally was because of the widespread use of various types of medication whose interaction with different anesthetic agents is not understood, though it is suspected with some justification, that in some instances, the interaction has been fatal.

The anesthesiologist not only produces a state of unconsciousness, but he actively protects the body's vital functions. He artifically breathes for the patient, regulates his temperature, blood pressure, and pulse rate. Far more important than rendering a patient unconscious is being able to restore him to consciousness.

The Congress has long recognized anesthesiology as a critical clinical area and authorized the research and training program of the National Institutes of Health in 1957. In 1958, the effort to solve the manpower problem in anesthesiology got off to a slow start with two research training programs for a total of $30,000.

This past year, for the first time, we have been making progress. One encouraging figure is that the number of research grants supported by the Institute increased from 11 in Fiscal Year 1964 to 27 in Fiscal Year 1966, an upward trend that has continued this year.

In an effort to ameliorate the manpower shortage in anesthesiology, the Congress authorized $1 million for the National Institute of General Medical Sciences to launch a training program that would increase the number of physicians in

anesthesiology and improve the quality of their training. From November 1966, when the $1 million was made available to the Institute, and this past March guidelines were developed by the Institute staff with the help of leading anesthesiologists. Residency training directors in 200 hospitals were notified of the program. Some 65 applications have been received by the Institute requesting $4,336,000. Following the usual dual review, it is anticipated that some 15 or so applications will be approved which will support about 60 physicians in a new type of three-year anesthesiology residency.

Although this program cannot train enough highly qualified anesthesiologists to meet the immediate demands, it will produce a group of physicians who can help to upgrade the entire field by the quality of their service to patients and their training of young physicians.

Along with this training program for residents, the whole field of anesthesiology will receive unprecedented impetus from the establishment of anesthesiology centers for research and training. The Congress appropriated $500,000 for these centers. Of necessity, they will be limited in number, the first grants to be awarded before the end of this Fiscal Year, contingent, of course, upon recommendation by the scientific reviewing bodies and the approval of the Surgeon General.

These centers, the first of their kind in anesthesiology, will concentrate on multidisciplinary research programs of long-term duration and of central importance to anesthesiology. At these centers every aspect of the problems faced by anesthesiologists will be studied, including the action of anesthetic agents as well as problems in the management of respiratory emergencies and in the provision of inhalation therapy. Special problem areas of anesthesia such as obstetrical, pediatric, and geriatric anesthesia will also be investigated.

I realize that in a sense my comments are not merely those of a single physician-scientist, but of many of my colleagues. I speak for them when I say that we appreciate the opportunity to appear before you and present our views based on our experience and our evaluation of the future needs.

My own conviction about the funds needed by the National Institute of General Medical Sciences is shown in the attached table and exceeds the President's budget figure by $25.5 million. My recommended total of $186 million does not include all the additional funds needed to pay the complete, scientifically approved list of grants now awaiting funding, a so-called backlog of nearly $32 million which indicates the measure of the scientific activity which is the responsibility of this Institute.

NATIONAL INSTITUTES OF HEALTH, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Citizens' budget for fiscal year 1968

	Fiscal year 1967	President's budget	Recommended
Research grants	$71,172,000	$80,763,000	$95,000,000
Pharmacology-toxicology research centers	3,500,000	3,500,000	4,000,000
Anesthesiology and diagnostic radiology centers	500,000	1,000,000	2,000,000
Subtotal, research grants	75,172,000	85,263,000	101,000,000
Fellowships	19,400,000	20,910,000	22,000,000
Training	43,735,000	45,729,000	53,000,000
Direct operations	7,724,000	8,382,000	10,000,000
Total	146,031,000	160,284,000	186,000,000

Dr. PAPPER. And also, my colleague, who was to come with me and Dr. Rhoads, Dr. Ian E. Bush, is in Europe attending a meeting in which he is a participant and has entrusted his statement to me, and may I have that inserted in the record?

Mr. FLOOD. It may be inserted at the conclusion of your testimony.

Dr. PAPPER. I would like to make a few remarks in an oral sense that will be an extension of the material that appears in the prepared statement.

The Institute of General Medical Sciences is quite different from many of the Institutes you have heard about. It has been charged, most wisely in my opinion, with underwriting and undergirding the basic sciences. That is to say, this Institute is responsible for the development and support of most of the scientists who develop the basic knowledge that those of us in clinical medicine can use. Also, this Institute has been charged by the Congress with developing health-oriented clinical scientists in short supply. This includes my specialty of anesthesiology as well as radiology and surgery.

I would like to speak with considerable feeling about this Institute because I believe so strongly in its programs that I spent, at the direction of Dr. Stone, its Director, 6 months with him last year and in the process I am sure I learned much more than I transmitted to him, but I think I do understand what they are about and what they are doing.

One of the areas they support is anesthesiology and resuscitation about which I have particularly strong feelings because I have just returned from Vietnam, where I went for the Surgeon General of the Air Force, and was impressed not only with the high quality of medical care given our men but the desperate need to give more knowledge to these young men giving care to our wounded soldiers and sailors and marines.

I would like to discuss the problem of training. In the National Institute of General Medical Sciences the problem of training is probably more critical to the scientists than in the other Institutes, though I do not want to minimize the importance of the other Institutes. This is because this Institute trains more than half our scientists.

The President's budget recommended a $2 million increase in training grants, less than a 4-percent increase, and in my judgment at least $8 million more is needed. The training of scientists take a long time. In our area of interest it takes 4 to 5 years after the period of specialized clincial training for an M.D., or past the Ph. D. point for a nonphysician. A training grant must escalate at least 8 percent a year in an appropriation not to gain but just to maintain itself. If I may I would like to illustrate the reason to you. If a training program starts with three trainees and it is a good one, the next year there will be six, and by the 4th year there will be 12, and there it will stop. Each year it continues to escalate and then it holds at a plateau that is not manifested until 4 or 5 years later.

Let me illustrate by one example what the problem is at the National Institute of General Medical Sciences. There are 580 fewer trainees this year than last year even though there has been a modest increase in appropiration. If the President's budget is approved without additional increase there will be a loss of another 200 scientists, a total of 800 scientists lost in 2 years, and it takes 5 years to make one of of them. This type of loss, I think, is irreparable.

The President and the Congress evidently recognized the shortage in manpower because they recommended an increase of 70 percent in the budget to develop helpers, but there is no use to develop helpers unless there are scientists to help.

I have a point of view which my colleagues may or may not share about fellowship funds. I would like to see the committee urge that

fellowships be used for very special purposes. The career development award is very important, as are postdoctoral fellowships for special purposes.

The next point I would like to address myself to is the question of automation of clinical laboratories. Dr. Bush was to talk in more detail about this but I think I can summarize the point by stating to you that manpower to do the many tests required in hospitals is sorely lacking. The quality of the tests is so variable as to be unreliable in transmitting information from one institution to another. And the methods are so obsolete they lend themselves to automation.

I would like next to turn to my own field of anesthesiology and to bring praise from my colleagues in this field and tell you that without the congressional support we have had since 1958 this field would almost not have survived. Our importance is that we are the bottleneck, as it were, for the application of the advances in surgical treatment of patients. Without us the surgeons cannot do their task and sometimes we can hinder their work if we are not adequate in number and quality to do it.

The major improvement in mortality in Vietnam compared to Korea and World War II is the type of resuscitation applied at the time of wounding and until the wounded are brought to the hospitals. The disciplines were learned in anesthesiology and taught to others. It is an important field in my judgment and warrants your support.

I think it would be of interest to you to point out in the last 3 years the research support in this field has trebled and this has made a very great difference in the progress we have been able to make. Right today, Mr. Chairman, there is a meeting of the anesthesiology training committee trying to decide how to most wisely use the $1 million in training grants that your committee approved when they have applications covering $4.33 million. I would suggest that the committee earmark not $4.33 million but $2 million for next year so we can insure further clinical training in anesthesiology and produce a high quality of physicians.

This committee, also, last year, approved half a million dollars for centers in anesthesiology for multidisciplinary research. There were approximately $2.5 million of applications for these centers. I do not know what the outcome will be of this sort of activity but I would respectfully request that $1 million instead of half a million dollars be earmarked for centers for anesthesiological research of a multidisciplinary nature.

It is my recommendation that the President's budget be increased to a total of $186 million. It exceeds the President's budget by $25 million or 15 percent and the written statement details the areas of its suggested increases. They are largely in research grant support and in training. My recommendations do not attempt to meet the so-called backlog for research, which I do not think is as important as fulfilling the national needs. The recommendations made to you will move in that direction though not solve it completely.

Thank you for your patience.

Mr. FLOOD. Thank you, Dr. Papper.

STATEMENT OF DR. IAN E. BUSH

(The statement referred to earlier by Dr. Papper, follows:)

Mr. Daniel J. Flood and Members of the Subcommittee on Appropriations for Labor and HEW, it is my honour to testify before you, and also an honour to do so on behalf of the National Institute of General Medical Sciences.

I received my Ph. D. and medical degree (M.B., B.Chir.) from the University of Cambridge, England, and have practiced research in physiology and endocrinology for sixteen years. I came to this country as a permanent resident in September 1964. For the four preceding years I was Chairman of the Department and Professor of Physiology in the University of Birmingham, England. At that time I was a member of the Biological Research Board of the Medical Research Council; Director of a Medical Research Council Unit for Research on the Chemical Pathology of Mental Disorders; and a member of the Research Awards Committee of the Mental Health Research Fund.

I am presently a Senior Scientist at the Worcester Foundation for Experimental Biology, Shrewsbury, Massachusetts; a Fellow of the American Academy of Arts and Sciences; a member of the Advisory Committee on research on the pathogenesis of cancer of the American Cancer Society; and on the editorial boards of three scientific journals. My main fields of interest are physiology, endocrinology, and metabolic diseases.

I believe that the support of the National Institute of General Medical Sciences is a more urgent task today than might be the case with some of the other Institutes which comprise the National Institutes of Health. For this is the youngest of the Institutes and is perhaps more vulnerable to financial stringency for this reason alone. But there are additional reasons why the National Institute of General Medical Sciences is more urgently in need of support than the other Institutes. These stem mainly from the fact that technological and social changes in the pattern of medical care are placing a rapidly increasing load of responsibility on this Institute at a very early stage of its development.

Last year before Senator Hill's Subcommittee on Appropriations, I emphasized the rapidly increasing importance of automation and computer sciences in modern medicine and surgery, and of training enough skilled men and women in these sciences. This year it is not only necessary to re-emphasize this but also to sound a note of urgency. A serious deficiency of medical laboratory workers has now been recognized even in the relatively mundane fields of present-day laboratory techniques. The first six months of operation of MEDICARE have already thrown an alarmingly obvious strain on all the branches of hospital care and treatment. It seems incontrovertible that a rapid introduction of automation and electronic data-processing into all our major hospitals is essential if effective medical care is to be maintained in the face of the increasing load of responsibility that our hospitals are being forced to bear. The necessary techniques are in existence or being energetically developed in our major medical centers, many of them being supported, pioneered or initiated by the National Institute of General Medical Sciences. If these techniques are to disseminated sufficiently rapidly to other hospitals, the research and training programs of the Institute must be increased in their scope forthwith.

Once again this year the Institute is asking for a generous increase in the budget available for its training programs but is faced with the prospect of being granted only an approximately 2 percent increase on last year. Owing to the youth of the Institute and its training programs, and the inevitable increases in budget required to cover rising costs and normal increments in stipends, this will mean that the normal growth of the Institute's training programs may have to be cut back by as many as 200 fellowships and 30 training grants in the coming year. I hope very much that the Subcommittee will find it possible to recommend a sizeable increase in the budget for the Institute for this purpose alone: the increase over the President's budget should be of the order of $8–10 million to enable the Institute to push forward with these programs at the optimum rate.

One final point on this issue: it is often said that pleas for the support of training programs are heavily biased by the self-interest of training institutions. As a member of an independent research institution I can perhaps plead the importance of such programs without being suspected of this bias. The point to

be remembered is that many of the fields being supported by the Institute through such training programs are entirely new technologies which are not specifically represented by the traditional departments of Universities and Medical Schools. Such fields as biomedical engineering and clinical pharmacology depend almost entirely upon the support of the Institute at this early stage of their development. They urgently need support *now*, because they are only being born just in time to meet the rapidly increasing needs of modern medical care.

I would like to turn now to another area of support in which the Institute carries a major or even unique responsibility. This is the area of large-scale clinical investigation, both into the causation of some of our major diseases and into the effects and effectiveness of treatment. Not only does the Institute carry a statutory responsibility for research and development support of the Regional Centres for Cancer, Stroke and Heart Disease; it also carries the major responsibility for non-categorical research in clinical pharmacology, and for radiology and anesthesiology. All these programs in turn depend more and more on the development of biomedical engineering, automation, and computer science which are major responsibilities of the Institute.

It is especially important to emphasize here that these programs must depend upon the study of human beings. No amount of elegant research in biochemistry or with experimental animals will prove adequate for the assessment of drugs and their side effects in *man*. Not really adequate models of peptic ulcer, of rheumatoid arthritis, or of coronary thrombosis, exist in experimental animals. Toxicity studies in animals are a necessary and often powerful method for the elimination of drugs with undesirable side effects, but the final answer is only provided by the extensive study of drugs in human beings. Much of the search for causes of cancer, and all of the search for effective methods for its treatment must, sadly but inevitably, be carried out in man.

This is another area in which the Institute is energetically engaged. I am glad to see specific sums recommended for centres of research in pharmacology and toxicology, anesthesiology and radiology. I believe, however, that the sums recommended for research in the President's budget are inadequate for the Institute's needs. Approximately $100 million is required for this item.

There are many other aspects of the Institute's over-all program which might be commended to you, but others can do this better than I can. You have the difficult task of assessing national priorities over a huge field in a year dominated by painful military needs. The plea I have made for the Institute of General Medical Sciences may seem to involve an excessive advance on last year's budget in these circumstances. I have only dared to make such a plea at this time because I sincerely believe that the relative youth of this Institute and the rapidly increasing urgency of its task in terms of practical, contemporary medical care demand rather special consideration.

NATIONAL INSTITUTES OF HEALTH, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Citizen's budget for fiscal year 1968

	1967 fiscal year	President's budget	Recommended
Research grants	$71,172,000	$80,763,000	$100,000,000
Pharmacology-toxicology research centers	3,500,000	3,500,000	3,500,000
Anesthesiology and diagnostic radiology centers	500,000	1,000,000	1,000,000
Subtotal research grants	75,172,000	85,263,000	104,500,000
Fellowships	19,400,000	20,910,000	23,000,000
Training	43,735,000	45,729,000	55,000,000
Direct operations	7,724,000	8,382,000	10,000,000
Total	146,031,000	160,284,000	192,500,000

Mr. FLOOD. We will now hear Dr. Jonathan E. Rhoads, professor and chairman of the Department of Surgery, School of Medicine, University of Pennsylvania.

STATEMENT OF DR. JONATHAN E. RHOADS

Dr. RHOADS. Mr. Chairman and members of the committee, thank you for this opportunity of testifying on the appropriation for the National Institute of General Medical Sciences.

I am Jonathan Rhoads, chairman of the Department of Surgery at the Medical School of the University of Pennsylvania in Philadelphia and serve simultaneously as the director of the Harrison Department of Surgical Research. I have had the privilege of serving for 4 years on the surgery study section of the National Institutes of Health. This was followed by several assignments to the former Division of General Medical Sciences, and I have served on the National Advisory Council for the General Medical Sciences since 1963, when it became an Institute. Thus, I have had opportunity to follow the work of this branch of our Government and to learn much concerning its great relevance to health problems.

Anything that is "general" is not very "particular" and the name General Medical Sciences does not give one much of a handle on the activity or the importance of this Institute. To put this in focus, let me cite an analogy. Most medical schools are divided roughly in half between the preclinical sciences—anatomy, biochemistry, physiology, pharmacology, microbiology, and pathology on the one hand and the clinical branches on the other. About equal time in the curriculum is given to each.

Basically, the General Medical Sciences Institute represents and supports the entire preclinical area while the other eight Institutes represent most of the facets of the clinical subjects plus dental medicine.

In addition, certain important fields in the clinical area have been assigned to the General Medical Sciences Institute under the phrase in the act which gives it responsibility for areas of interest which lie between or cross over lines separating the categorical Institutes. Thus, from a time several years before General Medical Sciences became an Institute it supported research and research training in surgery, radiology, and anesthesiology. More recently biomedical engineering has been assigned to this Institute.

The late Mr. Fogarty made the remark that the program of the NIGMS lacked "sex appeal" and that it was not easy to convince his fellow Members of the Congress of its importance. Its importance is evident if one stops to think about it.

For instance, we all know that the basic experiments of Pasteur made it possible for Lister to make surgery safe and at the same time laid the basis for many of our public health programs in the prevention of infectious disease.

We know that Fleming's observation that a mold killed a growth of bacteria gave us penicillin, but we get discouraged because the last 100 research grants in basic sciences may not have yet given us anything immediately applicable. We forget the timelage that separated these earlier discoveries from full application and we forget that many obscure investigations, often understandable to only a limited group of experts working in the same or related fields, usually precede and follow great breakthroughs.

The practical importance of basic research came to me very personally. About 1943, Dr. Selman A. Waksman, working on earth microorganisms at Rutgers, reported a new antibacterial substance, strep-

tomycin. We had some of the early batches of this material and tested its effectiveness in many surgical infections at the hospital of the University of Pennsylvania. A bit later it was shown to have a very beneficial effect in tuberculosis. When in 1946 the USPHS did me the great service of finding that I had active tuberculosis, I first tried the conventional rest cure but after several months of no improvement, I had streptomycin and rapidly recovered. Thus, I can say that I personally owe my health and perhaps my life to basic research.

This is the kind of work which the National Institute of General Medical Sciences now supports.

Medical research is a speculation—it is as much a speculation as that which attracted thousands of people to California in 1849 and to the Klondike in 1898, yet it is different. The goals are infinitely more valuable and their benefits are for all—not just for the discoverer or the man who stakes out the claim.

Last year the President's budget for NIGMS was only $135,000,000. I testified in favor of an amount over $160,000,000. Thanks to the Congress, the final appropriation was $146,000,000, and I am glad to see that the President's recommendation this year exceeds $160,000,000. I am still not satisfied and am recommending a figure of $185,500,000 plus an addition of approximately $15,000,000 if the war in Asia should end or be greatly deescalated.

In research the President's budget calls for nearly a 15-percent rise and this is good, but it is estimated that scientifically approved research projects within the area of responsibility of this Institute will exceed this allowance by $30,000,000 or $32,000,000, and I believe, at an absolute minimum, one-third of these should be funded. These projects represent much thought, they have received careful study by experts in the field and have the approval of peer groups—persons outside of regular government employment. Nearly all of them are backed by staff, and it is difficult to estimate what is missed or lost by our failure to support them. In each case the institution applying is proffering a contribution of its own scarce funds for the work.

In the area of research training, I believe the President's budget is unrealistic. Here it recommends less than a 5-percent increase. It must be borne in mind that we are experiencing a gradual but pervasive inflation and that in addition, research operations are facing a steady increase in the complexity and cost in the equipment required. The result of these trends has been that the number of training grants has been decreased and the number of people for whom training is provided has decreased in each of the last 2 years, despite small increases in the funds made available. A further decrease is foreshadowed in the President's budget for 1967–68. This decrease for the 3 years is estimated to support 800 less trainees than 3 years earlier.

Is this bad? I think it is bad because the number of scientists trained today limits what we can do for a good many tomorrows. Scientific endeavor requires money for current expense. It requires equipment, it requires building, and it requires people—people who have become expert in many different fields.

The lag time on these four categories is very different.

The current expense can be funded immediately by signing a check and its conversion into most supplies is rapid. Conversely, the larger items of equipment require 2 to 8 months for delivery, some longer. The buildings require 1½ to 3 years if one includes planning as well

as construction. The personnel, however, takes longer. From college on through medical school, internship, and residency, 9 years is usual and, in most instances, 2 years are added for national service. For those in the Ph. D. programs the requirement is shorter but probably averages 5 years to the Ph. D. and 2 years of postdoctoral fellowship plus national service when required.

If the war in Vietnam ends or even if it is substantially reduced in size, the Nation should certainly step up its attack on our common problems at home. Surely among the most urgent of these are disease, injury, and disability. Therefore, it behooves us to maintain and advance our production of scientific manpower so that we will have full capability 3, 5, and 8 years ahead.

The fellowship program falls in almost the same category. The President recommends approximately an 8-percent increase and this is estimated to provide for about 200 fewer trainees than in the earlier fiscal year.

Turning to special categories, the program in pharmacology and toxicology is forging ahead and will need some additional support. The anesthesiology and diagnostic radiology centers are important programs and should be expanded, in accordance with the President's budget from $\$1/2$ to $\$1$ million.

There is an important field of public health which has received only token attention and this is the field of trauma, especially injuries which are the result of highway accidents. Trauma, which includes burns, falls, war injuries, etc. is our fourth largest cause of death—after heart disease, cancer and stroke. Between the ages of 5 and 35, it is the largest cause of death. Yet, a recent study indicated that only about $6 million of Federal money was going into research grants in this field. Contrary to what one might suppose, the Armed Forces casualties are but the minority of those sustained. Furthermore, in most years the Armed Forces sustain many more casualties from accidents than from enemy action. For these reasons and others, basic research in trauma has not been looked upon as the peculiar responsibility of the Armed Forces and has not been funded adequately through this channel.

There is much to be learned about its treatment, about shock and what factors make shock irreversible. There are mysterious or at best poorly understood cases in which a limb is crushed and sometime afterwards the kidneys shut down and stop working. There are other delayed deaths from fat embolism in which it is thought that fat in the bone marrow gets forced into the circulation and clogs the fine capillary vessels in the lung and elsewhere.

The National Institute of General Medical Sciences called a conference on this subject last year, and it appeared to those present that the key problems would only be solved by the application of basic science research from several disciplines. It would appear, therefore, that the General Medical Sciences Institute was the logical place to sponsor it—except for head trauma which is being investigated by the Institute of Neurological Diseases and Blindness. I would strongly urge a line item of $2,500,000 to enable the Institute to begin the development of its pilot program in this area into a broad attack. Eventually, the cost will be proportionate to the importance of the field, but the sum should suffice for the fiscal year 1968 because of limitations of available manpower.

Finally, I would like to say a few words on two other subjects not immediately related to NIGMS though indirectly, they are strongly related to it.

The first of these is the National Library of Medicine. Libraries are the reservoirs or, if you will, the banks of human knowledge. The National Library of Medicine's extramural program has been authorized but thus far funding has been grossly inadequate. Certainly enough money should be put into it to implement the regional libraries program and to make a start on better means of data retrieval at the local level. A start has been made, as you know, at the central level.

The second subject I would like to mention is the heart, cancer, and stroke program. Since I last saw you, Mr. Flood, the University City Science Center has received word that a planning grant had been approved for the eastern Pennsylvania area. The promise of the heart, cancer, and stroke program in shortening the lag between discovery and general application of the new knowledge is enormous. The program should play a most important part in the continuing education of physicians. It is, however, largely a distribution system and depends heavily on the results of the research supported by both the categorical Industries and the National Institute of General Medical Sciences. Just as pipelines are useless without a source of water, so will the heart, cancer, and stroke program become unavailing without active sources of new knowledge.

In summary, I am proposing a regular budget of $183 million plus a special line item of $2,500,000 for basic research in trauma—particularly how these injuries produce death and what can be done to intervene and save a larger proportion of those injured, so many of whom are young people. Of the items in the regular budget. I would place the highest priority on the training grants because of the impact of these programs on future research.

Thank you again for the privilege of presenting the case for a national program more adequate for the support of basic medical science. In my judgment, anything less would not be commensurate with its great potential in improving the quality of health as well as our longevity.

(The following budget data was submitted by Dr. Rhoads:)

NATIONAL INSTITUTES OF HEALTH, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Citizen's budget for fiscal year 1968

	1967 fiscal year	President's budget	Recommendation, J. E. Rhoads
Research grants	$71,172,000	$80,763,000	$91,700,000
Pharmacology-toxicology research centers	3,500,000	3,500,000	4,000,000
Anesthesiology and diagnostic radiology centers	500,000	1,000,000	1,300,000
Center for research in trauma			2,500,000
Subtotal, research grants	75,172,000	85,263,000	99,500,000
Fellowships	19,400,000	20,910,000	23,000,000
Training	43,735,000	45,729,000	53,500,000
Direct operations	7,724,000	8,382,000	9,500,000
Total	146,031,000	160,284,000	185,500,000

Mr. FLOOD. Thank you, Dr. Rhoads.
Dr. RHOADS. Thank you, Mr. Chairman.

TUESDAY, APRIL 25, 1967.

GENERAL RESEARCH AND SERVICES

WITNESSES

DR. DANIEL C. TOSTESON, CHAIRMAN, DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY, DUKE UNIVERSITY MEDICAL CENTER
DR. H. STANLEY BENNETT, DIRECTOR, LABORATORIES FOR CELL BIOLOGY, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Mr. FLOOD. We will now go to "General research and services" and hear first from Dr. Daniel C. Tosteson. Dr. Tosteson is the chairman of the department of physiology and pharmacology at the Duke University Medical Center.

STATEMENT OF DR. DANIEL C. TOSTESON

Dr. TOSTESON. Mr. Chairman, I am grateful to be here this afternoon and to have the opportunity of discussing with you the general research and services appropriation for the National Institutes of Health during the fiscal year 1968.

I have prepared a written statement and would be grateful if it could be inserted in the record.

Mr. FLOOD. It will be inserted at this point, Doctor.

(The statement follows:)

STATEMENT OF D. C. TOSTESON, M.D.[1]

Mr. Chairman and members of the committee, I am grateful for this opportunity to discuss with you the general research and services appropriation for the National Institutes of Health during the fiscal year 1968. I particularly welcome the chance to speak about this part of activities of the NIH because it is so fundamental to all of the medical and health related research supported by the Agency. Research directed toward the cure of heart disease, cancer, mental illness, arthritis and metabolic diseases, infectious diseases, etc. all require the laboratories, animal facilities, general and special clinical research centers, computers, etc. which are supported by this appropriation. It is always less dramatic but more challenging to speak of the foundations rather than the spires of a building, to block and tackle in the line rather than to throw passes and run with the ball. However, no one, to my knowledge, has successfully built a skyscraper or beaten the Green Bay Packers without careful attention to these fundamentals. Just so, although I would enjoy discussing specific diseases, I prefer the task of dealing with the more complex and, I honestly think, more basic matters which confront us this afternoon.

Gentlemen, my position with regard to this appropriation can be summarized in a very few words. The greatest asset of our large and prosperous nation is the health of its citizens. By health, I do not mean mere absence of disease, but

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[1] B. Milwaukee, Wisconsin, 1925. M.D., Harvard, 1949. Professor and chairman, department of physiology and pharmacology, Duke University School of Medicine; member, Scientific Review Committee, Health Research Facilities Branch, National Institutes of Health; chairman, Grants and Fellowship Committee, National Kidney Foundation; former member, Molecular Biology Panel, National Science Foundation; member, Committee on Blood and Transfusion Problems, National Research Council-National Academy of Science.

rather fulfillment of the total potentialities of each of the persons in our country. The path toward achievement of more abundant health for our people is clear. Already evident in the accumulated experiences of biological and medical scientists up until the time of the second World War, it has been made obvious by the programs supported by the National Institutes of Health since that time. It is the path of basic research in medicine and the health related sciences. Despite the unprecedented advances of the past twenty years, many more challenging problems lie before us rather than behind us. Because of the fantastic rate of growth of our population and because of the enormous complexities of our modern society, the need for more medical research and better medical research is increasing at an increasing rate. In order to meet this challenge, we need more creative scientists and technicians working in laboratories equipped with the most modern and sophisticated instruments. Such an effort requires money. My purpose here this afternoon is to urge you in total sincerity and seriousness to meet these urgent needs by voting an adequate appropriation to support the activities subserved by the general research and services budget of the NIH.

A review of the record of wise and forward looking support provided by the Congress for medical research during the past two decades might be taken to indicate that the intensity of my concern for these matters is baseless. However, I share with many medical scientists the fear that a false opinion has grown up over the past several years about the relation between the needs and the present level of support for basic medical research. In my opinion, it is simply not true that this sector of our national life is now over-subsidized. We spend considerably less than 1% of our total Federal budget on basic medical research, research directed toward the health of our citizens, a problem which is certainly of greater than 1% concern to the tax-payers. In order to maintain the present level of effort in the health related sciences, it has been conservatively estimated that an increase of 10% per year in the appropriations devoted to this purpose is required. However, the number and complexity of unsolved problems in medicine is not remaining constant, but increasing rapidly. This is a dangerous situation, gentlemen, not without its parallels in clinical medicine. Like an untreated boil, it will surely fester if adequate treatment is not instituted soon enough. In my opinion, one of the major sources of the present confusion about this matter derives from the difficulty which the average citizen has in understanding the absolute dependence of progress in medical practice on basic medical research. This difficulty is not surprising because basic research may often concern problems which are superficially unrelated to the area of ultimate clinical usefulness. This often leads to the conclusion that basic research is some kind of play and it is never popular to pay hard earned money for nonsense. I know that you gentlemen are already well informed about this crucial issue, but in an attempt to contribute in some small way to your capacity to lead your colleagues and constituents in this regard, I will begin by giving some specific examples of how basic medical research on apparently abstruse questions had led to major improvements in the practice of medicine. I will then speak to a specific area of need for improvement in our national capacity for health related research, a need with which I am particularly familiar because of my recent service as a consultant, namely health research facilities. I will also make a few remarks about general research support including health science advancement awards and general clinical research centers.

BASIC RESEARCH AND MEDICAL PRACTICE

To promote health, it is necessary to understand how the human body works. Since a human being is a single integrated person, all of the processes occurring within him are related one to another. Any improvement in our understanding of the fundamental processes of life therefore has potential application in many aspects of medicine. It is as difficult to foresee the practical potentialities of basic research as it is certain that such potentialities exist. There are no charts for unexplored seas. But let me be more specific.

More than 15 years ago, the first technically successful kidney transplant was performed. Despite the fact that the surgeons were able to carry out the operation, the patients subsequently died in cases where the donor and the recipient were not identical twins. The tissues of a non-twin recipient recognized as foreign the transplanted kidney, and therefore made antibodies to it. These antibodies led to rejection of the transplant and the subsequent death of the patient. The problem of performing a truly successful kidney transplantation in non-twins thus

became a problem in immunology. Quite independently, other scientists were working on the fundamental biology of the immune process. For example, they found that new born animals do not form antibodies and are therefore tolerant of their own tissues. They learned that it is possible to suppress the formation of antibodies with certain drugs and with radiation. Furthermore, it is gradually becoming possible to type tissues like kidneys in much the same way as we type blood groups. As a result of 15 years of intensive laboratory research on these problems in immunology, we are now just beginning to be able to make successful kidney transplants in non-twins.

In the 18th century, Italian physicist, Galvani observed a frog leg to twitch when certain combinations of metal were applied to it. He not only began the field of electro chemistry, but also made the first of a series of researches into the nature of bio-electric phenomena which has continued to this day. He certainly had no idea that his work would bear a direct relationship to the most modern form of treatment of patients suffering from heart attacks. Yet, the coronary care units which are now being built up throughout this country with the support of NIH funds would not have been possible without the basic researches carried out by Galvani and his scientific descendants. These coronary care units, which allow a continuous electronic monitoring of the electrical activity in the heart, and thus permit instantaneous detection and treatment of abnormalities, have reduced mortality from acute myocardial infarction by as much as 20%.

Basic research on the genetics of bacteria and on viruses which infect bacteria have provided an astounding breakthrough in our understanding of the molecular basic of inheritance during the past 15 years. More recent work on the way in which the genetic material of micro-oranisms can be modified by chemical and psychical agents has opened up exciting new possibilities for control of the abnormal cell division which occurs in cancer.

Innumerable similar examples could be cited. Perhaps I am particularly sensitive to the connection between basic research and clinical medicine because of my own career. I began my work at the Harvard Medical School 20 years ago on the role of salt in the development of experimental high blood pressure in rats. I soon realized that it was hopeless to understand the role of salt in this disease before we understood much more adequately the way in which normal cells regulate their salt composition. I therefore became interested in the functions of cell membranes. The exceedingly thin layer which divides the inside from the outside of all living cells.

The way in which membranes control the movement of the positively charged ions, sodium and potassium, is very important in many cellular functions. These functions include the way in which nerve, skeletal muscle, cardiac muscle and smooth muscles (like those which control the size of small arteries and thus the blood pressure) can conduct impulses and transmit them from one cell to another. Membrane transport of sodium and potassium ions also underlies the capacity of glands like the kindey, the pancreas, the salivary glands, the microscopic glands which line the wall of the intestine, even the lacrimal glands which form tears, can produce their characteristic secretions. Indeed, without this regulated transport of sodium and potassium ions, the cells of the human body would tend to swell up and burst. Clearly, any fundamental progress in understanding this process would be of enormous value in many different aspects of medicine. Quite recently, we have been working in our laboratory with an antibiotic which is formed by a bacterium and which has the capacity to make artificial and natural membranes highly selective for potassium as compared with sodium. It is entirely possible that this compound may provide an important clue to understanding how human cell membranes distinguish between sodium and potassium and also how to design drugs which can accomplish this selection. Thus, the work of a micro-biologist interested only in bacteria and antibiotics may ultimately prove to be of great value in the treatment of membrane diseases of the heart and the brain.

I may note in passing that, for the first time in my experience, scientists in the Soviet Union are making important contributions in the field of the physiology and the biochemistry of cell membranes. A similar statement can be made about France. In both cases, these developments are undoubtedly related to a marked increase in the investment which these nations have made in basic medical research. The world is not standing still. If we wish to maintain our present position of leadership in medicine, we must increase our investment in

basic medical science. It is for you gentlemen to decide whether this matter is of sufficient concern not only to our citizens, but to people throughout the world to justify the kind of national effort which the United States can and, in my opinion, should make.

HEALTH RESEARCH FACILITIES

The record

Following the Korean war, it became obvious that it was necessary to increase the amount of medical research carried on in the United States was required. It became particularly evident that we needed more laboratories in which our medical scientists could work. The Congress in its wisdom responded to this need by starting the Health Research Facilities Program in 1956. Since that time, this program has granted approximately $400,000,000 to more than 400 institutions for the construction of health research facilities in every state of the Union. Medical schools, dental schools, schools of pharmacy, hospitals and research institutes have all participated on a 50–50 matching basis with the Federal Government in this construction effort.

With this response, we were able to meet the challenge of the times and assume a position of leadership in world medical science. Recognizing the value of this achievement and also taking note of the increasing needs for expansion of the program, the Congress passed the Health Research Facilities Act of 1965. The provisions of this act were based on a careful study of the needs of the Nation for construction of new and renovation of old health research facilities during the fiscal years 1967, 1968 and 1969. As a result of this study, you and your colleagues voted to allocate the sum of $280,000,000 for this purpose during the three year period. In direct opposition to these recommendations of the Congress, the President and his budgetary advisors recommended for expenditure on health research facilities only $21,000,000 in fiscal year 1967 and $35,000,000 for fiscal year 1968. Apparently, this group felt that the needs of the Nation for health research facilities had been largely met and that no substantial further expenditures were or are required. This decision on the part of the President has been a source of amazement to me and to my fellow medical scientists. I would therefore like to take a moment of your time to set the record straight on the national need for health research facilities.

The requirements

Because of the peer review system used by the NIH to obtain advice with regard to the quality of applications for support, I have had an opportunity to visit many institutions which have applied for grants from the Health Research Facilities Branch (HRFB) during the past three years. The severity of review of these projects is indicated by the fact that between 30 and 40% of the applications are disapproved on the basis of the relatively low quality of the medical research performed by the applicant institutions.

Despite this conservative stewardship of the funds placed at its disposal, the HRFB has been totally unable to meet the demonstrated needs of medical scientists for adequate working space. By the end of fiscal year 1967, there will be more than $85,000,000 worth of approved but unfunded grants for health research facilities. These applications have received and passed the most careful review by their scientific peers. In each case, the applicant institution has been visited and been found on direct examination to seriously need and deserve on merit additional health research space. These institutions have not been able to proceed in efforts to meet the needs of the Nation for more basic medical rsearch simply because of lack of funds.

I would like to emphasize that this lack of funds available to support construction is not limited to Federal sources. Throughout its history, the Health Facilities Program has operated with 50–50 matching. During recent years, it has become increasingly difficult for universities, hospitals, and research institutes to acquire the required non-federal funds which are necessary for such a project. It seems to me that this is short-sighted policy. A research facility which costs $5,000,000 for construction requires about $5,000,000 per year for operation. The first ten years of medical research in such a facility would thus cost about $50,000,000. Frequently, the entire project is stopped at the outset because the applicant institution cannot produce the required 2.5 million dollars for matching the construction grant. Thus, the nation is deprived of an investment in medical research because the applicant institution cannot produce in one lump sum approximately 5% of the ten year cost of the effort. It seems to me very much in

the national interest to attempt to work out as soon as possible a matching formula which prevents these serious delays in beginning needed projects for construction of health research facilities.

It is important to recognize that decisions which you gentlemen make in the next few months with regard to this appropriation will have important effects on our medical research effort not just this year but in five and ten years. The reason for this is that there is a considerable lag between the time when an institution is able to formulate its plans for extension of research facilities and when research programs to be carried out in the new laboratories can begin. For example, approximately three years elapse between the time when an application is approved and funded and when the facility can be occupied and used. Furthermore, failure to meet the needs now simply adds to accumulated but unfunded applications. Thus, based on recent past experience, it can confidently be predicted that at least $60,000,000 of approved applications will accumulate during fiscal year 1968. If the President's recommendations are followed, this will mean there will be $110,000,000 of approved but unfunded applications at the end of that year. It is with these considerations in mind that I have formulated the following recommendations with regard to the Health Research Facilities appropriation.

Recommendation

I recommend that the sum of $170,000,000 be appropriated for the construction of health research facilities during the fiscal year 1968. This sum, which incidentally conforms with the recommendations of the Congress as expressed in the Health Research Facilities Act of 1965, will allow funding the approved but as yet unpaid applications which have accumulated as a result of the reduced appropriation last year. This sum includes not only $145,000,000 for the construction of laboratories and related general research facilities but also the sums of $13,000,000 for construction of animal resources, $5,000,000 for construction of primate centers, and $6,000,000 for mental retardation centers. The latter three items will require new legislation whereas the former sum can be allocated under the provisions of the existing act. A special word about the need for animal resources and primate centers is in order. Experimental animals are absolutely essential for modern medical research. Because of the urgent need for construction of laboratory space, it has frequently been very difficult for research institutions to produce the additional funds for construction of animal facilities. It is extremely important that this situation be improved as soon as possible in order to assure continued humane living conditions for experimental animals and to provide an increased supply of such animal for legitimate scientific purposes.

GENERAL RESEARCH SUPPORT

The record

As the size of the research effort carried on in universities, hospitals, and research institutes has grown, it has become increasingly clear that broad institutional support for such efforts provides a needed flexibility which the traditional individual grant system cannot meet. For example, it is frequently very difficult for peers outside of an institution to evaluate the progress of young investigators. This can be done best by his colleagues at the home institution. Furthermore, there are many hidden general expenses which make the cost of maintaining a total research establishment excessive in relation to the supply of individual grant funds. The provision of an adequate supply of experimental animals is a case in point. Recognizing these institutional needs for funds to provide a base from which individual research efforts can be mounted, the NIH instituted the program of General Research Support Grants. The magnitude of this grant to a given medical school is in direct proportion to the size and number directly supported research projects carried out in the institution. This form of research support has proved to be enormously valuable in all of the schools of medicine in the United States. I am certain that I speak for all of the Deans of such schools when I congratulate you and your colleagues for your creative support in this venture.

Requirements

In order to maintain the General Research Support Grant in its present relation to project supported research and in order to provide support for new medical schools, it is essential that the magnitude of the appropriation for this program be increased.

Recommendation

Accordingly, I recommend that the appropriation for the General Research Support Grant be increased from the $61,700,000 recommended in the President's budget to $70,000,000. Of this sum, I recommend that $46,000,000 should go to the General Research Support Program directly and that $12,000,000 each go to the Bio-medical Sciences Support Program and to the Health Sciences Advancement Award Program. The Health Sciences Advancement Award, which singles out on a competitive basis worthy institutions which are capable of making a major advance in their research capability, seems to me a particularly valuable activity of the NIH, one which deserves encouragement. There is a quality of critical mass required for outstanding basic research. Frequently, a substantial investment in one institution can yield many times its original value by allowing the institution to increase the size and competence of its faculty above this critical value.

CLINICAL RESEARCH CENTERS

The Clinical Center Program of the NIH, both in the form of general clinical centers and clinical centers for specialized activities such as coronary care units, have proven to be very successful in promoting improved modern clinical care. Research involving patients is of necessity a team effort. These clinical centers have provided the support necessary to gather experts in various related disciplines who can then work together on specific areas of mutual concern, for example, cardiac diseases, metabolic diseases, etc. I strongly recommend continued and increased support for this activity.

	General research and services		Other appropriations	
	President's budget	Recommended	President's budget	Recommended
Division of Research Facilities and Resources:				
General clinical research centers	$30,443,000	$44,000,000	----------	----------
Scientific evaluation	305,000	305,000	----------	----------
Special research resources	10,850,000	19,400,000	----------	----------
Animal resources	5,100,000	8,250,000	----------	----------
Primate centers	10,500,000	12,500,000	----------	----------
Fellowships	200,000	200,000	----------	----------
Training	318,000	500,000	----------	----------
General research support [1]	----------	----------	$61,700,000	$80,000,000
Health research facilities [2]	----------	----------	35,000,000	170,000,000
Direct operations	4,298,000	5,400,000	----------	----------
Subtotal, Division of Research Facilities and Resources	62,014,000	90,555,000	96,700,000	----------
Office of International Research	14,105,000	15,125,000	----------	----------
Division of Computer Research and Technology	4,675,000	4,675,000	----------	----------
Medical engineering development	347,000	347,000	----------	----------
Total, general research and services	81,141,000	110,702,000	96,700,000	----------

[1] Provided by allocation from the research budgets of the various National Institutes of Health.
[2] Appropriated independently under the Health Research Facilities Construction Act.

Dr. TOSTESON. At the outset of this afternoon's long and rather arduous activities from your point of view, you mentioned seals. Seals are a kind of whale and whales have had, as you know, a long history in the economic and cultural life of our country. You can talk about whales, but I would like to request perhaps a different role. I think I would prefer the role of Captain Ahab, that singular whaling man who went over the seven seas looking for a white whale called Moby Dick.

My ship I would take to be laboratories, medical research laboratories of the country and my quarry, my whale, the ignorance about

fundamental biological phenomena which stands between us and the cure of diseases which continue to plague our citizens.

I am particularly grateful to talk to you about the General Services appropriation for the NIH because it is in many ways fundamental to all of the research activities supported by the agency.

It is always easier and more pleasant to talk about the spires rather than the foundation, to talk about the fellows who throw passes and make touchdowns than the guys who block and tackle in the line. I would submit that no one has ever tried to build a skyscraper or beat the Green Bay Packers without giving careful attention to the fundamentals.

Now, my position about the appropriation for these fundamental basic aspects of general research support by the NIH can be said in a very few words. I consider the health of our citizens to be the most valuable asset of our country. By health I do not mean the mere absence of disease, but the capacity of each of the citizens of our country to fulfill the total potentialities of his person, the path toward a complete achievement for greater health of our citizens I think is very clear. It has been demonstrated by what amounts to now four centuries of scientific research beginning approximately at the time of the Renaissance. It is particularly clear because of the programs that the NIH has supported in the past 20 years. It is the path of basic medical research. Despite the unprecedented advances of the past 20 years, it is my opinion that many more challenging problems lie before us rather than behind us. Because of the fantastic increase in our population, because of the increasing numbers of older persons who have different sorts of medical problems, because of the almost unbelievable and growing complexities of our society, the need for more medical research and better medical research is increasing and is increasing at an increasing rate,

I think all we have to do is to consider such developments as: the pollution of our atmosphere; the continuing introduction into common usage of new chemicals—food additives, new drugs—about which we often know too little; the new social relations which emerge from the vast urban centers that are growing throughout the land.

All of these insure the introduction of new medical problems, not to mention all the ones that we have not solved as yet.

In order to meet this challenge, we need more scientists, more laboratories, more technicians working in facilities which are equipped with the most sophisticated modern instruments. Such an effort requires money. My purpose here this afternon is to urge you and your colleagues in total sincerity and seriousness to meet this urgent need by increasing the appropriation for the General Research and Services budget of the NIH.

A review of the record of the Congress in supporting these activities over the past 20 years might lead one to conclude that the intensity of my concern is baseless. However, I share with many of my colleagues the fear that a false complacency has grown up over the past several years about the relation between the needs and the present level of support of basic medical research.

Mr. FLOOD. Do you read the election returns, Doctor?

Dr. TOSTESON. Yes, I try to.

Mr. FLOOD. Thereby hangs the tale.

Dr. TOSTESON. Yes, that is right. I wonder whether the interpretation of the election returns is straightforward in that regard, but I certainly am not in a position to say.

Mr. FLOOD. That remains to be seen. I am equally curious.

Dr. TOSTESON. Well, in my opinuon anyway, it is simply not true that this sector of our national life is adequately financed at the present time. We spend considerably less than 1 percent of our total Federal budget on basic medical research diretced toward the health of our citizens which I submit is of more than 1 percent import to the taxpayers.

In order to maintain the present level of effort in the health research field it has been conservatively estimated that an increase of about 10 percent per year is required. However, as I have indicated to you a moment ago, in my opinion, the problems are not static and we cannot afford to maintain our effort at a constant level. We must increase it in order to meet the challenges.

The situation is literally dangerous not unlike certain parallels in clinical medicine, like a boil that is going to fester unless we do something about it.

I think one major basis for this mood of complacency derives from the difficulty which many people who are not involved in medicine and the medical sciences have in understanding absolute dependence of progress in medical practice on basic medical research.

This difficulty is not surprising because research can often appear to concern problems which are at first glance unrelated to the area of ultimate clinical usefulness.

Dr. Rhoads gave you a few examples of this sort. This often leads to the conclusion that basic research is some kind of play and it is never popular to pay hard-earned money in support of nonsense. I know that you are very well informed on this crucial issue but I thought in an effort to make some small contribution to your capacity to lead your colleagues and constituents in this regard I would like to begin by giving some specific examples of how basic research, apparently totally unrelated to clinical practice, has turned out to be of crucial importance in improving clinical care.

After I have done that I would like to talk about one specific area of our national need; namely, the need for more and improved health research facilities.

I single out this specific part of the "General services and research support" appropriation for comment for two reasons. One is, I think it is the section of the appropriation which is most glaringly out of line with our needs. Secondly, it happens to be an area with which I have had some personal familiarity as a result of services as a consultant to the National Institutes of Health.

With regard to the relation between basic research and medical practice, I begin by pointing out that to promote health it is necessary to understand how the human body works. Since a human being is an individual person, all the processes occurring within him are related one to another. The improvement in our understanding of the fundamental processes of life, therefore, has potential application in many aspects of medicine. It is a difficult thing often to foresee the practical

potentialities of basic research as it is certain that such potentialities exist. Columbus set out for he did not know where, somewhere to Asia, and he ended up in America.

Let me be more specific. About 15 years ago it became technically possible to transplant the human kidney, that is to say, for the surgeon to perform the operation in such a way that the patient did not die on the table. However at that time all cases involving the donation of a kidney to the patient by any subject other than an identical twin, the recipient subsequently died. The reason for death was recognition by the recipient that the donor's tissues were foreign and the subsequent production of antibodies to the donor's kidney, said antibodies ultimately causing rejection of the kidney and death of the patient.

So it became apparent that people who were interested, the kidney doctors, in doing kidney transplantation, that the key lay in the solution of a problem in immunology. Quite independent of this research on the immune process had been going on for a long time in other laboratories carried out by other scientists who, in many cases, didn't even know about the problem of kidney transplantation, research stimulated by the realization of its importance to resistance to infection, and so on. These scientists had found out a number of interesting things. They found out, for example, that there is a period shortly after the birth of an organism—in the neonatal period when the organism does not make any antibodies. It is a period called immune tolerance. You can appreciate that it would be very useful because it permits the newborn organism to make its own new tissues without the characteristic response to the introduction of foreign tissues.

So it became obvious that if you could make the recipient in a transplant situation tolerant in the sense that the newborn is, it might be possible to implant new and foreign tissue successfully. In other laboratories, other scientists had found out that the formation of antibodies could be suppressed by drugs and radiation. In still other labs, it turned out that tissues, like kidneys, could be typed in somewhat the same fashion that blood cells are typed prior to blood transfusions.

After 15 years of intensive basic laboratory research we are just now beginning to be able to perform successful kidney transplantations between nonidentical twins.

Another example: there was an Italian physicist named Galvani, who, in the 18th century, found out a muscle would twitch if you put two different kinds of metal on it. This observation not only started the field of electrochemistry but also began a series of investigations into the so-called bioelectric phenomena which has continued down to the present day. I am sure Galvani did not have any idea that in a very direct way one of the outgrowths of his work would be the coronary care units that are now growing up around the country with the support of NIH funds. On these units it is possible to continuously monitor the electrical activity of the heart, electronically, and thus to detect instantaneously abnormalities and to initiate very rapidly appropriate treatment. It is conservatively estimated that these units have reduced morality in the immediate period after a heart attack by as much as 20 percent. Maybe I am particularly interested in this, what I consider to be crucial relation between basic research and medical practice, because of my own career. I guess we all try to reproduce our own.

I began my research 20 years ago at the Harvard Medical School on the subject of the relationship between salt and experimental hypertension. As I got into the work it soon became obvious that we were not going to understand very much about sodium and hypertension until we understood much more clearly how normal cells regulate their composition of sodium ions, the positively charged sodium in body fluids. So I got interested in the membranes that separate the inside from the outside of cells and in particular how these membranes regulate the movement of sodium ions and potassium ions between the inside and the outside of cells. It turns out that this process is very important to a wide range of cellular functions. For example, it is involved in how nerve cells or skeletal muscle cells or cardiac muscle cells or smooth muscle cells conduct impulses and transmit them from one cell to another. It is also involved in the secretion of fluids by such widely differing glands as the kidney, the salivary glands, the pancreas. In fact, if it were not for the regulation of the sodium and potassium content of cells, all of the cells in the human body would tend to swell up and burst. So efforts in recent years have all been directed at understanding this problem of membrane function—membranes from anywhere, as far as we are concerned—because we realized their applicability to all these areas of bodily function.

Just recently we have come across a compound which is an antibiotic made by bacteria. This compound has the property of producing a highly specific permeability, that is, the ease of penetration for sodium ions as compared with potassium ions through artificial and natural membranes.

We think that this is a very important clue to understanding how natural membranes tell the difference between these substances. It could very possibly lead to the synthesis of drugs which could selectively modify this process. If this turns out to be true, a microbiologist interested only in bacteria and antibiotics would have provided the clue that will lead to the improvement of membrane-determined disease of the heart, arrhythmias of the brain, and convulsive disorders. I might note in passing that in the last couple of years, in marked contrast to my prior experience, the scientists of the Soviet Union are making very important contributions in the field of membrane research. The same can be said of France. I am sure that this is in direct relation to the increased investment made in both those countries in basic medical research. The world is not standing still. If we are going to continue to maintain our present position of leadership in medicine and medical research I feel certain that we are going to have to increase our efforts in this area.

I would like to turn now specifically to the issue of the support for the construction of health research facilities.

As you know, following the Korean war it became obvious that we needed more laboratories if we were going to begin to meet the needs of the Nation in this regard. The Congress in its wisdom responded by starting the health research facilities program in 1956. Since that time the program has made grants of about $400 million to over 400 research institutions, universities, hospitals, medical schools, dental schools in every State of the Union.

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All of these projects have been carried out on a 50–50 matching basis and as a result of this effort we have been able to meet the challenge of the times and assume our position of world leadership in the medical sciences. Recognizing the value of this achievement and also the need for continuing effort, you and your colleagues passed the Health Research Facilities Act of 1965 which authorized the expenditure of $280 million during fiscal years 1967 through 1969 to support construction of health research facilities.

This, in my judgment, prudent and forward-looking legislation was based on a careful study of the needs of the Nation for medical research laboratories.. In direct opposition to these recommendations of the Congress, the President and his budgetary advisers recommended for expenditure on health research facilities during fiscal 1967 only $21 million, of which $6 million was earmarked for mental retardation centers and for fiscal 1968 is recommending only $35 million. Apparently this group felt that no substantial further expenditures were or are required. This decision on the part of the President and his colleagues has quite literally appalled me and, I might say, my fellow medical scientists. I therefore would like to take a moment to try and set the record straight with regard to the national need for medical research facilities. I think I know something about this because I participated in the peer review system which the NIH uses in this, as in all other areas of its activities. As a result of this system, I have had an opportunity to visit many institutions which have applied for funds to support the construction of laboratories.

The severity of review of these projects can be appreciated perhaps if you realize that between 30 and 40 percent of the applications are disapproved because they cannot compete on the basis of scientific merit with other institutions. Despite this conservative stewardship of the funds placed at its disposal the Health Research Facilities Branch has been totally unable to meet the demonstrated needs of the medical scientists for working space. By the end of fiscal year 1967 there will be more than $85 million worth of scientifically-approved but unfunded applications. These applications have received and passed the most careful review by the scientific peers. In each case the applicant institution has been visited and been seen on direct examination to really need the new or renovated facilities.

These institutions have not been able to proceed in reference to meet the needs of the Nation for more medical research simply because of a lack of funds. I would like to emphasize that this lack of funds is not limited to Federal sources. Throughout its history, as I mentioned earlier, the health research facilities program has operated on a 50–50 matching basis. During recent years it has become increasingly difficult for universities research institutes and hospitals to acquire the required non-Federal funds which are necessary to initiate such a project.

It seems to me that this is a shortsighted policy, if one considers the 10-year life of a research program, housed in a new facility. If you do this the figures add up something like this: If the building costs $5 million to construct, it will cost about $5 million per year to operate research in it. So the overall cost for 10 years of a research in a facility will be $5 million for the initial outlay and $50 million for operating expenses.

Frequently this whole effort is halted at the outset because the applicant institution cannot come up with one lump sum, with the $2.5 million to match the Federal grant. It seems to me this is inconsistent with the philosophy of institutional participation which hase been applied recently by the Congress to other forms of research support. That is to say, the concept of cost-sharing. I do not presume to be able to advise you people as to the best way to work this out but I certainly feel that a more sensible matching arrangement should be sought in the near future if we are really going to try to meet our national needs for research facilities.

I would also like to point out that it is important to recognize that decisions which you and your colleagues make now with regard to health research facilities will have great significance for a long time in the future. The reasons for this are obvious. One is that there is a considerable lag between the time when an institution formulate its plans to go ahead with the construction of laboratories, and the time when the laboratories become operational. It is now estimated that about 3 years lapse between the time in which an application is funded and the building is actually in use. So the funds in the appropriation request before you relate to buildings that will be completed in 1971.

Furthermore, the failure to meet the needs now simply adds to the number of approved but unfunded applications that are on standby waiting to go. This seems to me compounding foolishness.

Well, with these considerations in mind then I recommend the following actions by this committee and by the Congress with regard to this aspect of the appropriations for the NIH. I recommend that the sum of $170 million be appropriated for the construction of health research facilities during fiscal year 1968. This sum which, incidentally, conforms with the recommendations of the Congress as expressed in the Health Research Facilities Act of 1965, will allow funding approved but as yet unpaid applications which have accumulated as a result of the reduced appropriation last year.

This sum includes not only $145 million for the construction of laboratories and related general research space but also sums of $13 million for construction of animal resources, very much needed, $5 million for construction of primate centers and $6 million for the construction of two additional mental retardation centers. The latter three items will require new legislation, whereas the former sum can be allocated under the provisions of the existing act, as I understand it.

A special word about the need for animal resources and primate centers is in order. Experimental animals are obviously absolutely essential for modern medical research. Because of the urgent need for construction of the laboratory space it frequently has been very difficult for research institutions to produce the additional funds needed to remodel, update, and expand their animal facilities. It is extremely important that this situation be improved as soon as possible, not only to assure the continued humane treatment of the experimental animals but also to insure the development of needed new strains of animals to be used for legitimate scientific purposes.

I guess I could summarize my position on this whole matter, Mr. Flood, something like this: In the most serious terms I implore you and your colleagues to help us build laboratories which we desperately

need if we are going to continue to build and enlarge the edifice of medical knowledge which will insure the health of our citizens. In my opinion, this Nation is facing a future beset with complexities and perils which are literally without precedent in the history of man but also facing a future which holds the promise of what Norbert Wiener used to call the "more human treatment of human beings."

I would like the opportunity to continue the hard, creative mental work—that is what research is—that will help us to see through the complexities and fufill the promise.

Thank you for your attention.

Mr. FLOOD. You plead well.

STATEMENT BY DR. H. STANLEY BENNETT

On the subject again of General Research and Services we will now hear from Dr. H. Stanley Bennett.

Dr. Bennett is the director of laboratories of cell biology, University of Chicago, Chicago, Ill.

Dr. BENNETT. Thank you.

It is a pleasure to be with you. My predecessors have been very eloquent and have presented the general lines of argument which are my concern. I have prepared a statement, Mr. Chairman, and I would like to ask permission to have this inserted in the record.

Mr. FLOOD. It will be inserted at this point, Doctor.

(Dr. Bennett's statement follows:)

TESTIMONY OF H. STANLEY BENNETT, M.D.

Congressman Flood, honorable members of this committee, may I thank you for your courtesy in allowing an opportunity for this citizen to present his viewpoints relating to appropriations for those portions of the budget of the National Institutes of Health which support activities of the Division of Research Facilities and Resources.

I am the Robert R. Bensley Professor of Biological and Medical Sciences at the University of Chicago. I served for five years as Dean of the Medical School at Chicago, and for twelve years on the faculty of the Medical School at the University of Washington. Except for four and a half years of service in the Navy Medical Corps in World War II, I have spent my entire professional life of over thirty years in research and teaching in biological and medical sciences. I speak thus from a long familiarity with the state of our knowledge upon which the health of our fellow citizens depends.

I am not old enough to remember the terrible epidemics of cholera, typhoid fever and diphtheria which ravaged our country during the last century, but which no longer plague us, thanks to knowledge gained from research, to the skilled application of this knowledge, and to its dissemination, through good teaching. My own father contracted typhoid from swimming in the Cumberland River near Nashville in 1890. Though desperately ill, he recovered, but his family mourned the loss of two children who died in infancy. In those days, every family faced tragedy from infectious disease.

In my student days, lobar pneumonia, tuberculosis, and meningitis represented fearsome killers, and polio crippled thousands every year. Through research, knowledge was gained which led to great reductions in losses to these and to other infectious diseases. The life of my own daughter, Anna, now the mother of our third grandchild, was saved when she was three or four years old, from the prompt application of new knowledge gained through research. She developed a fulminating and rapidly spreading streptococcus infection which was stopped in its tracks by penicillin, then newly discovered, leading to a dramatic recovery which we thought to be almost miraculous. When playing with my handsome young grandson, I am reminded of the debt I owe Fleming and Florey for discovering the agent which saved the life of the boy's mother. We are

grateful, also, to the agencies which supported financially the research leading to these discoveries.

Thanks to the research of Dr. Enders, of Dr. Salk, of Dr. Sabin, and of others, poliomyelitis has almost disappeared from our country, through the discovery of effective preventive vaccines. Here the personal impact of the research is less evident to the individual family than in cases where a desperately ill child is saved by application of a recent discovery. As the polio vaccines work, the vaccinated child just never gets the disease, yet the absence of the crippling affliction in family after family throughout the nation is seldom noticed by individual parents. But we know that many of these families would be facing trial and tragedy, had vaccines not been discovered. Members of Congress can rightfully take pride and credit for their statesmanly part in supporting, through authorization and appropriation, much of the research which made these discoveries possible, and the research training which qualified some of the scientists who participated in the work. Of course, state and private agencies also have important roles in supporting medical research. In partnership with these nonfederal agencies, the federal support holds an honored, predominant place, for which a grateful and healthy constituency extolls its congressmen.

But much remains to be done, as our citizens are not yet free from the threat of dread disease. Cancer, heart disease and stroke threaten those who pass middle age, and genetic disease and injury will afflict our young. The problems before us are formidable in their complexity. We can expect them to yield little by little as new knowledge and technology is discovered. Congress can do much to accelerate this yielding by statesmanly action in providing adequate support for the research and manpower needed. Success will create a grateful, an appreciative, and a healthy citizenry, free from many of the apprehensions and afflictions which now beset them.

The President, and the Bureau of the Budget, in recommending appropriations to the Congress, have not, in this citizen's view, made realistic provision for the health needs of our people. For the support of medical research and research training, one finds the fiscal recommendations in short measure. In recognition of the necessity for resources and facilities for research, the figures in the President's budget reveal alarming deficiencies which threaten to cause a faltering and a lessening of momentum for a large part of our health-related research. These shortcomings can be seen clearly in the proposed budget for the Division of Research Facilities and Resources of the National Institutes of Health. In order to assist this committee in assessing these matters, I now present a chart which compares the President's recommendations for appropriations for the work of this division with the necessities of the several items as perceived by this citizen.

Health research facilities construction appropriation

	General research and services		Other appropriations	
	President's budget	Citizen's budget	President's budget	Citizen's budget
Division of Research Facilities and Resources:				
General clinical research centers	$30,443,000	$44,330,000		
Scientific evaluation	305,000	305,000		
Special research resources	10,850,000	20,680,000		
Animal resources	5,100,000	8,400,000		
Primate centers	10,500,000	12,600,000		
Fellowships	200,000	280,000		
Training	318,000	512,000		
General research support [1]			$61,700,000	$72,100,000
Health research facilities [2]			35,000,000	180,000,000
Direct operations	4,298,000	5,410,000		
Subtotal, Division of Research Facilities and Resources	62,014,000	92,517,000	96,700,000	252,100,000
Office of International Research	14,105,000			
Division of Computer Research and Technology	4,675,000			
Medical engineering development	347,000			
Total, general research and services	81,141,000		96,700,000	252,100,000

[1] Provided by allocation from the research budgets of the various National Institutes of Health.
[2] Appropriated independently under the Health Research Facilities Construction Act.

Let me start my discussion of this citizen's budget by mentioning once more, with gratitude, the preservation of beloved members of my own family through the application of discoveries made possible through research. One can safely say that every family in our country has similar reasons to be thankful for health and for sparing of loved ones, and for these benefits, the wise support of medical research by the Congress over many years has an honored and essential role.

In addressing ourselves to the ills and diseases yet unconquered, the fundamental part played by the Division of Research Facilities and Resources deserves special emphasis. This part of our splendid National Institutes of Health has responsibility for the basic resources required for the accomplishment of biomedical research throughout the country. Just as land must be cleared, machinery designed and constructed, and transportation provided before food can be delivered to the markets for purchase by the housewife, so laboratories, computers, animal resources, clinical research centers, and the like, must be set up and maintained so that research can be done to save lives threatened by cancer, heart diseases, and other remaining threats to health and longevity. And just as our country finds its must once more expand our base for food production, so must we now expand our base for reducing human suffering and prolonging the lives of our people. For this need, the President's budget is dangerously weak. It must be brought realistically into line with our nation's requirements or the strength of our medical research will falter and the aspirations and hopes of our citizens dismayed.

Let us look at some of the specific line items in the budget. The President recommends 35 million dollars as federal matching money for Health Research Facilities. Two or three years ago, the Congress, recognizing the growing national need for laboratories for medical research, increased the authorization for annual appropriations of federal health research facility construction funds from fifty to one hundred million dollars a year.

The country is rapidly expanding its medical school plants in order to meet our rising need for physicians. Last year Congress passed legislation authorizing the establishment of federal standards for housing and care of animals used in medical research. The need for new and remodeled research facilities is undiminished. A huge backlog of excellent construction proposals lies before us, sufficient to utilize more than the maximum amount now authorized. Our medical schools, hospitals and research institutions are capable of raising non-federal research construction funds sufficient to match more than the current federal authorization, which is, in turn, nearly thrice the sum recommended by the President. Much of our research is threatened by the difficulties some institutions face in bringing their animal facilities up to federal standards. These needs of research facilities construction, clearly evident to anyone who has studied carefully our national research picture, require an immediate federal appropriation for health research facilities of 180 millions for the coming fiscal year, and a raising of the authorization of this item to two hundred million a year. Federal investment in health research facilities of this magnitude is needed to house the research expansion required for our nation's health.

Another research necessity facing acute and chronic financial malnutrition on the basis of the President's budget is the item for Special Research Resources. Here the President recommends something under eleven millions, whereas the national need is about double this. I have estimated our need at a little over twenty million dollars, and recommend an appropriation at this level. Under this item, our nation supports large biomedical computer centers, laboratories for the pilot preparation of rare enzymes and other biochemicals not yet ready for commercial production, and other special and costly research resources which serve the needs of many separate biomedical research projects. These large resources have capacity far beyond the needs of any single research project, and costs beyond their budgets, but, through the provision of computation or other expert services, greatly enhance the productivity of many other project grants, and extend their capabilities to achievements which otherwise would be impossible.

Expansion and strengthening of our national effort in biomedical computation is especially urgent. This brilliant technology which—some economists tell us—is more than any other single development responsible for our nation's strength in business, science, economics and arms, is capable also of contributing greatly to health. One can reasonably expect that research will teach us how to use

computers to aid us in diagnosis, in tracing and stopping epidemics, in handling hospital records and medical histories of patients, in identifying antidotes for poisons, in processing laboratory data, as well as in handling data and calculations from research. The full development of computer technology will require much more research, but offers promise of very large savings in costs of medical services.

Development of instrument resources is also essential for research and for direct patient care. The management of severe heart disease, the diagnosis of cancer, the determination of the nature of anaemias, usually requires the application of complex instruments which, a few years ago, were in the research and development category. Thus a constant effort in instrument development research is necessary for preserving our effectivenesses in diagnosis and care of the sick. Several bioinstrumentation development laboratories are supported in this country through NIH grants. These require additional support, and more laboratories are needed. It is particularly important that several centers be established for development of high voltage and high resolution electron microscopy, and of novel forms of scanning and analytical electron microscopes. The electron beam is a powerful tool for revealing fine details of structure in living things. Even in its present crude form, the electron microscope has revolutionized the sciences of anatomy and pathology, and has given us profound new understanding of secrets of life and of disease processes. With further development, it may permit us to read out directly the structure of complex biological molecules, to picture individual atoms, and to reveal detailed chemical make-up of cells and tissues. The consequences of such developments for understanding of cancer and heart disease are potentially of great value to health, and justify substantial national efforts to increase our capability in electron and ion beam optics as applied to biomedical research. As immediate objectives, we should establish two or three one-million volt electron microscope research and development facilities in this country, and initiate work on five-million volt instruments.

These instrumental, animal, and needs in the Special Research Resources area are so pressing that the program must be promptly expanded. An appropriation of $20,080,000 is required for the coming fiscal year.

The Clinical Research Centers are threatened with crippling under-funding in the President's budget. These centers are absolutely necessary for translating scientific discoveries into practical procedures which doctors can use for the benefit of patients. New knowledge is of little value, unless it is made available to the public in a useful form. This is what the clinical research centers do.

Several thousand people die each year in this country because of kidney failure. Such persons are overwhlemed by internally generated poisons which normal kidneys eliminate, but which accumulate to fatal levels in the absence of proper kidney function. Basic research in the past has taught us what the kidneys do and much about how they do it. In persons with kidney failure, we can remove the poisons for a time by purifying their blood with an artificial kidney, or by inserting in the patient a transplanted kidney from another person. In the first case, the artificial kidney is an expensive piece of equipment, and skilled attendance is required to administer the treatment, which must be given about twice a week for the rest of the life of the patient. There are serious risks of infections and side effects, and meticulous attention to detail is needed. Research is necessary so we can make the procedure safer, cheaper, and more effective. If one chooses the course of kidney transplantation for a patient in kidney failure, one faces a series of dangers and problems just as serious. Usually the body tries to destroy the transplanted organ, recognizing it as foreign tissue, and treating it as it would invading foreign bacteria or viruses. Physicians have tried to prolong the life of the transplanted kidney, and hence the patient, by suppressing the rejection mechanisms, but this renders the patient more vulnerable to infection. Thus, the prolongation of life by transplanted kidneys has been disappointing for most patients of this kind, though some have survived for several years.

Clearly, many lives can be prolonged if our ability to manage permanent kidney failure can be improved. Research directed towards these ends must be carried out on human patients. Our clinical research centers serve as our main national resource for this work, and in them, research carried out has already brought noticeable improvements which can now be used for the benefit of patients throughout the country. But much more research is needed before we can really manage these patients in a way satisfactory to themselves and their families, and for this research, realistic support of clinical research centers is needed.

The clinical research centers have helped us develop effective treatments for some diseases thought, heretofore, to be incurable. Hodgkin's disease—a malignant growth of lymph nodes—has yielded to clinical research at Stanford, where suitable radiation doses and procedures were carefully worked out. Many patients with this once fatal disease seem to be cured entirely, and new hope is at hand for sufferers from Hodgkin's disease as knowledge of the Stanford research spreads throughout the country.

In clinical research centers elsewhere, other improvements in cancer treatment are under way. At my own University of Chicago, some years ago, Professor Charles Huggins discovered that some cancers would respond favorably to hormone treatment. For this discovery he received the Nobel Prize last winter. In the clinical research center at the University of Chicago, doctors are now exploring improved methods of hormone treatment of certain cancers, trying combinations of hormones with radiation and with chemotherapy, searching for ways to prolong life further.

Many persons are now alive whose lives were saved from sudden heart failure by cardiac resuscitation, or whose plugged coronary arteries have been opened by delicate heart surgery. The happy families of these survivors can thank clinical research for the continued presence of their loved ones. Many persons are threatened with diseases or conditions for which satisfactory clinical management is not available. For these millions, our Clinical Research Centers offer a golden hope.

Yet, for these suffering or threatened people, the President's budget offers only a declining program. The cost of hospitalization is rising, and for this thirty million dollars in the budget for Clinical Research Centers, a diminishing level of activity and a decrease in number of research beds is in store. Does the Congress really want to see us falter in the face of so much suffering and need? In order to maintain our centers at full strength in the face of rising costs, an appropriation of $44,330,000 is required—nearly 50% above the Bureau of Budget figure. I am amazed and dismayed at the niggardly budget recommendation for this item. This paltry sum, necessitating a cruel cutback in our nation's clinical research, cannot be defended by knowledgeable, humane people, familiar with the human lives and suffering which are at stake.

I turn next to Animal Resources and Primate Centers. Medical research requires resources of special animal strains from which many research laboratories can draw. Especially valuable are strains of experimental animals of no commercial utility, which carry genes for characteristics which duplicate or resemble human characteristics or disease. Models of human disease or of human physiology represented in such animals greatly facilitates research into those diseases, and expedites the gaining of results beneficial to man.

The regional Primate Centers are devoted to study of animals most closely related to man genetically. Seven have been established in selected regions about the country, and in them are very valuable stocks. Some strains, like the orangutans of the Yerkes Primate Center in Atlanta, may soon become irreplaceable through extermination of the wild stock in Malaysia. Primates have reproductive systems very much like those of humans. Their brains and nervous systems resemble the human ones better than do those of any other animals. Moreover, primates share our susceptibility to many diseases and even show patterns of behavior which can provide lessons to us. For these reasons, primate centers permit research endeavours of particular importance to human welfare.

The budget proposals submitted by the Bureau are insufficient for our national needs. As I perceive them, for Animal Resources, $8,400,000 is required, and for Primate Centers $12,600,000.

May I now draw your attention to the item entitled, "General Research Support." Funds for this purpose are drawn from budgets of the several Institutes of the National Institutes of Health and are allocated to the Division of Research Facilities and Resources for distribution to research institutions in amounts varying with their levels of research and research training activity, the more active and productive institutions receiving the larger appropriations. The President's budget mentions nealy sixty-two millions for this item, but from my experience and knowledge, I find this inadequate, and recommend $72,100,000.

I know of the great value of this fund from first-hand experience, as I served for five years as dean of one of our great medical schools, and came to learn how general research support funds function to provide essential flexibility for the institution's research work. Of course, project type research grants form the

mainstay of Public Health participation in biomedical research at the University of Chicago. These grants are very useful, but they have a certain budgetary rigidity and the reviewing processes consume a good deal of time. Moreover, they cannot be programmed to cover all the research needs of the institution, nor can a single project grant budget, as projected over several years, reflect accurately the unforeseen and unexpected turns and needs of research. The General Research Support Funds provide an essential resource to be assigned by the institution in accordance with local needs and necessities. Used in this way, they permit substantial economies in use of federal and local funds, and provide more research for the dollar. They are essential in many institutions as a resource which can be used to initiate research and research training of new faculty members while their research grant applications are in process of preparation and review, and to provide for orderly completion and termination of research work when the expiration of the term of project grant support does not correspond accurately to the course of the research work itself. In some institutions, General Research Support Funds are used to help maintain some central resource, such as an animal facility, which is utilized by many research projects. From my personal experience and from that of my institution, I can vouch for the importance and value of these funds, and for their contribution to the public interest, and foresee a need of $47,100,000 for this activity.

The same principles outlined above justify confidence in and additional funds to the extent of $12,000,000 for the Biomedical Sciences Support funds, which contribute flexibility and economy in a similar manner to institutions other than Schools of Medicine, of Dentistry, of Osteopathy and of Public Health.

Special mention should be made of the Health Sciences Advancement Awards, two of which have been approved recently on a pilot basis, one to Cornell University in Ithaca and one to the University of Virginia. These grants are designed to establish new centers of excellence and strength in institutions which have demonstrated the potential, but which have not yet developed their programs to the point that they can compete strongly on a national scale. It is desirable that competitive development grants of this kind be open to other institutions throughout the country, in order to increase our national capacity in science and to broaden its geographic base. As I see the need, thirteen millions will be needed for this program.

These three items sum to make the total of $72,100,000 mentioned at the beginning of this section of my testimony.

Mention must also be made of the inadequacy of the President's budget with respect to Direct Operations of the Division of Research Facilities and Resources. The figure in the budget is $4,298,000, whereas actually $5,410,000 is needed. The administrative staff of the Division is short-handed, and, within the budget, can scarcely negotiate and manage the contracts, review and administer the grants, and carry out the program planning and analysis which sound government practice requires. The Division should have the funds which will permit it to strengthen its staff with well-qualified persons in adequate numbers so that its administrative functions can be carried out promptly and thoroughly without overworking its dedicated staff or spreading it too thin. The recent Ruina report stresses the importance of strengthening the capability of the Public Health Service in contract management. It cannot meet the tasks without adequate funds for Direct Operations.

In concluding my formal, prepared testimony, let me stress that the cold dollar figures cited have profound human meaning. I have mentioned that almost every family in the country has members now alive and well whose presence could not be expected except for the results of medical research. Some of these people have been dramatically saved from threatening death, as have my son and daughter, but others—like those who took polio vaccine—have just never gotten sick with the disease in question. But many have been lost because the results of research came too late to save them. I remember a patient of mine thirty years ago when I was on the house staff of the Johns Hopkins Hospital. He had a serious staphylococcus infection. We tried the first of the sulfa drugs, which were then just becoming available. Though he was one of the first to receive the drug, and though the drug saved some of his fellow patients, his illness did not respond, and he was lost to his family and to us. He was a fine, promising boy, who had much to give to his country. I still reflect on the grief of his family, on my helplessness with the best medicines available, and on the

much greater hope we could have offered him, had his illness occurred a few years later, when antibiotics effective against his organism were available.

Today, still, many are threatened with diseases for which research may provide effective answers in the future, but which today cannot be managed in a very satisfactory way. Some will succumb before research provide the knowledge necessary for prevention, cure or palliation, but many can be saved if our research is strengthened, supported and expanded adequately. It is because of my concern for these people and for their families that I have brought my thoughts and my judgments before this distinguished group. I urge that you work for the enactment of this citizen's budget, for the funds thus flowing into research will raise the number of our fellow citizens whose lives will be prolonged and whose families will be rejoiced because the research was not too late for them.

Distinguished Congressmen, I thank you again for the opportunity of presenting my views.

NOTES ON BUDGETARY RECOMMENDATION

(By H. Stanley Bennett, M.D.)

GENERAL CLINICAL RESEARCH CENTERS

$30,443,000 in President's budget
$44,330,000 needed, representing an increase of
$13,887,000, of which
$10,200,000 is for continuing support of existing centers, to provide for increasing hospitalization costs and strengthen some with new equipment and personnel
$3,687,000 is for new centers (10–14), including several out-patient centers, as recommended by the Senate Report of the Committee on Appropriations.

SCIENTIFIC EVALUATION

$305,000 in President's budget seems adequate

SPECIAL RESEARCH RESOURCES

$10,850,000 in President's budget
$20,680,000 is needed
$9,830,000 increase
- $1,920,000 to support ongoing grants at recommended levels
- $1,540,000 for supplemental grants
- $6,370,000 for establishment of new facilities and resources, including several computation centers and four centers for high resolution and high voltage electron microscopy.
  - $1,500,000 for 8 computer centers
  - $2,100,000 for 6 centers for production of biological materials
  - $1,210,000 for grants in information processing
  - $1,560,000 for instrumentation, including electron microscopy

ANIMAL RESOURCES

$5,100,000—President's budget
$8,400,000—Needed
$3,300,000—Increase—needed to upgrade some present resources in the face of new legislation passed last year, and for funding of about 30 new grants for Special animal resources, study of animal diseases, and development of husbandry.

PRIMATE CENTERS

$10,500,000—President's budget
$12,600,000—Needed
$2,100,000—Increase, needed to give support to the seven existing centers as costs increase, to permit them to move to full animal capacity and staffing.

FELLOWSHIPS

$200,000—President's budget
$280,000—Needed
$80,000—Increase, needed for additional special fellowships in animal laboratory medicine, where need for trained experts is acute.

TRAINING

$318,000—President's budget
$512,000—Needed
$194,000—Increase, needed to fund three or four additional training grants in laboratory animal medicine.

GENERAL RESEARCH SUPPORT

$61,700,000—in President's budget
$72,100,000—Needed
$10,040,000—Increase—needed—of this
$3,900,000 for schools of medicine, osteopathy, public health and dentistry, to stabilize their research strength, give them independence and flexibility, and economize on use of project grants.
$4,500,000 for Biomedical Sciences support—for use as above.
$2,000,000 for Health Sciences Advancement—to permit addition institutions to develop as centers of excellence.

HEALTH RESEARCH FACILITIES

$35,000,000—in President's budget
$180,000,000—Needed
$145,000,000—Increase—needed as follows:
$6,000,000 for mental retardation research centers
$15,000,000 for animal resource facilities, at a 3–1 matching level, to be authorized
$6,000,000 for two new primate centers (not matched)
$118,000,000 for health research facilities on 50–50 matching plan.

DIRECT OPERATIONS

$4,298,000—in President's budget
$5,410,000—Needed
$1,112,000—Increase—Needed as follows:
$520,000 for collaborative research and contract administration—8 or 9 positions, and for increases in contracts.
$457,000 for review, approval and administration of grants, allowing for 40 to 45 new positions, including scientists, architects, engineers, auditors, planners, and clerical staff.
$135,000 for program direction; 10–12 new staff members for program planning, analysis and management.

Dr. BENNETT. May I then, since time has passed and you gentlemen have been patient——

Mr. FLOOD. Take your time.

Dr. BENNETT. May I turn to making a few amplifying remarks.

Mr. FLOOD. As you wish.

Dr. BENNETT. I will state that the budgetary figures which I have set before you, as this citizen's recommendation, represent the viewpoint that the President and the Bureau of the Budget have inadequately seen the Nation's needs in the field of medical research and I have mustered arguments which support the position I have taken here. I do not wish to repeat them but I wish to make my viewpoint clear to you. The reason why I support figures for the budget higher than those proposed to the President are because of my perception of the human needs in our country.

I think of medical research as a race against death and suffering, and if research produces knowdedge in time to save an individual then research and society win. But if research does not appear in time and a death results we are the losers and our society suffers.

We heard Dr. Rhoads of your State speak a short time ago about how his life was saved by the application of research which came in time for him, he being a sufferer from tuberculosis. He was saved by the discoveries which led to the production of antibiotics. Of course his family is glad he was saved and as private citizens we can be glad his life was saved because of all the lives he has saved as a surgeon and physician.

I can illustrate this perhaps in human terms with respect to my own family. I have here a picture of one of my daughters and my grandson. I am not asking that this be placed in the record. This is the second one. When she was a little girl she came home one evening with a little red spot on the side of her face. At 11 o'clock the whole side of her face was swollen. I recognized it as a rapidly developing streptococcus infection, and I knew from my student days before antibiotics were discovered that this was almost surely fatal. I was very apprehensive. My wife and I took her to the hospital at 3 o'clock in the morning. She was saved and here she is to give joy to her husband and family. She is a fine young lady. Her husband is a minister in the Anglican Church. They live in Chester County in your State and I think we can anticipate they will make a good contribution to the world.

Here is my son and his wife and their little daughter. His life was saved similarly. When he was a baby he developed a very serious case of intussusception which was fatal before the development of treatment by research.

Mr. FLOOD. What is the condition?

Dr. BENNETT. It is a condition characterized by an infolding of the intestine which causes one part of the intestine to be infolded into another and the blood supply is cut off and unless surgery intervenes this part of the intestine dies and peritonitis results.

This is the experience in one ordinary American family, two children saved by research out of four.

I have seen other examples where research did not come in time. When I was at Johns Hopkins Hospital I remember a young patient who had a very serious staphylococcus infection and some of the early antibiotics were available at that time and it was my privilege to be a young physician on the staff at Johns Hopkins Hospital when the very first antibiotics came on the scene and we had wonderful results from their use. But when we tried them on this boy they did not work. I worked very hard on this boy. I remember the tears in my eyes and those of the family when we lost him. The family were very fine people and he was a very promising young chap. That illustrates the loss to our country when his illness came too early for research. Had he had the same illness later in all probability he would have been saved. I recall another student of mine who developed Hodgkin's disease when I was a professor at the University of Washington. He

was an outstanding student. We gave him the best treatment we could at the time but he died. Had he been sick today he probably could have been saved because through the clinical research centers new methods of radiation treatment of Hodgkin's disease have been developed at Stanford which probably would have saved this young man's life.

We can think, then, of individuals where research has been too slow to save them and others where it has been on time. The thing that worries me about the stringencies of the budget is that it greatly slows down the pace of research and this is inevitably going to mean people who cannot be saved. It is this slowdown of the pace of research that means more of our citizens will encounter serious medical problems for which research is inadequate and they cannot be saved.

This is the real basis for my concern about this budget and the reason why I come before you pleading for my fellow citizens so that we have more like my daughter and son for whom the research comes in time.

Mr. FLOOD. That is a very dramatic presentation.

Dr. BENNETT. Thank you very much.

Mr. MICHEL. I would simply join in the chairman's observation. You have made a very good presentation. I know there are some sizable increases you folks want and desire. This is not a new story to this committee. We find ourselves in a situation, this year particularly, where there are so many pressing needs that it is hard to turn you down but by the same token there are many other considerations, too.

Dr. BENNETT. Well, Mr. Michel, I think our country is a strong, viable country. We have substantial resources and many fine people with great public dedication, and my personal belief, speaking as a taxpayer and a fellow citizen of your State, is I would prefer to see myself and my fellow citizens taxed for the benefit of our health and the future of our children than on any other grounds.

My belief is, speaking as a citizen, that this is a tremendous economy. I am speaking now in financial terms although I would prefer to speak in human terms. But if one wants to speak in terms of dollars, I would answer that the extra productivity the country would gain in the lives saved and the people who would avoid illness would far more than compensate for the expenditures we place in the field of medical research and medical care.

Let me say our Nation faces very rapidly rising costs in medical care, in part occasioned by high labor costs and in part occasioned by the shortage of medical schools. The country has not responded adequately to this need and we need to expand our national plant for training physicians. And we need the research so the doctors we train may be effective to the maximum degree. Within the budget you see a complex interrelated series of problems which our Nation faces and which can only be solved if we insure that the public has the medical care and medical knowledge they need for their own benefit.

Thank you.

Mr. MICHEL. Thank you, Doctor.

Mr. FLOOD. Thank you, Doctor.

WEDNESDAY, APRIL 26, 1967.

NATIONAL CANCER INSTITUTE

WITNESSES

DR. SIDNEY FARBER, PROFESSOR OF PATHOLOGY, HARVARD MEDICAL SCHOOL AT THE CHILDREN'S HOSPITAL
DR. GEORGE MOORE, DIRECTOR, ROSWELL PARK MEMORIAL INSTITUTE, BUFFALO, N.Y.

Mr. FLOOD. We are pleased to have this morning, with reference to the subject of cancer, Dr. Sidney Farber.

Dr. Farber is Professor of Pathology at Harvard Medical School.

I suppose that you have a statement, do you?

Dr. FARBER. Yes, I do.

Mr. FLOOD. Proceed.

STATEMENT OF DR. SIDNEY FARBER

Dr. FARBER. Mr. Chairman, may I express my great pleasure at this opportunity to come before you in behalf of the Citizens' Budget for the National Cancer Institute for fiscal year 1968. I want to congratulate you first, Mr. Chairman. We are very happy that you have taken on this extremely important chairmanship and we are very glad to greet the new members of the committee. I know that you are going to get deep satisfaction from this opportunity to work in the field of medical research and health.

I have had the privilege of appearing before this committee for almost 20 years, and there are others who will appear before you, Mr. Chairman and gentlemen, who have appeared many times also.

What we are doing in this testimony is presenting the needs of the country as a whole. We speak not for any one institution nor for any one part of the country, but about the needs of the country to carry-out much more effective work on the many problems of cancer and of the other many diseases represented in the research programs of the National Institutes of Health.

There has been a revolution, and I call it revolution rather than evolution, in the medical research programs of the country during these past 20 years since the Congress took the leadership in providing resources for institutions throughout the entire country, through the National Institutes of Health, on a level which we had never been able to achieve before.

What this has done has been to open the floodgates of opportunity to research workers who never could have remained in medical research. Through the programs which were approved by the Congress and the President, research institutions have been built in many parts of the country and medical research has been carried on by an immense increase in the total number of research workers, scientists, and medical doctors in the programs of the National Institutes of Health.

Mr. Chairman and gentlemen, we come here in complete support of the many programs of the National Institutes of Health outside the field of cancer; we shall speak specifically of the problems of cancer.

May I also express the great pleasure that we have had throughout the country at the suggestion of Representative Laird that there be created a Fogarty International Research Center in memory and honor of the great man who was chairman of this committee, your predecessor, Mr. Chairman, for so many years.

The problem of cancer is one that must be defined in terms of magnitude of suffering and economic loss—magnitude in terms of deaths—more than 300,000 to be expected this year—in terms of the many different diseases which are included under that term "cancer" which may require different forms of treatment, different cures, different means of prevention.

We are not talking about one simple disease that is sharply circumscribed, such as poliomyelitis. We are talking about more than 100 and perhaps many more different and unrelated disorders which may be prevented ultimately by the discovery of a single phenomenon that is so basic in biochemical terms that it will provide an answer to all of the disturbances to the cell produced by any form of cancer.

On the other hand, we must be prepared to find different methods of treatment, different methods of cure, and prevention for these many different disorders. This, I think, highlights the magnitude of the problem of cancer.

The question is always asked: Has there been progress in the field of cancer since the Congress has increased the funds so markedly? I do not believe there is any doubt in answering that question. When I first entered cancer research, about 40 years ago, the death rate was tremendous and the cure rate was about 1 in 6. In the middle of the 1930's it rose to 1 in 5. Now with the great advances in surgery, in radiotherapy and chemotherapy, at the present time it is about 1 in 3. We must emphasize also that if all of the knowledge that we have today——

Mr. FLOOD. One in three?

Dr. FARBER. We are curing 1 in 3.

Actually, I should have made that more clear. We are curing 1 in 3 today as opposed to 1 in 5 and 1 in 6, 30 and 40 years ago.

This represents tremendous progress but this progress is weakened by the realization on the part of such men as Dr. Moore and myself and many others in the field of cancer research and treatment, that if we could put into effect today, in behalf of all patients, all the knowledge that is available today, we could save 1 out of 2. So we address ourselves to two separate questions: First, how can we bring this knowledge to all people throughout the country so that we could save 1 in 2? Second, what can we do about the half, 50 percent, for whom we have no methods of cure or prevention at the present time?

This second consideration constitutes the field of cancer research.

There have been great advances in recent years in reversing the word "incurable" and changing it to "curable" in a small number of tumors, some of which 10 years ago were not curable at all after there had been spread from the local site to other parts of the body. I refer to the choriocarcinoma of the uterus, for example, the rarer form of cancer of the uterus, or Wilms' tumor of the kidney in children which was incurable after it spread to the lungs. We are now curing these; I am prepared to use that word "cure" today, as many as 90 percent of

all children with Wilms' tumor, whenever they come in with or without metastasis. The figure is lower once it has spread to the lung but we are able to cure 60 percent of these children after this has been spread to the lung, a situation which 10 years ago was incurable.

There have been great advances in the treatment of leukemia and retinoblastoma, a tumor of the eye, and Burkitt's tumor, a leukemia-like condition found in Africa in children. The treatment of Hodgkin's disease has resulted in a great increase in longevity. We are now seeing many more 10-, 15-, and 20-year survivals mainly because of the great efforts of our colleagues in the field of radiotherapy, which incidentally is one of the greatest shortage areas in medicine today.

We are concerned in our research efforts to increase our programs in virology and immunology, in the causation of cancer (carcinogenesis), and in the great field of chemotherapy. Our deepest concern is to obtain resources enough to spread to the study of other forms of cancer, the kind of programs which we have worked out so successfully through the National Cancer Institute in the study of acute leukemia. This is by means of the task force technique. Your committee ordered the National Cancer Institute, 2 years ago, to mount a task force on breast cancer. That is now moving along exceedingly well.

There is a National Cancer Institute task force on choriocarcinoma being established now. We are now hoping to establish task forces which concern the 95 percent of the deaths caused by cancer including lung cancer, prostrate, and bladder cancer, as well as breast cancer and uterus cancer in the female, cancer of the gastrointestinal tract, the stomach and colon, and so on.

Each one of these vital areas will be benefited by the rapid progress which we witnessed when the task force technique, properly supported, was put into effect by the National Cancer Institute. This acute leukemia task force is one of the greatest achievements that we have had in the history of the National Cancer Institute.

These task forces can move only if we have new resources in each one of these fields, provided that we could utilize the non-Government institutions of the country. There are men and women of ability in every part of the country, Mr. Chairman and gentlemen. This has been shown beautifully by the great developments in two places within the last 20 years. One of them is within the last 10 or 12 years where there had been no great cancer research or cancer care programs. This is the one represented by my colleague with whom I have the pleasure of appearing today, Dr. George Moore, director and surgeon in chief of the Roswell Park Cancer Hospital Research Institute in Buffalo. There was nothing 10 or 12 years ago to compare with this immense, magnificent institute and hospital which has been created under his directorship with the aid of the State of New York and the NIH and American Cancer Society. He has attracted scientists from all over the country and other parts of the world.

I might make a similar statement about the M. D. Anderson Cancer Hospital and Research Institute in Houston, Tex. Again, 20 years ago there was nothing but a prairie where today there is a magnificent hospital and research institute with hundreds of people busily doing excellent work.

In the State of Wisconsin it was not very long ago when there was very little cancer research activity. The McArdle Institute has produced more leaders of basic cancer research in this country than any other institute that I could mention. It was established for research and training, as part of the State University of Wisconsin. It attracted support, much of it Federal support, and is now paralleled by a splendid clinical program under Dr. Curreri, a surgeon and chemotherapist. The two parts, clinical and research laboratory research programs, have gone ahead in first-rate fashion. This represents another center of leadership in the country. The oldest, the Sloan Kettering Memorial Cancer Center completes the list of large cancer centers with concentrations of experts in one place and adequate facilities and staff.

There are smaller enterprises in medical schools where first-rate cancer work is going on but I am talking about a large concentration which I would call a center for cancer. There are parts in such places as Boston, Chicago, San Francisco, and Philadelphia today. I could mention a few more.

It is for this reason that in our proposals today we are once more emphasizing the need of increased support of more cancer centers than we now have, and are recommending the establishment of 20 centers in various parts of the country, wherever there are leaders to be found, wherever there is a good environment, wherever there is a population great enough to demand the kind of facilities that we are talking about.

I must not confuse these with the regional centers for continuing education and routine care of patients. What I refer to are vital research institutes and hospitals which take the leadership in discovering new methods of treatment, methods of prevention of disease, and which carry out fundamental research at any basic level in an attempt to solve the various problems of cancer.

May I now say a final word, Mr. Chairman, about the budget for the National Institutes as a whole and for the Cancer Institute. The budget for the NIH as a whole falls far short for the task which lies ahead.

This represents, now, the fifth consecutive year which I could call a "standstill" budget. The increase for the Cancer Institute, for example, of 6.3 percent over fiscal year 1967 represents actually a loss rather than a gain because there is an increase in the cost of equipment, salaries, and so on, which requires more than that percent even to stand still.

We are losing the highly trained cooperative groups, which have been supported under "programed chemotherapy," in various parts of the country because there has been a 22-percent cut in the President's budget at a time when costs of this kind of research have increased 25 percent in the last 2 years.

I shall not go further into specific needs at this time but will present the budget recommended by the Citizens Committee with this word of background. This budget was first put together since the last appearance before this committee by getting information from the scientists and doctors in various parts of the country. It was then taken to members of the National Advisory Cancer Council which met not as an

official body but as a group of citizens who happened to be members of that Council. I mention this because we wanted this to be unofficial on the part of the Council. This figure was arrived at by the Council on the basis of their knowledge of the needs of the country and of their very intimate knowledge of the needs of various programs of the National Cancer Institute.

It is extraordinary but not surprising that the needs of the experts in the Cancer Institute as expressed unofficially to this group of the National Advisory Cancer Council members coincided almost exactly.

This figure then was taken to the legislative committee of the American Cancer Society and to its board of directors which every year makes a recommendation which they call the citizens' budget. This figure, again gathered by their own experts, proved to be almost precisely the same as these other two figures. What we are talking about this year, then, in this citizens' budget is the amount of $300 million or an amount of $116,644,000 above the President's budget for fiscal year 1968.

We have broken this down into two parts. We have added the figure of $58,644,000 to support the program as a whole in research: in the support of task forces, cooperative groups, individual research efforts of scientists and so on. We have added a figure of $7 million in training grants because we must have a far greater number of scientists and doctors trained in research techniques in the field of cancer than we have today. That amounts to $65,644,000 for part I.

Then we have added two other figures which we put in because we want to emphasize the need—and we have the hope but not the expectation—that this can be done this year. This is $41 million to create the 20 large centers of cancer research and hospitals that I mentioned earlier and in addition $10 million to start a construction program. It is absolutely essential in so many parts of the country to have this on a nonmatching basis if we are really to help those institutions which cannot raise matching funds.

Mr. LAIRD. Getting back to my program we had going for 3 years?

Dr. FARBER. Indeed, this is precisely Congressman Laird's program. It was an extremely wise and effective program and we regret deeply that it has not been kept up.

We present this budget of $300 million compared to $183 million of the President's budget with clarity of mind. We understand that the Congress and the President must establish priorities. We are not giving an expert opinion on what priorities the Congress should establish. We are giving an expert opinion on what the needs of the country are if we are to make far greater progress in the solution of the many problems of cancer.

It is in this spirit, Mr. Chairman and gentlemen, that we offer the citizens' budget of $300 million for your consideration.

TRAINING GRANTS IN GENERAL MEDICAL SCIENCES

May I ask your permission, Mr. Chairman, to add to the record after my own statement before this committee a further statement which I would like to make in regard to training grants in another Institute,

National Institute of General Medical Sciences. Because of our great need for scientists who are trained at basic levels in the general medical sciences, a need that we have not only for their own sake but also in such categorical diseases as cancer, heart disease, neurological disorders, arthritis, and metabolic disease, and so forth. It is from this Institute that we will get the kind of basic scientists we can convert into specialists in any one of the number of Institutes in the NIH. With your permission I would like——

Mr. FLOOD. Without objection, that will be included.

(The statement follows:)

STATEMENT OF SIDNEY FARBER, M.D.

(Professor of Pathology, Harvard Medical School at The Children's Hospital; Director of Research, The Children's Cancer Research Foundation, Boston, Mass., Special Consultant to the Director of the National Cancer Institute; Chairman of the Medical and Scientific Committee, and Director-At-Large, of the American Cancer Society; Chairman of the Panel on Cancer of the President's Commission on Heart Disease, Cancer and Stroke (1964–1965).)

Mr. Chairman and gentlemen of the committee, I am grateful to you for this opportunity to appear before this Committee to speak to you concerning the needs for cancer research throughout the country, and specifically to present to you a suggested budget for the National Cancer Institute which we have through the years called The Citizens' Budget.

I appear before you as the official representative of the American Cancer Society and as a private citizen. It is with great pleasure that I have as my colleague once more this year, Dr. George E. Moore, Director and Chief of Surgery of the Roswell Park Cancer Hospital and Research Institute in Buffalo, New York.

The Citizens' Budget we present to you today was first discussed thoroughly with members of the National Advisory Cancer Council who met together, not officially, but as a group of citizens deeply interested in progress of cancer research, and thoroughly familiar with the needs of scientists and doctors in the field of cancer in institutions all over the country. This Budget was then submitted to the American Cancer Society, Legislative Committee and Board of Directors, whose members had made their own studies of the needs of the country.

We are presenting this today as the unanimous opinion of the Board of this Society with a word of explanation which we include in a letter to President Johnson with a copy of this Budget for his information: "We are aware of the numerous and difficult problems placed before you for decision, and we understand fully the necessity of establishment of priorities." It is in this spirit that we respectfully submit to this Committee a recommendation for an appropriation which we believe, on the basis of expert knowledge of the many people concerned in the formulation of this budget, to represent the amount of money which our scientists and doctors require to make possible the greatest progress in the solution of the many problems of cancer on the basis of present knowledge, the important gains of the past twenty years, and the availability of manpower and ideas for the rapid achievement of our goals. We submit this with confidence that those responsible for administering these funds in the National Cancer Institute and the National Institutes of Health, with the help of the large number of expert advisors who are called upon from all parts of the country to help in his great task, will use these funds wisely and effecively. The final justification lies in a realization of the magnitude of the problem, the enormity of the suffering caused by cancer, and the unhappy reality of the loss of more than 300,000 lives this year in the United States alone because of cancer.

CITIZEN'S BUDGET, FISCAL 1968

The total Citizens' Budget recommendation amounts to $300,000,000, or $116,644,000 above the President's Budget for F. 1968, of $183,356,000. This we have broken down into two parts, and we shall keep them separate for the sake of clarity.

Recommended increase above President's budget

PART I.

1. For exploiting research opportunities aimed at preventing cancer and treating it successfully through expanded support of basic and applied research carried out independently or in cooperative task forces through the National Cancer Institute in the universities, independent research institutes, industrial laboratories, and the National Cancer Institute itself, in continuation of the most effective methods responsible for research progress which have been developed in the past 20 years $58,644,000

   This additional support would make possible more rapid expansion in the application of the technology which has been developed in the space age to cancer research and treatment. It will provide increased support for the independent research worker who is developing his own program and for the large cooperative programs required in the fields of cancer causation (carcinogenesis) and chemotherapy.

   The full activities of capable scientists in biochemistry, molecular biology, cancer biology, virology, and immunology to permit pursuit of leads of importance already well known, should parallel a great development in research leading to the possibility of actual prevention of cancer by removing cancer-causing substances in our environment and by the perfection of vaccines if and when sufficient justification from experimental work is at hand.

   The task force, so effectively worked out in the field of acute leukemia has made a beginning at the suggestion of this committee in the field of breast cancer, and now chorio-carcinoma of the uterus. Plans for task forces against the forms of cancer which account for 95 percent of the deaths of the country, such as of the lung, the stomach and intestines, the prostate, the uterus and a number of others await only sufficient support.

2. Training grants: Support for increasing the training of scientists and doctors for cancer research and for the support of those highly trained scientists when they embark on their research careers will prove a valuable and essential investment 7,000,000

   Total 65,644,000

PART II. CANCER RESEARCH CENTERS

1. There are only three really large centers of cancer research and clinical investigation in the United States, and these are not as complete as the talents of their staffs and leaders would permit. For many years we have recommended that in 20 sites distributed throughout the country institutions of this kind should be built and supported in amounts adequate for effective research programs. To supplement, create and support such cancer centers in 20 sites where task force groups can be established, or located as part of a National program of cooperation, the amount of $41,000,000 is required 41,000,000

2. Start of a non-matching construction program in these cancer research centers, aimed at providing the research facilities needed at these sites of task force operations. These centers can not be built in all parts of the country without non-matching construction funds. The need for these is so great as to justify this request for special consideration. Funds in fiscal 1968 would be mainly for planning and for temporary and permanent facility construction 10,000,000

   Total 51,000,000

Part I and part II have been separated because the needs are of different nature, and we want to emphasize their differences and also their importance.

President's budget fiscal 1968	$183,356,000
Part I. Citizens' budget fiscal 1968	65,644,000
Part II. Citizens' budget fiscal 1968	51,000,000
Total	300,000,000

Training Grants—National Institute of General Medical Sciences

Mr. Farber. Mr. Chairman, I wish to add at this point if I may a few words concerning the programs and needs of the National Institute of General Medical Sciences. I recall with clarity the pride your predecessor, Congressman John Fogarty, took in the establishment of this Institute as section 442 of the Public Health Service Act as well as with the programs which this Institute has supported.

As you have no doubt been told, the National Institute of General Medical Sciences has been set up to support various areas and disciplines of the health sciences and to develop them as highly sophisticated tools to be used selectively and powerfully by the categorical Institutes and regional medical programs. In addition to its role in the support and development of the health sciences, this Institute is the largest single supporter of training in the basic medical sciences. At the present time I am told that this Institute supports about 5,000 young men and women by way of training grants and about 1,200 fellows through the research fellowship program. It is common knowledge that without this integrated type of training support there would be practically no development of medical faculties either in terms of replacement faculties or new faculties for the 25 medical schools that are being planned.

Now, Mr. Chairman, the programs of this Institute sorely need support beyond that provided in the President's budget. Upon inquiry, I found that this Institute's backlog of scientifically approved but unfunded awards came to almost $32 million. This large sum breaks down into about $18 million backlog for research grants and about $7 million for training grants and another $7 million for research fellowships. I wish to emphasize, Mr. Chairman, that these requested awards have already been reviewed and cannot be paid. They will constitute an additional unmet need as we approach fiscal year 1968 and will be added to very substantially by applications coming in now and during the first half of the fiscal year.

Even though the greatest need as measured by unpaid applications lies in the field of research grants, I believe the need for more training grant and fellowship funds is crucial if we are to provide the faculties needed by our present medical schools as well as our new medical schools, many of which are just opening to new incoming classes. I find that the President's budget for training grants is about $45.7 million. This is only about $2 million more than was made available in fiscal year 1967. It is not enough money to permit this Institute to support the same size overall program in 1968 as was supported in 1967 or in 1966. It is a little known fact that in terms of men trained, this Institute's program has been cut back for 3 consecutive years so that it is supporting some 700–800 fewer full-time trainees than was supported in a past fiscal year. This Institute's allotment for training grants should be increased by some $10 million; totaling about $55 million if it is to continue the training job which is clearly needed and for which there is no substitute program now active in the whole Department.

In research fellowships the same unfortunate state of affairs exist. This program also although given a small budget rise up to $20.9 million will find itself unable to support additional fellows in fiscal year 1968; in fact I believe here also there will be a program contraction. This program should not be permitted to falter. It is the oldest program in the Public Health Service and is looked to by the whole of the medical community to provide the bulk of the fellowships in the many health fields. For instance, this program was the one which provided the support and stimulation for the senior fellowship program which has de-

veloped into the present type of support which is called the research career development awards. This latter program supports hundreds of needy younger faculty members and is a much prized award among them. The needs here are once again met only in a token fashion by the President's budget. With a $7 million backlog to choose from, no less than $4 million additional should be added thus bringing the total for research fellowships to about $25 million.

It is clear that the other areas of activity of the Institute also need support, however, the bulk of the increase provided in the President's budget is allocated for research grants. Others testifying to you before me have no doubt been eloquent and convincing.

I appreciate this opportunity to speak concerning this Institute and to assure you that its work supplements and contributes to the programs of all of the other Institutes in terms of providing trained manpower and fundamental research.

STATEMENT OF DR. GEORGE MOORE

Mr. FLOOD. We will now hear from Dr. George Moore. Dr. Moore is director of the Roswell Hospital in Buffalo, N.Y.

Do you have a statement, Doctor?

Dr. MOORE. Mr. Chairman, I will use illustrations to describe to you the summary statement which I have submitted for the record.

Mr. FLOOD. It will be included.

(The statement follows:)

CURRENT STATUS OF RESEARCH FOR THE DIAGNOSIS, TREATMENT, AND PREVENTION OF THE MALIGNANT DISEASES

(By George E. Moore, M.D., Ph. D., Institute Director, Chief of Surgery, Clinical Professor of Surgery, State University of New York at Buffalo, Research Professor of Biology State University of New York at Buffalo, Director of the Roswell Park Division of the Graduate School of the State University of New York at Buffalo)

THE NATURE OF THE CANCEROUS DISEASES

We physicians and scientists have failed in our attempts to clarify two major concepts about the malignant diseases. As a result of this failure, professional and non-professional educational programs, political and social attitudes, and personal responses to these diseases have been greatly handicapped.

"Cancer" is *not* a single disease but a large group of related, but very different, diseases. The malignant diseases have as broad a spectrum of biological differences as the infectious diseases which range from a minor infection of a cut finger to lethal meningitis. Cancers are *caused* by the interaction of different agents and susceptibilities as are the infectious diseases and, in both instances, their effects on patients range from minor illnesses to fatal processes. There are over 100 basic kinds of cancers and many significant variations of these arbitrary "100 varieties". For example, cancers of the basal cells of the skin are—or should be—99% curable.

New ways of treating these skin cancers include the use of cryo-probes at —296°, laser beams, chemical applications, and ointments containing anticancer or immunizing agents. For example, Dr. E. Klein of our staff is not only treating skin cancers with drugs like 5-fluorouracil but with drugs producing a localized

allergic reaction. This technique has also been used for treating chronic benign, but disfiguring, skin diseases.

These skin cancers represent one of the kinds of cancer which are localized diseases. They grow much slower than the normal cell turnover in many organs. The cancerous cells remain adherent to each other and therefore do not spread quickly nor invade the blood and lymph vessels or metastasize to other parts of the body. They can be treated by all sorts physical methods for removal such as surgical exision or x-ray.

Another kind of cancer involving the skin—the malignant melanoma—is more representative of the majority of cancerous diseases since it can react as a locally invasive disease or, more frequently, as a devastating, widespread, fatal disease. It is there forms of cancers which spread throughout the body that require major attention.

The acute leukemias represent the other end of the clinical spectrum of the malignant disease. They have not been cured in the past even when diagnosed "very early" but now a very few patients have apparently been cured by combinations of new anticancer agents. These cancerous cells multiply rapidly in almost all tisses, penetrate into the lymphatics and bloodstream easily and are quickly distributed throughout the body. Even if 99% of the cells are destroyed by a single treatment with chemotherapy, the remaining cells may quickly replace the destroyed cells and the patient is benefited for only a few months.

We have illustrated the enormous differences between different kinds of cancer and also the differences in a single group of diseases—the leukemias, for example. One must not equate all leukemias. Untreated acute leukemia of children may cause death in a few weeks whereas some adults with certain kinds of leukemia and lymphomas may be successfully treated with anticancer agents for decades.

Cancer prevention

The prevention of cancer isn't stressed as often as it should be and more research work should be done in this area. As mentioned previously, cancers do not have a common cause any more than the infectious diseases are caused by a single kind of bacterium.

A whole series of occupational cancers have been identified such as those in workers exposed to lubricating oils, skin cancers from ultraviolet light in sailors, farmers, and ranchers—particularly those with blue eyes and fair complexions, skin cancers associated with arsenicals, bladder cancers in workers exposed to aniline dyes, inhalation of aerosols of asbestos, nickel, and chromates, and bone cancers in the infamous instance of the watch dial painters who were exposed to intense doses of irradiation because they tipped their brushes with their lips and thus swallowed appreciable amounts of radioactive material. It seems incredible that the causation of disabilities and cancer in these "ladies of death" was considered a "controversial issue" for many years.

Similarly, there is no excuse for so many thousands "dying for a smoke" each year.

It seems incredible that any "controversy" still exists as to the causal relationship between lung cancer and smoking. The evidence is as clear-cut as that for the watch dial painters. But again, ill informed persons and representatives of the tobacco companies have all too successfully sold the idea that there is no controversy and that there is no "good evidence"—that if it was really dangerous the Government would have prohibited it—that scientists who have issued strong statements really only had "statistical" evidence or evidence from experimental animals and that these men are "biased crusaders".

We can say without any contradictory evidence that smoking is the major causal factor in the development of lung cancer. This year there will be 49,000

deaths from lung cancer alone in the United States—more than the total of highway deaths. A rare disease 35 years ago, lung cancer is today the most common form of cancer in men. Further, its frequency is rapidly increasing in women who smoke.

Of equal distress to physicians is the fact that heavy smoking lurks in the causative background of a number of other diseases: bladder cancer, cancer of the larynx, Buerger's disease, and circulatory and heart disease. In fact, the man who is a heavy smoker stands twice as good a chance of dying from heart disease as does a non-smoker.

The results of seven prospective studies taken together show that the total death rate for male cigarette smokers is nearly 70% higher than that for non-smokers. These studies also showed that the increase in death rates among cigarette smokers is more than a simple coincidence. In general, this death rate rises according to the number of cigarettes smoked daily. For men who smoke 1½ packs or more a day, the death rate from all causes is almost 100% higher than for non-smokers. Men who begin smoking before age 20 have a higher death rate than those who begin after age 25. Similarly, men who stop smoking before age 55 have a lower death rate than those who persist in smoking after that age. The death rates for pipe smokers are almost the same as those for non-smokers. Inhalation of smoke by pipe smokers is rare.

This relationship between smoking, lung cancer, and other diseases is not "just a statistical phenomenon". Clinical observations and laboratory work stand in support of it. Autopsies and observations of lung cancer patients, heavy smokers who died from causes other than lung cancer, and of laboratory animals exposed to tobacco smoke have shown that definite abnormalities exist in the linings of their bronchial tubes which are not present in those of non-smokers. These include a loss of cilia and the normal ciliated epithelium, a thickening of basal cell layers, and the presence of atypical and premalignant cells.

These changes are reversible, however, if smoking is stopped—before a tumor has started to develop. It is even possible for persons who have been heavy smokers for 20 or 30 years to improve their survival chances measurably if they stop smoking.

Lung cancer is treated by surgery, radiation, chemotherapy, or a combination of these techniques. Yet by the time symptoms appear—generally a change in the "smoker's cough"—it is too late in 75% of the cases. More and more cases of advanced lung cancer are being seen at Roswell Park Memorial Institute each year. There have been approximately 400 cases in the last three years. Of these, 98% were heavy smokers.

Laboratory studies have been conducted at the Institute since 1953. The cancer producing properties of many brands of commercial cigarettes, both American and foreign, have been evaluated. The cigarettes were "smoked" in a steel and glass machine which simulated human smoking patterns and the tars were collected and painted on the backs of mice. Each mouse received tars equivalent to about 8 cigarettes per day for 60 weeks—about ⅔ of the normal mouse life span.

Approximately 100 mice were used to test each brand of cigarettes. Overall, up to 30% of mice exposed to tars from *non-filter* cigarettes developed skin cancers within a year of treatment, and another 30% developed benign tumors which progressed no further within a year of treatment. Only ½ as many tumors and cancers developed in mice exposed to tars from equal numbers of relatively adequate *filter* cigarettes. No skin cancers or tumors developed in control mice which did not receive smoke tars.

In another series of experiments, two groups of 100 mice each were painted with smoke tars for 26 weeks. At the end of this time, 6% of each group of animals had skin tumors. One group of mice continued to receive tars for the full 60 weeks. The other group received no more tars.

Of the 100 mice in the 60-week group, 62% developed skin tumors and 25% developed skin cancers. In the group treated for 26 weeks, only 18 developed skin tumors and 10 developed skin cancers.

The relationship between the effects of cigarette smoke on mouse skin and human lung tissue is, then, similar in that a similar dose-reponse effect exists. Further, if the exposure of tissue to smoke is stopped, the incidence of new tumors or cancers is either diminished or halted completely.

A second kind of substances, called tumor promoting agents, have been noted in extracts of raw, unburned tobacco as well as smoke.

Currently, tests are being performed at the Institute on the carcinogenic effects of smoke tars from cigarettes made with additives, such as those put in by the tobacco companies, and from cigarettes made with specially grown tobacco which was harvested and cured at our research center. In addition, cigarettes of lettuce, cabbage, and maple—all air-cured—are being made and tested on mice. Some of these cigarettes are producing tumors, whereas others seem much less dangerous.

Ciliostatic agents have been the object of considerable research and discussion. These chemicals are found in cigarette smoke and paralyze the cilia in the bronchi, tending to prevent normal removal of tar particles. The effects of these agents have been demonstrated in laboratory animals.

Smoking leads to over 300,000 premature deaths each year. It is perilous for the public, particularly so many of our young people, to ignore the earnest warnings of scientists all over the country, their own private doctors, and the U.S. Public Health Service. The legislative efforts in support of educational and research programs concerned with the health hazards of cigarettes have been insufficient. The label placed on cigarette packages has not constituted a sufficient warning to the public.

The cigarette buyer *has* responded to warnings that cigarette smoke is a health hazard. More physicians have stopped smoking or shifted to pipes and cigars than any other group. The sale of filter cigarettes has, and is, increasing rapidly. About 65 percent of smokers are buying filter cigarettes. Unfortunately, the buyer can't tell which cigarettes are less dangerous than others. Recently we published a summary of the comparative amounts of tar and nicotine from 56 brands of cigarettes purchased in a nearby store (CANCER, 20:323–332, March 1967).

It is noteworthy that the brands with high tar yields produced about five times the amount of tar recovered from other cigarettes. We believe that the tar yields of cigarettes smoked in a uniform way should be prominently printed on each cigarette pack. The Government apparently spends more research funds on methods of tobacco culture and more funds on the stockpiling, promotion, and sales than the limited medical and educational programs on this extraordinary health hazard of our times. In my opinion all public advertising of cigarettes should be banned and much greater efforts made to remove, or otherwise eliminate, the health hazards of cigarettes.

Many of the practicalities of reducing the amount of smoke from cigarettes are described in a recent issue of TOBACCO REPORTER, February, 1967.

Remember, heavy prolonged cigarette smoke is the greatest known preventable cause of disease in the United States. There is an emergency need of funds for developing acceptable, safer tobacco products.

DIAGNOSIS OF THE CANCEROUS DISEASES

Regretfully there have been only a few new developments in methods for the diagnosis of the cancerous diseases. This field is not a popular one among scientists, and clinicians have, in general, merely made slight improvements in existing techniques related to their individual specialtes.

Cytological diagnoses

The famous Pap-smear technique for diagnosing early carcinomas of the uterine cervix and, to a lesser degree, carcinomas of the uterine fundus, has been applied to washings or scrapings removed from the mouth, bronchi, esophagus, stomach, and small and large intestines.

There has been a steady decrease in mortality rates from carcinoma of the cervix which in part reflects dividends derived from wide use of the Pap smear and also the application of improved surgical and irradiation methods. About 40,000 women develop carcinoma of the uterine cervix each year and there are about 15,000 deaths. If we could attain wider application of the Pap smear, pelvic examination and prompt therapy, probably as many as 10,000 additional lives could be sved each year. We must devise effective kite for women to collect their own vaginal samples, screening techniques to reduce the number of negative cytological examinations, and provide the proper training for additional cytology technicians and pathologists. Hopefully physical aspects of cancerous and precancerous cells will be detectable by methods which can be automated.

Diagnosis by radioactive materials

During the last twenty years radioisotopes have been instrumental aids in solving many biophysical, biochemical, and biological problems. Radioactive iodine

was used for the detection of diseases of the thyroid soon after it was available from the early "atom smashers." Subsequently there have been developed a multitude of sophisticated instruments for tracing and "Photographing" abnormal collections of radioisotopes and "tagged" compounds in various organs. Photoscanners are used for the detection of brain tumors, liver and kidney tumors and metastases, and tumors of the pancreas.

Diagnosis—X-ray techniques

The improvements in diagnostic radiology during the last few years include angiography, lymphangiography, better contrast media, image amplifiers for greater contrast and reduced dosage of irradiation, and the popular medical topic of the moment—mammography. There seems little doubt that mammography (x-rays of the breast) is useful for maintaining surveillance of breasts which contain cystic changes and for initial screening of postmenopausal women.

Cancer detection clinics

Cancer detection clinics have been valuable as teaching aids for both physicians and the public but they are economically and professionally unfeasible.

If we could train technicians to perform many of the routine examinations and computers to coordinate the findings, such clinics would be more desirable and less expensive.

CANCER THERAPY

Radioisotopes

The radioisotopes have not been used effectively for the treatment of cancer. Exceptions are the use of radioiodine on a few functional thyroid cancers and radiophosphorus for chronic leukemia. Colloidal radioactive particles and spheres have been tested as an indirect way or irradiating tumor sites but the results have been doubtful. Radioisotopes have been successfully used to treat effusions of the pleural and abdominal cavities but it is more convenient and less expensive to use chemotherapeutic agents.

Irradiation therapy

The fundamentals of irradiation therapy have not changed much but there have been continual improvements in instrumentation and in the skills required for successful treatment. It seems likely that the cost of powerful electron and x-ray generators and the associated need for highly trained and experienced physicists and technicians will limit the number of medical centers in which optimal irradiation therapy can be provided.

The trend toward megavoltage x-ray units reflects the desirability of beams with greater energy and, therefore, better delivery of irradiation to deep-seated tumors with less injury to the skin. There is no magic about the so-called cobalt bomb. It is merely an economical, desirable method of delivering a 1.1 M.E.V. beam. It is equally important that the physicians using these high voltage sources carefully plot the patterns and schedule of irradiation with due regard for the tumor type and size, probable regional spread of the cancerous cells, the physical contours of the patient, and the physical and mental status of the patient.

At present instruments for delivering electron and gamma ray beams with intensities of 5 to 50 million electron volts are being tested. Units such as the linear accelerator will have advantages over cobalt units but will not appreciably affect the overall cure rate of radiosensitive tumors. This is particularly so since irradiation is used predominantly for palliation.

Irradiation therapy is being supplemented by oxygen—not too successfully—, and by various chemotherapeutic drugs. For example, 5-FU (5-fluorouracil) has been given during irradiation therapy. It is too early to be hopeful about the combination of irradiation and chemotherapy but both animal studies and clinical trials are encouraging.

There is a great need for the establishment of regional irradiation therapy centers and for the training of physicians and biophysicists in the use of the new and more complex instruments for supervoltage therapy.

Surgical therapy

The surgical excision of cancerous growths is the most effective way of curing a majority of malignancies. On the other hand we surgeons realize that this is an inadequate method for controlling those cancers which spread into the blood and lymphatic systems. In such instances we are attempting to cure a systematic disease by a local excision. Fortunately cancers do not grow without opposition, and

the single most important factor aiding the surgeon is the ability of the patients' defense mechanisms to destroy or control the cancerous cellular invaders when the gross tumor is removed.

In the next several years there will be a slow improvement in surgery applied to the cancerous diseases but probably no spectacular "breakthroughs." The replacement of diseased organs by transplants of organ structure or cultured functional cells is still remote because of tissue incompatibility problems. Progress is being made in determining the genetic factors which inhibit tissue transplantation. There will be definite advances made in the supplementation of surgical removal of cancer by anticancer agents, irradiation, and substances to improve host resistance. More large cooperative clinical trials will be required for the evaluation of these new techniques and, equally important, of some of the present methods of surgical therapy which are used routinely. These large clinical studies are long, difficult, and expensive but they are the only way of obtaining valid comparisons of the effectiveness of cancer treatments.

Cancer viruses

The fact that viruses can cause cancer in many different kinds of animals is now well established. It is possible to prepare vaccines from animal cancer viruses which will protect the animals against cancer caused by these viruses. It is, therefore, of great practical importance to increase the pace of the search for possible human cancer viruses since identification of one or more human cancer viruses could provide a major weapon for control of certain malignant diseases.

Although there is presently no proof that viruses cause any human malignant disease, there is a substantial body of circumstantial evidence. It should be pointed out that obtaining proof that a human cancer is caused by a virus is much more complex than identifying an animal cancer virus. The reason is that with the animal viruses one simply takes the suspected cancer virus and injects it into a newborn animal of the same species and waits for cancer to develop. The time for the appearance of the malignant disease may be one-half to two-thirds of the animal's life span. All of the other studies with the animal cancer viruses (electron microscopy, biochemical, immunological, etc.) have depended on correlation with disease production for their validity. This basic animal research method obviously cannot be used in the human (i.e., one cannot inject a suspected human cancer virus into a newborn infant). Therefore, the single most important aspect of animal cancer virus research must be omitted in the human studies. This has required a series of indirect but valid approaches to the study of the human cancer which has enormously complicated both the research and the evaluation of results. These approaches are time consuming, tedious and expensive. However, in view of the potential benefit to the 25% of Americans who will develop cancer sometime during their lifetime, the effort and expense is imminently justified.

I will briefly outline two especially interesting leads which have arisen during the course of viral studies with human cancer over the last two to three years. Both of these approaches have clearly identified at least two possible candidate human viruses. The first involves the finding of particles in the blood of leukemic patients which have the shape and form of viruses known to cause mouse leukemia. The virus-like particles are found in the blood of about 15 to 20% of the patients with acute leukemia. Immunlogical studies have shown that they are similar from patient to patient and are not found in the blood of non-leukemic patients or normal people. This is an important lead which should be followed expeditiously.

The second and even more exciting lead has been the finding of a herpes-type virus in human leukemic and lymphoma cells grown in cell cultures in the laboratory. Leukemic cells which have been originated in such widely scattered geographical areas as Africa, Sweden, England, France, Bethesda, Philadelpia, Houston, New Jersey, New York, Boston and Buffalo have all revealed viruses which appear to be similar if not identical. This makes the possibility that these viruses are casual contaminants of the cultures very remote. At the Institute methods for increasing virus production by the leukemic cells have been developed and we are now in position to determine the significance of these viruses within a reasonable period of time. This work will require a considerable increase in scientific personnel and laboratory facilities. For this reason I strongly urge that the level of support for the Special Leukemia Virus Program (sponsored by the

National Cancer Institute) be substantially increased at this very critical time. It is entirely possible that we now have a virus responsible for some human leukemia; it is imperative to determine if this is true as soon as possible since it could provide a vital step in the eventual control of some of the cancerous diseases which claim the lives of thousands of Americans (adults and children) each year.

Cancer chemotherapy

Whereas there is little evidence to support a major increase in funds for chemotherapy, there are excellent reasons for continuing the programs in existence. The Cooperative Clinical Trials Studies were and are a good use of tax monies. Critical remarks by review groups resulted from inadequate information and understanding of the nature, goals, and accomplishments of the Clinical Chemotherapy Studies. In my opinion they have revolutionized the thinking of clinicians evaluating new drugs, stimulated much better care of cancer victims, and provided better information about the nature of cancers in humans.

It would seem that a mixture of project grants, Institutional grants, and funds for specific clinical studies would be better than the present allocation of so much money to industrial concerns in the form of contracts.

Cancer therapy

There is a great need to establish and maintain centers of excellence for cancer therapy. This is particularly true because of the requirement of special equipment and skilled physicians and their adjuvants who are highly motivated to care for and study cancer victims. Expert judgment and care can make the difference between life and death and physicians who see cancer patients every day are more likely to provide the best possible treatment for complicated cases in contrast to the physician who sees only a few cancer patients each year.

The provision of modern equipment such as linear accelerators as sources of irradiation, special "life islands" for patients being intensively treated by chemotherapy, special operating rooms, physiotherapy units, and facilities for careful study of new kinds of therapy can be supported at a limited number of regional centers for cancer research and treatment. I highly recommend that the development of these special centers be begun immediately.

Cancer immunity

The greatest advances in cancer immunity have been made in the last five years. It is my intention to document the need for forming immediately a Cancer Immunity Task Force.

Several investigators demonstrated that there were significant immunological differences between experimental cancers and the host. These findings gave rise to the hope that effective immunological therapy could be developed. Each tumor had its own immunlogical identity if started by a chemical carcinogen but several tumors might be alike if started with the same virus even if they were growing in different animals.

Scientists in Sweden, England, and the United States began to test the use of immunological techniques for treating experimental animals. Briefly, the following statements summarize these exciting findings.

1. Tumor tissue was used to immunize similar animals and the resulting cancer-destroying lymphocytes or "cellular vaccines" were reinjected into the cancerous animals where they caused tumor destruction.
   (a) This activity was tumor specific.
   (b) Antibodies circulating in the bloodstream were not involved.
   (c) Animals of species other than the ones with cancer could be used to form cancer-destroying lymphocytes. This meant that a larger amount of cancer-destroying lymphocytes could be used for treatment.
   (d) Extracts of the cancer-destroying lymphocytes were also effective when inoculated in the cancerous animals.
2. Virus tumors shared immunological properties and therefore "cellular vaccines" could destroy simular cancers in more than one animal.
3. The "cellular vaccines" were only helpful or curative when the cancer was small. Thus, surgical excision or irradiation of the tumor mass plus the "cellular vaccine" was more effective.

Human studies

1. Observations of the spontaneous disappearance of cancer, the growth of cancers many years after the original tumor was removed, and the shrinkage

of some tumor growth when the primary tumor is removed provide evidence of "host immunity" to cancers in humans.

2. Choriocarcinoma represents a kind of tumor in which an interaction of cancer immunity and proper chemotherapy will provide cures in over 90% of the women with localized disease and 60% of those with widespread disease. One patient treated at this Institute 8 years ago is alive and well despite the spread of cancer to both lungs.

3. Children in Africa have a particular kind of cancer of the blood forming organs called Burkitt's lymphoma. Cells from these tumors contain a herpes-like virus which we call the "leukovirus." These tumors—often huge masses which distort the face—respond extremely well to chemotherapy. This is probably the result of immunological host resistance.

4. At this Institute over 100 cancer patients have been treated with transfusions of cancer-destroying lymphocytes after reciprocal immunization with a partner. Many of these volunteers had very advanced disease and could not be expected to have the ability to provide major immunological responses. Approximately 60 patients completed the entire course of therapy and lived at least two months so that evaluation of their response or lack of response was possible. The tumor masses in 12 patients decreased 50% or more and the lesions in 3 of these patients completely disappeared. One patient's metastases have not regrown during the last 3 years. A second patient has not had a recurrence 8 months after treatment but the lesions of the third patient have regrown.

Additional methods must be tested. Entirely new kinds of facilities for growing large amounts of human cells and for the recovery of the cell products must be designed and built. For example, the New York State Health Department has been given an appropriation of about $500,000 for the construction of a prototype cell plant. Equipment must be designed for the recovery and purification of cell products such as desoxyribonucleic acid on a large scale so that clinical trials of their effectiveness can be undertaken.

An unexpected dividend of the immunological viral research was the finding that it was possible to grow human leucocytes in the laboratory. These cell lines of primitive leucocytes continue to produce several products of practical as well as academic interest. Interferon, a compound with anti-viral activity, may be useful for treating certain kinds of virus infections in humans. The collection of large amounts of it will aid in studies of its chemical structure.

These cultured human hematopoietic cells also produce relatively large amounts of immunoglobulins. We have preliminary evidence that it may be possible to produce *specific antibodies* in the laboratory. If these findings are confirmed and applicable to the production of various kinds of antibodies, it may be possible to treat many additional kinds of infectious diseases for which there are no adequate antibiotics. It may also be possible to protect many persons who have an inadequate supply of immunoglobulins as a result of disease or genetic defects.

I strongly recommend that a Cancer Immunity Task Force be established under the National Cancer Institute and that an annual appropriation of $10 million be made for these studies for a period of 7 years.

Mr. FLOOD. Proceed, Doctor.

Dr. MOORE. The first aspect of malignancy I wish to speak about concerns the cause and nature of cancer. To illustrate this I wish to speak briefly about the causation of lung cancer and other kinds of cancer from prolonged and excessive use of tobacco products.

This is a statement of a young reporter dying in Hawaii as a result of a lung cancer in which he rather seriously describes the nature of his case and his history as a heavy smoker.

Mr. FLOOD. What do you propose to do with the statement there?

Dr. MOORE. This is just a statement to illustrate the problem as I go along.

To get at this serious cause of disease in America we in the laboratory work at it by using automatc smokers, such as this device which smokes 360 cigarettes at a time. We recover the tar from these large machines and we use the smoke from them.

The tobacco smoke is condensed and then the concentrate of the smoke is painted on experimental animals to assay the cancer-producing properties of the smoke condensate. These are photographs of cancerous and precancerous conditions in mice exposed to the smoke of cigarettes at the rate of eight cigarettes per day. After a year and a half, as many as 60 percent of these animals will develop malignancies.

We are trying to find safer kinds of cigarettes for people to use. One of the things we are studying is different kinds of tobacco that we grow on Institute property belonging to the Institute. We also are making cigarettes out of lettuce, cabbage, catalpa leaves, maple leaves, and sunflower leaves.

Mr. FLOOD. Banana skins?

Dr. MOORE. No. We leave that up to the university students. "Mellow yellow" I believe they call it.

There is a difference in the cancer-producing properties of different kinds of tobacco and also the different kinds of leaves and therefore it is important that this sort of work be done.

Another way in which smoking can be made safer is to develop more effective filters so that the person smoking inhales less smoke, and particularly we hope to design filters which will make the smoke particles selectively safer.

Mr. FLOOD. Do you smoke?

Dr. MOORE. No, I do not.

This represents the difference between the animals which have been exposed to the smoke of equal numbers of cigarettes from regular brands and filter brands of cigarettes. You can see it has been reduced from 55 percent to 10 and 15 percent.

Mr. SMITH. Have you exposed animals to the material from the other types of leaves, like lettuce and so on?

Dr. MOORE. Yes, sir. There is a difference between them. For example, the smoke of cabbage cigarettes is carcinogenic, cancer producing, and the smoke from lettuce is relatively mild as far as producing cancer is concerned.

Mr. SMITH. Are there some cancer-producing elements there, too, even with lettuce?

Dr. MOORE. No; in the first experiment there are no more than we would expect from controlled exposure. In such experiments we use solvents in both sets of animals.

Mr. SMITH. I am not very clear on that. There are some cancer-producing elements, then, even in lettuce or not?

Dr. MOORE. In the first experiment there are no more cancers produced in those animals exposed to the smoke of lettuce cigarettes than developed in control animals painted with the solvent itself, the solvent used to dissolve the smoke. We conclude there is none.

Mr. SMITH. Then there are some cancer-producing elements in lettuce cigarettes as used in this experiment because they also use a solvent is that right?

Dr. MOORE. That is right.

This chart shows one of the other studies done at the Institute concerning the variation in commercial brands of cigarettes. The problem here is that some people feel that they are being protected when they smoke filtered cigarettes where as a matter of fact some filter cigarettes allow a large amount of tar through.

This shows the five lowest and five highest in terms of tar yield of commercial cigarettes.

Mr. SMITH. Are you supported by Government research funds?

Dr. MOORE. Not on this particular project, no.

Mr. SMITH. This is a private project?

Dr. MOORE. It is supported by New York State and not the Federal Government.

Mr. SMITH. Is it the one in Newsweek or Business Week or some magazine?

Dr. MOORE. We published in the professional cancer journal. One of the problems is what should be done about advertising in the meantime. As you know, some of the famous men who have advertised cigarettes for one reason or another, such as Mr. Godfrey, Mr. Murrow, both were victims of lung cancer, although fortunately Mr. Godfrey was successfully treated by surgery and is still alive.

One of the problems is whether or not it is habituating and what we can do to educate. This indicates one of our patients who has had his larynx removed for malignancy but devised a technique of starting to smoke again before he left the hospital.

The problem of cancer in general is that in many instances if it is a local kind of cancer, as Dr. Farber pointed out, we can do relatively large operations such as one you mentioned, Mr. Chairman. This young lady has had part of her face removed by plastic surgery. The right half was removed.

The serious part of cancer is the fact that in many instances it is a systemic disease and we can pick up the cancer cells in the bloodstream such as this black cancer or malnoma cell in a 22-year-old redhead. This youngster died some weeks later.

The things that are being done to aid in the treatment of——

Mr. FLOOD. What is systemic?

Dr. MOORE. The spread of cancer through the body as against what we can do by surgery and X-ray for localized cancer. The most important thing in this regard has been the use of chemotherapy.

This is a young woman with a very bad recurrent cancer of the bowel. This woman was treated with a new compound developed at the University of Wisconsin.

Mr. FLOOD. Recurrent?

Dr. MOORE. Yes, sir. It was not cured the first time.

Here after 8 weeks you can see the lesion has healed. To use a common term, it was only about football-size at that time. Then by surgery we were able to go in and by removing parts of the stomach and spleen and kidney, small bowel and pancreas, to remove this lesion. This woman has been well for the last 5 years.

Another kind of anticancer treatment involves the use of drugs for the surface application of cancers. Here you can see a woman with such lesions before and after treatment with a kind of therapy developed at Roswell Park. One of the other kinds of cancer we are particularly interested in is leukemia. These are the abnormal cells found in children with leukemia. We are developing techniques for growing human cells in the laboratory. This represents a kind of cell plant that is necessary.

Mr. FLOOD. You mean you create cultures?

Dr. MOORE. That is right. We grow them as you would bacteria or other things in sterile techniques using body temperature, and so on. It is a new and exciting part of science. It is less than 28 months old and there is not much we know about it. We can do this now. The important part of it I want to mention is that in many of these cells we are finding a virus particle. This virus particle——

Mr. FLOOD. These are Rube Goldberg-looking mechanisms.

Dr. MOORE. This is just a very simple-looking one we are getting started with. We wish that we had the funds and equipment to make much better ones. Unfortunately, these we had to make up from some equipment that was left over from a dairy plant that went out of business.

This represents the photograph of a virus that was enlarged about 4,000 times, and this is a magnification in which a nickel would be approximately 45 miles across. This is under the electron microscope. This is the virus that we think may be very concerned with certain kinds of cancer. Hence I am showing you that photograph.

The cells from humans can also be shown now to produce antibodies in the laboratory. As you know, antibodies are a very necessary part of our fighting disease, not only cancer but other kinds of diseases. We are learning how to do this now in the laboratories.

Mr. FLOOD. You are creating antibodies artificially?

Dr. MOORE. Biologically, by growing the cells in the laboratory which in turn are making antibodies against things we are exposing them to. You detect this by fluorescent microscopy.

Mr. FLOOD. You find the same things exist in the body?

Dr. MOORE. Yes, sir.

Mr. FLOOD. You have this in your culture?

Dr. MOORE. We are beginning to duplicate some of the kinds we find in the body.

Mr. FLOOD. What would you do after you succeed in duplicating them?

Dr. MOORE. Some people have a deficiency in the antibodies.

Mr. FLOOD. What will you do about it?

Dr. MOORE. We can grow extra amounts of antibodies in the lab and treat them with it.

Mr. FLOOD. In what way?

Dr. MOORE. By injecting them into them. Just as some children have almost a total lack of antibodies from genetic and medical defects. I think we now will be able to resupply them with antibodies.

Dr. FARBER. Your purpose is to kill cancer by this means?

Dr. MOORE. That is right.

Mr. FLOOD. This is another weapon.

Dr. MOORE. That is right. It is immunity. This demonstrates the scheme that we use in transferring tissue between patients with cancer so as to stimulate each other to develop antibodies.

Mr. FLOOD. I note in the press cases like this.

Dr. MOORE. They were done at our Institute. We have 53 such patients treated and evaluated. Twelve of them have responded and three of them have total response and two of them to all intents and purposes cured.

Mr. FLOOD. This is the same as antibodies?

Dr. Moore. Except we are using cells instead of antibody units themselves. This just represents the X-rays of one such young man, a physician from down in Alabama so treated, and it shows the improvement in his lung on the right-hand side after treatment.

Mr. Flood. On these transplants from A to B, is there a transplant back from B to A or just one way?

Dr. Moore. That is correct.

Mr. Flood. Works both ways?

Dr. Moore. That is correct.

That concludes my testimony.

Mr. Flood. That is a very dramatic presentation, Dr. Moore. Both you and your pictures provided eloquent testimony. Thank you very much.

Wednesday, April 26, 1967.

Arthritis and Metabolic Diseases

WITNESSES

HON. CLARK THOMPSON, FORMER REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS
DR. RACHMIEL LEVINE (DIABETES), PROFESSOR AND CHAIRMAN, DEPARTMENT OF MEDICINE, NEW YORK MEDICAL COLLEGE
DR. CORNELIUS H. TRAEGER (ARTHRITIS), CHIEF, ARTHRITIS CLINIC, ROOSEVELT HOSPITAL; CHIEF, ARTHRITIS CLINIC, HOSPITAL FOR SPECIAL SURGERY, CORNELL MEDICAL COLLEGE
DR. PAUL PATTERSON (CYSTIC FIBROSIS), CHAIRMAN, DEPARTMENT OF PEDIATRICS, ALBANY MEDICAL COLLEGE OF UNION UNIVERSITY
DR. GIULIO J. BARBERO (PULMONARY CENTERS), CHAIRMAN, DEPARTMENT OF PEDIATRICS, HAHNEMANN MEDICAL COLLEGE, PHILADELPHIA, PA.
DR. LeROY W. MATTHEWS, PROFESSOR OF PEDIATRICS, WESTERN RESERVE SCHOOL OF MEDICINE, CLEVELAND, OHIO
DR. WILLIAM S. CLARK (ARTHRITIS CENTERS), PRESIDENT, THE ARTHRITIS FOUNDATION, NEW YORK CITY

Mr. Flood. We will now go to arthritis and metabolic diseases.

STATEMENT OF DR. RACHMIEL LEVINE

The first witness is Dr. Rachmiel Levine on diabetes. Dr. Levine is professor and chairman of the Department of Medicine at New York Medical College.

Dr. Levine. Mr. Chairman, I should like to submit a statement for the record.

Mr. Flood. Without objection, that will be inserted.

(The statement follows:)

Prepared Statement of Dr. Rachmiel Levine

(Prepared statement on behalf of the activities of the National Institute of Arthritis and Metabolic Diseases by Dr. Rachmiel Levine, professor and chairman, Department of Medicine, New York Medical College; director of medical services,

Flower-Fifth Avenue, Metropolitan, and Bird S. Coler Hospitals, New York; formerly professor of medicine, Chicago Medical School; formerly professional lecturer in physiology, University of Chicago; formerly director of medical Education, and chairman of the Department of Medicine, Michael Reese Hospital; formerly director, Department of Metabolism and Endocrinology, Michael Reese Hospital; vice president, Harvey Society; past president, Association for Research in Nervous and Mental Diseases; past president, American Diabetes Association; secretary, Section of Medicine, New York Academy of Medicine; member of Chicago Society of Internal Medicine, Institute of Medicine (Chicago), Endocrine Society, Central Society of Clinical Research, and American Physiological Society; fellow of the American College of Physicians; member of the executive committee, Health Research Council of the City of New York; former consultant to the National Science Foundation; former member of the board of directors, Foundations Fund for Psychiatric Research, New Haven.)

Mr. Chairman and Members of the Committee: I appear before you today to speak on behalf of the activities of the National Institute of Arthritis and Metabolic Diseases. My name is Rachmiel Levine and I am a Doctor of Medicine, having obtained by degree at McGill University. I am Professor and Chairman of the Department of Medicine at the New York Medical College. I am Director of Medical Services at the Flower-Fifth Avenue, Metropolitan, and Bird S. Coler Hospitals in New York. I am a former Professor of Medicine at the Chicago Medical School, and a former Professional Lecturer in Physiology at the University of Chicago. I am a former Director of Medical Education, and former Chairman of the Department of Medicine at the Michael Reese Hospital. I also was Director of the Department of Metabolism and Endocrinology at Michael Reese Hospital. I am Vice President of the Harvey Society, Past President of the Association for Research in Nervous and Mental Diseases, Past President of the American Diabetes Association, and Secretary of the Section of Medicine of the New York Academy of Medicine. I am a member of the Chicago Society of Internal Medicine, the Institute of Medicine (Chicago), Endocrine Society, Central Society of Clinical Research, and the American Physiological Society. I am a Fellow of the American College of Physicians, a member of the Executive Committee, Health Research Council of the City of New York, a former Consultant to the National Science Foundation, and a former member of the Board of Directors, Foundations Fund for Psychiatric Research in New Haven.

Mr. Chairman and Members of the Committee: I consider it a privilege to testify before you today on behalf of the National Institute of Arthritis and Metabolic Diseases (NIAMD). Before beginning, however, I wish to thank each of you for your very significant efforts toward solving the health problems of our Nation. Because of your interest, your concern, and your hard work, the battle being waged by our Federal Government against disease and disability can go on. I commend you, specifically, for the continuous support you have given to the vital programs of the National Institutes of Health (NIH). This world-renowned biomedical research center has become the veritable symbol of our country's efforts to achieve better health for everyone. Through its support of biomedical research, research training, and construction of research facilities, as well as through its own intramural laboratory and clinical research, the NIH has made—and will continue to make—valuable contributions toward man's conquest of disease.

My specific intent today is to discuss the progress being made by one of the eight NIH components, the National Institute of Arthritis and Metabolic Diseases (NIAMD). This Institute is performing admirably its task of obtaining new biomedical scientific knowledge needed to control the various arthritic disorders, which are probably responsible for more crippling and discomfort than any of the other ills of man. In addition to research on arthritis and diseases of metabolism such as diabetes, disorders for which the Institute was originally established, it has continued to expand its activties in other major research areas. These now include diseases of the gastrointestinal tract such as peptic ucler, many hereditary disorders such as cystic fibrosis, endocrine gland diseases, blood, liver, and bone disorders, urology and diseases of the kidney, orthopedics, dermatology, and many others. As you can see, this is an extremely broad area of responsibility. I am sure that in the future the Institute will continue to approach its many research problems with confidence that it can aid materially in solving some of the major physical ills of mankind, as well as with the sincere appreciation for this Committee's support.

The solution of these ills will be no small task. As you know, the complexities of biomedical research are exceeded only, perhaps, by the complexities of the human body itself. Productive laboratory experiments and clinical trials require time, labor, patience, diligence, persistence, and the drive to go on despite frustrations and seeming dead-ends. These laborious and meticulous processes, however, provide the function on which progress in medicine is built. And this life-preserving progress will continue to occur as long as research institutions such as the National Institute of Arthritis and Metabolic Diseases are enabled to carry on their work.

In discussing the specific accomplishments of this Institute during the past year and the directions of future research, I will devote most of my time to diabetes research because this is my own special field of interest. For the past 30 years and more, my research efforts have focused primarily on diabetes and related problems. I consider this to be one of the more fascinating and challenging fields of medicine today. Because of the hereditary aspects of diabetes and the fact that it involves many of the body's organ systems, the study of this disorder encompasses the fields of biochemistry and metabolism, genetics, neurology, opthalmology, dermatology, hematology and others. Although the research of recent years has yielded important information about the disease process and valuable new methods of treatment, basically diabetes still remains an enigma.

The disorder results from a built-in error in the body's metabolism. Individuals affected by this serious disease are predisposed to it by their hereditary background. The most obvious chemical defect in diabetes is the body's inability to metabolize carbohydrates normally. As a result, the diabetic is unable to utilize efficiently the carbohydrates he consumes, i.e. turn them into heat or energy needed for normal body functioning, or store them in the form of glycogen. Instead, the carbohydrates, converted into glucose, accumulate in blood and tissues and spill over into the urine. Primarily, this occurs because of a diminished activity or availability of insulin, a hormone produced by the pancreas, although many other factors are now known to be involved. Not only may there be an eventual decreased production of insulin, but there may also be initial periods of overproduction of insulin, stimulated by a basic impairment in the normal activity of this hormone. Disturbances in the metabolism of fats and proteins accompany the defect in carbohydrate utilization. Side by side with these basic metabolic disturbances are the many well known, serious clinical symptoms and pathologic manifestations in the body of the diabetic patient.

In its severe form, diabetes rapidly progresses to a state of grave metabolic derangement, called keto-acidosis, which may result in coma and death unless controlled by insulin administration. In its less severe form, diabetes will result in accelerated degeneration or hardening of the arteries, with serious heart or kidney disease, possibly neurological damage and blindness, and with a greatly decreased life expectancy. Although the disease can be fatal unless properly treated, in most cases it can be well controlled. Today with proper treatment, most diabetics can lead a normal life and live almost as long as their fellow human beings. In a minority of cases, however, although the abnormal blood sugar level can be held in check, the long-term complications of diabetes, primarily those affecting the blood vessels, peripheral nerves and the eyes, are as yet difficult to control.

Authorities now estimate that there are approximately four million diabetics in the United States alone. Another five million in our country are potential diabetics, persons who may develop the disease sometime during their lives. Of the total world population, 30 million are suffering from diabetes, and more than one quarter of the earth's population carry the gene for it.

These staggering figures serve to add dimension to even the smallest relevant research findings. The past year has been a highly productive one in diabetes research, and this Institute has played a vital role in this progress. Studies conducted in Bethesda or supported by the Institute and carried out at other biomedical research centers have continued to increase in a very meaningful and useful way the body of knowledge concerning this complicated disease.

Before commenting on these studies, I should explain that diabetes can be divided into two distinct clinical types, juvenile diabetes and maturity-onset diabetes. Juvenile diabetes beings begins childhood or during the first few decades of life. It progresses rapidly and most patients eventually develop keto-acidosis with a fatal outcome unless insulin injections are administered regularly. Such

patients show greatly accelerated degeneration of blood vessels in many organ systems which can lead to kidney failure, gangrene in the extremities, heart attacks, neurological damage and blindness. Even with insulin therapy, the life expectancy of the juvenile diabetic is shortened considerably.

Maturity-onset diabetes, which usually has its clinical start after the age of forty, is generally less severe, and usually does not progress to keto-acidosis with coma. Accelerated hardening of the smaller arteries, leading to the changes I mentioned before, does occur in maturity-onset diabetes and results in a decreased life expectancy. Most patients with this form of diabetes do not require insulin injections, but can maintain their blood glucose at relatively normal levels by controlling their weight, strict adherence to a low-carbohydrate diet, and use of the oral hypoglycemic drugs.

Certain investigators have proposed that the basic cause of diabetes may be the production of a structurally abnormal insulin. This theory is supported by an Institute-sponsored study which has shown that insulin isolated from the blood of diabetic children is significantly more resistant to destruction by an insulin-specific enzyme than insulin derived from normal individuals. This finding suggests that there is a genetically determined difference in natural insulin which in the juvenile diabetic contributes to the underlying biochemical disorder in diabetes. It would appear that resistance of juvenile diabetic insulin to the enzyme is a function of some difference in the insulin molecule itself, perhaps a structural change which affects the active contact site for the enzyme.

Other Institute-supported investigators have found a new strain of laboratory mice that will provide a much needed animal model for experimental research on juvenile diabetes. Diabetes resembling the human maturity-onset type had been found or produced previously in hamsters, dogs, and the Egyptian sand rat, but there had been no animal model for the juvenile form of the disease. Institute-supported investigators have now found a strain of inbred mice which develop a disorder resembling human juvenile diabetes as the result of a genetic mutation. The diabetic animals show severe disease symptoms with onset at an early age and a shortened life span. Because the disease closely resembles juvenile diabetes in man and is easily reproduced, scientists will now have a valuable new research tool for studying the human disease. The investigators who discovered the new animal model are already conducting further studies of the chemistry, endocrinology, pathology, and genetics of the diabetes mutant. Such studies may provide new information on many of the unanswered questions about the factors causing diabetes.

Investigators at the Institute's Clinical Field Studies Unit in Phoenix, Arizona, discovered in 1965 that the Pima Indians on the Gila River Reservation have the highest prevalence of diabetes ever reported in any circumscribed, normal population group. Since that time, the scientists have continued their studies of the Pimas, intensively investigating the mode of inheritance of diabetes, the natural history of the disease and its complications, the role of diet and other environment factors, and the effect of various therapeutic measures. Their most recent findings indicate that the effects of child bearing do not account for the higher prevalence of diabetes among parous women. These findings are at variance with previous studies, principally in England, which supported the hypothesis that pregnancy precipitates diabetes. Contrary to expectations, the prevalence of diabetes, especially in the younger age groups, was found to be somewhat higher in Pima Indian women who have *not* borne children than in those who have borne seven and more. The Institute scientists suggest that in previous studies which linked diabetes to pregnancy there was most likely an indirect association with obesity.

Even though insulin was discovered 45 years ago, there is still much disagreement about the mechanism of action of this important hormone, and this remains one of the most challenging questions in diabetes research. We know that insulin's most important function is to facilitate the entry of glucose into the cells of the body, but an understanding of the precise mechanism by which insulin accomplishes this task is essential to full solution of the diabetes problem.

Investigators have proposed that insulin may act primarily by initiating a disturbance at the cell surface which produces widespread structural changes. Such changes, it is theorized, would lead not only to increased penetration of glucose and other substances into the cell interior, but might also explain several other known effects of insulin. This hypothesis has been strengthened by a recent finding that radioactively labelled insulin binds largely to the boundary membrane of the muscle cell. Institute grantees have suggested that this action

of insulin may facilitate the entry of glucose, electrolytes, water, and amino acids into the cell via a hormone-sensitive, possibly contractile, system which might also account for the known stimulating effects of insulin on protein synthesis. Other Institute grantee scientists have added support to this proposal by showing that insulin has an immediate effect on potassium and sodium movement in and out of rat muscle tissue. This finding implies that insulin acts on the outer boundary of muscle cells and is in line with the proposal that it acts primarily on the cell membrane.

Diabetes researchers have long believed that abnormal carbohydrate metabolism is the first clinical sign of diabetes, and that changes in the small blood vessels develop later as the disease progresses. Institute grantees have now completed a study of a number of persons who are destined by heridity to develop diabetes. The investigators found a marked thickening of the basement membrane of capillaries (which is characteristic of overt diabetes) in at least 50 percent of these prediabetic subjects *prior* to the beginning of carbohydrate abnormalities. This evidence suggests that the primary lesion in diabetes may be the small blood vessel changes, and that these changes are followed secondarily by the carbohydrate derangement. This significant finding provides diabetes researchers with a new avenue of investigation in determining the basic cause of diabetes.

Diabetes complications such as heart disease, failing eyesight, hardening of the arteries, impaired kidney function, and diabetic neuropathy continue to plague the older diabetic who has had the disease for many years, despite dramatic improvements in the general management of this disease. While concentrating primarily on the cause and prevention of the basic disease, researchers today are also vitally interested in these complications in the older diabetic, inasmuch as his life expectancy and function to a large extent depend on them.

About four percent of diabetics have diabetic neuropathy, a condition characterized by pathological changes in the peripheral nervous system. Although the exact cause of these lesions is not known, an Institute-supported investigator has obtained evidence to suggest that a little-known chemical pathway involved in sugar metabolism is overactive in nervous tissue such as the sciatic nerve and spinal cord of diametic rats. The existence of such a hyperactive mechanism in the nervous tissue, coupled with the marked accumulation of its products in diabetes, may have minor implications in the development of diabetic peripheral neuropathy.

A number of factors, some of which I have already mentioned, have been identified as predisposing an individual to diabetes. Persons most likely to develop the disease are predisposed by heredity, overweight, beyond the age of forty, relatives of diabetics, or overweight mothers of large babies. During the past year Institute grantee-scientists found that idiopathic edema (swelling of certain body tissues in association with accumulation of fluid, the cause of which is unknown) may also be a predisposing factor for diabetes. Women nearing the menopause who are overweight and emotionally tense and unstable are most often affected by this condition. Studies of such patients now have suggested that idiopathic edema may be an early sign of diabetes. Scientists supported by the Institute have found that these patients show both an abnormality of the small blood vessels and impaired carbohydrate tolerance, conditions which are known to precede the onset of clinically apparent diabetes. The investigators recommend that carbohydrate tolerance should be evaluated in idiopathic edema patients periodically, and treatment appropirate to the severity of any diabetic abnormality which may be found, should be initiated.

One of the long held concepts in diabetes is that women who give birth to babies weighing more than nine pounds are likely candidates for this disease. This concept has now been questioned by Institute-supported investigators who studied 5,534 pregnant women, following them to term. They found elevated blood sugar levels only in overweight women who gave birth to large babies. Overweight women with infants of average birth weight, as well as women of normal weight with large babies, had no such blood sugar elevation. This finding implies that it might be possible to make a more accurate clinical distinction than is made now between potential mothers who are most likely to develop diabetes and those who are not likely to develop the disease.

The concept of autoimmunity, under suspicion as a causative factor in a number of different diseases including rheumatoid arthritis, is also now being considered in diabetes. This concept, simply stated, holds that some diseases are

caused by the development and persistence of abnormal antibodies which take action against the body's own tissues. Grantee scientists have reported that an autoimmune diabetes closely resembling early juvenile diabetes can be induced in rabbits by immunizing them with bovine insulin.

The investigators had shown earlier that rabbits immunized with bovine insulin developed antibodies directed against their own endogenous insulin. It was observed subsequently that several of these animals not only produced such antibodies, but also, as a result of the autoimmune phenomenon, became acutely diabetic. This observation raises the possibility that autoimmunity may not only be a contributing factor to the diabetic state in insulin-treated human subjects, but may also be an important underlying cause of the disease. At the present time, however, evidence that autoimmunity may play a role in the causation of diabetes is equivocal, and further studies will be necessary to determine its role, if any.

One of the difficult tasks facing investigators in the field of diabetes today is that of keeping abreast of current research developments. The breadth and depth of ongoing diabetes-related studies is such that maintaining meaningful current awareness is becoming increasingly difficult. The Institute, cognizant of the need for current awareness and improved scientific communications, has extended, in recent years, major financial support to the development of a comprehensive diabetes information retrieval program. The result was the establishment of an automated, computerized diabetes information center jointly located at the University of Minnesota, the University of Rochester, and Western Reserve University. This combined operation selects from MEDLARS computer tapes of the National Library of Medicine, diabetes-related scientific articles from the entire world literature on the subject.

As I mentioned to this Committee last year, in January of 1966 the Institute began publication and distribution of the regular output of this diabetes information program, in the form of monthly indexed bibliographies on diabetes. The current-awareness bulletin—"Diabetes Literature Index"—covers the entire current world literature in diabetes and provides an up-to-date alerting service to help keep diabetes investigators informed of current developments in their field. The response to this publication has been highly favorable. More than 2,000 copies of the Index are now being sent out each month by the Institute to diabetes researchers, practicing physicians, hospital librarians, and others who have requested it.

The Institute has also been helping to foster improved scientific communications in other areas of its research responsibility. The current-awareness publications initiated thus far by NIAMD are: "Arthritis and Rheumatic Diseases Abstracts," "Gastroenterology Abstracts and Citations," and a newcomer this year, the "Artificial Kidney Bibliography," which is being published quarterly. Several more are in the planning stages. Thus you can see that the Institute is making a number of very worthwhile contributions toward solving the ever-expanding information crisis faced by all areas of science. Researchers must have centralized sources of information such as these current-awareness periodicals if they are to keep up with the developments in their field as published in the voluminous literature of today.

The Institute's accomplishments during the past year in other areas have been equally fruitful. Lack of time prohibits me from recounting most of them, but I would like to mention a few. The Institute's vital special program of research and development of artificial kidneys has already resulted in a new artificial kidney which is considerably smaller, more efficient, and less costly in operation than those now in existence. In the area of peptic ulcer, an Institute grantee has shown that a new compound, amylopectin sulfate, is an effective form of treatment for duodenal ulcers and will help prevent their recurrence. Other achievements include a new treatment for malabsorption in intestinal scleroderma: the finding that a new cartilage-bone marrow extract is of clinical value in treating osteoarthritis; the development of an improved method of screening children for cystic fibrosis; the finding that potent antihemophilic globulin (AHG) derived from animals is effective in controlling life-threatening hemorrhages in patients with hemophilia; and the determination of the chemical structure of human growth hormone, used in the treatment of hypopituitary dwarfism, a major advance towards its eventual synthesis.

This last achievement, a most significant illustration of the value of basic research which eventually is transmitted to the doctor at the bedside, points up a subject which has been receiving a great deal of publicity recently, that is,

the question of the respective utilities of fundamental research and of applied or developmental research. It can hardly be denied that monies for research are in short supply due to our vast foreign and domestic commitments. Critics of fundamental research in the biomedical sciences indicate that the "beauty of science for its own sake" is hardly a luxury we can afford, further stating that nothing can be of greater concern to the scientist than relieving the agony of excruciating pain and saving his fellow man from certain death. This statement can hardly be gainsaid, yet it lacks a certain truth which is that all advances in medicine rest upon a foundation of basic research, without which they would not have come about.

These critics have been disturbed about the slow pace of progress, with which, by the way, I totally disagree, toward finding a cure for cancer, heart disease, arthritis and diabetes. They believe that only applied research, preferably in the form of special crash programs, in these areas holds the key to the solutions of these problems. I believe that that key may turn the lock but it won't open the door. If anything, it seems perfectly clear that our present stockpile of basic biomedical knowledge is wholly inadequate to direct applied research toward the causes and the cures of our medical problems, and that much additional fundamental research is needed to lay the foundation for expanded clinical or applied research efforts.

It has been said many times before but it is worth repeating for the record: Fundamental research provides the capital fund of knowledge on which applied researchers draw to give society a rich rate of interest. If the critical area of fundamental research is not adequately supported, or to continue my figurative example, if the capital fund is not increased or is expanded too slowly, the time will come when the expected interest or dividends dry up, when applied researchers may well be bankrupt for lack of fundamental new ideas and knowledge.

Fundamental research in biomedicine may be likened to the foundations upon which the house of clinical knowledge and application is built. There is a limit to the expansion of this structure, to the number of additional floors and balconies which can be added to the existing building unless the foundations are greatly enlarged. At present we are at a stage where the existing superstructure is beginning to tax the foundations. In brief, we need a vast expansion of fundamental knowledge in biomedicine from which to develop new clinical applications for our sick. Without those new foundations, any applied research efforts will soon reach the point of greatly diminished, if any, returns.

Mr. Chairman and Members of the Committee, important advances against disease and disability will continue to be made as long as the National Institute of Arthritis and Metabolic Diseases has the wherewithal to carry out its important programs. This Committee has made gratifying increases in the Institute's budget in the past, and I entreat you to do likewise this year. I am quite familiar with the past and present programs of the Institute, and I know what its financial needs are. I believe that an overall increase in operating funds is vitally needed and warranted. Having reviewed the Administration's proposed budget for this Institute, I must state emphatically that it is not adequate to support the activities needed to carry out is mission.

Because of the necessary expansion of the Institute's research grants program, it faces a deficit that grows larger every year. The Institute's extramural program is unique in that it covers a considerably wider spectrum of disease areas than other NIH Institutes. The number of research grants applications which have been approved after a tough review for merit and relevance but which cannot be financed for lack of funds, is increasing annually. Unless more of these projects can be funded, many promising and essential research projects will never be carried out and all of us, in the long run, will be the losers.

Likewise, the figure for fellowship and training grants needs an upward revision in order to assure an adequate corps of well-trained scientific manpower. The Institute's program of extending financial support for the training of promising young men and women entering biomedical research activities has been rewarding. But a further investment in this very worthwhile enterprise would undoubtedly bring a wide margin of returns. The budget item for direct operations also fails to provide enough support for important field studies and applied research and development efforts in selected areas.

I hereby would like to submit a citizen's budget which, I believe, meets more adequately the minimal needs of this Institute. I hope this Committee will act now to provide the Institute with its ammunition for the war on disease.

Fiscal year 1968 budget proposed by citizens for the National Institute of Arthritis and Metabolic Diseases

[In thousands of dollars]

	1968 President's budget	1968 citizens' proposal
Extramural grants:		
Research grants	$96,304	$105,000
Fellowships	6,591	7,500
Training	15,706	17,500
Total extramural	118,601	130,000
Direct operations:		
Laboratory and clinical research	14,333	15,000
Collaborative studies	7,736	8,500
Biometry, epidemiology, and field studies	751	850
Review and approval of grants	2,157	2,500
Program direction	376	550
Total direct operations	25,353	27,400
Total	143,954	157,400

Mr. Chairman and Members of the Committee, again I thank you for your continued interest and support, and for the privilege of testifying here today.

Dr. LEVINE. I would like to add a few remarks on behalf of the National Institute of Arthritis and Metabolic Diseases, particularly in the field of diabetes in which I have had experience in the last 30 years.

The Institute, as the name implies, deals with a wide range or spectrum of disease all under the section or field of metabolism. In the field of metabolism, diabetes——

Mr. FLOOD. What is metabolism?

Dr. LEVINE. That is the science of how the body handles food, produces energy from it, and repairs itself.

Disturbances of metabolism are frequent and common. The most common of these is diabetes, an old and ancient disease but about which we have learned an enormous amount in the last 20, 25 years because of the immense growth of knowledge in the biochemistry of the body.

Diabetes is an immense problem in the world, especially in the United States. I say especially because of our food affluence. Diabetes appears most commonly in urban communities, in the affluent and well-to-do countries because of its relationship to the amount of food intake and to weight.

Mr. FLOOD. Mere amount?

Dr. LEVINE. Yes.

Mr. FLOOD. Variation?

Dr. LEVINE. Yes, because the weight is an important aspect of this. In an underdeveloped country in times of famine or war, there apparently is less diabetes. I say apparently because in diabetes, which is well known as a disturbance in carbohydrate metabolism, the blood sugar goes up and sugar spills over and is wasted in the urine.

Mr. FLOOD. There is no difficulty in diagnosis?

Dr. LEVINE. No. But there is difficulty in the definition as to who has and who does not have diabetes. There has been progress in the last 20 years.

Mr. FLOOD. How does that follow? If there is this problem in diagnosis, I do not understand the rest of the sentence.

Dr. LEVINE. It depends on your definition. If you define diabetes as somebody who has a blood sugar higher than normal and spills sugar in the urine, you only catch the more severe group.

Mr. FLOOD. How do you define it?

Dr. LEVINE. You now define it as individuals who by tests have what is known as an abnormal glucose tolerance. There you will detect a much wider group and now we have added to this the actual quantitative estimate of the amount of insulin in the blood which is a highly refined technique.

Mr. FLOOD. Under normal conditions?

Dr. LEVINE. Under normal and abnormal conditions.

Mr. FLOOD. The presence of insulin in the blood is a natural condition?

Dr. LEVINE. That is natural. But the way in which the insulin reacts to the presence of food is different in the diabetic than in the normal. Over the years we have learned to detect what is called latent or potential diabetes. To give you a quantitative picture, we now have in the United States something in the order of 4 million known diabetics, known to the physicians.

Mr. FLOOD. Is that a lot?

Dr. LEVINE. That is quite a bit. It is a high incidence, but there are probably about 5 or 6 million potential diabetics.

At the same time, by potential you mean individuals who at the present moment cannot be so diagnosed but in whom it is statistically predictable they will get diabetes in the next 10 or 15 years.

Mr. FLOOD. The odds are better than even?

Dr. LEVINE. The odds are much better than even. We have found that diabetes is an hereditary disorder. For example, the degree of propinquity——

Mr. FLOOD. Transmitted generation by generation?

Dr. LEVINE. Generation by generation.

Mr. FLOOD. Mendel's law?

Dr. LEVINE. Mendelian. With recessive characteristics. For example, in case of a twin brother, one of whom has diabetes, the other one is almost 100 percent sure of getting it. When both parents have diabetes, the chance of developing it is almost 100 percent. If the degree of relationship differs, then these figures fall, but in general people with diabetes in the family have a 25-percent chance of having diabetes sometime in their life. This has been one concern that the Institute has supported and there are some very queer situations. One of the Institute-supported projects has been the finding that on the Pima Indian Reservation in Arizona, in that reservation there is a 40-percent incidence of diabetes in the tribe. A study is going on as to the reasons for this, whether this is inbreeding or environmental or both. This is also being——

Mr. FLOOD. Is there much inbreeding?

Dr. LEVINE. There is not as much. There is not so much that one can explain the whole situation by inbreeding. There is more to it than that.

The animal experimentation is going on parallel on genetic strains of certain rodents who develop diabetes spontaneously. This is a very interesting one. A desert rat from Egypt was studied for different

purposes but it was found that when he was brought from Egypt to the affluent food of the laboratories of the United States, he got diabetes. In Egypt when they only ate the desert plants they are thin and do not have diabetes. This is a very interesting counterpart to the human disorder. This animal is being studied more and more.

The revolution in the treatment of diabetes occurred first about 10 years ago where, in addition to insulin, we now have oral tablets which in the milder forms of diabetes can substitute as treatment for insulin. These are so-called sulfanylurea compounds and others. The study of those has advanced the field tremendously. What we do not have is an oral substitute for insulin. That has to be given by injection. The more severe forms can be treated orally.

Mr. FLOOD. How many times a day?

Dr. LEVINE. Generally once or twice a day. Sometimes three or four times in the more severe cases. With a chronic disease of this sort this is a terrible handicap. Research has to go on in the field of the biochemical field of insulin action.

Mr. FLOOD. What is diabetic shock?

Dr. LEVINE. There are two kinds. There is the diabetic shock and coma due to the fact that the disease is rampant and fat is burned at tremendous rates, producing certain acids called keto-acids which produce general acidosis and react on the brain and produce coma.

The treatment there is huge amounts of insulin and fluids.

The other kind is the exact opposite. That is when insulin lowers the blood sugar too low so the brain suffers undernutrition. The brain needs glucose at all times. Therefore, when you drop the blood sugar too fast the brain will react as if you cut off the oxygen. This is the so-called insulin shock which occurs in diabetes.

The study of the nature of insulin action, exactly what insulin does, is extremely important because if we understood this on a molecular level, biochemical level——

Mr. FLOOD. From what do you make it artificially?

Dr. LEVINE. From the pancreas of animals, beef, pigs, sheep, that are removed at the slaughterhouse and extracted. One can synthesize insulin now. This has been done in the last few years but this is not yet economically feasible to substitute for the extraction procedures.

Mr. FLOOD. Is it expensive?

Dr. LEVINE. No. Insulin is not very expensive. As a matter of fact, the oral tablets for mild diabetics cost more per day than the insulin for the severe diabetics. The big problem is not the cost of the insulin. It is the way of administering it.

Mr. FLOOD. Suppose I went to the corner drugstore to get somebody in my family insulin. What would I get? How much would I pay for it, one prescription, one order?

Dr. LEVINE. What you would get for the average case depends on the number of units needed. For the average case it would not cost more than about between 15 and 25 cents a day.

The oral tablets cost a little more.

To come back to the need for basic research, if we really understood the way insulin works we could perhaps substitute an oral chemical for it. You do not know how to fashion it though, if you do not understand the exact manner in which insulin does its job.

Mr. FLOOD. I understand you did substitute it in mild cases.

Dr. LEVINE. In mild cases. But the reason it works in mild cases is that it does not really substitute for insulin. What it does is stimulates the patient's own pancreas to secrete a little more insulin than it did before. So it is really not a substitute, it is an aid. But for a real substitute you would need to know more about insulin action.

The other point about insulin is that there is some suspicion, and it may be that this is the hereditary part, that the patient's insulin is slightly different chemically from normal insulin, structurally abnormal. There is some indication in the first two papers on the subject that have appeared that this may be so. This means we need better study of protein structure, because insulin is a protein.

Also in this, as in cancer, you have just heard from Dr. Moore, there is a suspicion that some change, some abnormal reaction to an abnormal protein might produce an antibody which later goes on inexorably to ruin more of the pancreas. So that antibodies are rearing their head in this field as well.

Mr. FLOOD. What is a protein?

Dr. LEVINE. A protein is the class of chemical materials which constitutes the machinery of the cell. It is a class of compounds, large molecules containing carbon, hydrogen, oxygen, but especially nitrogen. This is the most essential portion of the protoplasm of each cell. There are hundreds of thousands of different proteins. Proteins are characterized by the fact that antibodies can be formed against them.

Mr. FLOOD. They have no relationship to the nucleus of a cell; they are merely part of the physical structure as well?

Dr. LEVINE. A nucleus contains nucleic acids and proteins. The cytoplasm contains, or could contain some nucleic acids but mainly proteins.

Now, the most important part of diabetes is the nonsugar part. I call it the bitter part rather than the sweet part of diabetes, and that is that diabetes is known to increase the rate and degree of severity of hardening of the arteries throughout the body, and has a blood vessel disorder of its own which leads to small blood vessels breaking, hemorrhaging and otherwise becoming disrupted especially in the kidneys and in the eyes. Diabetes is now the second most common cause of adult blindness in the United States. It is the cause of much kidney failure, and diabetes is the only condition which causes a greater rate of coronary disease in the population of younger women who are ordinarily protected against coronary disease.

Diabetes then contains within it the seed of our finding out the cause of arteriosclerosis and coronary disease. We have learned how to prolong the life of a diabetic to about 25 to 30 years after the discovery of the disease, which, for most diabetics, puts them in a perfectly good survival period, because most diabetes begins after the age of 40 but the youngsters with diabetes also have about the same span of life. If a youngster gets diabetes at 10, statistically he is gone by the age of 35 or 40 due to coronary scleroisis and blood vessel disorders.

Now, the finding of preventive treatment for diabetes and the findings of mild cases means, as well, not only the prevention of the rise of blood sugar, which really is not that important as the prevention of the inexorable march of the blood vessel disorder. It has now been shown in Texas by Dr. Siperstein in Dallas——

Mr. FLOOD. The condition becomes progressively worse?

Dr. LEVINE. Yes—that by doing electron microscopy on the blood vessels of relatives; that is, relatives of diabetics, the so-called prediabetic group, where the blood sugar is perfectly normal, that you can begin to see the changes in the blood vessels already, long before there is any so-called evident metabolic abnormality.

These are then the studies that need to be bolstered and need to proceed at a much greater rate.

The Institute has done a magnificent job in this field as well as in the others under its supervision, but as I understand it, last year the number of research grants in the field which were approved by the study sections but which could not be funded reached more than 50 percent of those submitted.

It is, therefore, as far as the citizens' budget for the Institute is concerned, that we would recommend, a rather modest increase over the recommendation of the President's budget for fiscal 1968. You see, the actual 1967 budget of $134 million for the Institute was raised by the President's budget by 7 percent for fiscal year 1968. Seven percent will not permit the maintenance of the research at the level now operating because of the annual research cost increase. We recommend an additional 9 percent which would just about keep the onging research effort at a level, recognizing the many things that Congress has to do and that the President has to do. But the proposed citizens' budget of $157 million is just about 15, 16 percent higher than the fiscal year 1967 budget, which is just about enough to maintain the level of operations and to increase a little bit the training facilities for people to enter the various fields under the Institute.

Thank you.

Mr. FLOOD. Thank you very much, Doctor.

STATEMENT OF DR. CORNELIUS H. TRAEGER

Mr. FLOOD. We will now hear Dr. Cornelius H. Traeger on the subject of arthritis. He is chief of the Arthritis Clinic, Roosevelt Hospital, and chief of the Arthritis Clinic, Hospital for Special Surgery, Cornell Medical College.

Dr. TRAEGER. Thank you, Mr. Chairman and members of the committee. First of all I would like to express my appreciation for the ability to appear before you in behalf of the National Institutes of Health for Arthritis and Metabolic Diseases.

I would also request permission to present a prepared statement.

Mr. FLOOD. Without objection, it is so ordered. The statement will appear in its entirety in the record at this point, Doctor.

(The statement follows:)

PREPARED STATEMENT OF DR. CORNELIUS H. TRAEGER

(Prepared statement on behalf of the activities of the National Institute of Arthritis and Metabolic Diseases, by Dr. Cornelius H. Traeger, practicing physician; life fellow of the American College of Physicians; chief, arthritis clinic, and consulting attending physician, Roosevelt Hospital; chief, arthritis clinic, and attending physician, Hospital for Special Surgery of the Cornell Medical College; professor of clinical medicine, Cornell Medical College; past president, New York Rheumatism Association; past vice president, American Rheumatism

Association; member of the board of governors, Arthritis and Rheumatism Foundation; member of the National Advisory Council for Regional Medical Programs, National Institutes of Health; former member of the National Advisory Council, National Institute of Neurological Diseases and Blindness; special consultant to the Surgeon General, U.S. Public Health Service; former medical director, National Multiple Sclerosis Society; member of the Senate Committee of Consultants on Medical Research; and former member of the National Advisory Council, National Institute of Arthritis and Metabolic Diseases.)

Mr. Chairman and Members of the Committee. It is with great pleasure that I appear before you today to speak once more on behalf of the activities of the National Institute of Arthritis and Metabolic Diseases. My name is Cornelius Traeger and I am a Doctor of Medicine, having obtained my medical degree at the Columbia University College of Physicians and Surgeons. I am a practicing physician and member of the faculty of Cornell University Medical College. I am Chief of the Arthritis Clinic and Consulting Attending Physician at the Hospital for Special Surgery of the Cornell Medical Center and at Roosevelt Hospital. I am a member of the Board of Governors of the Arthritis and Rheumatism Foundation, Past President of the New York Rheumatism Association, Past Vice President of the American Rheumatism Association, and Past Medical Director of the National Multiple Sclerosis Society. I have been associated in the past with the programs of the U.S. Public Health Service and the National Institutes of Health as a Special Consultant to the Surgeon General and as a member of the National Advisory Councils of the National Institute of Neurological Diseases and Blindness and the National Institute of Arthritis and Metabolic Diseases. I also was a member of the Senate Committee of Consultants on Medical Research.

Before proceeding I would like to express my appreciation for the privilege of appearing before you today. The Committee has long been deeply intimate and actively concerned with the support of an endeavor to which I have devoted my life, the prevention and cure of disease. Long before the country as a whole became fully aware of the importance of progress in medical research, this Committee and its counterpart in the Senate recognized the vital needs in this field. And since then, it has not only given invaluable support to the campaign for improved human health but also sensitively judged the needs for expanded efforts as they arose.

If you will permit me, Mr. Chairman, I would like at this time to give a brief history of the National Institute of Arthritis and Metabolic Diseases which, since its establishment as an Institute in 1950, has been assigned a continually growing responsibility in the Federally-supported campaign against disease. Originally, this Institute was charged with the conduct and support of research in the various arthritic disorders, the rheumatic and collagen diseases, and such metabolic diseases as diabetes.

Over the years, this responsibility has been broadened to encompass numerous other disease categories, among them being: endocrine disorders; disorders of the gastrointestinal tract, including diseases of the gallbladder and liver; kidney diseases and urological disorders; diseases of the bone and blood; a wide variety of other metabolic diseases, both acquired and inherited, such as cystic fibrosis; and the fields of nutrition, orthopedics and dermatology.

The Institute's total program responsibilities include research investigations into the cause, diagnosis and treatment of these disease categories. To attain these goals, the fundamental research program of the Institute encompasses the disciplines of biology, biochemistry, chemistry, molecular biology, anatomy, physiology, enzymology, pathology, pharmacology, toxicology, histology, genetics, and many others as they relate to the life processes in health and to the diseases that are within its responsibilities. Much Institute emphasis is placed on the conduct and support of research into the fundamental sciences which constitute the foundation of knowledge pertinent to these disease categories.

From the vantage point of my position as a research investigator, physician and medical educator, I can attest to the high regard in which this Institute is held in biomedical circles for its prudent planning and emphasis upon areas of great need ,and can testify to the achievements of its research and training programs and to the efficiency with which they are administered.

I have seen new and relatively neglected areas of biomedical research brought to vigorous life through the programs of this Institute. I could, in fact, relate a lengthy list of solid, and on more than a few occasions, outstanding scientific

accomplishments, but time will not permit me. Some of these advances have already eased the burden of many people disabled by chronic diseases and have provided clues to the possible solution of other disease problems which should benefit untold future generations, enabling them to live active and productive lives to the fullest extent of their individual potentials.

My primary purpose in testifying before you today is to tell you why I believe that this Institute must increase its current support of research and research training both in the fundamental biomedical sciences, and in the specialized clinical fields. And, in view of the limited time available, I will endeavor to stress those Institute efforts within the area of one of my deepest interests, arthritis and related diseases.

As a result of its conduct and support of research in arthritis, this Institute stands in the forefront of the campaign against this disorder which today afflicts several millions of our people. The equally astounding economic impact of this insidious disease is now estimated at about $3.6 billion in annual costs to the Nation. The attendant suffering and human misery is impossible to assess.

Arthritis is the term applied to a broad group of diseases that result in joint inflammation and destruction. Specialists in arthritis have divided the different types of arthritis into four major categories: a) traumatic, that is, caused either by acute injury or by chronic wear and tear on the joint resulting in degenerative arthritis, or osteoarthritis; b) infectious, caused by bacterial infections and usually responding favorably to specific antibacterial therapy; c) metabolic derangement such as gouty arthritis, involving a metabolic alteration in the body's handling of uric acid; and d) the most puzzling and crippling of all the groups, rheumatoid arthritis and related collagen or connective tissue diseases, which seem to involve abnormal body immunity reactions.

Collagen diseases such as rheumatoid arthritis, systemic lupus erythematosus, scleroderma, dermatomyositis, and polyarthritis nodosa, among others, often present intriguing similarities. Patients with these disorders have been noted to have abnormal serum proteins which act as antibodies. The relationship of these abnormal antibodies, apparently capable of being directed against the host's own tissues, to the underlying nature of the disease, is not yet clear. Nonetheless, whether they are cause, effect, or merely associated with the basic pathology, these proteins provide a connecting link for the study of all these diseases, and a significant finding in one might benefit research in rheumatoid arthritis, and vice versa.

The main thrust of current Institute research and support of research in arthritis is being waged against rheumatoid arthritis, in which new etiologic possibilities have recently been uncovered. Two types of microorganisms that have been implicated in recent reports in joint disease in animals are now being investigated in relation to rheumatic diseases. The possible role of mycoplasmas, microorganisms with characteristics between bacteria and viruses, in causing rheumatoid arthitis is currently being studied, as well as the possible causative role of viruses belonging to the genus *Bedsonia*.

In the past year, Institute-supported investigators produced arthritis in monkeys by injecting them with *Bedsonia* organisms isolated from human patients with Reiter's syndrome, a disease closely related to rheumatoid arthritis. These investigators were then able to recover *Bedsonia* from all the infected joints, and from various internal organs of the experimental monkeys. The *Bedsonia* viruses have been reported to cause polyarthritis in lambs. This fact, plus the knowledge that microorganisms of this type cause human trachoma and inclusion conjunctivitis, led the investigators to suspect that they might also contribute to the development of Reiter's syndrome. If follow-up studies confirm these initial findings, this research may eventually have important bearing on a whole series of disorders having arthritic manifestations, including rheumatoid arthritis.

A study reported by another group of Institute-supported investigators offers hope, for example, for an effective form of treatment in rheumatoid arthritis and, possibly, in other diseases caused by faulty immune mechanisms (autoimmunity). These scientists produced adjuvant arthritis—an experimentally induced form of arthritis affecting many joints and exhibiting a true, but transitory, immunological reaction—in rats by injecting them with Freund's adjuvant, a material used in many immunity investigations. Therapy with rabbit antilymphocyte serum successfully suppressed the usual reactions in these rats; in contrast, untreated control animals all deevloped marked polyarthritis. This

valuable and important research lead is being followed up with other studies to ascertain its possible applicability in treating human arthitis.

No approach is being ignored by this Institute in its continuing search for new information and knowledge regarding rheumatoid arthritis. Among the factors thought to be associated with its onset, for example, are heredity and stress. Institute grantees in the past year obtained evidence that emotional stress may play a far greater role in the onset of rheumatoid arthritis than heredity. Other institute-supported studies in the last year include explanations of the anti-inflammatory and fever-reducing effects of salicylates, a drug used for more frequently than corticosteroids in rheumatoid arthritis and other arthritic disorders.

Although the cause of systemic lupus erythematosus (SLE) is not known, evidence points to an abnormal antibody reaction. SLE is a grave, generalized disease manifested by structural and functional changes in the skin, joints and internal organs. Moreover, it has been suggested also that antibodies may combine with products of tissue breakdown to form immune complexes potentially harmful to one prime target of SLE, the kidney. Institute grantees have now uncovered additional evidence to support this theory. In one study, investigators have detected certain antibodies in the skin lesions of SLE patients which led them to propose that such lesions may contribute to the formation of immune complexes capable of damaging other organs. Pursuit of this particular research might provide clues as to the cause and development of SLE, as well as lead to controlled studies of various methods of therapy.

Several significant findings also were reported in the last year by Institute-supported scientists regarding osteoarthritis, the common "wear and tear" form of arthritis. These investigators reported that a new cartilage-bone marrow extract, may be of clinical value in osteoarthritis therapy. The cartilage of osteoarthritis patients is thought to be deficient in chondroitin sulfate, a component of the ground substance of these tissues. Therefore, a drug capable of stimulating the synthesis of chondroitin sulfate in the affected tissues theoretically would be considered helpful in counteracting the pathologic changes seen in osteoarthritis. The investigators reported that this preparation stimulated the uptake of radioactive sulphur in human osteoarthritis cartilage, thus indicating increased synthesis of chondroitin sulfate. The study warrants further research into the basic mechanism of action of this extract and continued clinical trials of its effectiveness.

At the present time, gout can be and is the best controlled of all arthritic diseases. Some 500,000 to 1,000,000 Americans are thought to suffer from gout, which characteristically, affects the joints of the big toe as well as other joints and is often excruciatingly painful. Current therapy, most of which has been developed under the sponsorship of this Institute, is designed to control excess uric acid accumulation in the body and prevent or relieve the recurrent painful attacks. Drugs developed in the last few years can now be utilized to suppress abnormal uric acid synthesis or to stimulate its excretion in the urine, thereby preventing a buildup of harmful crystal deposits in the joints, urinary tract and in other tissues. Our current ability to treat and manage gout patients and to prevent its ravages is, indeed, a splendid example of achievements of this Institute.

These are but a few indicative examples of the broad scale attack on arthritis and metabolic diseases being conducted by and supported by this Institute. Before I close my comments on research, Mr. Chairman, I would like to mention briefly some important findings in other disease areas for which the Institute is responsible. In gastroenterology, for example, an Institute grantee reported that amylopectin sulfate—one of the sulfated polysaccharides—is an effective antipeptic agent in the treatment of chronic duodenal ulcer. Another Institute-supported investigator has shown that antacids constitute a considerably more rational and effective duodenal ulcer therapy when given one hour *after* a meal, rather than as according to current convention ("between meals", or several hours' after a meal).

Institute scientists are continuing their studies of the Pima Indians of Arizona, a population group recently found to have the highest rate of diabetes ever reported. Their most recent findings indicate that, in contrast to current thinking, the effects of child bearing do not account for the higher prevalence of diabetes among women.

In the past year, investigators receiving support from the Institute reported that by combining nuclear reactor techniques with fingernail clippings from 170

kindergarten children they could markedly accelerate screening of such children for cystic fibrosis, an inherited generalized metabolic disorder characterized by production of abnormal secretions by the various exocrine—externally secreting—glands of the body, resulting in malnutrition and fatal chronic lung disease.

Of tremendous importance are the Institute programs of research and support of research in kidney disease, including the various kidney disease entities, kidney transplantation studies, improved understanding of chronic uremia (the end stage of kidney failure), and its artificial kidney program. Progress, for example, in the latter program was amply demonstrated this past year when a group of Institute-supported investigators developed a new artificial kidney that is smaller and more efficient than those now in use. This promising, new device costs 50 percent less than the conventional Kiil dialyzer. In contrast to presently used devices, it can be assembled in only 10 minutes and sterilized in an autoclave. Because of its compactness, it has reduced considerably current high blood priming requirements for artificial kidneys and the costly need for compensatory blood transfusions (coupled with the attendant danger of hepatitis). This new dialyzer can purify the blood of a patient in 8 to 10 hours, compared to the 12 to 14 hours required by the Kiil unit. Thus, the bed capacity of artificial kidney treatment centers can be more efficiently utilized with this new device. A series of these new dialyzers are now being produced for exhaustive testing under normal operating conditions. This is by no means the last word in solving this problem, Mr. Chairman, but it represents a decided forward step toward more efficiency and less cost in the artificial kidney approach to management of chronic kidney disease.

The Institute's comparatively new artificial kidney program already has initiated numerous research and development contracts designed to lower the cost and improve current dialysis ("blood-cleansing") methods and equipment and to discover completely new and novel approaches to artificial replacement of impaired kidney function. These projects are broad in scope and involve a multitude of approaches, not merely engineering innovations, such as development of improved blood cannulas (the most serious obstacle in dialysis today), and development and evaluation of new plastic surfaces for artificial kidneys, cannulas, and membranes that will not induce blood coagulation (a major current drawback), and better dialysis membranes for more efficiency in artificial kidneys. Other program goals include the development of new design concepts for artificial kidneys such as "diafiltration" (a man-made imitation of natural kidney function) and "hollow fiber" kidneys, the evaluation and development of a special diet that can retard for substantial periods of time the necessity for intensive dialysis or be utilized for maintaining uremic patients for whom chronic dialysis is considered not feasible or unobtainable, and many other projects relevant to improved equipment and less costly methods of dialysis. Simultaneously, the Institute is endeavoring to discover new knowledge about the biochemical and physiological aspects of chronic kidney failure, a "must" for a rational design of more efficient artificial kidneys and for the improved rehabilitation of patients maintained by dialysis, through related grant investigations.

There is, Mr. Chairman, an urgent and continuing need to expand these research investigations and activities not only from the standpoint of alleviating the suffering of the millions afflicted by these and other diseases but also to further the concept of preventive medicine. The more basic knowledge we obtain through research about normal life processes and the factors that create disease conditions, the more effective medical means can be developed to minimize or prevent diseases and their effect on the human body.

This vital goal requires a far greater body of knowledge than is available to us today. Experience has taught us, sometimes tragically, that a major breakthrough in the treatment and control of a disease depends usually on essential advances in fundamental knowledge applicable to the disorder. Moreover, it has been found, that the pursuit of a disease problem merely along clinical or applied lines sooner or later approaches the point of diminishing returns due to serious limitations in new fundamental knowledge and techniques, which can only be developed by continuing basic research.

Mr. Chairman, I cannot stress this point too much. I realize that it is difficult for the casual observer to place the importance of fundamental research discoveries in their proper perspective. However, such findings are basic sup-

porting structures of the biomedical achievements of the future. As biomedical research becomes more sophisticated, it focuses on smaller and smaller units of living systems. For example, basic studies of the molecules essential for fundamental life processes are revealing how these ultramicroscopic cell components are constructed and how they organize themselves with other molecules into living systems. Such studies already have shown how even the slightest disorganization, or missing component, in a molecule may result in an abnormality in the human system which may also be transmitted to off-spring of future generations.

At this time, Mr. Chairman, I would like to touch on another, equally important, aspect of research for better health, and that is of *manpower* for such research. Manpower is certainly the scarcest and surely the most vital of the components presently needed. A simple continuation or even uncritical extension of current training activities of this Institute at present rates is inadequate to deal with the complex and changing circumstances of the future. The basic problem with which these activities deal with is the insufficient number of independent researchers and teachers having the degree of scientific sophistication and competence required for truly effective biomedical research and research training of others.

This problem is applicable to the so-called traditional, well established areas of research, such as arthritis, diabetes and endocrinology, and to an even greater degree to such emerging the resurgent fields as orthopedics, dermatology, gastroenterology and urology. The Institute is an important focal point at the National Institutes of Health for support of training in the clinical departments of medical centers and medical schools in view of its responsibilities for the greatest number and variety of diseases. This Institute's overall training program is facing a demand situation of unprecedented proportions. It is expected, for instance, that about 25 new medical schools are being or will be established within the next several years. Additionally, already established medical schools are creating new departments in response to the current general broadening in the field of medicine and to meet the need for improved teaching and research. Finally, some of the existing schools which in the past produced only medical practitioners are now changing this emphasis toward producing in addition, more fulltime educator-investigators.

Although Institute training programs have been eminently successful in increasing the actual number of trained investigators in various specialties and disciplines, this added manpower is being fully absorbed as it is created and in reality is inadequate to meet the current expanding requirements. Compounding the problem is the unusual length of time necessary to develop and train the qualified research investigator, especially in the field of clinical investigation. In an attempt to alleviate this problem, the Institute has established a limited number of special training programs in this field at several medical centers where innovations are underway to explore new approaches to training. If experience proves fruitful, more such programs should be established so as to produce qualified clinical investigators earlier, particularly in their most productive and imaginative years.

Taken together, the various training activities of the National Institute of Arthritis and Metabolic Diseases are designed to achieve their goals through a system of training grants and research fellowships so integrated as to promote a balanced array of training opportunities for individuals in the various stages of career development. A sufficiently large and highly trained pool of skilled and imaginative scientific manpower is the most critical dimension of the problem facing us in the fields of arthritis, diabetes, endocrinology, gastroenterology, hematology, kidney disease, and other areas for which this Institute is responsible. In order to attract high-quality candidates into these fields, it is essential to provide good initial research training opportunities, as well as the advanced programs whereby selected investigators may further develop and sharpen their investigative and clinical skills.

At present, this Institute is seriously underfinanced and has had to restrict its extramural research and training support gravely—particularly during the last two years, when literally hundreds of promising and *approved* research applications could not be supported for lack of funds. I am earnestly convinced that their lack of funds creates a potentially serious and tragic situation that will prevent this Institute from executing in thorough fashion the important functions with which it has been charged. As previously stated, future advances in medi-

cine depend not only on sustaining and reinforcing outstanding current research, but also on the development of a highly trained and skillful force of capable and dedicated young scientists for the future, and on the ability to fund their approved research proposals.

In calculating the costs of these programs, we must remember that they represent the pressing needs of a rapidly expanding population, not merely the promotion of biomedical research and training for their own sake. In as much as these programs are dedicated and designed to improving the health and well-being of our citizens, their cost is indeed reasonable for the priceless commodity we seek. The enormous burden of human suffering due to disease and disability, and the financial outlay for the support and institutionalization of those disabled by chronic disease, literally drains the financial strength of our country. The only way in which we can hope to ease this burden in the future is through continued progress in biomedical research and through practical applications of the resultant research findings.

Transmitting these findings to other research scientists as well as the private practitioner is another concern of the Institute. This Institute has shown itself very much aware of the need for improving communications between research scientists, and between scientists and medical practitioners, to facilitate research progress and to hasten the prompt application of research findings at the patient's bedside. To this end, the Institute embarked several years ago on a major program, including the creation of unique scientific current-awareness publications, which also include references to or translations of important foreign research findings, and encouragement and support of personal communication among scientists through working conferences in areas within its purview.

Enormous strides have been made by the Institute to cope with the problems of communication with the publication of various current awareness guides and abstracts. In the past year, for example, the Institute began publishing a quarterly current-awareness publication entitled, "Artificial Kidney Bibliography," dealing with research and development in the area of kidney failure, dialysis artificial kidney improvement, and kidney transplantation. Other such publications initiated by the Institute in the past include the well accepted "Arthritis and Rheumatic Diseases Abstracts," the "Diabetes Literature Index," and the "Gastroenterology Abstracts and Citations." These new communications techniques developed with Institute support are providing alerting services which never before existed to help keep investigators and practitioners abreast of developments in their fields.

In summary, Mr. Chairman, we have seen over the last several decades the development in this country of the most intensive, effective and highly cooperative research campaign against disease. What makes this effort unusual is the responsible partnership between the Federal Government, the health and scientific professions, medical schools and universities, medical centers, and private, voluntary health organizations interested in health advances. The role of the National Institute of Arthritis and Metabolic Diseases and the judicious support which you in the Congress have given it, have been a most significant and decisively important factor in this effort. This effort must not be permitted to lose momentum and to atrophy for lack of adequae financial support, and the power to make it work adequately and competently lies in your hands.

I am familiar with the Administration's proposed budget for this Institute as well as the needs of its programs. I feel strongly that the Administration budget, though providing for a small expansion, should be extended to include better support for the essential activities of the Institute.

In conclusion I wish to thank you, Mr. Chairman and Members of the Committee, for permitting me to present these facts about the programs of the Institute which have a direct bearing on the successful execution of its mission.

Dr. TRAEGER. I believe that in order to make sense before such an important committee I ought to qualify my reasons for being here. It has been said many times that medical progress depends on sort of a milking stool which has three legs, research, teaching, and treatment. In my career I have worked in all three of these areas. For 38 years I have been a practicing physician. I make my living treatment patients. For 25 years I have been associated with clinical research with a record of publications, of over 30 papers in reputable medical journals.

I have been chief of arthritis in two hospitals, and for 16 years I have had a teaching assignment at Cornell in the Hospital for Special Surgery where I have had medical students and interns.

Since 1950 I have been a member of three councils at the National Institutes of Health, the National Neurological Diseases and Blindness Council, the National Arthritis and Metabolic Disease Council, and presently the National Advisory Council for Regional Programs on Heart Disease, Cancer, and Stroke.

I have been active on many committees, such as the Senate Committee for Medical Research. I have been a special consultant to the Surgeon General and to the Secretary of Health, Education, and Welfare.

I am a member of the American Rheumatism Association and Arthritis Foundation, and I have had many executive offices in those organizations. However, I want to emphasize that I have no personal ax to grind. Nobody pays my expenses coming down here. I have never applied for an NIH grant. I have been a grantee only once and this was almost forced upon me back in the early days of cortisone. There were five or six groups in the United States who were working on the clinical evaluation of cortisone and I represented one of those groups. And when the manufacturers of cortisone decided they spent enough money and couldn't give us cortisone any more, the Congress allocated several million dollars for the purchase of cortisone and I was given a grant to continue my clinical evaluation of this drug—of cortisone in rheumatoid arthritis.

In 1950 I was present and testified for the establishment of two omnibus National Institutes of Health, one the National Institute of Neurological Disease and Blindness, the other the National Institute of Arthritis and Metabolic Diseases. I have served on both of their councils. I have watched them grow from infancy to their present enviable position in the world of the biological sciences.

Your committee, Mr. Chairman, and its counterpart in the Senate since the beginning have had a long and active intimate concern in the development and progress of these institutes and especially the National Institute of Arthritis and Metabolic Diseases. This Institute has been very successful—almost too successful. That is why I am here today.

Originally the National Institute of Arthritis and Metabolic Diseases was charged with the conduct of support of research in various arthritic disorders, rheumatic and collagen diseases and such metabolic diseases as diabetes. As time has marched on, other scientific disciplines were loaded onto this omnibus Institute, such as endocrine disorders, gastrointestinal diseases, including diseases of the liver and gallbladder, kidney diseases, including the research on artificial kidney, diseases of the bone, blood disorders, nutritional disorders, orthopedics and dermatology, and a variety of other metabolic diseases, both inherited and acquired, such as cystic fibrosis. Literally hundreds of separate diseases come under the umbrella of these broad categories and millions of patients.

With this added load of responsibility the omnibus of arthritis and metabolic diseases is about to break down financially.

Now, it is reasonable and proper that these diseases and entities be included in the umbrella of arthritis and metabolic diseases because

they all contain elements which interlock with each other. The problem of collagen diseases, the problem of secretory diseases, the problem of kidney problems, gastrointestinal diseases, all of them operate on more or less the same underlying pathology and therefore it is reasonable and intelligent that these diseases be under one umbrella.

Mr. NATCHER. Doctor, right at that point—and pardon me for interrupting—what is cystic fibrosis?

Dr. TRAEGER. Well, cystic fibrosis is a disease which is genetically derived—in other words, it is an inherited disease—and is a disaster. It produces abnormal secretions from the so-called exocrine glands, largely glands in the stomach, intestines, lungs, and skin.

It is a very fatal disease. It is a disease which produces viscous secretions in the lungs. These secretions are thick and tenacious and have to be liquefied in order that they can be expectorated. The cause is unknown. The biological chemistry is unknown. Most children with it live about 8 years, but some people do survive into adulthood. It is one of the great problems with which we have to deal.

The health and the lives of millions of our citizens are directly concerned with the disease categories which I have just listed. Billions of dollars, $3,600 million, statistically confirmed, are lost to the economy because of the disasters produced by the diseases which come under aegis of the National Institute of Arthritis and Metabolic Diseases: lost man-hours, taxes, medical, and hospital expenses, cost of providing for the sick, the disabled, the crippled, the whole horizon of lost manpower.

Mr. FLOOD. Is there a sex difference in arthritis?

Dr. TRAEGER. Oh, yes. There are three times as many arthritics in women as there are men.

Mr. FLOOD. Why?

Dr. TRAEGER. I wish I knew.

As a matter of fact, for a good many years, empirically, it was decided to treat men with female hormones, thing that perhaps that was the difference, that the presence of female hormone or estrogen might have some bearing on the incidence and the progress of the disease, but that proved to b a pretty false hope.

Now, to conduct fruitful and meaningful research in these medical problems involves nearly all of the scientific disciplines, anatomy, physiology, embryology, pathology, histology, pharmacology, electronics, atomic energy, and many others. All of this has been done by the institute and is being done and, God and the Congress willing, will continue to be done.

I can testify to the high regard that this institute has held in metabolic circles the world over, for its achievement in its research and training programs and its prudent and efficient administration of its programs. But this raises problems. Like in Genesis, "Research begets research." Every idea which is developed as a result of a research problem opens another window or many windows for new fields and new areas. Every new instrument which is developed enlarges the horizon for research and makes for more accurate laboratory and clinical research.

Every sophisticated technique which is developed as a result of research opens more areas for further research. And this kind of begetting becomes expensive. But this is true in every walk of life. It

was true in the radio industry, in automobiles, in the electron microscope. I can remember, I am sure some of you can, the early days of radio when the Westinghouse radio was an enormous box full of big tubes, condensers, coils, and so on. Well, today we have got all that in a little package half the size of a cigarette case which makes pretty good music, but which is also more expensive. This type of obsolescence is also a part of research. Obsolescence in thinking and obsolescence in expensive research hardware. This raises the question of funds.

The population explosion plus the scientific explosion has made this almost mandatory. You have to keep up with the problems; you cannot use an old machine when a new machine is available which is more accurate, easier to work, does more. Back in my days as an intern, if you wanted to do a blood sugar determination it had to be done individually with color comparisons. Today it is all done by automation. We can do a thousand blood sugars in a day. We never could do more than 15 or 20 before. And they are accurate, they don't depend on the personal equation of comparing colors.

Now, these new areas of research and new instrumentation which have opened up this enormous area can't be neglected. We can't come to a grinding halt. We have to go on until the ultimate solution is at hand.

Let's take polio, for example. We have known for many years that polio was a virus disease. We even knew which viruses they were. We could see them under an electron microscope but we couldn't control polio. Years and years of research went by and it wouldn't have been too bad, I suppose, or too poor judgment, to call a halt somewhere along the line. But fortunately, the halt was not called until John Enders came along and found that you could grow these viruses on extract of monkey kidneys. Of course, overnight that solved the whole problem. Now, if we had stopped somewhere along the line and said we have spent enough time and enough money and this is hopeless, we would still have polio with us. Now, polio is becoming a rare disease. This is true for so many other diseases, pernicious anemia, typhoid, and so on. So you can't stop, until you come to the end of the line, until you have the answer to all these problems.

For example, we know a great deal about anemia, about ulcers, about blood clotting. My goodness, we know a great deal about clotting of the blood but we still have hemophiliacs, we still tremble when we have to operate on a bleeder or even take a tooth out. The answers are not all here yet.

We can't stop until those answers are obtained. Of course, this is the whole business in science and in medicine. We are eventually trying to put ourselves out of business by conquering all disease. It is a laudable effort.

Progress leads us into the unknown on the basis of the light shed by the known. We know what research has been, and it has given us new leads, lights up new paths we have to go on. You can't do it with clinical research alone, because that comes to a dead end, until, as it did in polio, until some basic research fact is uncovered and that makes the final answer possible or at least more possible.

Now, basic research is something that is very hard to sell because so many people say: Well, what is this? What does this have to do. with arthritis, with diabetes? Why worry about mitrochrondia?

Well, when I was a student I was taught that the cell was the ultimate unit of life and it had cytoplasm, it had a nucleus and contained many elements. I was taught that an element was the simplest form of matter, that if you had gold or lead or bromine as an element, that was it, it could not be broken down into anything more simple. All of those concepts are archaic, obsolete today. A single cell is a universe with tremendous complexities, including the electrons. It has enzymes, many chemicals, DNA, RNA, and all of these are ultramicroscopic structures. It is no longer true that an element is an indivisible part of matter because we know now that you can have many forms of lead, iron, gold. When they are reacted upon with electron energy, atomic energy, they become radioisotopes and you can have 14 different kinds of gold and 17 different kinds of sulfur. They are all sulfur, with different atomic weights. All these concepts are new and we have to live with them, and the old ones are obsolete.

Now, molecules make up cells, cells make organs, organs become systems, and systems become human beings. The more we learn of the tiny elements within the cell, the quicker we will understand life and health and disease.

Now, how does this come about? By research, of course. But we are in trouble in our research program not only in the Institute but in the entire body of NIH. It is a disaster to sit in these National Advisory Councils and have before you applications which have been approved not only by study sections but by councils and with good priorities, which can't be funded for lack of money.

Mr. FLOOD. Suppose you sat here.

Dr. TRAEGER. Yes. Well, do not think for a minute, Mr. Chairman, that I am not cognizant of your problems. I know that the world is beating you over the head for the Federal dollar and it becomes a question of congressional judgment. However, I am biased, I admit it.

Mr. FLOOD. This is not immoral.

Dr. TRAEGER. I am interested and have been all my life in preserving the only resource that we have in this country, and that is our population, and there are just too many sick people, too many crippled people for me to sit back and be content with the status quo. After all, to get anything done you have to have people, manpower, and every sick person, every disabled person, every crippled person means that much less manpower, it means that much less money in taxes, it means that much more drain on the economy, whether it is local economy, State or Federal economy.

I really believe this. You know, you have all seen it. My goodness, when I was an intern we used to lose seven out of 10 people with pneumonia. We don't lose pneumonia patients any more—a few perhaps, that are misdiagnosed. I haven't seen an operation for a mastoid infection in my hospital in over 20 years. I haven't seen a case of typhoid fever in 20 years. We very rarely have any problems with pernicious anemia which in my day was 100-percent fatal. So the record is a good one. We have been able to save the lives of thousands and millions of people but there are an awful lot more, many more millions who have diseases which are crippling and disabling and fatal which we have to deal with, and I am not going to quit until we find the answers.

Mr. FLOOD. Don't.

Dr. TRAEGER. Now, sure, there are more medical schools being contemplated but the scientific manpower—now we come to the manpower problem. This is being absorbed about as rapidly as it is being formed.

There are today many unfilled areas for research activities, but there isn't enough money to pay for the researchers. What happens? These men who are research-oriented, who want to do research and who are gifted; they apply for research grants or even training grants and they are turned down—not on the basis of merit, but because there is no money. What happens? We lose them. They go to work for Colgate-Palmolive and make toothpastes and soaps and perfumes and make tremendously more money in industry than they would in research, but they have to live. They are willing to work in research, to come down here for a pittance.

I know many men in NIH who have been in industry and who have made a great deal of money, salaries up to $50,000 a year, who have come back to NIH to work for one-fourth, one-fifth the salary because they are motivated.

I do not expect the Federal dollar to compete with the industrial dollar but I do expect that the Federal Government will understand the urgent importance of research and the development of manpower for research. Otherwise we are squandering our money in manpower and in the ultimate conquering of these diseases. There are lots of them. Now, I have been working in arthritis for 38 years. I am not too sure that I know the natural history of the disease. Every possible lead, ever possible opportunity, every possible idea has been explored and will continue to be explored.

In my prepared statement there are evidences of this type of exploration. We have some promising leads just as we have in cancer, promising leads. But it is a difficult disease. It is a dreary disease. It is hard to get people interested in it because it goes on and on and on and it cripples an awful lot of people, millions of them. But I am not hopeless about it any more than I was hopeless about pernicious anemia 30 years ago.

The answer is there. Somebody will find it. It may be tomorrow, it may be just like in the case of John Enders—in the cultivation of polio virus on monkey kidney extracts. These things have happened before. They will happen again. But they can't happen unless we keep pounding and pounding.

In order to help the situation, the National Institute of Arthritis and Metabolic Disease has set up training programs and special training programs for advanced research. But here again the roadblock is funding.

Now, I know that these Institutes were developed by Congress. In your infinite wisdom and in your compassion for pleas such as I am making now, our budget has been increased. I remember when the first annual budegt was $800,000. It wasn't even a budgetary line item. But as a result of research and added research and instrumentation we have done a good job. We have changed the entire complexion of medical education and research by the congressional support of the National Institutes of Health. It is an enviable position for Congress to be in as creators of this type of organization. But as I say we are

almost too successful in that there is so much to do, so many ways to go, we need so many more people and so many more instruments and we just haven't got the money to pay for it. It is frustrating.

In the final analysis we are dealing with our greatest resources—the human being.

Now, one of the things that people talk about is how do you get research down to where it is going to be used? How are you going to get the knowledge which has been developed by research to the people who need it, to the scientists and to the practicing physicians? Well, this Institute has had a unique development.

They produced unique, current-awareness publications: the Diabetes Literature Index, the Arthritis and Rheumatic Disease Abstracts, the Kidney Failure and Artificial Kidney Bibliography, and Gastroenterology Abstracts and Citations.

Mr. FLOOD. The witness is showing a series of pamphlets and brochures dealing with the titles as he has indicated.

Dr. TRAEGER. Now, what do these do, why are they useful? Many times as council members we have had research grant applications, that come to us, turned down because the applicant was not familiar with the literature. To go to the library and dig out the literature on one aspect of research science takes hundreds of hours. That is done for him, he doesn't have to do that any more. Time is saved. Unnecessary reduplication of research is avoided. Scientists and doctors are kept up to date with what is going on and what has been done. This gives you a jumping-off place. This has been done. You might get an idea what more needs to be done in an area.

Well, I haven't talked about the individual research problems which the Institute is saddled with. I have tried to bring to you an overall picture of the enormity of the problem in this Institute, dealing as it does with these enormous categories of diseases, millions of patients, the need for not only the status quo but the urgent demand, the urgent necessity for expanding research, expanding training, expanding manpower.

Throughout the years, the Congress has been more than liberal and tremendously cooperative. I have lived with this program since its inception, Mr. Chairman, since 1950. It has done a good job. But we are running out of funds and we have got to have a little more fiscal push.

Now, the cooperation that we are getting from medical schools, medical centers, research areas, voluntary health agencies, have all added to the impetus of the biomedical research field, but it boils down to the root of the National Institutes of Health, which are the creations of the Congress.

As I say, I sympathize with you for having to sit here and listen to us yak at you for the Federal dollar. But, believe me, Mr. Chairman and members of the committee, I believe in what I have just told you, and in the citizens' budget presented to you.

Mr. FLOOD. I am sure you do.

Dr. TRAEGER. Thank you for the privilege of appearing before you.

Mr. FLOOD. Thank you for helping us.

STATEMENT OF DR. PAUL PATTERSON ON CYSTIC FIBROSIS

(Dr. Patterson's biography follows:)

Date of Birth: April 25, 1916.
Birthplace: Bloomington, Illinois.
Premedical education: University of Illinois, B.S., B.A., 1937.
Medical education: University of Illinois, College of Medicine, M.D., 1941.
Internship: Kansas City General Hospital, Kansas City, Missouri.
Pathology internship, 1941–1942.
Research and Education Hospital of the College of Medicine, University of Illinois, Rotating internship 1942–1943.
Military Service: U.S. Navy and Marine Corps, 1945–1946.
Northern Permanente Foundation; Vancouver, Washington, Head Resident Pediatrician, 1943–1944.
Children's Clinic of Seattle; Seattle, Washington, Director and Pediatrician, 1944–1945.
King's County Hospital; Seattle, Washington Acting Head of Department of Pediatrics, 1945.
Research and Educational Hospitals, University of Illinois, Research on Cystic Fibrosis, Fellow and Postgraduate in Pediatrics, 1946–1947.
Children's Medical Center; Boston, Massachusetts:
Fellow in Pediatrics with Dr. Harry Shwachman, 1947–1949.
Research Associate, Department of Clinical Pathology, 1949–1952.
Assistant Physician (full time) doing research on Cystic Fibrosis, 1949–1952.
Director, Diagnostic Laboratory, 1950–1952.
Harvard Medical School; Boston, Massachusetts:
Research Fellow in Pediatrics, 1947–1949.
Assistant in Pediatrics, 1949–1951.
Instructor in Pediatrics, 1951–1952.
New York State Department of Health, Division of Laboratories and Research; Albany, New York, Research Associate, Virus Laboratory, 1952–1953.
Albany Medical Center Hospital; Albany, New York:
Atending Pediatrician, 1952–1953.
Pediatrician-in-chief, 1953–present.
Albany Medical College of Union University, Albany, New York:
Assistant Professor of Pediatrics, 1952–1953.
Professor and Chairman of Department of Pediatrics, 1953–present.
Member of the consultative staff of 16 hospitals.
Medical Director of Albany Study Center for Learning Disabilities.
Director of National Cystic Fibrosis Research Foundation's Care, Teaching and Research Center at Albany Medical College.
One of the founding members of the medical team at the inception of the original Mucoviscidosis Research Foundation. First chairman of the Medical Education, Fellowship, and Legislative Committees of the General Medical and Scientific Council.
Vice-chairman of the General Medical and Scientific Council of the NCFRF.
Author of over 100 scientific publications and chapters in medical texts.
Member of several medical societies and national and state committees pertaining to the health and welfare of children.
Married and has four daughters. Is a licensed radio amateur; collector of antique guns; and formerly president of the Society of American magicians.

Mr. FLOOD. We next will hear from Dr. Paul Patterson on the question of cystic fibrosis.

He is chairman of the department of pediatrics, Albany Medical College of Union University, also chairman of the General Medical and Scientific Advisory Council of the National Cystic Fibrosis Research Foundation.

Dr. Patterson.

Dr. PATTERSON. Thank you.

I wish to testify to the need for more research and training in cystic fibrosis in the framework of the Institute of Arthritis and Metabolic Diseases.

Cystic fibrosis is one of the major metabolic disorders for which this institute is responsible. Essentially, cystic fibrosis is a disease of children but it is now seen with increasing frequency among adolescents and adults. It is a disease of the glands which affects the lungs and the digestive system, and invariably leads to malnutrition and chronic lung disease. And then, far too often, it takes its toll in terms of death of many children and young adults.

Mr. FLOOD. If it appears in young adolescents and young adults it has been a continuing condition from infancy?

Dr. PATTERSON. That is right. Through methods of control these children have been permitted to live longer.

Mr. FLOOD. This isn't something they acquire in later childhood?

Dr. PATTERSON. No. It is a recessive gene present at birth. In fact, more children annually die from cystic fibrosis than from measles and from many of the other well-known diseases.

Early diagnosis and early application of intensive prophylactic and therapeutic regimes have reduced mortality and morbidity in recent years but the outlook for most patients with advanced cases of the disease is still bad.

Mr. FLOOD. Can this be diagnosed in the fetus?

Dr. PATTERSON. No. In the newborn, yes, but not before birth.

Mr. FLOOD. Why not?

Dr. PATTERSON. The only method we have for diagnosing it now, definitively, is through what is called the sweat test, in which electrodes are placed on the arms and a drug called pilocarpine is infused into the skin. This causes the sweat glands to sweat, and then we collect that sweat and analyze it for salt, sodium chloride.

Mr. FLOOD. That is after birth.

Dr. PATTERSON. Yes.

We have no means at the present time to diagnose it before birth, even though it would be of benefit to all of us sometimes to do this because these children are sometimes born with obstructed bowels which require surgery immediately.

Mr. CASEY. Would the chairman yield?

You can make a forecast of a possibility by examination of the parents, though, can you not?

Dr. PATTERSON. There has been just recently a research tool which is not applicable for screening at the moment, of examining and finding within a potential parent a substance in the blood which may reflect a carrier state of cystic fibrosis but is not generally available as a tool yet, Mr. Casey.

To improve the prospects for children we need to develop a more simple and more effective means of therapy for the disease and the only way we can do this is by broadening the basis for research.

I am sure that you gentlemen would be willing to provide the funds for that research in the Institute of Arthritis and Metabolic Diseases and for the professional training that would necessarily be needed along with it if you felt that there were sufficient leads at hand to offer a reasonable expectation of worthwhile results.

I can assure you that there are new leads of great promise that were not in our hands 1 year ago.

Investigators in Pennsylvania have evidence today that the pathological process within a cystic fibrosis gland may be reversible. A drug administered intravenously to cystic fibrosis children has temporarily restored abnormal salivary gland secretions toward normal. This is the first time to our knowledge that a drug has altered the abnormal processes of a cystic fibrosis gland this way. This drug is a valuable tool in the manipulation of secretions of a diseased gland and will allow basic studies of the nature of the altered glandular disturbance.

A second exciting and promising finding from Duke University indicates that there may be a blood factor associated with cystic fibrosis, which we just alluded to.

A biological assay has been developed which has permitted the Duke workers to identify a unique property in the serum protein fraction of cystic fibrosis patients. Of equal importance is that parents of cystic fibrosis patients also have this factor but to a lesser degree.

When normal populations were tested for presence of this material, one out of 20 so-called normal individuals possessed this property in their blood serum protein. This coincides with the expected incidence of carriers of the cystic fibrosis gene in normal populations.

Duke investigators have consistently demonstrated that this may be a cystic fibrosis genetic marker. They are now trying to isolate this material to identify and study it. They want to find out what role it plays in cause and effect in cystic fibrosis. They believe that this could allow them to discover the origin and control mechanisms operating in this material.

This is our first clue that there might be a substance circulating in the blood which could play a role in the disease process. There is also an effort to develop a simple test for cystic fibrosis gene carriers from this new findings. Basic studies in cystic fibrosis have been hampered because of the severe restriction and limitation that must be placed on doing research on very ill children. Now that there is evidence that parents also have the defect but to a lesser degree, more meanful research may be possible using cystic fibrosis parents as volunteers. Because there are an estimated 10 to 12 million Americans who carry the cystic fibrosis gene, the finding that there may be a partial metabolic defect in carriers is exceedingly important.

Almost everyone agres that the finding of a cystic fibrosis counterpart in an animal could enhance research on this disease. This time last year there was no known way of producing symptoms in animals that could be directly linked to cystic fibrosis processes. Today, gentlemen, we are happy to say, less than 1 year since you last reviewed this phenomenon of medicine we can tell you that there is reason to believe that an animal system can be developed which could revolutionize cystic fibrosis research.

One group of investigators in Wisconsin has shown that cystic fibrosis saliva and sweat contain some substance which causes a dramatic change in the rat salivary gland. When cystic fibrosis sweat or saliva is injected into the rat salivary gland, that gland loses its ability to handle salt normally. This property appears unique to cystic

fibrosis sweat and saliva since normal sweat or saliva have no measurable effect on salt in this animal test system. The potential for this animal system is immense. Enzymes, hormones, drugs, and various agents can be tested for their ability to modify this salt loss effect. This may be our first screening system for more and new agents to treat cystic fibrosis. This could be important in many other areas such as kidney disease and intestinal problems. Already Wisconsin workers are trying to correlate findings about sweat and saliva with those of the Duke investigators. Both of them may be looking at the same substance.

Workers at the University of Miami, collaborating with investigators of the Arthritis and Metabolic Diseases Institute, have uncovered evidence of a unique substance in cystic fibrosis tissue using sensitive techniques. They are trying to determine the relationship of their tissue factor to that in the blood of cystic fibrosis patients at Duke and in sweat and saliva at Wisconsin.

Mr. FLOOD. Cystic fibrosis tissue?

Dr. PATTERSON. A tissue factor that may be localized in the cells and not just circulating in the blood, you see.

These are some of the exciting clues that have been developed from research during the past year. The research has been going on for some time with the support of the NIH and the National Cystic Fibrosis Research Foundation, but this past year, in terms of promising leads, appears to have been a bonus year.

Mr. CASEY. Mr. Chairman, you recall when the NIH was here they were telling us that the reason that their request was not for a greater amount was that they were moving slowly because they had not found any breakthrough to tie into, to really move forward. It sounds to me like they are getting right to the point where they could—they are getting some leads now that should be followed up.

Dr. PATTERSON. Yes; this is true.

In the past 6 months, even more so than the previous 6 months.

Certainly we can control to some degree the nutritional problems of the cystic fibrosis child. We can keep the lungs clear and prevent lung damage in children who are diagnosed and treated from an early age. But we have not found an agent that will liquefy the viscid secretions that plug the ducts of glands and organs.

We have found an effective means to lower the incidence of death from the lung involvement in cystic fibrosis, but sadly will lose part of this victory to eventual liver involvement, or to involvement of some other vital organ that yields to the progressive accumulation of viscid mucus. We must not guess about these things. We must do research and find the answers. We must pursue, with all our resources, the new clues and leads.

There is a great surge of interest in research in cystic fibrosis since the developments I have described have come to light. In fact, there are many more requests for research support from the National Cystic Fibrosis Research Foundation than we can meet. We cannot afford to lose these men's ideas, nor their interest, nor their talent. So, we turn

to you in the Congress to provide the means in the Arthritis and Metabolic Diseases Institute to take up this slack.

We recommend for fiscal year 1968 an increase in the funds for the Institute of $950,000, for research related to cystic fibrosis and for the training of doctors in that field; $700,000 for research and $250,000 for training and we recommend further that the funds be identified in the budget of the Institute in such a way that they will go to the purposes for which we recommend them.

I can assure you gentlemen and Mr. Chairman that these funds will be well spent and will make a noteworthy contribution to the health of our Nation's children.

Thank you for your kind attention.

Mr. FLOOD. You have a real killer, do you not?

Dr. PATTERSON. I am afraid we do, sir.

PULMONARY CENTERS

STATEMENT OF DR. GIULIO J. BARBERO

Mr. FLOOD. We will now hear Dr. Giulio J. Barbero on the question of pulmonary centers, and with him will be Dr. LeRoy W. Matthews. Dr. Barbero is the chairman of the department of pediatrics, Hahnemann Medical College, Philadelphia, Pa.

(Biographical sketch of Dr. Barbero follows:)

CURRICULUM VITAE

Name: Giulio J. Barbero.
Home address: 502 West Front Street, Media, Pennsylvania.
Birthdate: October 13, 1923.
Place of birth: Mount Vernon, New York.
Education:
Bangor High School, Bangor, Maine, 1940.
College: University of Maine, Orono, Maine, 1943 B.S.
Medical: University of Pennsylvania, Philadelphia, Pa., 1947 M.D.
Internship: Hospital of University of Pennsylvania—Rotating, 1947–1948.
Residency: The Children's Hospital of Philadelphia—Pediatrics, 1949–1950, 1952–1953
Post-Graduate: Hosp. of Univ. of Pa.—Pediatric-Gastroenterology and Nutritional Research, 1948–1949.
Licensure:
Pennsylvania and Maine, 1948.
Certified by American Board of Pediatrics, 1954.
Academic Positions:
Ass't Professor in Pediatrics, Univ. of Pa., 1957–1965.
Associate Professor in Pediatrics, Univ. of Pa., 1965.
Ass't Instructor in Pediatrics, Graduate School of Medicine, 1955.
Senior Physician and Director, Division of Gastroenterology, Children's Hospital of Phila., 1959.
Consultant, Atlantic City Seashore House, 1964.
Consultant, U.S. Naval Hospital, Phila., Pa., 1964.
Memberships:
Philadelphia Physiological Society, 1956.
Philadelphia Pediatric Society, 1956.
American Society for Pediatric Research, 1957.
American Gastroenterological Association, 1960.
New York Academy of Sciences, 1957.
American Academy of Pediatrics, 1959.
American Psychosomatic Society, 1960.

The John Morgan Society, 1961.
National Cystic Fibrosis Research Foundation:
Chairman, Professional Education Committee, 1962–1964.
Chairman, Research Evaluation & Development Committee, 1964.
National Research Council, Drug Efficacy Study Committee, 1966.

Dr. BARBERO. Thank you.

Mr. Flood, members of the committee, I welcome the opportunity to present this consideration of the needs in cystic fibrosis. We are here to recommend to this committee and the Congress a program of pediatric pulmonary disease centers for the treatment of cystic fibrosis and other children's diseases, to be established in the chronic respiratory control program of the public health Service Bureau of Disease Prevention and Environmental Control.

This recommendation is being made to the Congress because of the large number of children with crippling and often fatal pulmonary diseases who are not being properly treated today because of the lack of adequate treatment facilities and the lack of physician specialists competent to diagnose their illnesses and prescribe the proper controls and therapeutic measures for them.

The program would include bronchitis, asthma, bronchiectasis, cystic fibrosis and other respiratory diseases with the exception of tuberculosis. And it would embrace coordinated programs of teaching clinical research and training.

The benefits of a program such as this have already been demonstrated in pilot efforts financed by the National Cystic Fibrosis Research Foundation. Until recently, cystic fibrosis was considered a hopeless disease. The vital statistics of the United States show that in 1962, 85 percent of deaths due to cystic fibrosis occurred before 10 years of age. In spite of this we have found in one pilot center providing comprehensive care for over 400 children and young adults with cystic fibrosis, the mortality rate has been reduced to less than 2 percent per year and the crippling effects of pulmonary involvement markedly decreased over the past 10 years.

Mr. CASEY. Where is this?

Dr. BARBERO. At Western Reserve.

The gentleman to my left will make such comments and fill us in.

Even more important is the demonstration that application of an intensive, comprehensive and prophylactic treatment program prevents the development of serious lung disease in patients diagnosed early.

The establishment of pediatric pulmonary disease centers is the most practical and economical method of increasing the availability and improving the quality of care in this field. Total care of the patient with chronic pulmonary disease requires the specialized knowledge and services of a large number of medical specialists and new diagnostic and therapeutic methods are complex and also require specialized personnel and facilities. Very few physicians in general or in pediatric practice have the training, time, or facilities to provide a complete program of therapy. Very few general or local hospitals can afford the specialized facilities.

Children are not little adults. The personnel who treat children with chronic respiratory disease must be specially trained and must use equipment and facilities tailored to the size, limited ability to cooperate, and psychologic needs of children. Since many of the new and more effective therapeutic measures are prophylactic in nature it is essential that both the patient and the parents are thoroughly instructed in the nature of the disease, and how the therapy affects the course of disease. Neither patients nor parents will carry out time-consuming prophylactic treatment if they do not understand why they are doing it. Such instruction requires the team approach. General instruction should be provided by the physician but specific instruction is most effectively and economically provided by trained nurses, physical therapists, inhalation therapists and social workers.

Mr. FLOOD. Inhalation therapists, that means the administration of oxygen?

Dr. BARBERO. No, it is much more extensive than that.

Mr. FLOOD. There are institutes and technical training areas that certificate physicians as inhalational experts, are there not?

Dr. BARBERO. Yes.

Followup instruction provided in the home by the personnel of community health services is also often essential. Such personnel should be utilized to evaluate the effectiveness of therapy, to determine the effect of the treatment program both emotionally and financially on the patient and the family and to observe the patient for early psychologic problems. A close relationship between the Center and the community health services should exist.

Ideally, a child with severe neonatal or chronic respiratory disease should be referred to a Pediatric Pulmonary Disease Center for accurate diagnosis and initiation of a comprehensive treatment program tailored to his particular needs.

Mr. FLOOD. Are you speaking of inpatient care?

Dr. BARBERO. Totally, both inpatient and outpatient. I am talking about the total personnel which are listed later on here, of a group which will have all varied facilities available to them to tailor them to the individual's need. If possible, he should be worked up and treated as an outpatient but hospital facilities should also be available. The child with severe involvement should be admitted and the trained personnel and special facilities of the Center utilized to establish the diagnosis and to provide the intensive treatment necessary to bring the disease under control. In the outpatient clinic or in the hospital both the patient and the parents should be thoroughly instructed in the disease and the treatment procedures to be utilized in subsequent home therapy. The child should then return home on treatment to be followed routinely by his local physician and at frequent intervals by the Center. This would obviously require close liaison between the Center and the local physician and a significant exchange of information. General problems could then be handled locally and the child referred back to the Center whenever its specially trained personnel and facilities are required. In the few areas where this is now possible

significant improvement has occurred in the quality of care provided at all levels.

Obviously this arrangement would permit the gathering of large amounts of data on the incidence of the various respiratory diseases and the effects of therapy on both disability and mortality. Such data could be channeled to the National Center for Chronic Diseases for collection, comprehensive evaluation and dissemination to the health field at large.

There is currently a shortage of trained professional personnel to provide leadership, instruction, and direction in the treatment of neonatal and chronic respiratory diseases. Adequate professional personnel do exist, however, to man a limited number of centers as demonstration sites. The establishment of centers will make these men available to a larger group of patients and will also facilitate the training of more specialists and the dissemination of knowledge to the practicing physicians of the area.

Centers will also provide at minimal cost the specialized facilities required for optimum diagnosis and treatment. The strategic location of such facilities in geographic centers of population would make them available to all the patients in the area.

In general, these pediatric pulmonary disease centers should be established in existing medical centers where the special interest and competence of personnel and the availability of facilities and equipment indicate potential for the development of effective and comprehensive teaching, research and care programs.

In fiscal year 1966 the Congress, recognizing the growing threat of chronic respiratory disease in the United States, appropriated $1 million for initiating a prevention and control program geared primarily to the chronic, nonspecific lung diseases, emphysema and chronic bronchitis, in adults. This program, I am told, is making a significant impact on the problems of detection and rehabilitation in adults. We wholeheartedly support this program but we know also that separate but parallel efforts must be made to prevent and control chronic pulmonary disease at an earlier age.

It is therefore our earnest recommendation that $750,000 be added to the appropriation for the National Center for Chronic Diseases in fiscal year 1968 to provide first year grants of approximately $150,000 for five pediatric pulmonary centers. The estimated annual operating budget for such centers after they achieve full staff and patient load will be approximately $250,000 per year.

Professional personnel	$100,000
Ancillary personnel	80,000
Supplies, drugs, and equipment	30,000
Training stipends	40,000
Total	250,000

During the initial development years, grants of about $150,000 will be adequate since it will take time to attract qualified trainees and a full patient load.

These funds should be made available on a competitive basis. A suitable merit review system for awarding grants or contracts should be established by the National Chronic Disease Center.

The need for this program is great if we are to reduce our infant mortality rate which is outrageously high. Chronic pulmonary disease which results in inability to breathe freely is one of the most tragic forms of disease. It is even more tragic because much of it could be prevented if the benefits of modern treatment were provided to the children who need it.

This is what this program would do and we urge you and your colleagues to vote the funds to get it underway.

Thank you very much.

(Detailed data on centers follow:)

PERSONNEL COMPLEMENT FOR PEDIATRIC PULMONARY CENTER

1) A Center Director who would, as a specialist in the field of respiratory diseases in children, direct and coordinate the teaching, clinical research and care functions of the Center.

2) A training program director who would assume responsibility for organizing the formal aspects of the training program for fellows, practicing physicians, nurses, physical therapists, inhalation therapists and social workers and who would assist the Center Director in providing patient care.

3) A neonatal respiratory disease specialist who would direct and coordinate all aspects of the training, research and care programs for premature and newborn infants with respiratory problems.

4) A pulmonary physiologist who would supervise the blood gas and pulmonary function laboratories in providing routine evaluations and in carrying out clinical research.

5) A part-time clinical pathologist with special training in the fields of biochemistry and bacteriology to provide specialized diagnostic and evaluation tests and cultures.

6) Allied specialists in the areas of pediatric radiology, cardiology, allergy, thoracic surgery, otolaryngology and psychiatry to provide consultation clinical services and to assist in the training program.

7) Specially trained nurses, physical therapists and inhalation therapists are needed to supervise respiratory care in the clinic and hospital, to assist in the training program and to provide patient and parent instruction in the techniques of home therapy.

8) Pulmonary function, bacteriology and special test technicians are needed to man the special laboratories associated with the Center.

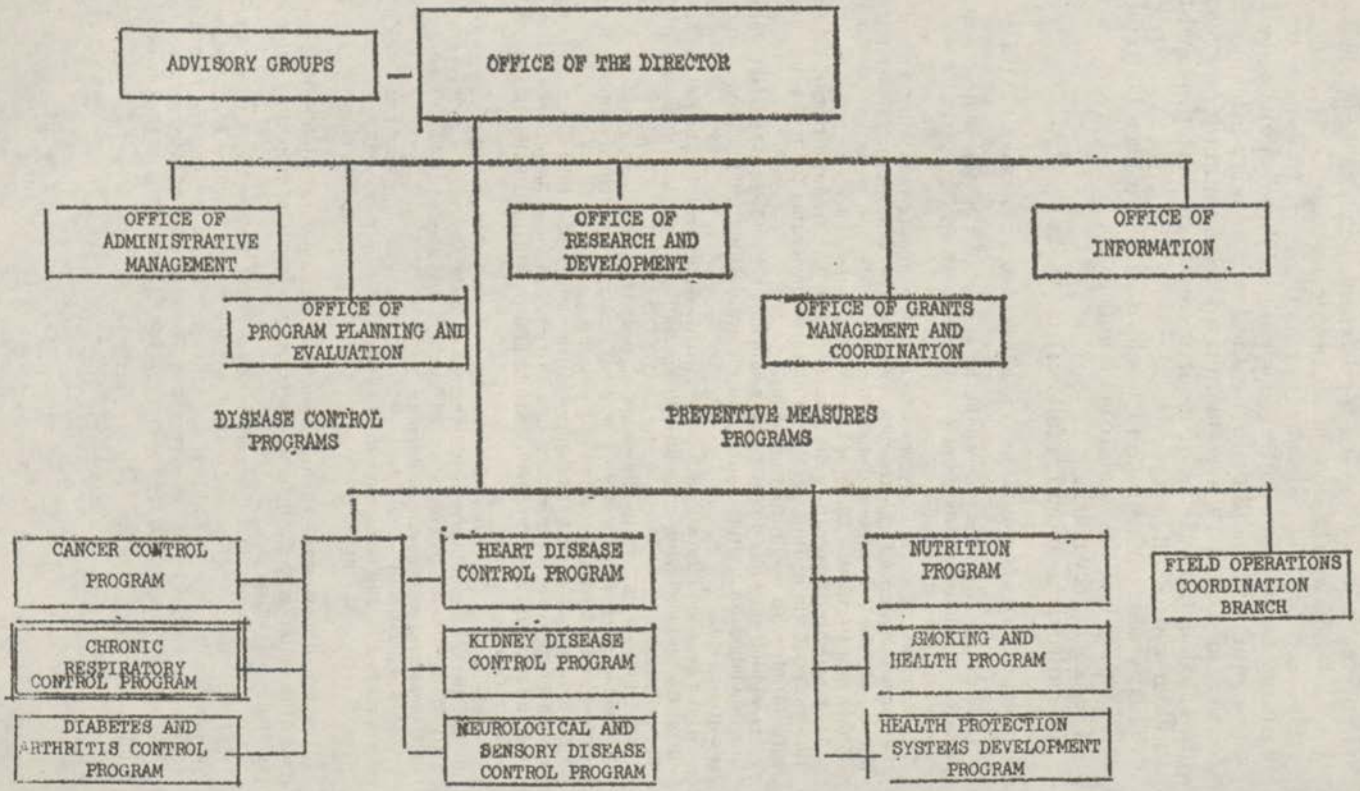
9) Medical and psychiatric social workers are needed to handle patient financial, social and psychiatric problems.

10) A statistician should be provided to collect, collate and analyze all data accumulated by the Center on the incidence of respiratory disease, the effectiveness of various therapeutic measures and programs, and on disability, morbidity and mortality.

11) Finally, secretarial help is essential to handle the administration associated with the training programs and the correspondence between the Center and referring physicians.

Mr. Chairman, at the table with me here is Dr. LeRoy Matthews of Cleveland, Ohio. Dr. Matthews has had unique experience as director of a Center where pulmonary diseases of children are treated. I think it would be helpful to you and to the committee if he gave you a few examples of what can be done for children in such a center. He has some photos which tell the story very graphically.

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL
NATIONAL CENTER FOR CHRONIC DISEASE CONTROL



Mr. FLOOD. Dr. Matthews.

STATEMENT OF DR. LEROY MATTHEWS

(Biographical sketch of Dr. Matthews follows:)

LEROY W. MATTHEWS, M.D.

Born: August 20, 1925 in St. Cloud, Minnesota.
Education:
St. John's University, Collegeville, Minnesota, 1943.
John Carroll University, Cleveland, Ohio, 1943–44.
Harvard Medical School, Boston, Massachusetts, 1945–49 (M.D.).
Post-Graduate Training:
University Hospitals of Cleveland, 1949–50 (Intern).
Babies and Children's Division, Cleveland, Ohio, 1950–52 (Resident).
Fellowships:
Research Fellow in Pediatrics, Western Reserve University, School of Medicine, 1950–52.
Academic Appointments:
Instructor in Pediatrics, Western Reserve University, School of Medicine, 1954–55.
Senior Instructor in Pediatrics, Western Reserve University School of Medicine, 1955–57.
Assistant Professor of Pediatrics, 1957–1967.
Professor of Pediatrics and Assistant Director of Babies and Children's Hospital, 1967–.
Military Service:
United States Navy, enlisted, 1944–45.
United States Navy, medical officer, 1952–54.
Society Membership:
Alpha Omega Alpha-Harvard Chapter, 1948–present.
Academy of Medicine, Cleveland, Ohio, 1954–present.
Ohio State Medical Society, 1954—present.
Society for Pediatric Research, 1957–present.
Midwest Society for Pediatric Research, 1958–present.
Northern Ohio Pediatric Society, 1954–present.
National Cystic Fibrosis Research Foundation, 1958–present.
Offices held:
Secretary Treasurer-Northern Ohio Pediatric Society; 1960–61.
Secretary Treasurer-Nothern Ohio Pediatric Society, 1960–61.
Council Member-Midwest Society for Pediatric Research, 1960–63.
Member, General Medical and Scientific Advisory Council, National Cystic Fibrosis Research Foundation, 1960–67.
Vice-Chairman, General Medical and Scientific Advisory Council, N.C.F.R.F., 1967–.
Honors: Alpha Omega Alpha–Harvard, 1948.

Dr. MATTHEWS. Mr. Chairman and gentleman, I am Dr. LeRoy Matthews, professor of pediatrics at Western Reserve University and director of a center like the ones in the program recommended by Dr. Barbero. I would like to illustrate what such a center can accomplish and to show you some of the special facilities and equipment required.

The life table graph on page 1 was prepared by Dr. Warren Warwick, chairman of the National Cystic Fibrosis Research Foundation Medical Care Committee to show the increase in the life span of patients with cystic fibrosis that has resulted from improvement in methods of care. Lines A, B, C, D, and E show survival curves of patients with cystic fibrosis diagnosed between 1938 and 1950 when no specific therapy was available. The median age at death was 8 months and 70 percent died before 1 year of age. During the next decade the development of methods for treating the digestive defect

and antibiotics for treating and pulminary infection resulted in significant improvement as shown in curves F and G. The median age at death was extended to 3 years, the number dying before 1 year of age reduced to 36 percent and the number surviving beyond 10 years increased to 22 percent.

In 1964 the National Cystic Fibrosis Research Foundation studied the mortality rate of 3,131 patients who were receiving care in university affiliated hospitals where special cystic fibrosis projects had been established and where as a result, more knowledgeable physicians, nurses, and other personnel and better facilities existed. These institutions, in general, used inhalation therapy, physical therapy, antibiotics and nutritional therapy after the respiratory disease had developed. The marked improvement in survival is shown in line H. The average age at death was extended to 12 years and survival to 20 years increased to 32 percent.

Data on the 349 patients with cystic fibrosis cared for in the Respiratory Disease Center at Babies and Children's Hospital in Cleveland from July 1, 1957, through December 31, 1965, is shown in curve I. Only 25 deaths occurred over a total of 1,188 years of followup. The most marked improvement is seen during the first 7 years of life in the children diagnosed early and treated prophylactically. No deaths due to respiratory disease have occurred in the prophylactically treated group. Since a prophylactic therapy program was only available for 7 years most of the children over 7 years of age had significant lung disease before treatment was initiated and as a result show a higher mortality rate with increasing age. Despite this fact the median age at death is increased to 21 years.

To further illustrate the benefits of respiratory disease center care I have prepared some before and after treatment pictures.

Debbie Reynolds was a 10-month-old infant who came to us weighing 10 pounds 3 ounces and in critical condition. She had been ill with chronic respiratory disease for 6 months and had failed to respond to routine treatment in her hometown. Despite the duration and progression of her illness she had not irreversibly damaged her lung and responded well to an experimental comprehensive treatment program. The second picture shows her 5 years later. She is now 9 years old and continues to have an excellent prognosis.

The next set of pictures show another infant who was born with intestinal obstruction due to cystic fibrosis. She developed severe pulmonary disease at 2 weeks of age and failed to respond to routine therapy in another university hospital. She came to us at 11 months of age weighing 5 pounds, 6 ounces. The second picture shows her 1 year after comprehensive therapy was initiated.

The next page shows pictures of two older girls with severe pulmonary involvement before and 1 year after optimum therapy was initiated. The improvement is obvious.

These are just a few examples of the results respiratory disease centers can achieve. They are dramatic results but we are more impressed by the prevention of respiratory disease illustrated in the next set of pictures. These identical twins were born to a family that had, in the past, lost two infants to the respiratory complications of cystic fibrosis. Because of the family history the twins were diagnosed at 2 weeks of age and placed on a prophylactic treatment pro-

gram. They are now 4 years of age, have normal lungs, and are growing and developing as healthy children.

Unfortunately early diagnosis is not available to all children. Picture No. 11 shows a 4-year-old boy who was not diagnosed until 1 year after he developed a chronic, wracking cough at 6 months of age. He has severe permanent damage to his lungs. Center care will prolong his life but he will not grow up. He like most children with cystic fibrosis is above average in intelligence and could have grown up to be a productive member of society if a center had been available within 1,000 miles of his home.

The other picture on page 4 shows a 13-year-old boy with asthma and severe emphysema. He too has little life to look forward to. He is a straight A student, president of his class, and would have great potential if his lung disease had been adequately treated early. The knowledge and treatment techniques necessary to prevent this type of outcome are available. We use them daily and observe the benefits. We are not asking for support of a theoretical program. We base our request on 10 years experience which has demonstrated the educational and training potential of the respiratory disease center. We have observed the improvement in quality and availability care that occurs in the surrounding area and we have accumulated data which clearly shows the decrease in disability and mortality that results.

The statement was made by Dr. Barbero that the new diagnostic and therapeutic measures used in the total care of the child with chronic pulmonary disease are complex and beyond the financial and technical means of most community hospitals. The next three pages of pictures illustrate this point. Page 5 shows some of the equipment used in a pediatric pulmonary function laboratory to study and measure the abnormalities in breathing produced by disease. Page 6 shows scenes from the other essential laboratories: a child having a sweat test for cystic fibrosis, a bacteriology technician reading cultures of sputum bacteria, a chemistry laboratory where blood and urine are analyzed, and a clinical research laboratory where studies of the bichemistry of mucus are in progress. Page 7 shows some of the special treatment facilities, the inhalation therapy unit, an ultrasonic fog therapy, tent, a patient inhaling a medicated mist, and a physical therapist draining the bronchial tubes of an asthmatic child and teaching the mother so she will be able to continue the treatment at home.

The need for such centers cannot be overemphasized. Fifty-five percent of all acute illness and almost one-half of all chronic disease in children is respiratory. USPHS statistics indicate 30 percent of deaths under 1 year of age and 11 percent of deaths under 20 years of age are due to respiratory disease. We sincerely hope that you will recognize the need of these children and provide the appropriation for the beginning of a program of pediatric pulmonary disease centers.

Mr. LAIRD. Mr. Chairman.

Mr. FLOOD. Yes.

Mr. LAIRD. I hope it will be permissible to ask a question not only of the two witnesses that are before us now but Dr. Patterson who spoke a few minutes ago on cystic fibrosis.

I am familiar with your statement and particularly the work that is going on in Wisconsin which you make reference to.

During the hearings on the NIH budget it was stated that there was work in Wisconsin and that it has Federal support through a

research grant. Your statement does not mention that, but I always like to bring out the fact that this is a program that is supported by the National Institutes of Health. It is supported by the Institute on Arthritis and Metabolic Diseases. I think people in Wisconsin should know that, too.

When we discussed this matter with the NIH, they indicated very strongly in answer to questions before the committee that they do not think that any substantial increase could be wisely used for research on cystic fibrosis, because good scientists are not going to submit applications sufficient to use a large increase. Whether this statement of the NIH is correct is the most important question to be answered as far as this committee is concerned.

Your statements do not direct themselves specifically to this most important question. NIH says there would not be enough good, approvable applications. You indicate that perhaps there would be. I think this is the nub of the situation before this committee that we have to answer.

Dr. PATTERSON. I think it is a good point that you bring up. I think that our foundation has helped support the fellows involved in Wisconsin. It is a joint venture, private and Federal.

Mr. LAIRD. I think that is a very good point.

Dr. PATTERSON. As to the available supply of research teams and individual investigators in cystic fibrosis let me report the situation of the National Cystic Fibrosis Research Foundation this year. We were able to fund $303,000 in research grants but we will have $213,000 in meritorious research grant requests that we will not be able to meet. Therefore, we will have to tell the scientists who submitted these proposals—that we do not have the funds to support them. We regret this very much and I can assure you that if the Institute had the funds and the inclination to approve the projects, these requests would go to the Institute.

Mr. LAIRD. You realize that the administration says this committee overappropriated in this general area. Out at NIH they have funds frozen well in excess of the amount you are talking about.

Dr. PATTERSON. I wish that we had them available.

Mr. LAIRD. This committee made them available and the administration says in effect that we overappropriated, because they froze the money.

Dr. PATTERSON. Many of us have had difficulty obtaining grants. We speak for many of the basic research workers that have turned to us.

Mr. LAIRD. I am not trying to be argumentative.

Dr. PATTERSON. I understand that. I appreciate the question.

Mr. LAIRD. I want you to know that they are lapsing $1,724,000 that is available for this one Institute alone. When we go to the Congress again they may point to this committee and say, "You overappropriated last year."

You understand my point?

Dr. PATTERSON. I certainly do.

Much progress has been made in this disease in the past year. This is why we used examples such as Pennsylvania and Wisconsin where new work was done.

Mr. FLOOD. Are you aware of the facts that Mr. Laird has recited?

Dr. PATTERSON. Yes. I think that this money could all be spent this next year.

Mr. LAIRD. Don't you think it could have been wisely spent this year?

Dr. PATTERSON. Yes—yes and no.

Mr. LAIRD. You think no?

Dr. PATTERSON. All the funds appropriated for the Institute by the Congress could have been spent if they were not frozen by the executive branch of Government. The funds frozen could not be spent—not because the need was not there but because they were arbitrarily frozen. The Congress did not overappropriate—as you say it is charged with doing. The Congress did not appropriate enough but what it did appropriate was not released to the Institute by the executive branch. Now, Mr. Laird, it is not now too late to correct this situation if the executive branch is willing to do so. This is late April so there are still more than 2 months left in fiscal year 1967. Let the executive branch release the full amount the Congress appropriated for fiscal year 1967 tomorrow and I promise you there won't be 1 cent left by June 30, 1967, which is the end of the current fiscal year.

Mr. LAIRD. You know this had been appropriated because we thought it could be wisely spent. We would not have appropriated it if we didn't think it was needed. Maybe we are wrong.

Dr. MATTHEWS. It is a very nebulous area of research. Now we have a tool that we can use and a lot of us will ask for more and try to get people involved. Just as an example, we are engaged in fractionating salivary secretions. We have been engaged in this for 5 years and got NIH support. We are going to ask for increased support because now in order to study——

Mr. FLOOD. The fact is that you are saying that you could not have spent this last year.

Dr. PATTERSON. We could not have spent last year what we are asking for this year. But we could have spent every cent appropriated last year.

Mr. FLOOD. I am not talking about this year but last year.

Mr. MICHEL. Mr. Chairman, let me put in my 2 cents worth. I have a little more than passive interest in this program. It so happens that one of the secretaries in my office, a onetime secretary who still does part-time work once in a while, has had three children all of whom suffered from cystic fibrosis. The two younger ones have died, and only the first-born child is still living. We have been very close to this thing. I must say that I am glad to hear you testify that there are new leads of great promise.

Mr. FLOOD. Were you here when he said within the last 6 months?

Mr. MICHEL. Right. I think at one place within the last year you make reference to the advance. Even if it is within the last 6 months, this gives us great encouragement. Having made these breakthroughs, whatever you folks in the know have done, we want to build upon that as fast as we can. I just want to make it clear for the record that I certainly want to give it all the support that I possibly can.

Mr. FLOOD. Thank you, gentlemen.

STATEMENT OF DR. WILLIAM S. CLARK

We now have Dr. William S. Clark.

Dr. Clark is the president of the Arthritis Foundation of New York City.

Dr. Clark.

Dr. CLARK. Mr. Chairman and members of the committee, I represent the board of directors of the Arthritis Foundation and its medical council. Literally hundreds of our people have studied extensively what needs to be done about arthritis. My testimony will indicate our consensus. We do support——

Mr. FLOOD. Were you here when Dr. Traeger testified?

Dr. CLARK. Yes; I was.

We do support the request of the National Institute of Arthritis and Metabolic Disease. This Institute's support of basic research and training programs is vital but we believe that the research in arthritis currently supported by the Federal Government is not supplying answers to at least two key questions:

1. How can present medical knowledge be most effectively delivered to individual patients, so as to prevent or control disability from arthritis?

2. How can we determine the natural history of these diseases in order to hasten the discovery of curative or preventive measures?

Mr. FLOOD. Are you in private practice?

Dr. CLARK. No, sir. I have been. I started out in general practice and I have been engaged in practice, research, and teaching arthritis.

Mr. FLOOD. Now you are administering the Foundation?

Dr. CLARK. I am a full-time administrator now, Mr. Chairman.

Such information cannot be obtained by simply supporting facilities for short-term in-hospital research. There is an immediate and critical need for:

More facilities for early diagnosis, intensive treatment, and continuing ambulatory care.

More medical and allied professional personnel trained to provide comprehensive care for arthritis patients.

More studies focused on the natural history of the rheumatic diseases and the effectiveness of treatment.

Greater public awareness of the importance of crippling arthritis and the benefits to be derived from early diagnosis and comprehensive care.

These needs can best be met by a network of arthritis treatment and study centers which would have the following specific objectives:

1. To demonstrate that early diagnosis and the early initiation of comprehensive care will prevent crippling and disability from arthritis.

2. To conduct long-term clinical and epidemiologic studies in order to define the natural history of the arthritic diseases and to evaluate the effectiveness of treatment and rehabilitation.

3. To provide excellent postgraduate and continuing education in arthritis for practicing physicians and allied health personnel.

4. To put to use locally the knowledge and competency acquired at the centers by the practicing physicians and allied health personnel.

5. Thereby to provide a focal point for community programs of coordinated service and continuing care for people with arthritis.

We recommend, therefore, that the Congress appropriate $1.5 million to the National Center for Chronic Disease Control of the Public Health Service to establish a program of arthritis centers and satellite clinics.

The stated mission and previous activities of the National Center for Chronic Disease Control are consistent with the aims of this program, since their primary responsibilities are for applied research, technological development, operational development and demonstration, training, and the operation of programs for prevention and early detection of chronic diseases.

The concept of centers for the care and study of patients with arthritis has been developing in a few medical schools and teaching hospitals during the past 25 years. Their experience promises that crippling and disability from arthritis can indeed be forestalled. A recent analysis done at the National Center for Chronic Disease Control has shown, for example, that the application of our present knowledge about arthritis can, through the prevention of disability, return $40 to the economy for every dollar invested.

Up to now, funds for the support of key personnel and facilities for ambulatory care have come largely from private philanthropy, principally voluntary health agencies. However, these funds have only been sufficient to stimulate the development of this concept. An adequate demonstration of the feasibility and effectiveness of this approach requires support beyond that currently available.

I want to be entirely clear that I am not suggesting construction of new facilities but rather a more effective organization of existing facilities and personnel to include—

A hospital-based out-patient service to provide continuing ambulatory care and studies thereof;

A core staff of physicians specializing in rheumatic diseases, orthopedic surgery and rehabilitation medicine; and

A staff of allied health personnel—a medical social worker, physical therapist, occupational therapist, orthotist, vocational counselor, and nurses.

In addition to providing exemplary patient care, such an organization would have the competence and resources to accomplish the stated research, training, and evaluation objectives.

The appropriation I am suggesting would permit a small but significant beginning for an imaginative program. The essential ingredients of this program are based upon the experience of the Arthritis Foundation, which has made small grants to initiate a few such programs. The plan is also supported by a recent critical survey and analysis of the arthritis problem by the National Center for Chronic Disease Control. I am confident that it would serve to demonstrate an effective approach for the control of chronic crippling diseases.

This testimony has the full endorsement of the Arthritis Foundation, the sole national voluntary health agency working to solve the problems of arthritis, the Nation's No. 1 crippling disease. The Arthritis Foundation, its 79 chapters throughout the country, its paramedical section and its medical section, the American Rheumatism Association, represent thousands of health professionals, medical scientist and lay volunteers who are giving their time and dedicating their efforts to the conquest of arthritis. The present goal of the foundation is con-

tainment of the arthritis problem, but with confidence that the future can bring primary prevention or cure.

An immediate investment of Federal funds when added to the current effort of the Arthritis Foundation can bring great human and economic benefits to the American public at minimal cost to the taxpayer. I urge that you gentlemen consider seriously our proposal and let us together take a bold step toward a new and imaginative partnership in health.

Mr. FLOOD. The thing that concerns me, suppose you got in your car and at the next town stop at the first hospital. Yesterday the cystic fibrosis people had been there with money to set up a center. Now you come along on Wednesday with money to set up an arthritis center in this hospital. They haven't room enough last Saturday for what they are doing. It is a question of square feet.

Dr. CLARK. Yes. It is a question of a new concept of the center, Mr. Chairman.

Mr. FLOOD. I am talking about square feet. You stop at the hospital and you walk in the door and there is a building; it has x square feet in it, and they are bulging at the seams.

Dr. CLARK. Right.

Mr. FLOOD. The cysticfibrosis people had been there yesterday with money to set up a center. Now you come in on Wednesday with money to set up an arthritis center. What are they going to use for space?

Dr. CLARK. Except for administrative space, these centers use the same space at different times.

Mr. FLOOD. But there is no extra space to begin with.

Dr. CLARK. Well, the space for ambulatory care in U.S. hospitals in general is inadequate.

Even in our major medical centers, teaching hospitals, there is a space shortage.

Mr. FLOOD. Yes. That is the question I raise.

Dr. CLARK. But these people work wonders under very trying circumstances. It is amazing what they can do in the existing space.

Mr. FLOOD. Yes; I know this.

Now, suppose we created centers for each one of the presentations made this morning; you got all the money you asked for these centers. Then you went out to hospital X to set up five different centers in this hospital when they are bursting at the seams before you get out of the car.

What do they do? Where do they put you?

Dr. CLARK. Well, in practice the hospital would not be required to set up these centers. It would do so only if it had the motivation and the physical facilities.

Mr. FLOOD. The fact of the matter is you could only set these centers up where the hospitals were motivated and where they would make room?

Dr. CLARK. That is correct. In the United States there are 96 medical schools. I would question very much whether more than 40 would have either the personnel or space.

Mr. FLOOD. That would be enough?

Dr. CLARK. Oh, yes. If we could have that many we would really make a dent in the problem.

Mr. FLOOD. Thank you, Doctor.

Two o'clock, gentlemen.

WITNESS

HON. CARL D. PERKINS, REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY

Mr. FLOOD. The committee has the pleasure of having before us one of our colleagues, for whom we have had great love and affection down through many years. I believe he has been here as long as I have, if anybody can remember that far back, and I have watched his work in the field of education. He is now, we are pleased to say, chairman of the distinguished Committee on Education and Labor of the House, and certainly from no committee in this House in many, many years has there been such a revolutionary, almost unbelievable breakthrough. I never expected in my lifetime to see, in the field of education, the bills that have become law as recommended by his committee and approved by Congress.

So we will now hear from the Honorable Carl Perkins, chairman of the House Committee on Education and Labor.

Mr. NATCHER. Mr. Chairman, before you permit Mr. Perkins to testify, could I just make a brief statement? Mr. Chairman, certainly I want to concur with the statement you just made in regard to my friend and colleague from Kentucky, Carl Perkins. In Kentucky we are proud of Congressman Perkins. Mr. Chairman, he is a diligent, hard-working, able Representative, and not only represents his people well, but in the capacity he is now serving in as chairman of the Committee on Labor and Education is rendering wonderful service for the people of this country.

I would just like to join with you, Mr. Chairman, in welcoming my friend before our committee at this time.

Mr. FLOOD. Mr. Chairman.

Mr. PERKINS. Thank you, Chairman Flood and members of the committee.

(Mr. Perkins' prepared statement follows:)

STATEMENT OF CHAIRMAN PERKINS BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON LABOR-HEW

Mr. Chairman, it is with great pleasure that I appear before this distinguished Subcommittee today. I feel it appropriate that my appearance coincide with that of the superintendents from a number of the Nation's largest school districts who wish to share with you their concerns and recommendations relative to the pending appropriations bill for the financing of next year's federal aid to education programs. It was after my review of the testimony on the 1967 Elementary and Secondary Education Act amendments of state and local school officials—some of whom are here today—and my discussions and correspondence with numerous other concerned school officials that I felt constrained to come before you.

Mr. Chairman, because you will have the benefit of the testimony of many of the Nation's leading educators this afternoon, I will be brief. Two local School Superintendents have accompanied me—Dr. James Hazlett from Kansas City, Missouri, and Dr. Carroll Johnson, Superintendent of Schools of White Plains, New York. Each is prepared and anxious to present a statement to the Subcommittee.

May I just take a few moments then to mention two or three items of particular concern to me. Initially, I would like to share with you my views on the specific dollar authorizations the Committee on Education and Labor provides for in the education legislation within our jurisdiction. It has only been

after the most careful and thorough consideration by the Committee and its Subcommittees—public hearings, executive sessions, informal meetings and field visits—that the Committee has recommended certain dollar authorizations. In our study and deliberation, we define and identify problems, design programs to aid in the solution of these problems, and recommend authorizations which we feel necessary to make the programs work.

In light of the tremendous needs in education the authorizations adopted by the Committee on Education and Labor represent a minimum figure. The Committee is specifying a minimum amount of what was considered necessary to meet the needs and make the programs work. The Committee has substituted for the phrase "such funds as are necessary"—a phrase with which you are quite familiar—the amount which the Committee, after its extensive deliberation, decides is essential to carry out the program.

The programs resulting from the Committee deliberation, in large part ask the local school officials, the people here with you today, to shoulder the major responsibilities in the partnership efforts to improve American education. The response of our local school systems and our colleges and universities to these requests have been gratifying. State superintendents of instruction, local school superintendents, college presidents, teachers, parents and students are actively engaged in the task of meeting the challenges set out in the various Acts approved over the last few years, and they are rapidly and effectively responding to the Congressional request for action. It is this marvelous response which has in part encouraged me to come before you today, for not only can we ask, as we have done, but we must also give, as we have promised.

We have asked—and I am using the word "we" in the broadest sense to include the entire nation—that local school teachers and administrators like Dr. Hazlett and Dr. Johnson undertake and administer programs to strengthen American education and to make the dream of equal educational opportunity an existing fact. To succeed we must also then give these good and dedicated people the resources so that they can carry out the assigned tasks. We must give them the means to continue on with the work which was started in 1965. But, Mr. Chairman, I do not think that we can continue in any effective manner with only partial support—with less than 60% of the funds authorized to carry out these programs.

I have reviewed very carefully the appropriations request for federal aid to education programs administered by the Office of Education. The appropriations requests represent less than 60%—in fact, 58% of what is authorized. You and I would be very much disappointed, I feel, if in a classroom we observed a teacher who was making only a 60% effort. And let us assume the hypothetical case of a full and total commitment at every level, including the Federal, but with only a 60% effort on the part of the children, the ultimate beneficiaries of the program. We would be even more disappointed! I think that I can assure you that in neither instance is this the case. I am convinced that the efforts on the part of school administrators and teachers with respect to federally financed programs is 100% or more; their efforts exceed the average workday.

A number of the members of the Committee on Education and Labor were in New York just last week in the Bedford-Stuyvesant area. They had an opportunity to visit in the classrooms where federal funds are being translated into programs and services. And they talked with students from disadvantaged homes who are participating in those programs and benefitting from the services. I have been told that, in the eyes of these children, and in their work, the members saw far more than a 60% effort.

Is it not necessary therefore that our effort be more than 60%, that it equal the efforts of those whom we are trying to assist?

It is of concern to me then, with respect to the following major budget categories that the appropriations requests represent much less than a 100% effort. For elementary and secondary education activities, more than 50%—more than $1.7 billion dollars out of a $3.4 billion dollar authorization is needed and expected. With respect to higher education activities, $1.2 billion dollars of a $1.8 billion dollar authorization represents only a 66% effort, just ⅔ of our promise. While not as disproportionate as the above, the pending requests for the expansion and improvement of vocational education represents only 90% of what is authorized. It is my impression there is almost unanimous agreement that in the area of vocational education, much more is necessary, even if the existing authorizations were fully funded.

For libraries and community services, $166 million out of an authorization amounting to $282 million is being sought, only a 59% request. Should we not

do more to improve educational opportunity for the handicapped than the estimated expenditure of $53.4 million or 26% of a $205 million authorization?

From my correspondence and the Committee hearings, it is clear that the major concern over the 1968 appropriations is centered on Title I of the Elementary and Secondary Education Act. Dr. Joseph D. Lohman, Chairman of the California Advisory Compensatory Education Commission, commented as follows during our Committee hearings on the 1967 ESEA amendments:

"In California, our appropriation for fiscal 1967 is only 67% of our authorization. We are faced with providing programs for *more* children than last year with *less* funds than we received last year. Last year's appropriation amounted to $252 per eligible child. The fiscal 1967 authorization would have provided $259 per eligible child. But our actual appropriation was drastically reduced to $180 per eligible child. This means that California either will not be able to include all of the children programmed in the authorization, considering the additional children Congress added, or the quality of the entire program stands to be severely impaired by spreading the funds too thinly. To add to the seriousness of the problem, it is our understanding that the President's fiscal 1968 appropriation request for ESEA Title I is based on the fiscal 1967 figures. This means that the deleterious effects of the cutback will be projected into the future, despite the fact Congress' authorization bill increases the income eligibility formula to $3,000 instead of the current $2,000 figure. While the authorization for fiscal 1968 is $2.4 billion, the President has requested an appropriation of $1.2 billion—exactly half of what is needed to reach the number of children the Congress intended."

Dr. Lohman's remarks are typical of the concerns and comments of many, if not all, of the witnesses appearing before the Committee. I am certain that the remaining witnesses today will comment on the impact and implications the pending appropriation requests for Title I will have on programs and services in their school systems. May I just emphasize one point which was first brought to my attention by Dr. Sidney Marland, who is here today. It is simply that the administrative cost increase in any school system amounts to 6 or 7% annually without any increase in program. Many school districts will receive not even this small increase for Title I, perhaps even less than they received last year, unless more than $1.2 billion is appropriated.

With respect to Title I, an additional point should be made. Our Committee hearings show that there are still many unattended yet serious deficiencies in American education. The overcrowded classroom, inadequate classroom facilities, and the inability of many school systems to provide satisfactory teacher salaries is future business for the Congress and the Federal Government. The position that in these troubled times, we cannot embark upon programs to address these needs perhaps is defensible. The failure to adequately support existing programs, programs already begun, is for me indefensible!

Undoubtedly the members of this Subcommittee have received correspondence regarding the budget request for Title III of the National Defense Education Act. I will not belabor this matter except to express just one of my concerns. As you know, Title III provides grants to local school systems for the acquisition of instructional materials and equipment and that for every federal dollar the state or local community must contribute a dollar. It is of deep concern that only 48.5% of the authorization is being requested and that the request represents $32.2 million less than what was appropriated last year. More importantly, however, is the realization that the reduction of $32.2 million, because of the matching provisions in the program, may result in $64.4 million less being expended for needed instructional equipment that what was envisioned under the authorizing legislation.

During recent months, more and more attention has been given to the critical shortages of qualified educational manpower. In August, Secretary Gardner testified before one of the Education Subcommittees that there is a critical shortage at almost every level. Within the last two weeks, the Office of Education indicated in testimony before the same Subcommittee that—

"The critical need for teachers continues and, according to a nationwide study, is more acute this school year than it was a year ago. Total enrollments in public elementary and secondary schools reached a new peak of 43 million last fall. To meet the demand for teachers, to reduce class size, to replace teachers leaving their positions, and to eliminate the number of teachers not having adequate training, thousands of additional teachers are needed. Today, more than 5 percent of our schools' teaching force—approximately 90,500 full-time teachers—do not meet their State's certification standards."

In the face of such evidence and reports, an effective argument could be made that the Federal Government make every effort to assist in the training of teachers. If a complete effort were to be made with the existing fellowship program for experienced and prospective elementary and secondary school teachers, the appropriation would have to be much more than the $35 million being requested. This particular request represents only 12% of the authorization.

Finally, Mr. Chairman, may I comment on one of the higher education programs. I share the feeling of many members of the Committee that the most effective way of providing help to our colleges and universities is in the provision of aid for the construction of facilities. Also, I share the feeling of many members of the Committee, and of numerous representatives of the educational community, that the existing authorizations in the Higher Education Facilities Act represent a minimum effort on the part of the Federal Government. It is therefore particularly disconcerting that the pending requests for funding of Title I of that Act is for less than what was appropriated last year. The amount being requested represents only 53.4% of the amount authorized. If we are successful in providing programs and services through ESEA, it is probable that the demands for higher education in future years will be even greater than they are at present. The students in Head Start today, and the elementary and secondary students in Title I projects today, are hopefully the college and university students of tomorrow. To insure that is possible, it is essential that the Federal Government assist in meeting the pressing and increasing need to expand higher education facilities.

Mr. Chairman, I have touched up on just a few of my concerns. For so many years, America seemed content with an educational system that had many deficiencies, that provided more to those who could afford then to those who could not. No longer can this Nation be accused of being unaware of the responsibilities to provide education for all of our youth. And though it is late, efforts are underway to strengthen and improve educational opportunity in almost every local school system, and on most college and university campuses.

In large part, these efforts were begun on the promise of the Federal Government to provide on a continuing basis assistance at the local level where the ultimate responsibilities rest. If the efforts are to progress at the level and rate envisioned in the promise, then we must make every effort here in the Congress to provide an adequate level of support.

Before concluding, Mr. Chairman, may I discuss briefly one additional issue. As I have already indicated, the Committee hearings on the elementary and secondary school legislation last month were extensive and in depth. Every educator appearing before the Committee expressed deep concern over the noncompatibility of the school year and the Congressional year. The record is clear that the untimely authorizations and appropriations create monumental problems at the local level. The Committee on Education and Labor in the future will make every effort to provide authorizations at least one year in advance in order that funds may be appropriated by this Committee early in the Congressional session. The school people, to do an effective job, must know the exact amont of money they will receive. And they should know by April 1 because it is at this time when contracts with teaching personnel are renewed, and when the plans are made for programs for the school year commencing in September.

Because of the great concern over this matter, I am sure that the issue will be raised repeatedly in Committee and on the House Floor as we consider the remaining educational bills. Let me state, however, that the inadequacy of funding supercedes all other problems that concern the school people throughout America. I cannot over-emphasize the seriousness of this matter. The concern of local school officials with respect to the timing of appropriations and authorizations is exceeded only by their concern that there be adequate funding of existing programs.

Mr. PERKINS. First let me compliment this distinguished subcommittee, especially the new chairman and my colleague from Kentucky. I well realize and appreciate the huge task before you. I know we have come before you with a problem, and it is no small problem. The projected level of funding for Federal education programs to my way of thinking, has brought about tremendous conflict, dissension and frustration not only in the committee that I chair, but in school

systems throughout the country. I will address my remarks initially to elementary and secondary education activities. The authorization for fiscal 1968 in this budget category amounts to $3,376,909,876. The budget estimate however is only 50 percent of that amount, or $1,692,000,000.

Mr. Chairman, many of the local school superintendents appearing before my committee thought the authorizing committee could do something about the budget request. I told them we could not.

Mr. LAIRD. They understood we did not appropriate, last year, the full authorization. I would assume they understand that, although I talked to one of my superintendents the other day and he did not understand the difference between the authorization and appropriation.

Mr. PERKINS. There is much confusion along that line.

There are two points that stand out in the committee on the elementary and secondary school legislation. The ESEA programs in many areas of the country were difficult to get off the ground. The testimony before the committee indicates however that, through the efforts of local education agencies and superintendents, an excellent start has been made. Now they are confronted with what actually amounts to a cut-back in funds during fiscal year 1968 if only $1,692 million is appropriated. This will have a disastrous effect, because the schools are in the process of concentrating on the disadvantaged youngster, trying to raise the level and quality of education for disadvantaged youngsters. There is only one way to do it; that is through a concentrated effort. This is not an easy task; with inadequate funds the difficulties are compounded.

The other point I want to make is the timing of appropriations and authorizations.

Mr. FLOOD. Of course, if the Chairman will yield, the Appropriations Committee of the House and the House works expeditiously on these appropriations. We will have this bill through the House by the end of May. The same thing happened last year. The other body, however, did not act so expeditiously. Of course, we couldn't include funds for some programs in that bill because they weren't authorized at the time.

Mr. PERKINS. Last year it was October before we had an authorization. That is why I say we were derelict, the House Committee on Education and Labor. The year before it was October. For the general welfare of the school program in the future, we must do better.

Because of the employment problem, the personnel problem, school systems must know how much they will receive at an early date. There has been a study made by one of our subcommittees, and the chief thing that came out of that study, is that untimely authorizations and untimely appropriations are the major complication in the educational partnership. That criticism certainly is not directed here because you people could not do a thing in the world about it. In my committee we are trying to get our house in order so that we can do something about it in the future. That is my point, and I am hopeful that it will result in earlier appropriations so the school people will know just how much money they can rely on.

Mr. LAIRD. I wonder if the Chairman could give us some idea when we can get an authorization this year?

Mr. PERKINS. Yes. I would think about the week after next the pending bill will be on the floor.

Mr. LAIRD. The week after next?

Mr. PERKINS. I just doubt that we would have heard of the Quie substitute if the Elementary and Secondary Education Act were fully funded, because if we had a full appropriation the poorer States of this Nation would benefit greatly. I supported the amendment last year to provide for one-half of the average national per pupil expenditure because I feel that Federal aid should be on the basis of need.

We have postponed the effective date of that formula change because of the inadequacy of the projected level of funding. It is because of the possibility of inadequate funding that we are hearing so much about a substitute bill.

Mr. LAIRD. It is going to get worse before it is better. This budget we have before us today is going to provide for a cutback in these programs just as last year in the budget sent up here.

First, they went out and told the superintendents to go on ahead on about 85 percent of the approved projects, and after they hired teachers and made all their plans, they told 72 percent. This program is getting a lot of our school people in real serious trouble. They certainly got a lot of school people in serious trouble last year because of misleading the school boards as to the amount of money that was available.

Mr. PERKINS. I am not defending the Office of Education. I think we can rectify the whole situation if we will fully fund title I of the Elementary and Secondary Education Act instead of the 50-percent-funding recommendation of the Bureau of the Budget.

Mr. LAIRD. I realize that, but I really think we ought to discuss this, and if the chairman will let me just a minute——

Mr. PERKINS. I will be delighted to discuss anything with you.

Mr. LAIRD. The problem involved is that last year this committee overappropriated for title I.

Mr. PERKINS. I am not aware that the committee has ever overappropriated for title I.

Mr. LAIRD. I just want you to know that the President froze $55 million under title I and said this committee had given too much money. That is what the freezing of those $55 million clearly indicates. That freeze is set out right in the President's budget document on page 406.

Mr. PERKINS. For fiscal 1966 there was perhaps money that was not utilized, however that was because the program was just starting.

Mr. FLOOD. There was a new program.

Mr. PERKINS. This was a new program. In so many sections of the country it took an awful lot of ingenuity and leadership on the part of the school superintendents to get the programs going. But the devastating thing is that after they have made such an effort and have these programs in operation, they may have to cut them back. This will cut the heart out of all the progress we have made.

May I repeat we only have a recommendation for 50 percent funding of title I.

Mr. LAIRD. I understand that. My point is, Even though we didn't appropriate as much as was authorized, the executive branch froze $55 million.

Mr. PERKINS. Perhaps that much was not expended in fiscal 1967 because of the delays last year in the authorizations and the resulting delays in getting the money to the districts.

Mr. LAIRD. That is what I am talking about, fiscal 1967. I am talking about this year. This is the freeze they have.

Mr. PERKINS. There may be a few States unable to use all of the money because of the timing of things. However the majority of the States—the vast majority of them, 95 percent of them—are spending every dime of their funds and spending the money wisely.

Mr. FLOOD. I might indicate, Mr. Chairman, that in the Department of Defense, upon which subcommittee I have sat some 20 years, this is not an unusual problem; only instead of $50 million we may freeze $1 billion for what they call long leadtime items. You will find Detroit shuts down for weeks to gear up for a new model car coming out. This is not necessarily alarming.

Mr. LAIRD. The difference, Mr. Chairman, is that this money lapses, this $55 million. Under the basic law this money could be reallotted to take care of some of the many projects under title I that cannot be funded now.

Mr. PERKINS. But it must be reallocated in the State under title I if that State wishes to utilize the funds before it can go to any other State.

Mr. LAIRD. That is correct, but this is not going to be reallocated. This is frozen.

Mr. PERKINS. We must remember that funds were not received in the school systems until December and January of this year because of the late appropriation and because of the late authorization.

Mr. FLOOD. I would go on from there. I think we understand both positions.

Mr. LAIRD. Mr. Chairman, I have been on this committee ever since this Department was created. I just want the gentleman to know that we appropriated even prior to the signing of the authorization bill by the President of the United States. I do not believe that it is fair to even bring up the question of appropriations in discussing undue delays, because we will be operating on the appropriations just as rapidly as we can. The problem has been in connection with the authorization. This is the thing that causes trouble with schools from one end of the country to the other.

I do not think it is fair to be critical of the appropriation process.

Mr. PERKINS. I am not critical of the Appropriations Committee. I concur in the statement you made. I want to make myself clear. You acted as hastily and speedily in the Appropriations Committee, even ahead, as you stated, of the authorizing committee last year, and the year before. The Appropriations Committee's hands were tied because you had no authorization to work on. I was just talking about the future.

We do have an authorization already for fiscal 1968. I know that we cannot do too much about it this year, but I am talking about fiscal 1969. That is the point I wish to make.

I am here today also to try to make it clear that the school people in the country really need full funding of title I. We have a budget estimate of about $1,200 million for title I, and if it was fully funded it would be about $2,400 million. If you do not fully fund any other

title of this bill, or any other educational bills, I think it is altogether necessary to fully fund title I of the Elementary and Secondary Education Act by appropriating $2,400 million for the next fiscal year.

With respect to the estimate budget may I make the following points for elementary and secondary education activities, 50 percent of the authorized amount is being requested; title I of ESEA is 49.2 percent; title III, the supplemental educational centers, 46.6 percent; title V, 59.5 percent; title III of the NDEA—for the acquisition of instructional equipment and remodeling—48.5 percent; title V, NDEA, 81.6 percent. The impacted areas program—is not fully funded—only 90 percent is requested.

Mr. LAIRD. I thought it was only 85 percent.

Mr. PERKINS. The figures I have show 90 percent. For higher education activities 66 percent is requested. Title I of the Higher Educational Facilities Act only 53.4 percent is asked for. For title V of the Higher Education Act of 1965, experienced and prospective teacher fellowships, 12.7 percent is requested.

Mr. FLOOD. Let us hope, Mr. Chairman, that the Members on the floor whose hearts bleed for the Federal impacted areas have the same concern for the balance of the education programs.

Mr. PERKINS. I agree with you. Title II of the NDEA, student loans, will only be 84 percent funded. Vocational education is not fully funded. We lack the difference between $259 million and $288 million.

By all means the vocational education program should be fully funded. There are students all over the Nation almost crying to enter vocational training and they are being turned down.

For programs for libraries and communities services only 59 percent is requested. There is an authorization of $281 million but only $165 million is budgeted.

For improvements in the education of the handicapped only 26 percent is being asked. The total authorization for the Office of Education for fiscal year 1968 is $6,849,148,331. The appropriations request for fiscal year 1968 is $4,007,670,445. If you average everything up, the budget estimates amount to 58 percent of the authorizations. I hope to see everything fully funded, but I know the conditions under which you must operate.

I said, Mr. Laird, before you came in, that this subcommittee—is handling more money next to Defense. You are second only to Defense. In educational matters there is almost a $7 billion authorization.

Mr. FLOOD. Mr. Laird and I happen to be on both subcommittees.

Mr. PERKINS. If there is anything that you could do in this committee to help fully fund title I of ESEA, I think you would be rendering a great service to the whole country. Those are my honest views. I listened to 300 or 400 witnesses this year. This is my statement.

Mr. FLOOD. Mr. Laird.

Mr. LAIRD. We can always entertain a supplemental request. We have acted on several requests for supplemental appropriations this year. For instance the executive branch underestimated the amount needed for grants to States for public assistance by about $400 million. We are going to have to add that money, because these are State matching programs that are on a formula basis. We have also found in our other subcommittee that the Defense budget is underestimated by about $5 billion.

Mr. PERKINS. I read that in the morning paper.

Mr. LAIRD. We are facing a budget deficit of $22 billion without any tax increase. I happen to be willing to vote for a tax increase, but there are a lot of people in the Congress who are not willing to. I just wonder if you can go for a budget deficit in excess of $20 billion. This is a tough problem we have on our side of the table.

Mr. PERKINS. I know you have a problem and I know what your policy has been. It is really difficult for me to visualize—after you hear these witnesses as they come before you like they came before me in our committee—how we can afford not to fund fully title I of the ESEA, notwithstanding what the deficit may be.

Mr. NATCHER. I want to thank my friend and colleague, Carl Perkins, for appearing before our committee at this time and to say to him that certainly every consideration will be given to his request.

Thank you, Mr. Chairman.

Mr. LAIRD. Thank you, Chairman Perkins, for coming before the committee. It has been very helpful to hear your views. We appreciate your taking time to come here.

Mr. FLOOD. Not only do you recognize the problems of the subcommittee, but you may be sure that the members of the subcommittee are by no means, under all the circumstances, unaware of your problem.

Mr. PERKINS. I can appreciate that. We could eliminate a lot of these problems if title I were fully funded.

Mr. LAIRD. I just want you to know that I am for some increases in the programs. As a matter of fact, last year I put in an amendment to increase vocational education. I think it is a mistake that this program has been so curtailed in this budget. I think for the dollars spent you get more out of that than you do on a lot of these other programs with a new, popular name on them.

Mr. FLOOD. Mr. Laird has been very helpful here, you know.

Mr. PERKINS. I know he has been very helpful.

I mentioned the debate on the formula in our committee. If the bill is fully funded, it means all the poorer States in the country will receive an amount per poor child equal to one-half of the national average per pupil expenditure. But if the bill is not fully funded, they will continue to receive one-half of their own State average per pupil expenditure. It was Congressman Al Quie who made the motion that carried in the full committee, and I supported it, to give the poorer States the right to have the national average, rather than one-half of their own State average. However, we have postponed that change in formula until the program is fully funded.

I think we are not doing justice to our youngsters if, after we make a commitment, we cannot fully fund title I.

Now, Dr. Donovan and the other superintendents who are here can present the picture much more clearly than myself.

Mr. FLOOD. We will be glad to hear from Dr. Bernard E. Donovan, superintendent of schools, New York City, and the others in his group.

THURSDAY, APRIL 27, 1967.

FINANCING FEDERAL EDUCATION PROGRAMS

WITNESSES

DR. BERNARD DONOVAN, SUPERINTENDENT OF SCHOOLS, NEW YORK CITY
DR. NORMAN DRACHLER, SUPERINTENDENT OF SCHOOLS, DETROIT
DR. RALPH DAILARD, SUPERINTENDENT OF SCHOOLS, SAN DIEGO
DR. HAROLD SPEARS, SUPERINTENDENT OF SCHOOLS, SAN FRANCISCO
DR. SIDNEY MARLAND, JR., SUPERINTENDENT OF SCHOOLS, PITTSBURGH
DR. PAUL BRIGGS, SUPERINTENDENT OF SCHOOLS, CLEVELAND
DR. ROBERT POINDEXTER, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA

Mr. FLOOD. Dr. Donovan is accompanied by a delegation of school superintendents from large cities. I presume, Doctor, that you would like to introduce them.

STATEMENT OF DR. BERNARD DONOVAN

Dr. DONOVAN. I have with me today from the 16 great cities, Dr. Norman Drachler, of Detroit, Dr. Ralph Dailard, of San Diego.

Mr. FLOOD. These are the superintendents?

Dr. DONOVAN. These are the superintendents of schools.

Dr. Harold Spears, of San Francisco, Dr. Sidney Marland, Jr., of Pittsburgh, Dr. Paul Briggs, of Cleveland, Robert Poindexter, of Philadelphia, and myself.

In addition to the gentlemen who are here, I have written statements which, with your permission, I would like to submit from Dr. Ohrenberger, of Boston, Dr. Crowther, of Los Angeles, Dr. Redmond, of Chicago, Dr. Kottmeyer, of St. Louis, Dr. Vincent, of Milwaukee, Dr. Manch, of Buffalo, Dr. Stimbert, of Memphis, and Dr. Paquin, of Baltimore.

Mr. FLOOD. Without objection, those statements will be inserted at the end of your testimony.

Dr. DONOVAN. Sir, in order to conserve the time of your committee, which has been gracious in letting us come here today, we have organized our testimony so as to be as brief and to the point as we can.

Mr. FLOOD. We have you here because we think you can help us.

Dr. DONOVAN. We will be pleased to do what we can.

I will make a general presentation of a short nature and each of the other superintendents will supplement it with a brief statement containing points about his own city and the effects of funding.

If I may, Mr. Chairman and members of the committee, may I first express my gratitude and that of the superintendents of the great cities for this opportunity to testify before your committee on the funding of educational programs. I am speaking not only as the superintendent of schools of New York City, but also as chairman of the Coordinating Committee on Federal Activities of the Great Cities Research Council.

Mr. FLOOD. How long have you been superintendent in New York?

Dr. DONOVAN. I have been superintendent for the last 2 years and twice before that, acting.

The council consists of 16 of the great cities of this Nation searching cooperatively for solutions to the common problems of urban education, and in our member cities we have a combined pupil enrollment of approximately 4.5 million pupils. Approximately one-half of this enrollment consists of pupils from minority groups who suffer educational disadvantages.

In addition to the 16 cities represented here today, the same effects are felt by at least 50 other large cities of this Nation because within the cities of the Nation are the concentrated problems of poverty, illiteracy, unemployment, and educational disadvantage.

I am expressing the common concerns of all the great cities on the matter of funding.

Following my general presentation the other superintendents will testify briefly on their particular cities.

The superintendents for the great cities have been very concerned about the availability of Federal funds for education programs. In particular we have been troubled by the uncertain nature of the funding both as to the amount and the timing. We would make the following recommendations to the Appropriations Committee:

1. There is great need for Federal appropriations to match Federal authorizations. School systems build their planning and their hopes on authorization adopted by Congress. They then find in the course of appropriations that the money forthcoming for these authorizations does not contemplate meeting the full program, either in scope or in length of time.

Now I want to insert here, please—I understand the submission of a budget by the President. We are not referring to the actions of the Appropriations Committee, but we are referring to the whole matter of asking for and providing funds for the program.

Mr. FLOOD. Of course, may I point out, Dr. Donovan, the fact that the superintendents look at the authorization act and then proceed to establish their budgets predicated upon the authorization act. This reflects an appalling misconception of how this Government functions.

Under no circumstances should a superintendent of schools or anybody else establish a budget merely because the legislative committee establishes a figure. I think you follow me.

Dr. DONOVAN. Yes, I do, quite clearly, and in my statement you will see we don't do it that way. There is another step.

Mr. LAIRD. I am sure you understand if we were ever to appropriate for all the authorizations which we have in the field of public works. in the field of defense, interior, and so forth the budget deficit would be astronomical.

Mr. FLOOD. May I add parenthetically at that point, there are now on the books, Mr. Donovan, authorizations for public works that have been law for decades. Almost $25 billion of authorizations have never been funded—$25 billion that are law.

Dr. DONOVAN. I think, sir, you will see as we go on that the full funding and the timing of it are two conflicting matters with us that make a difference in our approach.

Authorization for 1967 indicated $151 million under title I for New York State. The appropriations provided $111 million.

For 1968, authorization would contemplate giving New York $123,945,000, but the reduced amount under consideration is $65,676,000.

It is particularly important that title I be funded fully because it is the major thrust to the entire Federal aid to education. Title I funds help our city school districts to strike at the hard core of poverty and educational distadvantage.

We would also appeal to the Congress for earlier appropriations action. Within the past 2 years, we have started Federal programs under authorizations—not fully. We never started them under the full authorization, but we started them at the advice of the Federal Office of Education, and our own State offices, because programs must start when school starts.

Mr. FLOOD. May I point out to the gentleman, the authorization act for the program of which you speak was signed by the President on November 3, 1966, after Congress had adjourned sine die for the year.

Dr. DONOVAN. We already had Federal programs in operation before that, the year before, and they are not the kind of programs we can take 1 year and drop the next year.

Mr. LAIRD. The appropriations process was not tardy.

You are coming in here indicating that the appropriations process held this up. We appropriated funds even before the President signed the law, on the basis that he would sign it.

Dr. DONOVAN. This is why I think I prefaced my statement before——

Mr. LAIRD. I was referring to this sentence. This is a question of the difference between authorization and appropriation.

Dr. DONOVAN. I think we understand the process, but what we don't understand is something else.

Mr. FLOOD. I am not so sure the superintendents do. I don't question their eagerness to move, however, I am not sure they understand, Dr. Donovan, what the problem is.

The Labor-HEW appropriation bill was reported out by the Appropriations Committee on the 5th of May last year. We cannot start hearings until the Presidential message comes up. It is almost physically impossible to accelerate that if we are to hold sufficient hearings to act in a responsible way. We are giving 2 weeks now to hearing public witnesses, such as you. We finished the hearings with Government witnesses a week ago. Last week, all this week, and until Wednesday of next week we will be hearing distinguished educators and welfare people and medical people, as they have a right to be heard. You have a very difficult physical problem. I can't imagine how this bill could have been reported out more expeditiously last year.

Dr. DONOVAN. I think that perhaps I am not making myself understood. We understand quite well the difference between authorization and appropriation. We understand the alacrity with which your Appropriations Committee moves. We are not arguing that point. We are not talking, really, about the Appropriations Committee or Congress' part, but we are talking about the entire funding process which includes the President, the budget, everything that comes into the funding process.

We are not saying the Appropriations Committee didn't do its work, but what we are concerned with—and I don't have to refer to the testimony for this—is that school systems operate on a standard

year and employ people in September and cannot find them in October and November, and therefore, if the process is such—and it has nothing to do with the Appropriations Committee—if the entire funding process is such that our funding is given us in November, we cannot mount educational programs.

Mr. FLOOD. Mr. Donovan, aren't there two sides to this story? Does it follow that the Congress of the United States must adjust itself to the budget system of the school superintendents?

Dr. DONOVAN. I don't think it follows that per se, sir, but I do think it should be taken into consideration; that is all.

Mr. FLOOD. I agree. Just so we are clear.

Dr. DONOVAN. You will find this in every school system in the Nation. It has to do with our State budgets, as well as any Federal funding, and everybody employs teachers in September and we are so desperately short of teachers in this country that when we get extra money in November there is nobody around to mount the programs.

Mr. FLOOD. I am merely raising the question that it is not clear to me that the burden rests solely, entirely and exclusively upon the constitutional processes of the Federal Government. While it may be difficult, it may be irritating, I raise the question, Isn't there within the rule of reason a possibility of adjustment within the education area?

Dr. DONOVAN. Yes, I think there is. I think adjustments could be made equally on both sides of the fence.

When the appropriations come at a latter part of the year as indicated here, they are generally not for the full year, and sometimes because of coming at that point, they may lead to an unwise use of funds when they come. We don't want to do that.

Thirdly, there is a need for long-term funding if we can get it, of educational programs. It is difficult for a city to predicate a program upon an annual appropriation without the knowledge that that appropriation will be continued to a succeeding year. Almost every program involving Federal legislation requires personnel appointments and it is impossible to employ personnel without a reasonable expectation of maintaining a program for more than the course of 1 year. Competent personnel in the school business are at a premium these days and we cannot attract such personnel if they feel their employment is simply on a year-to-year basis. We are not asking for increases every year, but some kind of——

Mr. LAIRD. You are making the best argument I ever heard for revenue sharing. Just keep it up.

Dr. DONOVAN. No. 4. There is a recommendation that there be a cut in the funds available for title III of the National Defense Education Act. In the course of past years, many school systems have utilized the Elementary and Secondary Education Act instead of the National Defense Act because no matching is needed under the ESEA.

This was unfortunate because we believe that ESEA was intended to be in addition to anything already funded under NDEA, and we believe there should be full funding for title III of NDEA.

While not all of the great cities of the country have engaged in the National Teachers Corps program, those of us who have are in favor of full funding for this program. It is unfortunate that a program with great promise for the inner core cities does not succeed because

it is not completely funded and, therefore, does not get the wholehearted support of the agencies and institutions which should be working with it.

Lastly, there is a great need for funds for construction of educational facilities in the cities of the Nation. Now, I know these funds are not definitely and specifically being asked for but we want to make known to you this matter.

Mr. FLOOD. This is what we call bricks and mortar.

Dr. DONOVAN. Well, these bricks and mortar and the funds for them should be over and above any funds now contemplated for extension of the Elementary and Secondary Education Act. I know we will take this message to the President and to others. We are not asking your Appropriations Committee, that you should have the responsibility. We understand that. We feel Congress could make a great contribution to the improvement of education in the cities if it could provide for some site acquisition and construction money. We do not suggest under which section of which act this should be done, but we do know that many programs envisioned under the legislative intent of Congress, and the many ideas which we are prepared to carry out, we cannot carry out, if we do not have the facilities in which to place the programs. So we would welcome congressional assistance in the funding of construction, including guidelines, which would enable us to use construction funds in the solution of social problems.

We are aware that at this hearing we are testifying about the funds to be appropriated under the extension of the Elementary and Secondary Education Act. I think we would be remiss, however, if we did not indicate our critical need for supplemental appropriations, for certain federally funded programs. It is important to us that Public Law 874, which can render considerable assistance to city school districts, receive a supplemental appropriation of approximately $17 million so that the cities can get the aid for which they qualify under the law.

My own city has $5.5 million at stake. It is also essential that Public Law 815 receive an estimated operating need in supplemental funds of approximately $48.5 million. This supplementary appropriation is necessary if the programs that were authorized are to be continued at their appropriate strength. We are not willing to accept the suggestion that the Bureau of the Budget has finality on appropriations. We believe that the Members of Congress are responsible for funding and we urge careful consideration of the need of these supplementary educational dollars by the House Appropriations Committee and by every Member of Congress.

Mr. FLOOD. You are aware of the history of this subcommittee on this program, are you not?

Dr. DONOVAN. Yes, sir; I am.

It is our understanding some substitutes will be proposed. It is our understanding that some substitutes will be proposed in lieu of the recommended extension of the Elementary and Secondary Act of fiscal year 1969. These substitutes include provisions of general aid under conditions different from those governing present programs. While we recognize that the funding of these substitute proposals always is not before the Appropriations Committee at this point, we felt the urgency of bringing to the attention of the members of the committee our concern for these proposals. While the superintendents of the

great cities believe that general aid should be a long-range objective of Federal financing of education, we also believe that the categorical aids now functioning and now considered for extension are critically needed for the unique problems of the big cities. These categorical aids have been devised to probe the problems surrounding the education of the disadvantaged in the large cities of the country. The cities have mounted important and needed programs on the basis of these aids and they need to continue these categorically lest the entire forward movement for the improvement of disadvantaged pupils be endangered.

General aid must be of massive proportion and it must be over and above the categorical aids which are directly aimed at the social problems of the Nation. It would be most unfortunate if the strides that the large cities have made for minority group children and for other children in disadvantaged areas would be here jeopardized by the removal of categorical aid in full, authorized amounts. Any consideration of general aid must also contain the mechanics of recognizing the financial needs of the large cities, which have not been recognized adequately under State formulas of aid.

Administratively, these changes will throw the Federal assistance programs into chaos.

Mr. FLOOD. And it is most unlikely that they would ever be. That is my statement, not yours.

Dr. DONOVAN. No comment, sir.

Our basic concern is that the authorizations in the substitute proposal are too small to cover a general aid-to-education program. The level of authorizations would mean substantial reductions in the amount of Federal assistance going to the great cities under the substitute proposal.

I am merely pointing this out in case such proposals reach the Appropriations Committee.

In repeating my thanks to the committee——

Mr. LAIRD. A question in that area: Would you object to putting titles I, II, III, and V, with the same categorical specifications set forth, together, with a provision that at least 50 percent of the funds made available must be used in the area of the disadvantaged child? Would this help the big cities?

Dr. DONOVAN. I am afraid there would not be—this would not mean more money for the big cities unless I misunderstood the allocation of funds in the bill.

Mr. LAIRD. Fifty percent of the appropriation.

Dr. DONOVAN. As I understand, New York State would get $125 million less under the substitute proposal than it will under the extension of ESEA.

Mr. LAIRD. There is a provision in that substitute.

Dr. DONOVAN. But there——

Mr. FLOOD. You are both speaking of an authorization act, I believe.

Mr. LAIRD. That is right, but the 50-percent provision, with that in there, would mean more for New York State.

Mr. FLOOD. We cannot write law here.

Dr. DONOVAN. I realize that.

Mr. LAIRD. Right now you will find the total amount available will only be 44 percent—44 percent of this money, with the freeze that is in this budget now, will go to the area of the disadvantaged child. You

see, they haven't spent the money we gave them last year. You understand that?

Dr. DONOVAN. I understand.

Mr. LAIRD. If you put a 50-percent provision in there, as far as the disadvantaged child is concerned, and gear it to 50 percent of the appropriation rather than the authorization, you will come up with a little more money.

Dr. DONOVAN. We might possibly, sir, except it isn't directed at the big city; it is directed to the State department of education, which is the one to make the allocation and there are no guidelines for that.

Mr. LAIRD. That has to be approved by the offices of the commissioners of education and the guidelines are pretty well set forth. This definite percentage as far as the disadvantaged child is concerned, may help take care of your problem. It makes no difference to me because I know this categorical aid situation—until you get rid of the categorical aid to education approach, you won't get the support you need.

I know that. You should know it, and, if you don't, you will learn in 5 years or less with the experience under this elementary and secondary education program.

Mr. FLOOD. Of course, it is clear to everybody here that any such program would call for ratification by the State. That being the case, you still have a problem in the big cities.

Dr. DONOVAN. Yes, we do, sir. We are generally in favor of our State education departments being in close relationship with us, and we have said so in testimony.

But, in the disposition of general aid, we would like to see some effective method of insuring adequate support to the cities where we think the concentration of educational problem is, and State formulas of aid, as good as they may be—my own State of New York is in the foremost—they still don't meet the problems of the big cities.

Mr. LAIRD. I just want to disagree with you 100 percent. I happen to come from an area where we also have many school problems. This idea that you have all the school problems in the big cities and that that is where all this money should be going is something with which I completely disagree.

I represent just as many people as any other Member of Congress. We are perfectly apportioned in Wisconsin. I have always opposed categorical aids and have always supported a general approach right from the time that Bob Taft put in the first general aid to education bill.

Right now we have over 100 categorical aids to education. I thought back when we had 33 we had a lot, but we have 127 categorical aids today. We keep piling one on top of the other.

I just don't believe that in 5 years you are going to agree with the position you take today, that you want to pile more categorical aids on top of the 127 we have.

Dr. DONOVAN. I think we have taken a stand here that we would like to see in 5 years a big general aid piled on top of categories because the categories are the first approach that I ever knew that even tried to touch the problem of the big cities.

Mr. LAIRD. Let me tell you this. Unless you move for general aid now, by the time the war is over and defense expenditures are down,

that money will be used for tax reduction and won't be used for education. You have got your chance now. Just remember that.

Mr. FLOOD. It does not necessarily follow that if and when there is a cessation of hostilities, plus a tax reduction, that the sufferer would be education.

I have the impression that after the tremendous breakthrough made in this area in the last few years, that this is so deeply imbedded in the warp and woof of the American society that when your grandchild sits where I sit, you will find the budget handled by this subcommittee equaling that of the Department of Defense. This would be by public command.

Dr. DONOVAN. I would hope that what you believe comes true, sir.

I am closing my testimony. I just want to thank you again and say our real concern is the effect of it and we know Congress is as concerned as we are in this matter and we look to the Members of Congress for full support of essential programs to the extent they are able to do so.

May I ask Dr. Marland if he would speak first.

STATEMENT OF DR. SIDNEY MARLAND, JR.

Dr. MARLAND. My name is Dr. Sidney Marland, Jr. I am superintendent of schools in Pittsburgh. I am pleased to appear before a fellow Pennsylvanian.

Mr. FLOOD. How long have you been a superintendent?

Dr. MARLAND. Four years.

Mr. Chairman and members of the committee, my statement will be very brief and it will be in a sense a translation of the generalization Dr. Donovan mentioned with a specific case or two.

First, I feel there should be a word of clarification as to the matter of dependability of funding. Dr. Donovan stated the general views of his colleagues but in the outside chance they still may be misunderstood, I would like to say when we speak of the timing we are not speaking of criticism of this committee or anybody else. We are speaking of the generalization of the impossibility of fulfilling the spirit of these laws Congress has enacted unless there is a more realistic approach to the time. I mean by that not an adjustment of congressional procedures to breach custom, but rather looking at a new procedure which we call continuing resolutions or authority to mount a program with some assurance it will continue in force. I am not sure of the details of how congressional terminology applies to this but I know that in higher education, which is receiving very large sums of money, they are not beset with these interruptions from year to year, such as the National Science Foundation.

We have in Pittsburgh exhausted all our money in May. We speak of the apparent misunderstanding by superintendents on authorizations vis-a-vis appropriations. We do not misunderstand authorizations vis-a-vis appropriations but we have to bring programs to boys and girls where they are desperately needed. We gamble in September we will have so much money. I gambled and lost because we are 20 percent under the level we were a year ago and that has meant I have had to announce we will have no summer school in Pittsburgh this summer. In addition, I will have to lose 90 professional people. This is devastating to the integrity and reputation of a school.

From time to time we have read in the Congressional Record that members of the administration have indicated we are unable to mount programs at the level of the authorizations. I can say very categorically that for Pittsburgh, at least, we can mount programs with honest stewardship and integrity at double the present level. We have proposals awaiting approval in our State legislature to double our present level and I can assure you these moneys would be spent with care and wisdom, notwithstanding the testimony of the Secretary of HEW and the Commissioner of the Office of Education.

Thank you.

Dr. DONOVAN. May I now introduce Dr. Norman Drachler, superintendent of schools of Detroit.

STATEMENT OF DR. NORMAN DRACHLER

Dr. DRACHLER. I am Norman Drachler, superintendent of the Detroit public schools.

Mr. FLOOD. How long have you been superintendent?

Dr. DRACHLER. Since last September 1 and I began in the school system 32 years ago.

Mr. FLOOD. You do not look it.

Dr. DRACHLER. Thank you. So far I have led a sheltered life.

Mr. Chairman, just in preface to what has been discussed here—and I appreciate the time the various members of the committee and yourself have given to us—as a youngster when I attended a large meeting with my dad I never could understand why a speaker always said he would like to say a few words.

We understand the distinction between authorization and appropriation. On the other hand, we come before this committee not only because you are knowledgeable in this area but you are Congressmen and we seek help.

In Detroit it cost $516 to keep one child in school per school year. It cost $5,000 to keep a child in a juvenile home, and we need help.

May I touch on one or two items concerning Detroit. At the outset I want to say the enactment of the Elementary and Secondary Education Act and other programs—firmly established—brought with them the promise of new and wider educational opportunity for all our youth. Indeed, for the first time, the promise of equal educational opportunity for all appeared possible.

Mr. FLOOD. What is the population of schoolchildren in Detroit?

Dr. DRACHLER. 300,000, of whom 178,000 fall under title I, which represents over 80 percent of all our Federal aid program.

The fiscal affairs of the Detroit public schools are seriously in need of Federal funds. This is particularly true in those educational programs designed to aid the economically and educationally deprived youngster. These youngsters are enrolled in continuing programs that must be upgraded and expanded if the full benefits of initial amounts of money allotted and gainfully expended are to be fully realized. Fiscal restrictions for this year are now being felt. We have this year approximately $2 million less in Federal aid than we had a year ago, which has meant shutting down some programs through no fault of anyone but the expectations and hopes of people had been raised.

May I give you one or two examples concerning Detroit.

Of our 11,000 teachers in the city of Detroit, over 800 are emergency substitutes in regular positions simply because we could not hire qualified certificated teachers in competition with other communities. And of these most of them are in the areas dependent upon Federal aid.

Another point is, if we in Detroit were to have the same ratio of teachers to pupils as exists in the rest of the total State, including Detroit, we would need an additional 1,650 teachers simply to equal the ratio of teachers to pupils provided in the rest of the State.

Mr. FLOOD. You say the community is upset about this? How do you know they are aware of the problem?

Dr. DRACHLER. I think they are aware because despite the fact that property is bearing a great deal of the burden and we have 250,000 citizens 65 years old and over, and despite the fact over 20 percent of our children are in private schools, a majority of the community went out last November and voted 5 additional mills on their property in order to support the schools.

Mr. LAIRD. I would like to ask one question in regard to your statement that you had counted on more for your budget. My schools in Wisconsin, Milwaukee on through Madison, and the depressed area of the State, were told to go ahead last year on the basis of 85 percent appropriation level. This year they have been notified to go ahead and plan their budget for next year on about 47 percent that they could be assured of. So they are planning their budgets for the next school year with the understanding that they will have 47 percent. I think they will have 47 percent. Last year the State superintendent was led to believe by the Office of Education, that it would be 85 percent. It turned out to be only 72 percent. But this year he is telling them to go ahead and plan their budgets and get them before the school boards and they will only have 47 percent. But my school superintendents in my local communities are preparing their budgets on that basis. So if there is action taken on this bill and even if it does not clear the Senate until next September or October, most of my schools will already have their budgets pretty well in shape for the next school year. Do you not have to do that in Detroit too?

Dr. DRACHLER. Yes; and I misspoke if I said we expected more. I stated that we have $2 million less. I want to say, on the other hand, this was our second year. We are more realistic now. I am not pessimistic. I am a sort of discouraged optimist in terms of help, but our State has made it very clear to us in terms of the coming year so our program, I think, is much more realistic in planning now.

Mr. LAIRD. You are getting your budget ready based on some indication of an appropriation for the next fiscal year?

Dr. DRACHLER. Yes, sir.

Mr. LAIRD. And are you basing your budget that you will present to your school board on the estimate of how much Federal funding you will get as compared with this current school year?

Dr. DRACHLER. In terms of the Federal funds I think our budgets are dependent in that we set up programs and then we may cut off a program at the end of 6 months or 5 months or 9 months, and we have done that in the past, rather than say we have a specific allocation.

Mr. LAIRD. You would rather shut the programs off?

Dr. DRACHLER. Unless we can, in advance, know how much we would have for the total year.

Mr. LAIRD. You have a pretty good idea how much you will get for next year, do you not?

Mr. DRACHLER. We think we do for 1967–68.

Mr. LAIRD. Do you think you will have to shut any programs down if you get the amount the Office of Education has requested?

Dr. DRACHLER. If we get the amount the Office of Education has indicated we would receive, we will plan according to our first- and second-year experience. It is complicated by the fact you hire in many of these programs not exactly professional people, aides, and so on, so that we are not dealing only with the professionals.

Mr. FLOOD. Thank you very much, Dr. Drachler.

(The following statement was submitted for the record:)

TESTIMONY OF NORMAN DRACHLER

Mr. Chairman and members of the committee, I am Norman Drachler, Superintendent of Schools in Detroit, Michigan. I appreciate very much this opportunity to come before this committee to discuss one of the most vital problems facing the school districts of this nation today—the full funding of federal educational programs as authorized by the Congress.

I am here today to discuss my concern over the inadequacy of the proposed federal appropriations for education for fiscal year 1968. The appropriations, as proposed, come far short of meeting the full authorization of the several acts. It is my feeling that if the Congress appropriates less than the full authorizations, state and local educational programs now under way or just emerging will be severely damaged.

I am convinced that the great breakthrough in the field of education accomplished by the 89th Congress received overwhelming support from the people of this nation. The enactment of the Elementary and Secondary Education Act, the Economic Opportunity Act, the Demonstration Cities and Metropolitan Development Act, the Manpower Development and Training Act, and other programs firmly established brought with them the promise of new and wider educational opportunity for all our youth. Indeed, for the first time, the promise of equal educational opportunity for all appeared possible.

The proposed appropriations now being considered by the committee for almost every federally supported program now in operation are far below the present congressional authorization. In some instances, such as the Elementary and Secondary Education Act, the appropriations for fiscal year 1968 are less than half of the full authorization. I cannot be convinced that the Congress will accept the argument that the proposed level of appropriations requested will guarantee present standards of operation at the local level, even though no state will receive less in total funds than it did in 1967. This nation cannot be content with a hold-the-line fiscal position while educational programs are cut back or go out of existence.

The fiscal affairs of the Detroit Public Schools are seriously dependent on adequate funding of federal programs. This is particularly true in those educational programs designed to aid the economically and educationally deprived youngster. In Detroit, some 178,000 of our 300,000 pupils are attending schools eligible to receive funds under Title I of the Elementary and Secondary Education Act. These youngsters are enrolled in continuing programs that must be upgraded and expanded if the full benefits of the initial amounts of money allotted and gainfully expended are to be fully realized. Fiscal restrictions for the current year are now being felt. For example, in fiscal 1966 the federal government provided an allocation to Detroit for programs under Titles I and II, Elementary and Secondary Education Act, of $12,704,550. In fiscal 1967, it is reported that these same titles will provide only $10,904,605. Needless to say, the level of appropriations requested for fiscal 1968 would reduce this amount to an even greater degree. This means that some of our programs will be reduced. Other programs will be dropped. Such actions will be difficult to explain to parents and children who had, at long last, been given new rays of hope, higher levels of aspirations.

The Economic Opportunity Act has suffered the same serious decline from fiscal 1966 to fiscal 1967, with an even greater reduction projected for fiscal 1968. In fiscal 1966, the allocation to Detroit was $5,997,002. In fiscal 1967, this amount has been reduced to approximately $3,600,000. Once again, despair in place of hope.

The detailed expenditures under the Economic Opportunity Act, the Elementary and Secondary Education Act, and other federal programs are included as an addenda to this testimony to show the type of projects being conducted and the level of expenditure necessary to maintain the programs. I have made specific reference to both the Elementary and Secondary Education Act and the Economic Opportunity Act because they are the two major federal subvention programs that provide funds for our disadvantaged youth.

The question may well be asked as to why these programs could not be continued with funds from local or state sources. The answer, of course, is that the present level of local and state revenues is such that it is exceedingly difficult to maintain even the regular school program, which must be available to all children regardless of who they are or where they live.

Had revenues been available from local resources or from state grants, it must be assumed that these supplementary programs would have been in widespread operation without the federally supported programs. In fact, many efforts in this field had already been instituted in the Great Cities, but because of the inadequacy of available revenues these programs were of a token nature. Such programs, along with others, provided the basis for the formulation of the federal Elementary and Secondary Education Act itself and the rules and regulations implementing that act. Financing of these supplementations by federal participation is now a significant part of the operation of the schools in these cities.

Our school system has many problems that are system-wide and reach all parts of the school community. When testifying before the House Labor and Education Committee some time ago, I called to the attention of that committee some facts concerning the status of all our schools and their needs as they relate to the total funding program of the school system. Let me list some of these items for this committee, since they are pertinent to the total needs that we face in the financing of education.

1. Over 800 of our 11,000 teachers are emergency substitutes in regular positions simply because we have been unable to hire qualified certificated teachers.

2. Despite our inservice training program, many of our teachers are teaching subject matters, such as mathematics, science and foreign languages, for which they are not adequately prepared.

3. If we, in Detroit, were to have the same ratio of teachers to pupils as exists in the rest of the state, we would need an additional 1,650 teachers in our schools tomorrow morning. At an average salary of $8,000 per year, this amounts to about $13 million.

4. If we could hire these 1,650 teachers, we would need at least an additional 1,000 classrooms in order to house them.

5. In Detroit, we have over 4,000 elementary classrooms. Of these, 51%—more than half—have between 35 and 49 youngsters per classroom. In junior high schools, 20% of our classrooms run between 35 and 49, and in our senior high schools, over 32% have between 35 and 39 in a room.

6. Each of our grades in the elementary schools, particularly grades 3 through 6, operate on one basic textbook to two children. One class uses these in the morning while others are in special rooms, and then in the afternoon the classes switch and the second group in the homeroom uses the same textbook. Simply to make it possible for each child to be able to take home to study his basic textbook, a reader, a speller, or an arithmetic book, we need an additional $3 million next year in Detroit.

7. Detroit is spending about $516 per child per school year. The suburban areas are spending $600 to $800 per year. It is our task to produce quality education for city youngsters, most of whom come from disadvantaged homes, with less than neighboring schools have to provide services for their children, who come from middle-class environments. It is quite obvious that a child from a lower socio-economic home, be he white or Negro, is much more dependent upon his school success, upon the quality of teacher services, facilities, and educational program than is a youngster from a higher socio-economic situation.

8. The ratio of counselors to students as recommended by the North Central Association should be one to 300. To achieve this for all pupils in grades 7 through 12, Detroit needs 90 more counselors to do the job.

9. Innovation in vocational education calls for adequate facilities, buildings, machinery and teachers to do the job. Out of approximately 315 school buildings now in use in Detroit, 30 were constructed between 1874 and 1912, and 153 between 1913 and 1930. Many of these buildings require renovation, modernization, and equipment in order to achieve the very worthy goals included in your proposed legislation. Fifty-seven of our schools now have boilers 30 years old or older. Safety and efficiency call for replacement. Replacement costs for each of these 57 boilers is approximately $100,000.

10. Ten thousand pupils in Detroit public schools need speech correction help. Our teachers serve both public and private schools. If the number of private school children who need speech correction were included, our needs would be even greater. More than 100 speech correction teachers are necessary to enable these youngsters to do their work successfully.

11. The accepted standard for visiting teacher service to help youngsters with emotional problems is one teacher for each 2,500 pupils. To do this job for Detroit, for both public and private schools which we service, would require a minimum of 160 visiting teachers. Our present staff consists of 47 full-time and 13 part-time visiting teachers.

12. Nearly 700 pupils are not receiving adequate schooling while awaiting testing by the Psychological Clinic. We need an additional 50 diagnosticians in order to handle this basic service. And we know that many teachers are working with youngsters in their classrooms who should have the services of specially trained teachers, but they are doing the best they can with them simply because schools know that the waiting list is long.

13. Detroit is one of the few cities that has libraries in its elementary schools. The American Library Association recommends $18 per year per pupil to meet its standard of ten library books for every pupil. This amounts to approximately $18 per child. Detroit is spending $1.25 for each pupil for library books per year.

14. In his message, the President has mentioned the need to expand educational opportunities for handicapped children. Detroit has approximately 10,000 children in special education classes. We have another 5,000, at least, who require similar services. Properly trained teachers, space and cost of transportation impede our efforts to enable these youngsters to become useful and productive citizens in our community.

Let em say that I do not view these problems as hopeless problems because I know that the efforts on the part of the local, state and federal governments will eventually work out a program that will meet these demands that cannot be denied.

Once again, back to the matter of inadequate funding in terms of proposed appropriations. Detroit this year, for the first time, has made an application under the new eligibility requirements of Public Law 874. It has been determined that under the authorization Detroit should receive this year approximately $700,000. However, funds were not provided in the appropriations for fiscal 1967 to carry out the provisions under which Detroit qualified. To fund this eligible application and others who qualify under the same provisions would require an appropriation for fiscal 1967 of approximately $17,000,000. These new applicants will also require an additional appropriation for Public Law 874 considerably higher than the proposed appropriation for fiscal 1968. The $416 million figure suggested will fall far short of the $461 million required to permit full funding for all school districts that qualify under the present provisions of the act. Ratable reductions rather than full funding would have a serious impact on local districts.

I would also mention, even though Detroit is not an active applicant under Public Law 815, that a number of school districts will not receive funds for needed school construction in fiscal 1967 unless a supplementary appropriation of some $48,844,000 is made. I would urge that the committee recommend a supplemental appropriation for Public Law 874 and 815 for fiscal 1967 and an adequate appropriation for fiscal 1968 to meet the total requirements of all eligible applicants.

The necessity for the full funding of all federal educational programs with specific detail would be an appropriate continuation of this testimony; however, the brief discussion of the programs that I have cited would apply equally well to almost every educational program for which appropriations are made. Limited revenues support limited programs.

I am aware that the restrictions placed on many of the proposed appropriations were applied under the rationale that local school districts could not handle

large additional amounts of funds in fiscal 1968 because they are not geared for program expansion. This argument does not any longer represent the true case. In the initial stages of most programs under consideration here today, the charge was valid, for school districts were in the position of trying to carry out full-year programs on a half-year basis. This first-year problem arose because the legislative enactments and the appropriations were not made until late in the school year. Funds not expended by these school districts, even though available, are indicative of the prudence exercised by school officials in expending educational dollars. The programs that we are discussing are continuing programs with successful operating experience. In Detroit we are ready, if funds are made available, to provide programs requiring expenditures far in excess of the amounts authorized. It is not a question of the desirability of full authorizations or the ability of school districts to carry out worth-while programs. It is a question of the Congress meeting the obligations that are inherent in the authorizing legislation. Many school districts planned programs on the basis of the authorizations. The programs are in the national interests; they are an investment in democracy; and they can go a long way in providing equal educational opportunity for our youth.

I thank the committee for this opportunity to appear and stand ready to provide any type of detailed information that might assist them in arriving at the most desirable levels of appropriations.

FEDERAL AND STATE SUPPORTED PROJECTS, DETROIT PUBLIC SCHOOLS, DETROIT, MICH., SPECIAL PROJECTS DIVISION

DETROIT PUBLIC SCHOOLS,
Detroit, Mich., March 1967.

The following report indicates funding obtained by the Special Projects Division of the Detroit Board of Education for various federal and state supported projects instituted in the Detroit Public Schools from 1964 to the present time.

LOUIS D. MONACEL,
Special Projects Division.

1964-65

Title	Project description	Federal share	Non-Federal share	Total	Duration of funding
I-B	In-school youth work-training (school year 1965).	$587,486	$68,252	$655,738	Jan. 1 to June 28, 1965.
I-B	In-school youth work-training (summer, 1965).	577,486	74,219	651,705	June 28 to Aug. 20, 1965.
II-B	Project Read (remedial education for adults).	247,135	58,290	305,425	May 20 to Nov. 30, 1965.
II-A	Extended schools (33 schools)	508,167	156,000	664,167	Nov. 24 1964 to Aug. 30, 1965.
II-A	School-community project in disadvantaged areas (great cities project, 20 schools).	783,326	156,000	939,326	Do.
II-A	Preschool (10 schools)	193,774	56,100	249,874	Do.
II-A	Child day care study grant	3,360		3,360	Do.
II-A	Assistant attendace officers (10)	42,420		42,420	Do.
II-A	Intramural physical education	26,577		26,577	Do.
II-A	Project Headstart	812,685	100,000	912,685	June 28 to Aug. 30, 1965.
	Total, EOA, 1964-65	3,782,416	668,861	4,451,277	

1965-66

I-B	In-school youth work-training (school year 1965-66).	$931,004	$103,852	$1,034,856	Oct. 14, 1965, to June 24, 1966.
I-B	In-school youth work-training (summer, 1966).	377,580	47,100	424,680	June 27 to Aug. 19, 1966.
II-B	Project RAD (refunding)	337,873	69,608	407,481	July 1, 1965, to June 30, 1966.
II-A	Extended school (summer, and expansion to 51 schools).	726,958	169,720	896,678	June 28, 1965, to June 30, 1966.
II-A	Extended school (refunding of original 33 schools and 18 for summer of 1966).	992,004	198,440	1,190,444	Sept. 22, 1965, to Aug. 31, 1966.
II-A	School-community project in disadvantaged areas (great cities project, refunding of 20 schools).	824,459	184,800	1,009,259	Do.
II-A	Preschool (refunding)	382,174		382,174	Do.
II-A	Assistant attendance officers (refunding)	63,912		63,912	Do.
II-A	Intramural physical education (refunding).	24,777		24,777	Do.
	Subtotal	4,660,741	773,520	5,434,261	
II-A	Project Headstart (summer, 1966)	938,470	101,124	1,039,594	June 27 to Aug. 31, 1966.
II-A	School health coordinator	24,146		24,146	June 28, 1965 to June 30, 1966.
II-A	School volunteer service	44,658		44,658	Do.
II-A	Program development	62,084		62,084	Sept. 22, 1965 to Aug. 31, 1966.
II-A	Developmental career guidance (with Wayne State University).	89,421	12,901	102,322	Oct 14, 1965 to Aug. 31, 1966.
II-A	Administration	42,001	4,565	46,566	Jan. 25 to Aug. 31, 1966.
II-A	Pilot project to train teachers' aides	57,177		57,177	June 27 to Aug. 5, 1966.
V	Wayne County work experience	38,304		38,304	Oct. 18, 1965 to Mar. 4, 1966.
	Total, EOA, 1965-66	5,957,002	892,110	6,849,112	

Economic Opportunity Act of 1964, Public Law 88-452—Continued

1966-67

Title	Project description	Federal share	Non-Federal share	Total	Duration of funding
	PRESENTLY OPERATING				
I-B	In-school youth work-training (refunding of school year 1966-67; summer, 1967).	$1,394,260	$189,380	$1,583,640	Sept. 6, 1966, to Aug. 31, 1967.
II-A	NEA Job Corps Center	92,950		92,950	June 27, 1966 to June 26, 1967.
II-A	Administration and program planning	35,653		35,653	Sept. 1, 1966 to Mar. 31, 1967.
II-A	Great cities project	937,384	283,733	1,221,117	Do.
II-A	Preschool child and parent education	427,500	50,000	477,500	Sept. 1, 1966 to Aug. 31, 1967.
	Total, current EOA	2,887,747	523,113	3,410,860	
	PROPOSED				
II-A	Headstart, summer 1967	877,461	222,150	1,099,611	June 26, 1967 to Aug. 11, 1967.
	Total, proposed EOA	877,461	222,150	1,099,611	

Elementary and Secondary Education Act of 1965, Public Law 89-10

1965-66

Project description	Federal share	Duration of funding
Title I:		
Communication skills center	$1,267,341	Oct. 1, 1965 to Aug. 31, 1966.
Basic reading demonstration and inservice training	1,417,589	Oct. 15, 1965 to Aug. 31, 1966.
Program to continue education of girls who must leave school because of pregnancy.	103,496	Nov. 15, 1965 to Aug. 31, 1966.
Cultural enrichment	996,070	Do.
In-school youth work-training (junior high)	578,230	Dec. 8, 1965 to Aug. 31, 1966.
Discretionary development fund for disadvantaged schools.	819,866	Jan. 1, 1966 to Aug. 31, 1966.
School service assistants, program dissemination, program evaluation.	1,272,137	Jan. 3, 1966 to Aug. 31, 1966.
Preschool child and parent education	365,195	Feb. 1, 1966 to Aug. 31, 1966.
Temple Baptist Church building	1,421,894	
Operation Go	190,559	June 27, 1966 to Aug. 19, 1966.
Job upgrading	244,288	Apr. 1, 1966 to Aug. 31, 1966.
Educational television	913,562	Do.
Equipment, materials, and supplies	1,239,323	May 2, 1966 to Aug. 31, 1966.
Subtotal	10,829,550	
Summer school	842,137	June 27, 1966 to Aug. 31, 1966.
Outdoor education and school camping experience	327,387	May 16, 1966 to Aug. 31, 1966.
Title II:		
School library resources, textbooks, and other instructional materials.	705,476	Apr. 12, 1966 to Sept. 30, 1966.
Total, ESEA, 1965-66	12,704,550	

Elementary and Secondary Education Act of 1965, Public Law 89-10—Continued

1966-67

Project description	Federal share	Duration of funding
PRESENTLY OPERATING		
Title I:		
Great cities expansion	$3,535,982	Sept. 1, 1966, to June 30, 1967
Staff development (inservice training)	898,803	Do.
Preschool child and parent education	553,997	Do.
Program to continue education of pregnant girls	235,428	Do.
Educational television	255,853	Do.
Developmental career guidance in action	141,707	Do.
Job upgrading	201,906	Do.
In-school youth work-training (junior high)	415,860	Do.
Communication skills	1,149,555	Do.
Basic reading demonstration	328,118	Do.
Outdoor education and school camping experience	43,851	Do.
Program evaluation	372,231	Do.
Program dissemination	26,709	Do.
Supplementary services	2,040,000	
Subtotal	10,200,000	
Title II: School library resources, textbooks, and other instructional materials.	704,605	October 1, 1966 to June 30, 1967.
Title III:		
Cultural enrichment (planning grant)	31,152	
Project READ (remedial education for adults) [1]	755,821	July 1, 1966 to June 30, 1967.
Title IV: Michigan-Ohio Regional Educational Laboratory, Inc.	184,241	May 15, 1966 to (indefinite).
Total, ESEA, 1966-67	11,875,819	
PROPOSED		
Title III:		
Curriculum laboratory network	400,000	
Model school system	750,000	
Children's museum	2,700,000	
Instructional Technologies Laboratory	100,000	
The development of a multiethnic approach to curricular revision in the Fitzgerald Community	100,000	
Science center	850,000	
Urban Adult Education Institute	181,631	
Total proposed ESEA (1967-68)	5,081,631	

[1] Formerly under title II-B, Economic Opportunity Act of 1964.

State Aid Act, sec. 4

1966

Project description	Funding	Duration of funding
3-school integration (tri-area)	$1,000,000	Jan. 3 to Aug. 31, 1966.
Shared experiences	122,176	Mar. 7 to Aug. 31, 1966.
Instructional materials and supplies for disadvantaged children.	463,478	Do.
Rehabilitation project to upgrade instructional facilities in disadvantaged schools.	1,052,646	Do.
Satellite lunch project for disadvantaged schools	325,850	Do.
Total, State Aid Act, sec. 4 (1966)	2,964,150	

1966-67

PRESENTLY OPERATING		
3-school integration (tri-area)	$1,045,357	Sept. 1 to Aug. 31, 1967.
Shared experiences	175,592	Do.
Rehabilitation project to upgrade instructional facilities in disadvantaged schools.	85,828	Do.
Miller demonstration project	550,388	Do.
Total, State Aid Act, sec. 4 (1966-67)	1,857,155	

State Aid Act, sec. 12

1966-67

Project description	Funding	Duration of funding
PROPOSED		
Remedial reading	$1,977,875	
Total, State Aid Act, sec. 12 (proposed)	1,977,875	

National Defense Education Act

1965-67

Title	Project description	Funding	Duration of funding
VII	Effectiveness of instructional tapes for changing dialect patterns of urban primary school children.	$72,293	May 1, 1965, to Aug. 30, 1967.
	Total, NDEA, title VII	72,293	

Higher Education Act of 1965

1966-67

Title	Project description	Federal share	Non-Federal share	Total	Duration of funding
V-B	National Teacher Corps	$112,010	$12,446	$124,456	November 1966 to June 1967
	Total, higher Education Act of 1965.	112,010	12,446	124,456	

Demonstration Cities and Metropolitan Development Act of 1966

Title	Project description	Funding	Duration of funding
	PROPOSED		
I	Model city (plnning personnel)	$99,350	1967 to (?).
	Total, DCMDA (proposed)	99,350	

Summary

Act	Funding granted			Funding proposed		
	Federal share	Non-Federal share	Total	Federal share	Non-Federal share	Total
Economic Opportunity Act of 1964:						
1964–65	$3,782,416	$668,861	$4,451,277			
1965–66	5,957,002	892,110	6,849,112			
1966–67	2,887,747	523,113	3,410,860	$877,461	$222,150	$1,099,611
Elementary and Secondary Education Act of 1965:						
1965–66	12,704,550		12,704,550			
1966–67	11,875,819		11,875,819			
1967				5,081,631		5,081,631
State Aid Act, sec. 4:						
1966	2,964,150		2,964,150			
1966–67	1,857,155		1,857,155			
State Aid Act, sec. 12: 1966–67				1,977,875		1,977,875
National Defense Education Act, title VII: 1965–67	72,293		72,293			
Higher Education Act of 1965: 1966–67	112,010	12,446	124,456			
Demonstration Cities and Metropolitan Development Act of 1966: 1967–(?)				99,350		99,350
Total	42,213,142	2,096,530	44,309,672	8,036,317	222,150	8,258,467

ESEA	1965–66			1966–67			1967–68		
	Federal appropriation authorized	State allocation	Detroit public schools allocation	Federal appropriation authorized	State allocation	Detroit public schools allocation	Federal appropriation authorized	State allocation	Detroit public schools allocation
Title I		34,734,957	11,999,074		31,595,833	11,232,334	2,442,337,720	61,576,074	
Title II	100,000,000	4,671,827	705,476	102,000,000	4,775,593	704,604	105,880,000	7,185,401	
Title III	100,000,000			175,000,000	6,000,000		515,000,000	21,942,477	
Title IVA (regional research laboratory)	100,000,000	(1)	(1)	100,000,000	(2)	(2)	38,675,000	(3)	(3)
Title VI (aid for handicapped)				50,000,000			150,000,000	6,757,626	
Title VII (dissemination)				1,500,000			2,000,000		

[1] 184,240 for Michigan-Ohio region.
[2] 299,600 for Michigan-Ohio region.
[3] 400,000 estimated for Michigan-Ohio region.

EOA	1965–66			1966–67			1967–68		
	Federal appropriation authorized	State allocation	Detroit public schools allocation	Federal appropriation authorized	State allocation [1]	Detroit public schools allocation	Federal appropriation authorized	State allocation	Detroit public schools allocation
Title I–B: In-school youth work-training, 16- to 21-year-olds			$1,308,584	$410,000,000		$1,394,260			
Title II–B: Read (remedial education for adults)	$18,239,960	$1,635,460	337,873	14,300,000	$705,000				
Title II–A (community action programs):									
Total program			4,215,064			3,368,536			
Extended school and great cities project			2,543,421			2,027,920			
Preschool			382,174			427,500			
Assistant attendance officers			63,912						
Intramural physical education, breakdown by programs for 1965–66 only			24,777						
Project Headstart, breakdown by programs for 1965–66 only			938,470			877,461 (requested)			
School health coordinator			24,146						
School volunteer service			44,658						
Program development and administration			104,085			35,655			
Developmental Career guidance			89,421						
Title V: Wayne County work experience			38,304						

[1] State allocation, $20,000,000.

	1965–66			1966–67			1967–68		
	Federal appropriation authorized	State allocation	Detroit public schools allocation	Federal appropriation authorized	State allocation	Detroit public schools allocation	Federal appropriation authorized	State allocation	Detroit public schools allocation
NDEA:									
Title III (assistance to mathematics, science, and foreign language program) (45 percent Federal, 55 percent local matching)	$100,000,000	$3,757,794	$1,000,000	$100,000,000	$3,645,951	$999,998	$110,000,000	(1)	
Title V–A (guidance, counseling, and testing) (10 percent local, 90 percent Federal)	24,500,000	1,086,613	[2] 138,764	30,000,000	1,092,543	[2] 166,426	30,000,000		
Title VII (instructional tapes for changing dialect, etc.)	5,000,000		[3] 72,293	5,000,000		([3])	5,000,000		
Higher Education Act 1965: Title V–B (National Teacher Corps, Wayne State University)				[4] 8,000,000		112,010	[5] (31,200,000)		

[1] It is assumed that the State allocation will be at the same level of funding as the previous 2 years.
[2] 10 percent of total plus $20,359.
[3] Elementary guide, 40 percent of total.
[4] Estimated.
[5] Requested.

	1965–66			1966–67			1967–68		
	Federal appropriation authorized	State allocation	Detroit allocation	Federal appropriation authorized	State allocation	Detroit allocation	Federal appropriation authorized	State allocation	Detroit allocation
Vocational Education act pt. A, sec. 2 (50 percent–50 percent matching)	$118,500,000	$9,580,194	[1] $2,509,243	$177,500,000	$10,374,870	[1] $3,253,818	$225,000,000		
MDTA title II (training and skill development program)	281,000,000	5,438,029	[2] 2,300,000		3,844,578	[2] 1,500,000			
Adult Education Act 1966: (90 percent–10 percent matching)				40,000,000		[1] 755,821	60,000,000		

[1] Public schools.
[2] Estimated.

Dr. DONOVAN. I would like now to introduce Dr. Paul W. Briggs, superintendent of schools of Cleveland, Ohio.

Mr. LAIRD. Mr. Minshall has told me Dr. Briggs would be appearing here and he is very much interested in his testimony.

STATEMENT OF DR. PAUL W. BRIGGS

Dr. BRIGGS. I will be very brief. I have been superintendent in Cleveland for 2½ years. It is a city with real troubles. I do not know what we would have done in the last few years without the help of the Federal Government.

Mr. FLOOD. Have you pointed this out to Mr. Minshall?

Dr. BRIGGS. Yes.

First, we have the problem of burgeoning school enrollment. In the period since 1950, the Cleveland schools enrollment increased by 56,000 children while the city of Cleveland lost 140,000 residents. Today for every resident that we lose we have a net gain of one student in public schools.

Second, there is an overburdened local tax base in Cleveland. In our large old urban center the need for expensive municipal services greatly reduced the proportion of the tax dollar available for education. In Cleveland only 44 percent of the tax dollar is available for education as compared with 68 percent across the State of Ohio, and 72 percent in the rural and suburban school districts. And Cleveland's total tax rate is among the highest in the State of Ohio.

Third, there is an alarming dropout rate in Cleveland. Over 3,000 young people drop out of high school annually. At the present rate, 47 out of every 100 children entering the ninth grade will not graduate from high school in the city of Cleveland.

There is an increasing poverty in our schools. In 89 Cleveland schools, at least 10 percent of the children are from families at or below the poverty level. There are now 30,000 ADC children in the Cleveland schools and this has increased 412 percent in 10 years. We have two large schools where over 85 percent of the children come from ADC families.

Mr. FLOOD. By ADC you mean?

Dr. BRIGGS. Aid to dependent children. There is a crippling illiteracy in Cleveland. There are more than 50,000 adults in the city of Cleveland who are functionally illiterate; 45 percent of the residents of Cleveland over 21 years of age have not gone beyond the eighth grade.

Then there is the matter of massive unemployment. The greatest single concentration of unemployment in the United States is in an inner city area of Cleveland.

Mr. FLOOD. What is the percentage?

Dr. BRIGGS. It exceeds 15 percent while the citywide average is 2 percent.

Mr. FLOOD. What is the national average?

Dr. BRIGGS. Three to four percent. We established in Cleveland last year a high school for adults. More than 1,600 adults enrolled, including one who is 77 years of age. This school was funded until December 31, 1966, through the Economic Opportunity Act. When that was transferred to title I it was not funded under title I and today it is

operating with contributions from industry until we can find some other way of funding it, but the people of Cleveland do not want to turn these adults out on the street; 60 percent of them are on relief. Those who are completing their education are securing jobs. I think at least the adult education program should be funded.

Thank you very kindly.

Mr. FLOOD. Glad to have you on board. Send Mr. Minshall a copy of your statement.

Dr. BRIGGS. I shall do that.

(The following statement was submitted for the record:)

STATEMENT OF PAUL W. BRIGGS

Mr. Chairman and members of the committee; I am Paul W. Briggs, Superintendent of the Cleveland Public Schools. I appreciate very much the opportunity to appear before this committee.

May I express to the members of this committee and to your colleagues in the Congress the gratitude which we in Cleveland feel for the federal support of efforts to improve and expand educational opportunity.

In recent testimony before the Committee on Education and Labor (March 8, 1967) I indicated the endorsement of the Cleveland Public Schools for the principle of federal assistance to education as embodied in the Elementary and Secondary Education Act. P.L. 89-10). We in Cleveland are comfortable in this new federal, state and local partnership.

At that time I also discussed some of the benefits derived from federal education legislation and cited several federally supported school programs which have achieved outstanding success in Cleveland. These successes are encouraging and a new optimism prevails in Cleveland. I do not want to suggest, however, that all of Cleveland's problems have been solved.

Today I would like to focus on some of the depressing facts that we continue to face in Cleveland—and to suggest some needed action.

Facts

1. *Burgeoning school enrollment.*—In the period since 1950, the Cleveland schools enrollment increased by 56,000 children, while the city of Cleveland lost 140,000 residents.

2. *Over-burdened local tax base.*—In the large old, urban center, the need for expensive municipal services greatly reduces the proportion of the tax dollar available for education. In Cleveland only 44% of the tax dollar is available for education as compared with 68% across the state of Ohio, and 72% in the rural and suburban school districts. Cleveland's total tax rate is among the highest in the state.

3. *Alarming dropout rate.*—Over 3,000 young people drop out of high school annually. At the present rate, 47 out of every 100 children entering the 9th grade will not graduate from high school.

4. *Increasing poverty.*—In 89 Cleveland schools, at least 10% of the children are from families at or below the poverty level. There are now *30,000* of these children of despair in the Cleveland schools.

5. *Crippling illiteracy.*—There are more than 50,000 adults in Cleveland who are functionally illiterate. 45% of the residents of Cleveland over 21 have not gone beyond the eighth grade.

6. *Massive unemployment.*—The greatest single concentration of unemployment in the United States is in an inner city area of Cleveland (in excess of 15%). Moreover, 50% of the total unemployment is among youth between 18 and 26.

Action

While it is true that education alone cannot solve all the acute problems that beset Cleveland, none of them can be solved without education.

The people of Cleveland have demonstrated their faith in education by their overwhelming approval of the largest tax levy and building bond issue ever presented to them.

We need improvement in every area—in instructional techniques, in pupil personnel services, in follow-up services to our graduates, in projects to reclaim

the dropout, in adult education, in services to the handicapped, in the professional development of our fine staff, in increasing the quality and quantity of instructional materials, in expanded vocational education.

The Cleveland Public Schools must expand on-going programs and initiate new ones if we are to maintain the momentum generated by increased local interest and encouraged by federal support.

This will require the full and prompt funding of federally authorized education programs to provide for orderly planning and development.

I should like especially to urge that funds be appropriated immediately for adult education.

We have in Cleveland today a full time adult high school with more than 1,600 adults enrolled. This school was funded until December 31, 1966 through the Economic Opportunity Act. Since that time the school has been supported by money raised by Cleveland business and industrial leaders, in the hope and confidence that this Congress would provide funds in order to continue this vital service.

As we face the future, it is important not only to maintain the level of federal funding as currently authorized, but also to increase substantially the funds made available for education.

This must be done if we are to overcome the accumulated educational deficit and move education ahead to meet the demands of this space age.

Dr. DONOVAN. I should now like to introduce to you Dr. Ralph Dailard, superintendent of schools at San Diego, Calif.

STATEMENT OF DR. RALPH DAILARD

Dr. DAILARD. My name is Ralph Dailard, superintendent of the San Diego city schools.

I want to talk about a problem I do not think has received special emphasis this afternoon. We are concerned about Public Law 874 funds.

Mr. LAIRD. We have been contacted by Representatives Wilson and Van Deerlin. They are very anxious about this.

Dr. DAILARD. This is a part of our basic program. San Diego is a Navy town; 25 percent of the 675,000 people in San Diego are military connected; 25 percent of the parents of children live on or work on Federal property. Our entitlement for the current year is $45,000 larger than that of the city of New York. It is $5,545,000. We have drawn $53 million since the bill has been in effect, including this year. The reduction in this amount is a reduction across the board. The present Bureau of the Budget request before you of $416 million is $45 million to $50 million short of the estimates of need for next year.

Mr. FLOOD. Dr. Donovan, under the amendment you will be close to $6 million?

Dr. DONOVAN. About $5.5 million.

Dr. DAILARD. There is a 10- to 15-percent differential for next year between the estimate and the budget and that will reduce our revenues $750,000. We have no revenues with which to cover that. That means a cut in programs across the board.

The pattern for this type of operation is already established this year. There is need for a $17 million supplemental appropriation to meet the entitlements under the act this year.

I have been superintendent of the San Diego city schools for 15 years and in the district 27 years and there has never been a significant deficit in this act. This pattern this year would be destructive of the programs in federally impacted districts all over the Nation. We urge that the budget item for Public Law 874 be increased by $50 million for fiscal year 1968.

One word about what has been said about title I of the Elementary and Secondary Education Act. Under terms of the authorization the entitlement of San Diego was $3.6 million. For fiscal year 1966 we received $2.6 million for the short term. We were told to budget on the basis of 85 percent of that for the current year. That was $2,411,280. Just 3 weeks ago Friday we received hard figures of what our entitlement for this year would be. It was $2,411,281, just one dollar more than the 85 percent.

We have made plans in this full year to use the whole amount. We can use in San Diego the full amount that is authorized in the bill, and let there be no mistake about it other districts are set up in the same way. We can use the full entitlement under the Elementary and Secondary Education Act.

We are particularly concerned about not the categorical aid at this moment, although we are concerned about it, but we are particularly concerned about the deficit for the first time that is appearing in Public Law 874. This is not categorical; this is part of the bread and butter program.

Mr. LAIRD. Last year the President's budget cut it down to almost nothing.

Mr. FLOOD. Of course this is so. However, it is not unknown in the House that this is a sacred cow. I am sure your plea is not parochial. It is very difficult and sometimes frustrating for many Members of this House on both sides of the aisle to see the barricade manned in behalf of this program, and then we see these troops disappear when fights appear on other parts of the bill. Check the voting records. It is very frustrating.

Dr. DAILARD. I have been in the two buildings up on the Hill most of the morning and I am glad to know Mr. Van Deerlin and Mr. Wilson are interested in this.

Mr. FLOOD. Thank you very much.

(The following statement was submitted for the record:)

STATEMENT OF RALPH DAILARD

Mr. Chairman and members of the committee, I am Ralph Dailard, superintendent of the San Diego, California public schools. I deeply appreciate this opportunity to appear before you and report firsthand on the problems in San Diego which are pertinent to the legislation you have now under consideration.

The population of San Diego is now over 670,000—twice its 1950 population. It is built around one of the finest natural harbors in the world and is a "Navy town." The major military installations located in the city include the Eleventh Naval District Headquarters, Naval Hospital, Naval Training Center, Naval Supply Center, Miramar Naval Air Station, Naval Electronics Laboratory, and the Marine Corps Recruit Depot. Immediately adjacent to the city are the North Island Naval Air Station and the Naval Amphibious Base; the Camp Pendleton Marine base is a short distance away. A number of major fleet commands including the U.S. First Fleet, Naval Air Force Pacific Fleet, Amphibious Force Pacific Fleet, Cruiser-Destroyer Force Pacific Fleet, Training Command Pacific Fleet, and Submarine Flotilla One are located in San Diego. It is home port for a large number of fighting ships—many now on active duty in the Pacific.

Roughly 25% of the total population of the area is directly connected with the military. In addition, a number of industries such as General Dynamics-Convair, Rohr Corporation, Solar, and National Steel and Shipbuilding Company have major contracts for military equipment and materials.

The school district programs extend from the preschool level through junior college. The total current enrollment in all programs is almost 150,000. The parents of almost 25% of the regular day school students live on and/or work on Federally owned property—are "Federally connected" under the definitions of

Public Law 874. The district has received substantial amounts of General Fund revenue from this act each year since its passage. The entitlement for the current year is $5,545,000.

In addition to the P.L. 874 funds, the district is receiving substantial support from a number of other currently effective Federal acts. The total of Federal support this year will approximate $10 million or 12% of the operating budget of the district. (See attached table.) We are deeply concerned that the appropriations for fiscal '68 be adequate and that any deficit in support of fiscal '67 funding be eliminated by enactment of necessary supplementary appropriations. Any significant failure of the Federal government to meet the financial obligations defined in enacted statute will necessitate a crippling reduction in the quantity and quality of education for San Diego's children—and those of any other city which has relied on these acts for program support.

Stability of funding of Public Law 874 is of greatest importance to San Diego. In this act, payments are made for the education of children whose parents work and/or live on tax-exempt Federally owned property. The amount paid per child is the same as that paid by local property owners. The revenue is for general support of the basic school program of the district. The proposed appropriation for fiscal '68 of $416 million is $45 to $50 million, or about 11%, less than the amount shown to be needed by careful estimates. If this appropriation is not increased by the proper amount, each eligible district will receive less than 90% of its entitlement as defined by the statute for fiscal '68. San Diego will receive approximately $700,000 less than the entitlement for the current year. A reduction of program for *all* of the children in the city would be necessary. There is no source of funds to replace the deficit. I strongly urge that the budget item for P.L. 874 be increased by $50 million for fiscal '68 so that the defined obligation of the Federal government to the children of the eligible districts can be met.

While San Diego and other districts previously eligible under P.L. 874 will receive their full entitlements this year, the districts made eligible by the latest amendments will receive nothing. The obligation of the Federal government to these districts has been defined by statute. A supplementary appropriation in sufficient amount to meet the obligation should be enacted.

The NDEA, Title III, funds have been used in San Diego to materially accelerate improvement of teaching in the eight critical subject matter areas designated by the act. Reduction of the appropriation for this section to approximately one half of the fiscal '67 level would seriously retard this process of improvement. The district could continue to use the funds previously required for matching the Federal grants. Funds cannot be diverted from other programs to replace the loss in Federal support. While the act has resulted in dramatic improvement of materials of instruction, the level is yet below a reasonable optimum. Increase of the budget item up to at least the level of fiscal '67 is urged. Continued incentive aid is essential to our program improvement plans.

In the case of the support for vocational education, a loss of Federal support will necessitate a reduction in the promising but as yet incomplete program of high school occupational training. A study to develop a master plan for career development centers in our twelve high schools has just been started. Implementation of a comprehensive plan will require an improved support level. Continued appropriations at the authorization level is urged and is essential to the program of vacational education in San Diego.

If the full amount authorized for Title I of the Elementary and Secondary Education Act had been appropriated, San Diego would receive approximately $3.6 million for improvement of program in the schools enrolling a substantial number of deprived children—about 30% of the schools operated by the district. Approximately $2.6 million was granted to the district for the portion of fiscal '66 for which funding was available. Plans were made for a fully financed program in fiscal '67. Heavy expenditures were made for acquisition of equipment, instructional materials, and books. Key staff members were employed and assigned. The program was established at a level which could be continued for a full year under the complete entitlement. In short, the district developed a plan in the spring of 1966 and "tooled up" for a full year of operation at the complete entitlement level. Instead of the full entitlement, however, we were instructed to set a budget and operational level for fiscal '66 at 85% of the partial grant for the prior year. The exact amount of the grant for fiscal '67 was just one dollar more than 85% of the grant for the prior year—and we were notified just three weeks ago of the exact amount we would receive. The need for the

Title I program is clearly established in San Diego. We have workable plans for operation of a program up to the full entitlement. With a few months lead time for staffing, we can make effective use of the full enticement in San Diego. We strongly urge that the appropriation for fiscal '68 be set at the full amount authorized by the act. As far as our city is concerned, we can make effective educational use of the full entitlement of the district for the purposes defined in the act.

The need in the district for library books, audio and visual aids, and instructional materials has usually exceeded the amounts which could be budgeted for the purpose. A substantial backlog of need has developed and the full entitlement which might become available under Title II of the ESEA can be used. The need of the independent schools of our area for enriched instructional materials is critical. The only restriction on our use of Title II funds would be the ability of the publishers and material suppliers to deliver the books and materials. Full appropriation is urged.

An ESEA, Title III, grant to the city of San Diego has been used to stimulate the development of a cooperative instructional television program for the city district and 25 districts of the metropolitan area. Added support can be used to bring this program to full effectiveness. A demonstration program is under way for teaching children to whom English is a second language. A limited cultural arts program is operative. All districts and agencies of the county have consolidated their efforts for full study of the needs of the children of the area for supplementary educational activities. Limitations on Title III funds have limited the useful creative programs which could be initiated. Rich educational resources are available which could supplement effectively the existing in-school programs in an important way. Substantial added funds can be used in the San Diego district and metropolitan area districts for education innovation which would enrich the present programs for all children greatly. So far as one area is concerned, we can use the full share of the authorized funds for the development of enriched educational opportunities for all children.

The entitlements which would be available if ESEA appropriations were brought up to full authorization coud be used in our district and by the districts in the San Diego metropolitan area. We urge that the full amounts be appropriated for fiscal '68.

Restricted funding for Operation Headstart and Manpower Development and Training Act also concerns us. When Economic Opportunity Act funds first became available for Operation Headstart, our district opened a limited summer program. Facilities were not available for a full-year program. We wanted to move slowly to a full-scale program to assure development of program quality. The district is now restricted to this limited initial program of forty or less summer classes. Some State funds have become available this year for facilities and operation for full year prekindergarten classes for deprived children. However, our district has need for approximately twice the number of summer preschool classes for deprived children and can use substantial amounts in extending the limited preschool program available during the regular school year. We would urge substantial increase in the earmarked funds for Operation Headstart in the appropriation for the Economic Opportunity Act.

The change in national policy on MDTA has reduced funds available for institutional training. As a result, funding under MDTA has been discontinued in San Diego in a number of occupational areas. A number of the training programs have been continued using State and local funds. However, no subsistence funds have been available for the trainees. As a result, those who are unable to sustain themselves are denied the opportunity for training for employment. Some are being supported by welfare funds and some by unemployment insurances but the restriction on funds is limiting the ability of the district to train the unemployed for useful occupation. Local educational funds cannot be used for subsistence payments.

SUMMARY AND GENERAL COMMENT

1. Where there are authorizations there should be appropriations. The San Diego school district can make effective use of the full entitlement under the various acts. Full appropriations for P.L. 874, NDEA, and VEA are essential to maintenance of the basic education program of the district.

2. A supplementary appropriation in sufficient amount to pay all entitlements under P.L. 874 and P.L. 815 for fiscal '67 should be enacted.

3. The major titles of the Elementary and Secondary Education Act should be continued and fully funded. This act is directed to the solution of definite and urgent educational problems. Diversion of the funds for exiscting bills at present authorization levels to any form of general aid would leave critical problems unsolved and would result in only a minor level of general program improvement.

4. The Federal appropriation cycle must be adjusted to the budget and operation cycle of the school districts if the available funds are to be used most effectively. School budgets are being made now. Professional staff are being employed now. Firm information on revenue is needed now when the plans for the year are being developed, budgets are being formed, and staff are being employed. This early information is particularly necessary for the categorical aids programs.

5. Arrangements must be developed for an orderly flow of funds to the school districts and for advances of funds in advance of spending. The portion of the total expenditures of major school districts which is financed from Federal revenues is to large to be carried by the cash flow from other revenue sources.

Again, I deeply appreciate the interest of your committee in the problems of education and the opportunity to appear before you. The full support for these specific programs is critical if adequate solutions for the pressing educational problems of the major cities are to be met.

Funds received from major Federal Acts 1951–67

	Total, 1952–67	1966–67	1965–66	1964–65	1963–64	1962–63	1961–62	1960–61
Public Law 874 [1]	[2] $52,907,397	$5,545,300	$5,413,243	$4,884,202	$4,673,222	$4,141,274	$3,924,051	$3,349,223
Public Law 815	[3] 22,828,946							
NDEA	396,637	50,000	107,543	68,430	41,790	90,050	38,824	
MDTA	1,633,921	984,954	313,233	291,499	43,082	1,153		
VEA	1,490,592	423,359	588,167	94,996	153,972	115,342	114,756	
Higher Education Act	37,500	37,500						
EOA	371,077	185,025	186,052					
ESEA	5,571,631	2,724,770	2,846,861					
Total Federal funds received	85,237,701	9,950,908	9,455,099	5,339,127	4,912,066	4,347,819	4,077,631	3,349,223

	1959–60	1958–59	1957–58	1956–57	1955–56	1954–55	1953–54	1952–53
Public Law 874	$3,080,869	$2,686,435	$2,292,967	$2,202,387	$1,811,934	$1,988,164	$1,962,768	$1,914,632
Public Law 815		587,277	2,636,032	2,476,167	426,521	6,278,682	2,067,042	4,360,911
Total Federal funds received	3,080,869	3,273,712	4,928,999	4,678,554	2,238,455	8,266,846	4,029,810	6,275,543

[1] Adjusted final entitlement figures for each year's project (will not correspond to J–41 income figures for respective years).

[2] Includes $1,104,195 received in 1950–51 and $27,540 flood disaster money received 1965–66.

[3] Includes $3,550,628 Lanham Act projects.

Dr. DONOVAN. I will now introduce to you Dr. Howard Spears, Superintendent of Schools of San Francisco.

I might indicate that Dr. Marland, who testified earlier, is not only Superintendent of Schools of Pittsburgh but he is a member of the Advisory Council on Disadvantaged Children to advise the Congress on title I and he indicates that our general testimony today is endorsed by the Advisory Council on Disadvantaged Children.

STATEMENT OF DR. HAROLD SPEARS

Dr. SPEARS. My name is Harold Spears. I am Superintendent of Schools of San Francisco. I was hoping you would ask me how long I have been superintendent.

Mr. FLOOD. How long?

Dr. SPEARS. Twelve years. However, I am finishing 43 years, having started in Indiana in 1924. Forty years have been in school administration.

Mr. LAIRD. Your good mayor of San Francisco served on the Appropriations Committee with great distinction.

Dr. SPEARS. So after all these years this is my last year as superintendent since they will throw me out at 65.

Mr. FLOOD. Are you 65?

Dr. SPEARS. I was in March.

Mr. FLOOD. Why are all you fellows so well preserved?

Dr. SPEARS. It is because Congress is giving us more money for schools.

This last year I was president of the American Association of School Administrators and I got the reactions from one State group after another. I am not here to talk about who is at fault. All I am saying is that the administration's recommendation and Congress going along with it started us along a certain trail and in the cities there is an aspect that has not been discussed and I would like to mention it. This opens a whole new area. We are dealing under title I in the poverty areas. The poverty areas are in the minority areas and we want to do right by their children.

Last fall in San Francisco, after having been funded for the previous year late with over $3 million to add to our $75 million budget to work in this area, we had to pull back 100 teachers last fall. To try to convince those minority groups why we take the teachers from the schools or take the pupils from the schools, in our area we have been taking children out of minority areas and taking them to schools where there were classrooms. The classrooms were not in the minority neighborhoods and we had bussing. This is not an interchange of pupils. We took them where there were the classrooms. Now we cut down on teachers and we have to move them back. The board of education is in a touchy situation in these minority areas. So title I has great implications. It touches the whole civil rights movement in the large cities. These people will not understand where the money comes from. That is the business of the school people, the legislatures, and so on. So I am throwing that out. I am not blaming this committee or anybody. I work in this business and I do not try to look at who is at fault. But I hope in San Francisco we do not have to pull back again.

Our board meetings in California are all open and we can get as many as 750 or 1,000 people at a board meeting when there is something coming up of significance such as this. We had 28 minority type groups address the board of education last year in an effort to determine how to spend the $3.4 million we had the first time. Thirty-eight people addressed that board and the meeting ran until 2:30 in the morning. But the board approved the program.

I am making a plea on behalf of the large cities' problem and how title I touches that problem and alleviates the problem to some extent.

That is my little speech.

Mr. LAIRD. May I ask the gentleman from San Francisco one question, Mr. Chairman?

Could you tell me a little background about the 100 teachers you did not get the funding to keep? You are talking about a year ago?

Dr. SPEARS. We are talking about last October compared with the previous February.

We were cut down 15 to 20 percent in the funding.

Mr. LAIRD. Were you misled?

Dr. SPEARS. We never knew until the last minute what would happen. In last August we were told what we would have.

Mr. LAIRD. We gave the Office of Education what they requested.

Dr. SPEARS. I have no idea how the Office of Education works. I am dealing with the practical matter of how it operates in the schools.

Mr. LAIRD. We gave the Office of Education what they requested and they have frozen $55 million.

Dr. SPEARS. I do not know what they are doing with it.

Dr. DONOVAN. The superintendent of schools in Wisconsin says he was advised of an 85-percent figure and it was not until this March he found out he had 70 percent.

Mr. LAIRD. Seventy-two percent. We gave the Office of Education what they asked for and there is a frozen figure of $55 million.

Dr. DONOVAN. We are caught up in the middle.

Dr. SPEARS. We have access to you but we do not have access to the President.

Mr. FLOOD. Thank you very much.

Dr. DONOVAN. We will now hear from Dr. Robert Poindexter, superintendent of schools of Philadelphia.

STATEMENT OF DR. ROBERT L. POINDEXTER

Dr. POINDEXTER. My name is Robert L. Poindexter. I am the interim superintendent until Dr. Mark Shedd, presently superintendent of schools in Englewood, takes over.

Philadelphia has the problems of the big cities.

Mr. FLOOD. Dillworth is your chairman?

Dr. POINDEXTER. Yes.

Mr. FLOOD. How long has he been in that position?

Dr. POINDEXTER. About a year and a half.

Mr. FLOOD. Was he elected or appointed?

Dr. POINDEXTER. It is an appointive job.

Mr. FLOOD. What is the source of the appointment?

Dr. POINDEXTER. From the mayor.

We have found in Philadelphia we are facing the same problems as the other large cities. We will need $14 million this year just to stand

still with our present programs and another $10 million more to put into effect the new and expanded programs in the basic skill areas that we want to operate. That is in our general operating budget which we have not been able to get past the board yet.

At the present time about 40 percent of the 270,000 children in Philadelphia's public schools have been adjudged to be educationally disadvantaged. A variety of specialists, materials, supportive services and programmatic approaches to develop new educational, remedial, guidance, and psychological service programs are needed to overcome this deprivation.

We are faced with the problem that if these funds are cut back we will hear from the community because Mr. Dilworth has made the meetings open. We are about $25 million short. Mr. Dilworth has a tax committee out trying to raise this money, which will have to come through the city council, and if we have to add the cost of some of the Federal programs, I do not know what we would do.

Mr. FLOOD. Now that I have before me the great superintendents of schools of Pittsburgh and Philadelphia, I will say that every school district in the 64 counties in Pennsylvania, including my county of Luzerne, was seriously damaged in dollars under the reallotment, with the advantage going to Pittsburgh and Philadelphia.

Dr. MARLAND. Are you speaking of the State legislature and the distribution of State money or Federal money?

Mr. FLOOD. The discretion was exercised by the commissioner of education at the Federal level but the allocation was made by the State. The result was as I have indicated.

Dr. POINDEXTER. Money is not allocated unless the proposal meets the approval of the people in Washington.

Mr. LAIRD. Not the people in Washington, the people of the State.

Mr. FLOOD. The allocation, of course, is made by the State. But the net result in Pennsylvania was as I have indicated. I am sure you all realize that while we recognize the fantastic problems of the great cities, most Members of the House do not come from big cities. This makes it very difficult.

I think Dr. Donovan has done a good job. You should be commended.

Mr. LAIRD. I hope you will help to communicate to the people the simple fact that authorizations merely set a maximum of appropriation level.

Dr. DONOVAN. I think we understand that.

Mr. FLOOD. Thank you very much, Dr. Donovan and gentlemen. As you requested, we will insert in the record at this point the additional prepared statements of other great city school superintendents.

(The material follows:)

STATEMENT OF JACK P. CROWTHER, SUPERINTENDENT, LOS ANGELES CITY SCHOOLS

SUMMARY

Mr. Chairman and members of the committee, the uncertainty of the availability of federal funds for the variety of programs which have been passed by Congress has been of great concern to educators. The recital by school administrators of difficulties encountered in conducting federally funded programs should not be interpreted as mere complaints about inconveniences we are encountering. Our real concern is the effect on children, youth, and adults and on the lost and impaired potential for developing and maintaining a continuity of effective, meaningful programs for these pupils. Unless Congress can provide some an-

swers to these very real problems, we shall all fail. It seems to us, on the basis of our experience, that the following things must be done in order to make it possible for local school districts to make truly effective use of federal funds for education.

1. Congress should appropriate funds for educational programs early in the spring if programs are to be implemented the following fall term.

2. Local school districts should be notified no later than March 15 of a firm commitment of funds for all federally supported activities to be undertaken by them during the ensuing fiscal year.

3. Federal commitments must be firm, with minimum possibility of reductions of funds during the year for which the funding was provided.

4. If commitments for programs designed to extend over a period of time can be known to the local school district during the initial implementation stage, it can plan a totally well-articulated program.

5. If fiscal requirements for different items of legislation can be stadardized, local districts will not be faced with a different set of rules for each federal activity in which they become involved.

6. When the use of government-furnished property is contemplated, as in the case of MDTA programs, the commitment of this property should be firm and the property should be made available to the local districts in time to operate the program effectively.

7. Although the use of the continuing resolution for programs which have been funded for more than one year is helpful, it is extremely difficult to plan a meaningful program around a commitment that must be renewed from month to month.

8. Guidelines for determination of entitlements under federally funded programs should be written so that individual school districts may plan a program extending over the total period of time authorized by the Congress in any act which provides financial assistance to the public schools. This means that the minimum level of funding would be the amount provided for the first year of any program.

During the past several years I have had the privilege of appearing before you on many occasions. On each of these occasions you have courteously listened to me tell you about the unique problems confronting the Los Angeles City Schools, especially concerning the problems of finance, of school construction to meet the growth needs of large metropolitan areas, and of federally funded programs. We are fortunate that several members of this committee represent important constituencies of Los Angeles and are extremely well versed in the needs of this great urban population, including its educational needs. At the same time I am sure all of us are keenly aware that the topic of consideration today has tremendous significance for school districts throughout the nation. While there are many unique applications of federal legislation to the Los Angeles area, most of what has concerned us in Los Angeles has concerned school officials and educators in other parts of the nation as well.

For the written record I should like to fit the Los Angeles City Schools into the national educational setting. The school district is unique in that there are two districts being served by same Board of Education and the same Superintendent. The Unified District serves grades kindergarten through twelve; and the Junior College District, grades thirteen and fourteen. I am limiting my discussion today to the Unified School District which serves the elementary and secondary grades and adults enrolled in high schools. This school system, second largest in the United States, has a total enrollment in kindergarten through grade twelve of close to 700,000 pupils, which includes 62,000 adults (enrollment in junior college day and evening classes is close to 67,000). It serves a total population of almost three and one-half million people. It accounts for approximately 15% of all of the elementary and secondary enrollment in the State of California. Our school system's enrollment is constantly increasing. This is perhaps a unique characteristic of Los Angeles, compared to most of the very large school systems of the nation.

Our district is characterized not only by enrollment growth, but by great geographic size, covering an area of some 710 square miles (Junior College district is 882 square miles). The school district boundaries extend considerably beyond the muncipal boundaries of the City of Los Angeles and include large sections of unincorporated territory, as well as many smaller municipalities. Nearly 45% of the elementary and secondary pupils in all of Los Angeles County are served by the Los Angeles City Unified School District. Our school system

serves large numbers of racial minorities. According to our most recent racial census the composition of our district is 18.5% Spanish surname, 57.1% other white, 20.2% Negro, 3.6% oriental, 0.1% American Indian, and 0.5% other nonwhite.

Los Angeles has a Spanish speaking population larger than any city on the North American continent with the exception of Mexico City. Los Angeles is the center of the largest foreign population in the western United States, and is one of the fastest growing cities in foreign population in the entire nation. Much of the growth in Los Angeles population consists of non-English speaking peoples. I am convinced that the special needs evidenced in large metropolitan school districts which are experiencing the impacts of urbanization, cannot be met without additional federal or state assistance.

I believe the educational needs which have been the targets of the Vocational Education Act, Manpower Development Training Act, and other very meaningful pieces of legislation have in many instances had their effectiveness blunted because school districts have not had sufficient time to plan and implement the programs. In other words, helpful as they have been, our federally aided programs to date have not been as effective as we know they can be. The day of the instant program and instant implementation of programs has passed. Education is a process and we cannot expect instant results, we must be willing to commit funds over a period of several years if programs are to be effective.

For many years the Los Angeles School District has been meeting many of the special educational needs of the citizens of our district utilizing local tax funds to provide occupational training centers, adult job training programs, apprenticeship training, exploratory work experience programs, and one of the most advanced high school industrial arts programs in the nation. Under the junior college district's jurisdiction Los Angeles Trade and Technical College is perhaps unique in the nation. In addition to these locally funded programs, the Los Angeles School District, under MDTA, has several skills centers located in the most disadvantaged areas of the district. The programs of these centers are designed to retrain adults so that they can be removed from the welfare roles and placed in productive jobs and become contributing members of the community. The program of the skill center in Watts, as well as our other skills centers in East Los Angeles and Pacoima, have been unable to function as planned because the equipment for many of the areas of training has not been forthcoming. The district has received letters and telegrams from the federal agency in charge of the program assuring us that government-furnished equipment would soon be on its way to the center. These programs were to have started in September, 1966, but today we are still waiting and the people who were to receive the training are still on the welfare roles. We know that many of these people, who were at first eager to become involved in the program, have lost their interest as a result of the discouraging delays.

In 1965 the Los Angeles Unified School District for the first time became eligible for funds from PL 874. This law, because of the flexibility it made possible by virtue of coming to us as general aid, has allowed the district to implement many meaningful programs for pupils who otherwise would not have been reached under the categorial aid type of legislation and who could not have been served within the existing financial limitations of the district.

The 1966 amendments to PL 874 allowed the Los Angeles Junior College District to become eligible for impact aid. However, the appropriation made by Congress did not provide funds for the newly eligible school districts. In my conversations with the Office of Education and with other superintendents throughout the nation, it would appear that a supplemental appropriation of approximately $17,000,000 would permit participation by all of the newly eligible school districts in PL 874. The Los Angeles Junior College District has submitted an application for approximately $300,000 under PL 874. These funds will be lost to the district unless a supplemental appropriation is passed by Congress this year.

The Los Angeles School Districts have been involved in federally funded educational programs for many years, beginning prior to the 1930's with the George Barden and the Smith-Hughes programs. In 1958, with the passage of the National Defense Education Act, the district became more involved in the process of federal aid. In 1964, under the provisions of the Juvenile Delinquency and Youth Offenses Control Act, the district's first preschool programs were initiated. With the advent of the Economic Opportunity Act, additional programs for the educationally and economically deprived child were implemented. The VEA of 1963 allowed the district to provide more advanced programs of vocational educa-

tion. In 1965 the school district was, for the first time, provided with sufficient funds to make an initial impact in the area of serving the educationally disadvantaged child. (We are presently able to provide saturation programs for only 65,000 of the close to 200,000 pupils needing these kinds of programs). This became possible with the enactment of PL 89–10 (The Elementary and Secondary Education Act). Up to that time, programs providing special remedial and corrective classes for children with educational deficiencies were necessarily limited because available local funds were completely inadequate to support the kind of effort required. They became even less adequate each year in the face of relentless growth in enrollment. Additional expenditures for compensatory programs have been at the expense of a dilution of the overall educational program. The maintenance of substantial reserves to be drawn on in anticipation of a probable grant of financial support is no longer possible. Like other large school districts which must operate within the restrictions of their respective state constitutions and education codes, Los Angeles is in no position to commit personnel, supplies, equipment, and facilities in substantial amounts on the basis of oral promises. The problem we face is that such commitments cannot be made on the basis of anything less than a binding legal contract between the school district and the federal government, completed, and signed well in advance of the commencement of a new program. This contract should include a complete recital of all terms and conditions that will remain unchanged, except by mutual consent, for the period of the contract.

The Los Angeles Unified School District, like every other school district in the nation, launched its Elementary and Secondary Education Act, Title I, programs during this current year on the basis of a continuing resolution passed by Congress, authorizing expenditures up to 85% of the first year's entitlement. This school district, like many other school districts in the nation, designed programs which would benefit the educationally deprived children of the district to the full extent of the funds we believed were committed by Congress in the continuing resolution. These programs began operation in September, 1966. Twenty-one counties in the State of California and an unknown number of local school districts within these counties will receive an actual entitlement totalling less than the 85% figure that was seemingly guaranteed in the continuing resolution. What will happen to these districts? Will they now be forced to cut back their programs, lay off teachers, cancel commitments for supplies and equipment, and face the very delicate task of explaining to the local community why this has to be done? No organization can operate effectively under such conditions. Something must be done to insure that local school districts know well in advance the amount and the source of funds that will be available to them to operate their educational programs. This is not a problem which is unique to the Elementary and Secondary Education Act. It is a serious weakness in all federal legislation affecting schools. The effectiveness of NDEA, which might be considered the grandfather of modern federal aid, is hampered by this problem. For example, the Los Angeles Unified School District submitted proposals under Title III–A of the National Defense Education Act in April, 1966. The district was notified that these proposals had been approved in January, 1967, and that equipment called for must be purchased and delivered before June 30, 1967. This is a requirement that is impossible to meet because certain types of equipment simply cannot be produced and delivered by the vendors by that date.

We are all concerned about the educationally deprived children, youth, and adults of our school districts and of the nation. We are all concerned about developing effective, meaningful programs to aid these pupils. However, unless Congress takes the necessary steps to make it possible for local school districts to receive early notification concerning approved projects, accompanied by binding commitments, we will fail.

STATEMENT OF JOSEPH MANCH, SUPERINTENDENT, BUFFALO PUBLIC SCHOOLS, BUFFALO, N.Y.

In the school district of Buffalo with 73,000 pupils or in a neighboring suburb with only 7,000 pupils, long range fiscal planning is vital to efficiency and economy of school administration. I would like briefly to scan the longer range view in Buffalo in order to point out some of the problems we face with federal school financing.

Title I ESEA was greeted with eager anticipation in 1965 because it tremendously strengthened our hand in equalizing educational opportunity. We in Buf-

falo moved rapidly, as did others in the early part of the 1965–66 school year, and we were able to implement some 15 Title I programs which operated for about a half year. The law—P.L. 89–10—authorized by formula $5.3 million for Buffalo and this amount was fully appropriated by Congress. Although it was not possible, in that first year with only some six months of actual operation, to put the full appropriation to use, our level of operation prorated to the school year amounted to over $6 million.

So our first effort at solidly confronting the problems of the educationally disadvantaged with the assistance of federal financing was an auspicious one.

Then came the retrenchment. On the basis of information available from Washington, The Board of Education was advised to reduce our operation in 1966–67 to about 75 percent of the 1965–66 level.

This made it necessary for our project administrators to forestall purchases and to restrict services. When on April 18 we were apprised for our allocation, we had already rejected numerous staff suggestions for new programs for the disadvantaged, including a work-study project for the mentally retarded, expanded health services, and a curriculum resource center. This effect was partly caused by tardy financing at the federal level. Despite rapid and efficient action by our state officials, we were informed of our allocation less than two weeks ago. Even more important, this retrenchment is directly caused by inadequate appropriations. Whereas the formula in PL 89–10 would produce over $7 million for Buffalo if fully implemented, our actual allocation is less than $4.9 million this year.

Now we come to fiscal 1968. The estimated authorization for Buffalo for Title I alone, as amended by the $3,000 low income factor, would be in excess of $9 million. Yet again we are faced with the anomaly of authorization versus appropriation. Our experience indicates that we should plan on a dollar decrease in allocation and a further cut in programs, combined with no solid basis for any decision until the next school year is well underway.

A similar story could be told with regard to the fiscal underpinning of the Teacher Corps Program.

Furthermore, this year our hope of receiving general aid in recognition of federal impact was raised when Congress amended PL 874 so that large cities such as Buffalo could qualify. Yet that hope had a short life, because the necessary appropriations were never enacted.

We urge supplemental appropriations for 1966–67 and appropriations for fiscal 1967–68 to the full extent of authorization contained in programs already enacted by Congress. This includes the new provisions of PL 874, ESEA as amended to include the $3,000 factor, adult education, and the handicapped, and the Teacher Corps Program.

STATEMENT OF WM. KOTTMEYER, SUPERINTENDENT OF INSTRUCTION, ST. LOUIS PUBLIC SCHOOLS, ST. LOUIS, MO.

Mr. Chairman and Members of the Committee, I am Wm. Kottmeyer, Superintendent of Instruction, St. Louis, Missouri. I appreciate this opportunity to present testimony before your Committee regarding educational appropriations for fiscal year 1968.

The children in St. Louis are now beginning to realize great benefits from the legislation passed in the last several Congresses. Even greater benefits can and will flow from this legislation if it is properly supported with the best ideas which can be brought to bear on the problems of education and with funds adequate to carry them through. Only in this way can the laudable purposes of this very excellent legislation be fulfilled.

St. Louis, in company with the other large city school systems, is faced with the almost impossible task of providing more services to more children with more learning problems than ever before. At the same time our tax support is diminishing because of a decreasing local tax base and insistent demands for other city services brought on by slum living conditions. The specialized services which our students need are extremely expensive. Such help, if it is not just "window dressing," almost always involves small groups of students or even individual instruction.

Severe cuts in funds for school systems.—It is in this context that we must view the fiscal year 1968 Elementary and Secondary Education Act budget. While we were told that no state would receive less money in fiscal year 1968 than it did in fiscal year 1967, severe cuts have been made for individual cities.

St. Louis is an example. During a period of less than eight months in fiscal year 1966, the St. Louis Public Schools received and spent, quite effectively, we think, the sum of $5.2 million on the educationally disadvantaged children of our city. Then in fiscal year 1967 our allocation was drastically reduced to $4.3 million. This was announced a month ago. Now we find that the anticipated allocation for 1968 will be about $3.8 million which is a reduction of 27% from the fiscal 1966 figures.

In the last year as Title I funds were being reduced, the number of children receiving AFDC payments rose another thousand, the impoverished and blighted areas of the city continued to spread, and the overall numbers of poor children with learning needs increased in numbers and in the need for expensive special services.

Increased numbers and categories of children.—Last year when Congress changed the low income factor determining eligibility for Title I assistance from $2000 to $3000 we were delighted. This meant that many other children from almost equally poor areas would receive needed help. At the same time Congress added a number of additional categories—Indian and migratory children, the neglected, and the delinquent. These categories do need to be in the legislation and educators were full of praise for this action. What none of us envisioned, however, was the severe reduction in funds from those authorized in the legislation. The results are fairly obvious. Since we are now conducting a number of successful projects which should continue we will most certainly have to reduce their funding. We have the choice of cutting out projects, cutting back on the numbers of children who will be affected or keeping the numbers and diluting the resources and services which these children will receive.

Morale of teachers, children, and community.—When we add to this the psychological effect of these cutbacks upon teachers, parents, and children another depressing factor is introduced. The Elementary and Secondary Education Act of 1965 has provided the schools with much more than money. Schools which had been struggling for generations to help children learn suddenly found the necessary resources to do many things they had always wanted to do. This generated an optimism and raised the hopes of teachers, children, and their parents. When these people must be told that the services they have barely tasted are to be taken away, the morale may well hit a new low for many of the schools most in need of help.

Some effects on projects in St. Louis.—The severe cuts in funds will seriously affect our Title I projects. We have considerable evidence that we can make substantial gains in pupil achievement by placing only twenty children in a teacher's class instead of our present average of thirty-five By providing the teachers with information on the best methods of working with children as individuals or in small groups and by providing a wide variety of instructional materials, we can get good results in a short period of time. With larger numbers of children such training for teachers has only a marginal value. The crucial element is the amount of individual attention a child can get from the teacher. Next year we should have 1840 children in such classes during the school week and another 800 enrolled after school and on Saturdays. While the numbers sound impressive, we will only be providing for about 7% of the Title I area children who need such help—those who are a half-year or more behind the national averages in the skills of reading, writing, and arithmetic. Before larger numbers of children can be so served much larger amounts of money must be found to pay for more teachers and to build classrooms in which they may teach.

To partially alleviate this problem we hired 476 teacher aides in FY 1966. These aides made an excellent contribution and provided the teachers with more time to teach. Last year the cutback in funds allowed us to hire only 200 aides. Next year this cutback may allow us even fewer than this.

Last year we began a special high school for students who could not get along in the regular high schools, who were suspended for disciplinary or academic reasons. We are not judging the success of this school on whether the students adjust there but on their adjustment back in their own high school after attending Lincoln High. This high school will send back about 200 of its present enrollment of 288. We anticipate that most of these students have been sufficiently helped so that they can make the grade in their regular high school. We want to extend this program also to another 250 students who need it but the limitations of funds may prevent this also.

At the end of the year we must carefully evaluate whether the projects we have underway are successful. If we are required to serve larger numbers of children with smaller amounts of money the results—no matter how hard teachers work—cannot meet the purposes of the legislation.

I would therefore urge you to implement the legislative enactments with full appropriations. New programs should not be funded from appropriations designed to maintain existing programs. The new categories introduced in amendments to the Elementary and Secondary Education Act are needed but unless they are fully funded they only serve to dilute existing programs which are also desperately needed. Public Laws 815 and 874 should also be fully funded at the earliest possible date. Many cities which need the funds are being deprived this year. Next year, unless the available funds are increased markedly, all cities will suffer a reduction.

In sum, with many additional poor, educationally deprived children entering the schools each year, new categories of children who must be served, and a precipitous decline in Title I funds, we can only hope for pilot-type programs with little impact upon the real problems these children face. These children only pass through our schools once. A program—no matter how innovative, exciting, and dynamic—which is a decade away, will not help the poor children in our schools today.

A massive case which showed that Federal aid was necessary if poor children were to achive in school was built up over the last few years by hard-working Congressional committees. I do not see how this evidence can be overlooked. The real hope and legacy of our country is our children. They must not be relegated to a place behind other programs.

We are now at a crossroad in education and I am most pleased that this committee is considering the issues so very carefully. I want to thank you for inviting me to testify on this most vital legislation.

STATEMENT OF RAY TRUSSEL, PRESIDENT AND DEAN OF THE SCHOOL OF PUBLIC HEALTH, COLUMBIA UNIVERSITY

Mr. Chairman, our schools, where the public health personnel required throughout this nation and in many parts of the free world receive advanced training, are shocked, deeply disappointed and unable to rationalize the request of the Administration for funds to support the Schools of Public Health in fiscal 1968. The request for $3.5 million is a reduction from the amount which you approved for the current year—despite the fact that added responsibilities have been assigned to us by that same Federal establishment. We are perplexed, to state it moderately, and seek your support of the vitally needed $5 million appropriation authorized. This is short of the amount required to enable us to fulfill our obligation but, in our opinion, it is completely in keeping with the commitment of the Congress to provide a rightful contribution toward the Federal share of students enrolled in our schools.

May I describe briefly the origin of Federal support for our programs, the role and function of our Schools and include an outline of the courses through which we prepare personnel for the newly emerging health programs of today and tomorrow.

Hill-Rhodes formula funds became available to the Schools of Public Health as a result of legislation passed in 1958 amending Section 314 (c) of the Public Health Service Act to enable the Schools to provide comprehensive training, specialized consultative services, and technical assistance in public health and the administration of State and local programs. The formula under which the annual appropriations are allocated among the accredited Schools of Public Health is tied to the numbers of Federally sponsored students enrolled in the individual Schools, helping in small part, to defray the costs of basic operations incurred by the Schools in educating these students. The importance of the formula grants has been stated strongly by the Association of Schools of Public Health to the Congress, at training conferences, and in periodic reports.

Since fiscal 1959, the first year that formula funds were available, amendments have extended the time limits and added to the initial fiscal authorization in an attempt to keep pace with increasing Federal commitments and demands on the Schools to train public health personnel. The conferees at the Congressionally required Second National Conference on Public Health Training, after reviewing activities of the Schools of Public Health under the Hill-Rhodes formula grants, recommended that the authorization be doubled and that appropriations be increased gradually so that the Schools would receive the maximum by fiscal 1971. At that time (August 1963) the authorization was for $2.5 million and the appropriation was $1.9 million. But the Nation's public health concerns and program authorizations in many aspects of public health accelerated more rapidly than anticipated, and the Congress responded by doubling the formula grant author-

ization for fiscal 1966, a year earlier than the recommendations had called for, and appropriated $3.5 million that year instead of waiting for fiscal 1968 as projected in the Conference time-table.

The same session of Congress was unprecedented both in the quantity and kinds of health legislation enacted and that Congress recognized that these new programs would place additional demands on the Schools of Public Health is very much to its credit. Experience to date has already shown that the Schools not only are providing the focal point from which to build manpower training and retraining curricula for the leadership skills required by the health programs that are emerging out of the new legislation, but also are serving those programs through the expert knowledge and advice of their faculty.

The latest "Hill-Rhodes" authorization, for fiscal 1968 ($5 million) was passed in the second session of the 89th Congress as part of P.L. 89-749, the Comprehensive Health Planning and Public Health Service Amendments of 1966, and placed in Section 309 of the Public Health Service Act. Bills already introduced in the 90th Congress by Senator Hill and Representative Staggers would extend the authority for four additional years with authorization for "such sums as may be necessary." The table which follows shows the relationships of Hill-Rhodes formula grant authorizations to appropriations and numbers of Schools of Public Health sharing in the available funds from the first year of operation to the present. All indications are that two additional schools (at the University of Loma Linda in California and the University of Oklahoma) will be accredited this Spring, and that at least three other Universities are making plans to establish schools of public health. The 13 accredited Schools of Public Health in the United States are in the following Universities:

University of California (Berkeley)
University of California (Los Angeles)
Columbia University
Harvard University
University of Hawaii
Johns Hopkins University
University of Michigan
University of Minnesota
University of North Carolina
University of Pittsburgh
University of Puerto Rico
Tulane University
Yale University

Hill-Rhodes formula grants to accredited schools of public health

	Authorization	Sums available	Number of schools of public health
Fiscal year:			
1959	$1,000,000	$450,000	11
1960	1,000,000	1,000,000	11
1961	1,000,000	1,000,000	12
1962	2,500,000	1,173,000	12
1963	2,500,000	1,900,000	12
1964	2,500,000	1,900,000	12
1965	2,500,000	2,500,000	12
1966	5,000,000	3,500,000	13
1967	5,000,000	3,750,000	13
1968	5,000,000	----------	----------

The Hill-Rhodes formula grant method has proved itself an effective mechanism for providing the Schools, and hence the Nation, the means to improve and expand public health training to meet the requirements of changing and emerging health problems. Four years of experience had shown that formula grants made it possible to compensate for imbalances of program caused by categorical or project grants, to initiate new programs as soon as they are needed, to hold or secure faculty until other sources of support could be developed, to take care of emergencies, and to provide supporting personnel and equipment needed in training programs. The more recent experience, culminating with fiscal 1966 and the added responsibilities under Titles XVIII and XIX of the Social Security Act, only emphasizes the need for increased Federal support.

The percentage distribution of formula grant expenditures during the past four years shows the greater amount each year going into salaries for teaching personnel—50% or more—and the least into travel and equipment. The "other

expenses" item has included such items as rental of space for teaching, renovation to provide increased classroom and teaching laboratory space, specialized reference materials for student use and library acquisitions, and machine rental for training purposes. The large proportion of expenditures going to faculty salaries deserves some elaboration as it is in this item where the Hill-Rhodes formula grant contribution to public health training is most easily seen. Use of the funds for these activities serves a dual purpose: enrichment and strengthening of curriculum content and increase in faculty to take care of increasing enrollment. It is also under this item that the unique contribution of formula grants as a complement to categorical and project training grants becomes so noticeable. It is here that they are enabled to allow for the development of a new course or appointment of a new faculty member before regular or categorical supporting funds have been found; it is here where they can find funds for the worthwhile visiting lecturer; it is here where they can find the temporary supplement to a faculty member's salary needed to maintain a competitive position in the labor market.

Specific content areas in the last two years reflect the newer responsibilities as well as the continuing concerns of the public health field. Medical Care Administration, Continuation Education, Chronic Disease, current problems in Environmental Health, and Population Dynamics are prominent among the newer responsibilities. Continuation Education is the logical area where the Schools can be expected to participiate in retraining, either directly, by providing instruction for operating personnel, or indirectly through the preparation of key health agency personnel for inservice teaching. As an example, the provision of training courses to assist in the implementation of Titles 18 and 19 of the Social Security Act has been particularly stressed as a special and unprecedented burden during 1966–67. This can be expected to continue for some time to come.

The variety of teaching areas to which Hill-Rhodes formula funds contribute includes—

Behavioral Sciences.
Biostatistics.
Chronic Disease, including Aging and Physical Medicine.
Continuation Education.
Dental Public Health.
Environmental Health, including Aerospace Health, Air Pollution, Physiology, Radiological Health.
Epidemology.
Health Education.
Hospital Administration.
Infectious Diseases, including Microbiology and Virology.
International Health, including Tropical Public Health.
Legal Medicine.
Maternal and Child Health.
Medical Care Administration, including Health Economics, Medical Records, Operations Research.
Mental Health.
Nutrition.
Occupational Medicine.
Population Dynamics.
Preventive Medicine.
Public Health Administration or Practice, including Public Administration, Public Health Law, and Program Development.
Public Health Nursing.

The Federal commitment to contribute to the support of comprehensive public health training available only in the small number of accredited Schools of Public Health was made on the basis of national need, the public service nature of the tasks to be performed by the personnel so trained, and the inability of private sources and State governments to bear the financial burdens unassisted in the face of rising numbers of Federally sponsored students. Although the Hill-Rhodes formula grants are tied to the numbers of Federally sponsored students, practically all public-health trained personnel, regardless of sponsorship, go into public service.

Federal training support of all types has never met the full costs of educating even the Federally sponsored students, and this contribution has declined, relatively, as the proportion of such students has risen. Federally sponsored students constituted 56.4% of the total enrollment in the Schools in fiscal 1963

and 65.1% in fiscal 1966, an increase of 8.7%. The increase in Federal support for those same years amounted to 0.9% (48.8% in 1963 and 49.7% in 1966).

In the spring of 1966 the Association of Schools of Public Health indicated to the Congress that the 13 accredited Schools could prudently use $5,165,070 in Hill-Rhodes formula funds during fiscal 1967. This estimate was based on projected enrollments of Federally sponsored students and needed improvements and expansion of the teaching programs contemplated. Although this figure exceeded the $5 million authorization, we were aware of other public health needs to be met by the pool of funds from which formula grant appropriations are allocated and we requested, an increase of only $250,000 over the previous year's appropriation to a total of $3,750,000. This amount was made available by action of the Congress.

This year with the prospect of fifteen, rather than thirteen, accredited Schools sharing in the appropriation, and a realization, gained by experience, of the full impact of new health legislation on their responsibilities, the Schools must seek increased aid. The two prospective new Schools have documented an estimated need for $550,000 in formula funds in fiscal 1968. In the absence of an increase in the fiscal 1968 appropriation the existing Schools will be faced with a serious cutback.

Our Association, therefore, in keeping with our responsibility and in the knowledge that these and more funds are needed and can be put to profitable use, requests that you appropriate $5 million for grants to the Schools of Public Health in fiscal 1968. We are most appreciative of your consideration of this request.

STATEMENT OF E. C. STIMBERT, SUPERINTENDENT, MEMPHIS CITY SCHOOLS MEMPHIS, TENN.

Mr. Chairman, Distinguished Members of the House Subcommittee on Appropriations for the Department of Health, Education and Welfare, as a member of The Research Council of the Great Cities Program for School Improvement, the Memphis City School System appreciates being accorded the opportunity of submitting a statement in support of a realistic supplemental appropriation for education.

FULL FUNDING OF AUTHORIZATIONS

There is a great need for federal appropriations to match federal authorizations. School systems build their plans and hopes on authorizations passed by the Congress. They then find in the course of appropriations that the dollars actually appropriated do not meet authorizations either in scope or in length of time.

We would also appeal to the Congress for earlier appropriations action. In the Memphis City School System, we have in the past two years started federal programs under authorizations but the funding has come considerably after the beginning of the school year. It is not sound practice for any school system to gamble on funding nor is it desirable to start programs after the school year has begun because qualified personnel are not available. This fact alone reinforces our position in another matter—namely this—it is difficult for a school system to predicate a program upon an annual appropriation without the knowledge that the appropriation will be continued into a succeeding year. Almost every program involved in federal legislation requires the appointment of personnel. It is impossible to employ personnel without a reasonable expectation of maintaining the appointment throughout more than the course of one year. Competent personnel are at a premium these days in school systems, and it is impossible to attract such personnel for federally-assisted programs if they feel that their employment is simply on a year-to-year basis. Furthermore, the funding of federally-supported programs is tied inescapably to the funding of local programs. Good financial planning for school systems requires that the sources and amounts of funds be known in advance so that effective planning can take place. This cannot be done adequately on an annual basis. We would appeal then, to Congress to try to make its educational appropriations for the succeeding year known at least by early Spring—more specifically, by March 1. School systems are organized on the basis of school years and, although we know that this is a new organization for the members of Congress to consider in their appropriations procedure, we hope that through this Committee, Congress will become aware of this appropriation timing need.

Title I, P.L. 89–10, summary

	Fiscal year 1966	Fiscal year 1967
Authorization	(1)	$3,124,841.76
Allocation	$2,985,744.00	2,728,806.98
Programed for expenditure	2,985,744.00	2,728,806.98
Expended and/or encumbered	[2] 2,820,141.16	[3] 1,018,276.82

[1] Undetermined.
[2] As of Aug. 31, 1966.
[3] As of Feb. 28, 1967.

The above summary of Title I funds is self-explanatory. For a detailed analysis of the nine projects which comprise our Title I Program, I respectfully refer you to a digest which is attached. Exclusive of Project 67–09, a tally of all costs indicates that 6.8% of funds are budget for Administratives; 84.23% for Instruction; 1.12% for Capital Outlay; 6.38% for Other Costs and 1.47% for Food Services. It becomes readily apparent that the Memphis City School System is placing emphasis upon Instruction to school children. We believe this to be the primary purpose of Title I as enacted, and the intent of the Congress.

Last summer with $625,000.00 we operated a "free" Summer School Project for 4,912 elementary and secondary school children. The project was very favorably received by patrons of the school system. Daily the staff at the Central Office, principals and teachers receive inquiries from parents about the prospects of a "free" summer school this year. The prospects for a similar project this summer appear dim indeed. However, IF the Congress were to fund Title I at the authorization level, we could conduct a summer school project for approximately 75% of the eligible failures.

When the Congress amended P.L. 89–10 last year and established authorization levels, we initiated planning to develop our Title I Program. In all frankness we planned on another summer school project, because we were convinced that the participants benefited significantly. For example, among approximately 2,000 students in grades 1 through 6 who participated in the federally-supported program, only 12.7% of those who were promoted are now failing. The program "salvaged," "motivated," "reoriented," or whatever you may term it, 87.3% who are currently achieving satisfactorily.

On November 30, 1966, President Johnson made public a report on special federally-assisted summer school programs, submitted by the National Advisory Council on the Education of Disadvantaged Children. "Dollars thoughtfully expended on summer schools may be among the most productive dollars spent by Title I. Future summer programs, besides being important in themselves, can have special beneficial effects on the year-round success of Title I programs which can be attained in no other way," the report stated.

ADULT BASIC EDUCATION PROGRAM—TITLE I, P.L. 89–10

The Second Session of the 89th Congress in its amending/authorization actions on P.L. 89–10 transferred the Adult Basic Education Program from the Economic Opportunity Act to The Elementary and Secondary Education Act—Title I. We believe that responsibility for administration of this program is properly established in the U.S. Office of Education. We also believe that the dollars necessary to operate the program—approximately $41 million—should have been transferred or otherwise appropriated. Under existing appropriation and fiscal arrangements, this amounts to a $41 million slice of the Title I pie.

In the Memphis area we are currently operating 120 Adult Basic Education classes for 2,815 adults at a cost of $153,920.56—dollars which reduce the State's Title I allocation for children.

EDUCATION OF THE HANDICAPPED—TITLE VI, P.L. 89–10

We are utilizing $289,817.00 for a Comprehensive Special Education Project which benefits 735 children in six areas of exceptionality—Educable Mentally Retarded; Trainable Mentally Retarded; Perceptually Handicapped; Speech; Deaf and Visually Limited. Additionally, with our own Board of Education funds, we are serving approximately 2,300 handicapped children—yet some 600

remain on waiting lists. The Elementary and Secondary Education Act was amended to include Title VI—Education of the Handicapped—authorizations were established at approximately $50 million, but appropriations did not match authorizations. Again, in all frankness, our staff planned on utilizing Title VI funds for our Special Education Project and, again, we had to shift gears in the development of our program. We have the capability of shifting gears; however, as we all know it reduces the gas mileage and increases wear and tear on the motor and the driver.

CONCLUSION

Although we have not addressed all education legislation under the purview of your Committee, Mr. Chairman, using only three specific situations uder Title I, P.L. 89–10 which have a direct impact upon the Memphis City School System, we have attempted to present a strong, realistic case for a full appropriation of all educational programs. The timely funding of programs at authorized levels continues as a significant problem to school people because their plans are based upon authorizations. Accordingly, if sound, well planned educational programs are to be operated, full funding of the various educational acts is essential.

Mr. Chairman and Members of the Committee, we thank you for this opportunity to place in the record our views relative to appropriation of federal funds for education. We hope the views expressed will be useful in your deliberations.

The Elementary and Secondary Education Act 1965, Title I, P.L. 89–10, fiscal year 1967 allocation: $2,728,806.98

General: The Title I Program for the school year 1966–67 includes the following projects:

Project No.	Title	Amount
67–01	Master project, reading improvement and achievement emphasis	$1,161,425.00
67–02	Teacher training in improving reading skills (September session)	78,691.00
67–03	Kindergarten	264,988.00
67–04	Elementary guidance and psychological services	454,641.00
67–05	Vocational education	195,289.00
67–06	Special education	289,817.00
67–07	Teacher training in improving reading skills (February session)	11,881.00
67–08	Basic swimming instruction	72,408.00
67–09	Inservice training for teachers (project in process of finalizing)	199,666.98
	Total	2,728,806.98

BRIEF OF APPROVED PROJECTS

67–01 Reading improvement and achievement emphasis

1. *Reading improvement, senior high*:

(*a*) *Purpose.*—This project is designed to improve the reading ability of selected Senior High School students with the view of improving the students' reading rate, comprehension, self-image and academic achievement in all subject areas.

(*b*) *Amount.*—$335,000.00

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grades:		
10	2,572	
11	2,572	
12	2,572	
Total	7,716	

(*d*) *Special features of the project.*—The library in each project high school will be open for student use from 7:00 p.m. to 9:30 p.m. three nights a week and on Saturday morning from 9:00 a.m. to 12:00 a.m. Each library will be staffed with one librarian and two aides.

The library feature will primarily serve the students participating in the project, but will not be limited to their use. All students will be encouraged to utilize the services and facilities of the libraries involved in this project.

(*e*) *Personnel required*—

Teachers	1
Teacher aides	66
Librarians	8
Librarian aides	16

2. *Reading improvement, elementary:*

(*a*) *Purpose.*—This project is designed to improve the reading ability of selected elementary pupils with the view of improving the students' self-image, reading rate, comprehension, and academic achievement in all subject areas.

(*b*) *Amount.*—$351,825.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grade 3	387	12
Grade 4	425	34
Grade 5	250	34
Grade 6	158	34
Total	1,220	114

(*d*). *Special features of this project.*—The reading teacher will schedule small group (3–6 students) and individual instructional periods according to the needs of participating students. Instruction will begin at the child's reading level using interesting materials different from those used in the regular classroom. Methods of instruction will be varied to meet the individual needs of the students. Special materials include reading laboratories, listening centers, instructional games, texts at various grade levels, and high interest materials. Students in this project will be referred to the proper source for guidance services and visual and auditory examinations.

(*e*) *Personnel required.*—

Teachers	45
Teacher aides	0
Librarians	17
Librarian aides	0

3. *Achievement emphasis, junior high*:

(*a*) *Purpose.*—The project is designed to provide under-achievers in Grades 7, 8, and 9 with the opportunity to improve their individual achievement in the basic subject matter fields.

(*b*) *Amount.*—$175,872.00.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grade 7	1,500	0
Grade 8	1,000	0
Grade 9	900	0
Total	3,400	0

(*d*) *Special features of this project.*—

(1) Libraries will be open on Monday, Wednesday, and Friday nights from 7:00 P.M. to 9:00 P.M. in the project Junior High Schools.

(2) Emphasis in this project exists in four areas—language arts and reading, social studies, science, and mathematics. Schedules for the student are flexible so that the teacher may concentrate on individual needs rather than adhering to the traditionally structured hour time block. There are plans to broaden the educationally deprived child's environment by field trips to local businesses, cultural centers, and other points of interest throughout the city, audio-visual aids (e.g. movies, overhead and slide projectors, tape recorders, etc.) and a variety of other learning activities.

(3) Two mobile science laboratories have been purchased which will aid in the teaching of general science, biology, chemistry, and physics. The Space/Science van is equipped with a planetarium, science lab area, complete weather bureau station, all types of audio-visual aids, and a display area.

The biology, chemistry, and physics van is equipped to conduct laboratory experiments in any of the three major science areas. Two science teachers compose the staff of each of the traveling laboratories.

(*e*) *Personnel required.*—

Teachers	4
Teacher aids	11
Librarians	0
Librarian aids	0

4. *Achievement emphasis, elementary:*

(*a*) *Purpose.*—This project is designed to provide under-achievers in Grades 4, 5, and 6 with the opportunity to improve their individual achievement in the basic subject matter fields.

(*b*) *Amount.*—$298,728.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grades:		
3	200	0
4	1,200	0
5	750	0
6	569	0
Total	2,719	0

(*d*) *Special features of the project.*—The program is flexible so that the students are able to spend more time on subjects in which they are deficient. The classes are similar to an ungraded class and for this reason, it is hoped that each pupil can progress rapidly enough to return to the regular school program.

(*e*) *Personnel required.*—

Teachers	38
Teacher aides	0
Librarians	18
Librarian aides	0

67-02. *Teacher training in improving reading skills:*

(*a*) *Purpose.*—This project is designed to give special training in improving reading skills to teachers of educationally disadvantaged elementary and junior high children.

(*b*) *Amount.*—$78,691.00

(*c*) *Children benefiting from this project.*—

	Public	Nonpublic
Grades:		
4-6	340	
7-9	340	
Total	680	

(*d*) *Special features of the projects.*—An intensive ten (10) week course for eleven elementary and eleven junior high teachers conducted by Doctors Sawyer and Taylor in the Reading Laboratory of the School of Education at Memphis State University. Substitute teachers were hired to replace these twenty-two teachers while they were attending the Laboratory. Each teacher transported three students from their regular classes to the Reading Laboratory and used the new techniques on these students.

(*e*) *Personnel required.*—

Reading consultants	2
Graduate assistants	3
Substitute teachers	22

67-03. *Kindergarten:*

(*a*) *Purpose.*—The purpose of this project is to take children of pre-school age (eligible for first grade 1967) who show a marked deficiency in readiness, and attempt to increase their expectations in school. Priority was given to the children who showed the greatest deficiency in readiness for learning.

(*b*) *Amount.*—$251,638.

(*c*) *Children benefiting from this project.*—

	Public	Nonpublic
Grade: Kindergarten	625	

(*d*) *Special features of this project.*—Teachers and aides for this project were given a one week training period prior to the inception of the project. In-Service meetings are to be held throughout the year with emphasis on guidance in understanding the child's growth and development and ways to improve the self-image of the child. The curriculum provides for interrelated and interdependent activities which will be implemented by the child's work and play and teacher led experiences, e.g. discussing, listening, field trips, investigating, experimenting, constructing and observing.

(*e*) *Personnel required.*—

Teachers	25
Teachers aides	25

67-04. *Elementary guidance and psychological services:*

(*a*) *Purpose.*—This project was designed to provide for the development of a program of elementary guidance and psychological services for educationally deprived children in the geographical areas of twenty-seven elementary schools, ten secondary schools and seven Catholic schools. These services will be closely coordinated with the regular school program. There are three centers, Klondike, LaRose, and Prospect.

(*b*) *Amount.*—$454,641.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic	Nonschool
Grades:			
Kindergarten	43		20
1 to 3	1,296	33	40
4 to 6	1,168	32	40
7 to 9	197	27	10
10 to 12	38	6	5
Ungraded	5		10
Total	2,747	98	125

(*d*) *Special features of the project.*—The staff members, in working with the referred youngster, will go to the child either in his school and/or visit the child in his home environment. Efforts are to be made to improve the physical and mental health of the child.

(*e*) *Personnel required.*—

Director	1
Supervisors	3
Psychological interns	2
School psychological service workers	9
Elementary guidance counselors	18
School psychologists	5

67–05. *Vocational education*:

(*a*) *Purpose.*—This project is designed to help the student to improve his achievement in the occupational skills areas of Distributive Education, Office Occupations, Home Economics, Industrial Arts, and Trade and Industrial.

(*b*) *Amount.*—$195,289.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grades:		
8	370	0
9	2	0
10	42	0
11	102	0
12	266	0
	782	0

(*d*) *Special feature of the project.*—

(1) The special feature of the Distributive Education area is is that the students are given the opportunity of obtaining knowledge, competency and skills in marketing and distribution by combining the classroom activities with actual work experience in stores and markets.

(2) The special feature of the Office Occupations section is that the classroom is set up just as one would find in any business department of any company throughout the city or area. This allows the student upon completion of the course to go into any business and begin work without feeling lost.

(3) The special features of the Trade and Industrial portion is that the students are gaining a valuable experience in the areas of cosmetology, printing, and auto mechanics by attending classroom lectures, discussions, and demonstrations in the morning. The afternoon is utilized by the students actually being involved in work experience projects.

(4) The special feature of Industrial Arts section is that it offers the students exploratory experiences in the areas of (1) mechanical drawing, (2) electricity, (3) wood, (4) metal, and (5) electronics.

(5) The special feature of the Home Economics area is to try to instill in the girls concepts which are accepted as desirable for satisfactory living within their home and their community. One emphasis will be on good manners, good grooming, poise and self confidence. Another emphasis will be on the student gaining an understanding of good basic nutrition.

(e) *Personnel required.*—

Area specialists supervisor	1
Distributive education teacher	5
Home economics	1
Office occupations	10
Industrial arts	2
Trade and industrial	4

67-06. *Special education:*

(a) *Purpose.*—The purpose of this project is to provide educational experiences and work activities to orthopedically and/or mentally handicapped children in the following areas of exceptionality—Educable Mentally Retarded, Trainable Mentally Retarded, Perceptually Handicapped, Speech, Deaf, Visually Limited, and Social Adjustment in Vocational Education.

(b) *Amount.*—$289,817.

(c) *Children to benefit from the project.*—

	Public	Nonpublic
Grade: Handicapped ungraded	600	135

(d) *Special features of the project.*—The utilization of multi-sensory approaches, equipment and devices in accomplishing. Over $14,000.00 will be expended on such equipment as Auditory Training Systems, Auditory Trainerettes, Language Masters, Tape Recorders, Copy Machines, Filmstrips and Overhead Projectors. In addition, there will be twenty pairs of special glasses furnished.

Another special feature of this project is that it provides for teachers of the Deaf to attend the University of Tennessee for special training. In addition, the Memphis City Schools in conjunction with the University of Tennessee School of Education, have set up two seminars—one in Knoxville and one in Memphis—to study the problems of the deaf.

The Elementary Guidance and Psychological Services Project has identified four hundred twenty-seven children ranging in age from 13-17 in twenty-seven elementary schools. Although these children are not mentally retarded, they are not academically talented and lack self-motivation. They are not eligible for the regular vocational program. Therefore, the Special Education Division of the Memphis City Schools has devised a vocational-occupational program which will help the over age child overcome his dilemma. The program is to be called Social Adjustment in Vocational Education or SAVE.

(e) *Personnel required.*—

Supervisor	1
Teachers:	
EMR	12
SMR	1
Perceptually handicapped	8
Visually handicapped	1
Deaf	2
Speech correction	4
Perceptually handicapped transition	2
Social adjustment	5
Area specialist	3
Consultants	12
Braille specialists	2
Special education attendants	15

67-07. *Teacher training in improving reading skills:*

(*a*) *Purpose.*—This project is to begin on February 13, 1967 and is a sequel to Project 67-02 which took place in September. The program will be ten weeks in duration.

(*b*) *Amount.*—$11,881.

(*c*) *Children benefiting from the project.*—

	Public	Nonpublic
Grades:		
4 to 6	310	71
7 to 9	310	0
Total	620	71

(*d*) *Special features of the project.*—Provisions have been made for one Reading Teacher from St. Thomas and Blessed Sacrament to attend the Reading Laboratory headed by Drs. Sawyer and Taylor. Substitute teachers will be hired by the Memphis City Schools and placed in the Catholic Schools for the ten week period.

(*e*) *Personnel required.*—Funds for the twenty-two substitute teachers' salaries in this project were obtained in 67-02.

67-08. *Operation Head First:*

(*a*) *Purpose.*—Swimming instructions will be given to children in the poverty areas during the summer months. Not only will this involve learning to swim, but it will also help the deprived child's muscular development along with teaching them good health habits. The instruction process will begin June 5 and terminate approximately August 18.

(*b*) *Amount.*—$72,408.

(*c*) *Children to benefit from the project.*—

	Public	Nonpublic
Grades:		
5	5,416	50
6	5,073	50
Total	10,489	100

(*d*) *Special features of the project.*—Twelve portable swimming pools were purchased in August, 1966 and were delivered in January, 1967. These pools can be moved from location to location. Present plans call for the pools to be used at twelve junior and senior high schools to utilize the shower facilities. This program is designed to reach children of the fifth and sixth grade with the possibility of going down to the fourth grade. If any of the original twelve locations do not have enough participants, the pools can be moved to other junior or senior high locations.

(*e*) *Personnel required.*—

Director	1
Pool manager	12
Instructor	12
Instructor aids	24

TITLE I—SUMMER SCHOOL

Operation of a summer school project is dependent upon receipt of additional funds.

P.L. 89–10, title I projects, personnel summary (as of Feb. 7, 1967)

Position	Number authorized	Number requisitioned	Number filled	Present vacancies
Elementary teacher	90	84	84	6
Teacher aid	111	111	111	0
Special education teacher	33	16	16	17
Special education aid	15	15	15	0
School psychologist	5	2	2	3
School psychological service worker	9	9	9	0
Personnel assistant	3	3	3	0
School psychological intern	2	1	1	1
Elementary guidance counselor	18	18	18	0
Director	2	1	1	1
Supervisor/area specialist	15	15	15	0
Special education consultant	10	10	10	0
Testing specialist	2	2	2	0
Graphic arts specialist	1	0	0	0
Audiovisual specialist	1	0	0	0
Communication assistant	1	0	0	0
Research assistant	1	0	0	0
Librarian, elementary	35	35	35	0
Librarian, secondary	8	8	8	0
Vocational teacher	22	21	21	1
Science teachers, secondary	4	4	2	2
Reading teacher, secondary	1	0	0	1
Kindergarten teacher	25	25	25	0
Reading consultant	5	5	5	0
Substitute teachers	44	44	44	0
Pool manager	12	0	0	12
Swimming instructor	12	0	0	12
Swimming aid	24	0	0	24
Secretary/clerk-typist	33	32	30	3
Accounting clerk	1	1	1	0
Accounts payable clerk	2	1	1	1
Warehouse clerk	1	1	1	0
Buyer	2	1	1	1
Payroll/insurance clerk	1	1	1	0
Testing clerk	2	0	0	0
Braille specialist	2	2	2	0
Librarian aid	16	11	11	5
Accountant	1	1	1	0

STATEMENT OF JAMES F. REDMOND, GENERAL SUPERINTENDENT OF SCHOOLS, BOARD OF EDUCATION, CHICAGO, ILL.

Congressman Flood and members of the committee, I am James F. Redmond, General Superintendent of Schools, Chicago, Illinois. I deeply appreciate the privilege of appearing before you at this time to discuss appropriations for educational programs as they relate to the Chicago schools.

The Chicago Public Schools have an enrollment of 567,895 pupils and the nonpublic schools in Chicago an enrollment of 235,447 for a total of 803,342. Of this large number of pupils in grades kindergarten to 12, some 339,626 are officially designated as disadvantaged under ESEA Title I standards and 129,300 of these are being served by Title I programs.

Children of school age in the Chicago schools have benefited greatly from the assistance provided by the Elementary and Secondary Education Act of 1965. The many disadvantaged children involved in the programs have made great progress under the impetus of Title I funds and a summary of Title I activities is attached so the record may show them in detail. Library collections of all Chicago schools have been expanded with Title II funds with a total of some 511,887 volumes being added in fiscal 1966. Innovative and exemplary projects are moving forward with Title III funds.

Despite the many benefits from ESEA programs, however, there have been a number of difficulties. The first and greatest difficulty encountered has been the late date at which funds have been appropriated and allotted. It is extremely difficult to use money efficiently and effectively when the allotments are made in the closing months of the fiscal year and must be utilized in a relatively short period of time. I strongly recommend that this committee expedite in every way possible the appropriation of funds for fiscal 1968 so that these funds can be allotted to the schools by the state departments prior to the beginning of the school year in September.

A second difficulty encountered with ESEA Title I funds has been the tendency for these funds to diminish as time went on. The Chicago schools apparently were eligible in fiscal 1966 for Title I funds of some $31,218,155 but actually received only $20,951,214. This was but 67% of the amount on which the educational plans for use of these funds had been made. Fiscal 1967 is not much better since of the $33,400,000 which the Chicago schools should have been eligible to receive, only about $23,400,000 has been allotted to date. As a result, many current activities face curtailment before the objectives have been reached, and the very valuable summer programs are facing the danger of not being funded.

My plea is that this Congress appropriate adequate amounts for fiscal 1968 to fully fund the authorization of PL 89–750 for ESEA programs and that this be done at an early date to facilitate the effective and efficient use of the funds.

Title VI of the ESEA Amendments of 1966 authorized financial assistance for a greatly expanded program for handicapped children, and established in the Office of Education a Bureau for Education and Training of the Handicapped, but unfortunately no funds were appropriated by the 89th Congress. Chicago has some 50,000 handicapped children but is now able to serve only about half of this number. Federal assistance is essential to provide special educational facilities for those children not now being served and I would urge you to provide full funding for Title VI of the Elementary and Secondary Education Act of 1966 so that this program can be expended at the earliest possible date.

For years the Chicago Public Schools have been providing a quality education program for some 13,000 pupils whose parents work on federal property, despite the fact that school revenue received for such pupils has been only a fraction of that realized for pupils whose parents work on taxable property.

Until this year certain minimum percentage requirements in the Act have prevented the Chicago Public Schools from qualifying for financial assistance to impacted areas under PL 81–874 to compensate for the lack of tax revenue. With the change in requirements provided in the Elementary and Secondary Education Amendments of 1966, PL 89–750, Chicago for the first time this year became eligible for federal grants under PL 81–874. Provisions were made in the 1967 budget of the Chicago Public Schools for the use of these impacted area funds, but unfortunately the appropriation bill passed by Congress in October 1966 did not provide money for school districts which became eligible for payments as a result of legislation enacted after June 30, 1966.

Consequently the Chicago Public Schools are eligible for and desperately in need of some $2.5 million in fiscal 1967 under PL 81–874 but will be unable to collect these funds unless Congress enacts a supplemental appropriation bill to provide the money. I strongly urge the enactment of a supplemental appropriation for fiscal 1967 to completely fund all eligible claims under PL 81–874 and PL 81–815. Appropriations for fiscal 1968 should also take into account the school districts which became eligible for the first time this year so that adequate funding will be provided to fully meet the authorization of the legislation.

For the past eight years instruction in the critical subjects in the Chicago Public Schools has received invaluable assistance and advancement from the National Defense Education Act. Workshops, institutes, and fellowships supported by NDEA funds have done much to raise the quality of instruction, and new equipment has made this instruction far more effective. In addition to the science demonstration equipment and basic science kits provided in all of the elementary schools, the laboratories of 39 high schools and four branches have been rehabilitated and modernized. Modern foreign language laboratories have been installed in a number of high schools and much equipment for the teaching of mathematics and other critical subjects has been provided.

Despite the many gains that have been made in the teaching of the critical subjects, much more remains to be done. Twenty-two high school science laboratories in Chicago need modernization and virtually all of the 460 elementary schools require science laboratory equipment, in addition to the demonstration equipment furnished thus far, if the interest in science of young students is to be fostered. More equipment is needed for the teaching of the other critical subjects and more workshops and institutes are required to upgrade the instruction in these areas.

It is recommended that adequate appropriations be made to fully fund the NDEA activities so that this valuable program can be continued and increased in scope to include industrial arts.

It has been a pleasure to appear before this committee and it is my fervent hope that you will consider favorably my plea for a supplemental appropriation for Public Laws 81–874 and 81–815 for fiscal 1967, as well as early and full funding for these acts and the ESEA and NDEA programs for fiscal 1968.

ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965, PUBLIC LAWS 89–10 AND 89–750

Title I: Financial Assistance to Local Educational Agencies for the Education of Children of Low-Income Families

The following activities are listed in two parts: Project I, Saturation of Services, and Project II, Extended Day and Week Activities. The grant period for all activities under Title I is September 1, 1966 through August 31, 1967. The programs are 100% reimbursable. The activities are listed by name and official number and include a brief description and number of pupils served. (As of the date of this summary final allotment of funds for Title I has not been made and therefore dollar amounts are not shown.)

Project I, Saturation of Services

1. Child-Parent Education Center.—This plan involves parents in the educational process of their children in the early stages: prekindergarten and kindergarten. 480 pupils plus parents are scheduled to be involved.

2. Smaller Class Size.—Class size reduced to 20 to 25 pupils in Primary One and Primary Two. In kindergarten, two teacher aides are placed in each class of 30 pupils, thus reducing the ratio of adults to children to 1 to 10. 17,700 pupils involved.

3. Health Services.—This activity aims to identify and eliminate many potential and actual health problems, to improve school attendance by improving physical health and indirectly result in improving school achievement. 340,788 pupils involved.

4. In-School Speech Improvement.—This activity aims at improving the basic skills of oral communication and at developing acceptable and accurate so-called "standard" speech patterns. 5,730 pupils are involved.

5. Teaching English as a Second Language (TESL).—The objectives are: to enable non-English speaking pupils to gain proficiency in English; to assist pupils to adjust to the school program; and to develop the self-confidence of pupils with limited or no proficiency in English. 24,267 pupils are involved.

6. District Education Center.—Eligible districts have been staffed with human relations and school-parent coordinators; saturation districts staffed with academic subject area specialists, a reading specialist, a clerk and an assistant to the district superintendent. School-community representatives have been assigned to each eligible elementary school. 340,788 pupils involved.

7. School Beautification.—Pupils, parents, school personnel, and other members of the community cooperate in planning, directing, and performing the various services, activities and tasks in initiating, carrying on, and completing the beautification of the homes and schools in two school attendance areas. 3,605 pupils involved.

8. In-School Guidance.—This activity for sixth-grade pupils contributes to the improvement of the self-image, a realistic and worthy self-direction and self-motivation, and an awareness of social and occupational opportunities. All sixth-grade pupils in the eligible schools are scheduled to participate. 46,750 pupils involved.

9. Education and Vocational Guidance Centers.—Basic Occupational Skill Training Centers provide a simulated work situation to overage underachievers to assist them in acquiring skills and acceptable attitudes so they can make the transition from school to the world of work. 700 students involved.

10. Upper Grade Media Saturation Program.—This activity will increase the availability of multi-sensory teaching materials substantially by providing a film library in each of eleven designated schools. 10,187 pupils involved.

11. Project to Improve Education in Large Elementary Schools Having Enrollment Above 2,000.—This activity involves a staffing and organizational pattern in the eleven largest elementary schools, which will permit the schools to be organized into three small schools within each large school. 22,143 pupils involved.

12. Closed Circuit Television.—Lessons in all areas of the curriculum are presented via television. This activity permits local schools with similar needs to prepare programs for the specific needs of their pupils within a cluster. Teachers are teamed to capitalize on their individual strengths. 39,296 pupils served.

13. Demonstration Reading Classes.—This activity provides demonstration of methods, techniques, and materials which are most effective in teaching educationally deprived children in classes of 25. 2,002 pupils served.

14. High School Saturation of Services.—Each of four high schools is staffed with a professional human relations and school-parent coordinator, an assistant principal for curriculum and teaching; class size in English of 20, teaching load of academic chairmen reduced to teaching two classes in order to permit them to give supervision and leadership to their departments. 15,259 students served.

15. Citizenship.—This activity is planned to develop a respect for law and order, a sensitivity to individual rights and to fair procedure, and a feeling of responsibility for one's acts. 2,800 pupils involved.

16. In-Service Education Center.—This activity involves the in-service education of teachers in workshops in the following areas: speech improvement, child-parent education centers, demonstration reading, techniques for the after-school activities, smaller class size, teaching English as a second langauge, tutorials, and group guidance. 3,400 teachers served.

17. Reading Labmobile.—Two traveling laboratories in the area of language arts provide service to specified eligible schools by providing teachers with in-service education through workshops and demonstrations in the use of multi-audio-visual approaches in the language arts field. 178,200 pupils involved.

18. Science on Wheels.—This activity is devoted to the science-in-service training of elementary teachers through demonstration classes. Approximately 99,570 children will be served.

19. Filmobile and Consultant Center.—This program serves 31,025 pupils by having the latest films and other materials delivered to the schools daily to help the students in their unit studies. Workshops help the teachers learn the basic techniques in the operation of their equipment, how to use the material in class rooms and in unit planning.

20. Art on Wheels.—A mobile printmaking studio was designed to provide instruction and motivation in the area of printmaking. The mobile will make it possible to introduce the teacher to the use of all specialized media and equipment used in printmaking. 54,762 pupils involved.

21. Family Living Centers.—These centers provide elementary and secondary instruction for pregnant girls who would otherwise be excused from school attendance. 253 girls enrolled.

22. Occupational Training Center for Culturally Deprived Mentally Retarded Youth of High School Age.—The curriculum of this occupational training center provides a functional academic program as well as occupational orientation, training, and placement. 147 pupils enrolled.

23. Tutorial Program.—Fifty-nine tutorial classes, of ten children each, are for pupils who are considered emotionally disturbed or serious behavior problems. Each class serves only the pupils in the school in which it is located. 590 pupils served.

25. Outdoor Education and Camping Program.—This activity provides for a five-day outdoor education and camping experience for sixth grade pupils as an extension of their classroom work. 10,600 pupils served.

26. Cultural Field Experiences Program.—All pupils at the third, seventh, eighth, ninth, and tenth grade levels in the saturation districts participate in carefully planned cultural field learning experiences. Some of the places visited are the filtration plant, City Hall, Art Institute, Museum of Science and Industry, and Goodman Theatre. 330,000 pupils involved.

27a. Instrumental Music Instruction.—Instruction on pre-band instruments, as well as band and orchestra instruments, is given to approximately 25,000 children (grades 4–8) in 109 elementary schools by a corps of 41 special music teachers.

27b. Music Appreciation Concerts.—This activity provides opportunities for children (grades 4–12) to attend concerts presented by professional musical organizations. The cost of transporting children to and from concerts is included in this project. 330,000 pupils involved.

28. Compensatory Education in the Summer Schools.—This program provides for 30 special summer schools in addition to the 30 which were operational in 1965, making a total of 60, for the expansion of the regular summer school program to three more high schools beyond the 35 which were operational in 1965, and for expansion of services to all summer programs in attendance areas eligible for services in Title I.

(Six additional activities have been proposed but as of April 1, 1967 have not received State approval.)

Project II, extended day and week activities

1. Developmental and Remedial Reading (Grades 3–12).—In eligible schools this reading program enrolls pupils whose achievement levels are one year or more below grade level in reading. 49,513 pupils are enrolled. Class size may vary from 5 to 15.

2. Development and Remedial Arithmetic (Grades 3–12).—In eligible schools this arithmetic program enrolls pupils whose achievement levels are one year or more below grade level in arithmetic. 5,557 pupils are enrolled. Class size may vary from 5 to 15.

3. Library Opportunities and Homework Help (Grades 3–12).—The library serves pupils who are not enrolled in other programs by providing a place for homework study, reference reading, and recreational reading. A teacher-librarian and a homework teacher provide individualized instruction and guidance. 5,000 pupils per month served.

4. Speech Improvement (Grades 3–12).—This speech program enrolls pupils whose speech is difficult to understand. Class size varies from 10 to 15. 2,750 pupils served.

5. Teaching English as a Second Language (Grades 3–12).—Pupils who do not speak English or whose proficiency in English is limited are given instruction in English. 576 pupils enrolled in classes ranging in size from 12 to 15.

6. Group Guidance (Grades 6–12).—Pupils of average or better achievement are enrolled to help them acquire knowledge about the educational and occupational opportunities with emphasis on self-direction and self-motivation. 4,580 pupils involved.

STATEMENT OF DR. WILLIAM H. OHRENBERGER, SUPERINTENDENT, BOSTON PUBLIC SCHOOLS, BOSTON, MASS.

We of the Boston Public Schools feel that the Elementary and Secondary Act has been a most effective and successful piece of legislation. Its benefits have been manifold; its contribution to educational improvement significant. Its full force will become more and more evident as time passes and these children who have profited from its services progress through the various educational levels.

It is our feeling, however, that improvements might be made in the administration of the act that would increase its effectiveness. Many of these improvements touch upon appropriation procedures and the timing of funding authorizations and fall within the purview of this committee.

At present appropriations under ESEA are renewed annually by Congress. Actual allocations to local educational agencies follow at a much later date. To cite an example, for fiscal year 1967 Boston had not received its allocation by mid-September of 1966. By then the school year had begun. Since commitments had already been made to operating personnel, and since supplies and materials had been ordered, and since schools had been selected for program operation, we proceeded with our plans on the assumption that funding would be authorized. Funding was finally authorized late in September just in time to meet our September payroll. This kind of uncertainty, however, does not contribute to effective planning, and gives rise to feelings of insecurity among teachers, planning staff, and administrative personnel.

For effective planning the local educational agencies and the State Departments of Education should be informed of the full amount of their allocations by March 1st of each year for the following school year. This date would conform closely to the time set aside by local school boards and school committees for budgetary considerations. It would permit coordination and financing of regular school programs with activities and programs planned under Federal funding. It would permit early identification, screening and selection of program personnel. It would expedite the ordering of supplies and materials and assure that these materials would be on hand in time to conduct programs effectively. It would permit thoughtful, careful planning of program components rather than hasty, last minute improvisations.

It would be further helpful if Congress might appropriate the authorized funds for two or three year periods rather than annually. Appropriations for the amounts authorized should be guaranteed so that there would be no uncertainty as to whether funding would actually be forthcoming when needed. State Departments of Education should then be empowered to make definite commitments to local educational agencies for this extended period. In this way program continuity would be guaranteed, program personnel might be assured that their association with programs would not be based on year by year assignments.

Supplies might be ordered in larger quantities and, consequently, more economically.

INCREASE IN APPROPRIATIONS

Merely to maintain Title I projects at their present level the Boston Public Schools will require an increase of 10% above last year's allocation. However, present Title I programs do not begin to meet the needs of all of our educationally disadvantaged children.

Boston's allocation under Title I for the fiscal years of 1966 and 1967 was slightly above $3,600,000. Prior to the receipt of federal funds we had already operated a program of compensatory services with local funding. With ESEA funds we extended our program to include 12,000 children in thirty-eight schools. At least twenty-five additional schools with an enrollment of 9,000 pupils are in need of similar services and qualify just as fully under the provisions of Title I.

Similarly, our model demonstration subsystem program, which originally involved one elementary school, has now been expanded to include junior high and high school components. This year a tenth grade is being added to the program, and, in succeeding years, an eleventh and twelfth grade will follow. Additional personnel, supplies, and educational facilities will be needed each year. These will add considerably to the program cost.

One Work-Study Program which now serves five classes in five junior high schools has proven to be a very successful program. Within two years it is our intention to extend this program to twenty-six classes from grades nine through twelve.

It is our hope that all of these increased costs will be absorbed by more generous appropriations under Title I.

An analysis of current and past authorizations and expenditures under Title I, P.L. 89–10 follows:

	Authorized	Allocated	Expended
1966	$3,619,840	$3,619,840	[1] $2,000,000
1967	[2] 5,150,000	3,672,000	[3] 1,750,000

Total amount allocated for 1967	$3,672,679
Amount received to date	3,631,923
Additional amount needed to equal allocation	40,856

[1] Funds not approved until mid-January 1966 which account for failure to expend full allocation.
[2] Estimated.
[3] Expenditures as of Mar. 1, 1967. The balance of the allocation of $3,672,000 has been committed for programs currently in operation and for summer programs up to Aug. 31, 1967.

For the remainder of fiscal 1967 our financial situation stands as follows:

We are presently negotiating with the Massachusetts Department of Education for re-allocation of Title I funds unexpended by other communities in the Commonwealth in the amount indicated as follows:

Total amount needed for 1967	$3,766,201
Total amount allocated for 1967	3,672,679
Additional amount requested	93,522

Anticipated needs

1968:	
Compensatory programs	$3,680,000
Model subsystem program	1,200,000
Work-study program	285,000
Total, title I funds	6,165,000
1969:	
Compensatory programs	5,180,000
Model subsystem program	2,600,000
Work-study program	585,000
Total, title I funds	8,365,000

TITLE III P.L. 89–10

The Boston Public Schools were awarded a planning grant of $207,000 under Title III P.L. 89–10 to develop five projects. The estimated financial needs of these projects follow: Proposals were submitted to the U.S. Office of Education in January, 1967.

Requests in proposals of January 1967:	
B.U.-Horace Mann project	$154,981
Tufts-Quincy project	114,600
Kennedy-Charlestown project	266,863
Central administration	117,275
Total	653,719

In addition we have requested $250,000 for Central High School and fringe area school planning.

Estimated future needs for two of the above projects are as follows:

B.U.-Horace Mann:	
5/67 to 8/68	$154,981
9/69 to 8/69	110,791
9/69 to 8/70	120,089
Total	385,861
Tufts-Quincy:	
7/67 to 8/68	114,600
9/68 to 8/69	125,000
9/69 to 8/70	90,000
Total	329,600

Estimated future needs for Charlestown, Central High School, and Fenway projects will be submitted later.

TITLE VI P.L. 89–10

Fifty million dollars has been authorized under this Title but only $10 million has been appropriated for planning grants. Boston has received no funds at this date. If fully funded we could strengthen and expand the many existing programs that the Boston Public Schools are currently conducting for more than 5,600 handicapped children in the following areas: Braille, Cerebral Palsy, Conservation of Eyesight, Lip Reading, Educable Mentally Retarded, Trainable Mentally Retarded, Speech Improvement, and Emotionally Distributed.

The Boston University-Horace Mann Project now in the planning stages under Title III focuses upon the needs of deaf children of all school ages. Title VI funds might be used to develop projects in conjunction with this planning.

Similarly, the Tufts-New England Medical Center Project also under Title III plans services for emotionally disturbed and physically handicapped children. Educational programs currently being developed to serve these children might also be established under Title VI funding.

Conclusion

We should like to conclude this statement with a general recommendation that, when programs such as Adult Basic Education are transferred from other agencies to the U.S. Office of Education and fall within the provisions of the P.L. 89–10 supplementary funds be appropriated to finance these programs.

Funds allocated to local educational agencies are fully committed to on-going activities and services. Any withdrawal of funds for other purposes lessens the effectiveness and scope of these programs. Similarly, it would definitely weaken the transferred programs were funds not readily available for their implementation.

We appreciate the opportunity to submit our views regarding appropriation of federal funds for education, and we hope that they will be helpful in the deliberations of the Committee.

WEDNESDAY, APRIL 26, 1967.

EDUCATIONAL PROGRAMS

WITNESSES

DR. JAMES A. HAZLETT, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.
DR. CARROLL F. JOHNSON, SUPERINTENDENT OF SCHOOLS, WHITE PLAINS, N.Y.

Mr. FLOOD. We will now hear from two additional superintendents of schools who accompanied Congressman Perkins. They are Dr. James A. Hazlett, superintendent of schools, of Kansas City, Mo.; and Dr. Carroll F. Johnson, superintendent of schools, of White Plains, N.Y. We will be glad to hear from Dr. Hazlett and Dr. Johnson at this time.

STATEMENT OF DR. JAMES A. HAZLETT

Dr. HAZLETT. My name is James A. Hazlett, superintendent of schools, of the School District of Kansas City, Mo., a school system that is largely innercity in character in a sizable metropolitan area. I want to express my appreciation in having the opportunity to testify before this committee and to express the belief in the need for continued and increased financing of the various pieces of Federal legislation supporting educational programs.

There are 75,000 students enrolled in our schools. Forty-five percent of them are Negro and a third could be called disadvantaged. Seventy-five percent of our pupils study in buildings over 25 years old and the average age of the elementary school buildings is 50 years.

Ten percent of our operating budget, or approximately $4 million, comes from Federal moneys. In the last 3 years these funds from a variety of acts have assisted our school system in meeting critical needs of national character which we could not otherwise have provided.

These needs have been in the areas of improvement of educational opportunity for disadvantaged youth, experimentation in promising new ways of instructing, the improvement and extension of technical education, providing expensive new equipment and materials, and assistance in stabilizing integrated communities.

Public Law 89–10 has provided almost $2¼ million, $1,794,000 for the disadvantaged under title I, $350,000 for a countywide diagnostic center, $160,000 for library materials, $39,000 for a computer assisted instruction program, and $27,000 for setting up a community service school. I believe that the law is philosophically sound and promising in outcome, but the objectives would be aborted if appropriations are curtailed and if appropriations are not made early enough to permit schools to secure and maintain staff, place orders, do necessary remodeling, and so forth.

For example, in fiscal 1966 our school district received $2 million to spend in 6 months. In fiscal 1967 it will receive $1,794,000 under title I to spend in 12 months, but we did not know about the last $200,000 until a few weeks ago. We have employed about 80 certified

people and 170 others in our program development but we cannot give assurance of continued employment for the next school year because appropriations have not been made. Much time has been spent in program development and enthusiasm engendered. Not to continue the program at at least the same level of financing or to delay the availability of funds would be wasteful.

Program under Public Law 89–10 and most other Federal acts have provisions for evaluation built in. To justify expenditures, this is as it should be. But these programs have not been fully operative and running at normal levels to yield anything more than the most tentative conclusions.

In my judgment, a full 5 years of experience is necessary to provide valid conclusions with respect to their effectiveness.

As far as our experience is concerned, we could efficiently use more funds under title I because we are not reaching all our eligible children or providing desirable services. The original plans called for increasing appropriations. These can be easily absorbed without losing sight of the specific objectives of any particular title or law.

Thank you.

Mr. FLOOD. To be sure we are not overwhelmed by the delegation from the great cities, it is good to have you abroad.

We will now hear from Dr. Johnson.

STATEMENT OF DR. CARROLL F. JOHNSON

Dr. JOHNSON. Thank you. I will be brief so that I will not wear out the welcome.

I believe the things you are hearing today and the problems with which you are dealing in terms of the education of the youth of our country are of tremendous value.

I have listened to the problems of the big cities. In my community, which is a medium-sized small city, we have problems too. As I see the people and see the faces of people who have been on relief rolls all their lives, and after they have been taught a trade and have learned to read through assistance granted by the Congress, I am overwhelmed by the results. I think this Government, and the Great Society programs is laying the kind of foundation that will lead to increased virility of this country.

I do want to say a couple of words about the tremendous value of these programs.

The second point I would make is that we could use to very great advantage, and prudently invest, double the amount we now have even in my small community. We do not have enough funds to educate well both adults and youth.

I would say that we need those funds early enough so that we may employ our teachers not in September, as Dr. Donovan has suggested, but we need to employ them in January for the following September. There needs to be long-term funding. There needs to be an assurance for the teachers that they will be in a continuing type of program.

I would hope too, that some allocation of funds might be made available as soon as the project is approved so we could put them in effect. You mentioned the President signed the bill on November 3. Our title I program in reading got underway in April.

We would hopefully have some reduction in the paperwork. Our community is a fine community and we have the staff that can draw up proposals, but the greater the need the more difficult it is to write the proposals that will delineate the program. We can do it but many communities cannot. So I would hope we could reduce the paperwork to a minimum.

I would hope also that the Teacher Corps program would be fully funded. My colleagues mentioned the need for this program in the densely populated areas of the cities. I would say the Teacher Corps offers great promise in educating children in my community also. I have poor people in my community too; 20 percent fall in that category. So I would hope the Teacher Corps program would be fully funded and that the program under title I would be fully funded.

Mr. FLOOD. Thank you, Doctor.

(The following statement was submitted for the record:)

STATEMENT OF CARROLL F. JOHNSON

Thanks to funds made available by the Congress under the Elementary and Secondary Education Acts of 1965 and 1966, the Economic Opportunity Act and other federal legislation, White Plains—a community of 50,000 population and the County Seat of Westchester County—has been able to provide badly needed assistance to many children. We have given approximately 160 pre-kindergarten children the advantage of participating in summer Head Start programs and plan to enroll an additional 75 children this summer. We have also instituted a remedial enrichment program in reading and arithmetic for pupils in the primary, intermediate and secondary grades during the summers of 1965 and 1966 and plan to continue these services during the coming summer. And, using ESEA Title I funds, we established last April (1966) a Remedial Reading Clinic which gives intensive attention during the regular school year to some 90 public, private and parochial school pupils who have critical reading difficulties. The Clinic also provides remedial reading specialists to work with other, less critical reading problems among children in the elementary and secondary school buildings of our city.

Additionally, Title I ESEA funds made it possible for us to assemble a special faculty team last summer to review kindergarten through 12th grade English, science, social studies and mathematics curricula and to write new K–12 curriculum guides for use of our teachers and special study guides for culturally disadvantaged pupils.

We have been able to purchase library books and valuable instructional equipment with federal funds under Titles I and II of the Elementary and Secondary Education Act. And we are even now installing at White Plains High School a microfilm center which will serve the public, private and parochial schools of our city. This microfilm facility will make available to our students the back issues of 28 major periodicals, dating back to the mid-19th century in some cases. Unique in Westchester County, the microfilm center will be an invaluable adjunct to our school library and classroom facilities and will serve, as well, adults who wish to do serious periodicals research.

As I have previously testified before the Committee on Education and Labor, federal aid from all sources for our elementary and secondary programs, including the National School Lunch Act and the National Defense Education Act, totals approximately $413,000 in the White Plains School budget for the current year, 1966–67. In addition we have an adult education center which is in operation both day and night. Federal aid for our Manpower Development Training Program and for programs in basic education will amount to approximately $1,000,000 in 1966–67. As a result of the basic education and MDT programs we have given new hope to adults who were functionally illiterate and lacked the training necessary to obtain jobs in Westchester County. We have taught adults to read and enabled them to vote and enjoy the daily newspaper. We have trained typists, stenographers, auto mechanics, food service workers, electrical workers, metal workers and practical nurses. As of January 1, 1967 we had 242 adults in our multi-occupational MDT program, 145 others had graduated and of those 115 had been employed. This is an exciting program. It

has helped "disadvantaged" adults to gain a sense of worth and self esteem. It has helped them get jobs and it has taken many of them off the welfare rolls.

Needless to say, we appreciate this assistance and we are doing our best to spend these federal funds as economically and effectively as we spend funds which derive directly from our own local real property tax.

As local real property taxes rise, schools throughout the nation will need more and more federal assistance if they are to cope with the problems of public education in urban, suburban and rural areas during the coming decades.

It will also become increasingly important that these federal funds be applied with maximum effectiveness. And if this is to be done, ample federal funds must be made available in advance and on something more than a one-year basis.

Specifically, I would urge the Congress to make funds available promptly so that scheduled educational programs can open on time, with requisite materials and supplies. And further, I would urge that the Congress provide federal education funds on some long-term basis, at least a three- or four-year basis, rather than annually.

Public boards, such as boards of education, cannot prudently embark on programs involving additional expenditures unless they are assured of receiving promised support in a timely fashion and over a period of years which will make it possible to secure and retain qualified personnel to execute those programs. It is quite difficult in the face of the national teacher shortage, to obtain qualified professionals for programs that are funded for only one year.

Especially in the case of those programs which have operated and which may continue to operate under one-year funding, it is imperative for funds to be authorized early in the year. Many school systems and state education departments operate on a July 1 to June 30 fiscal year and they must be able to recruit professional personnel in January and February if they are to secure competent teachers and specialists for programs scheduled to begin the following September. A final deadline in January for funding such programs would enable school districts to spend these funds in a far more effective manner. Without a firm, early commitment on funds, superintendents and boards of education simply cannot secure personnel in time and there are inevitable delays in ordering supplies and equipment.

Belated funding severely impairs any program. It is the most common, most deeply felt criticism of federal aid to education.

Paperwork is another problem, especially for programs funded under the Office of Economic Opportunity. We realize that the local district must be accountable for federal funds, and we acknowledge the right of federal departments and the Congress to require meticulous accounting of disbursements and the manner in which disbursements are applied at the local level.

But let us work together, somehow, to simplify all reporting procedures so that the man hours spent on reports and accounts will be kept to a minimum. It is becoming increasing difficult for local school budgets to absorb the hidden administrative, clerical, and accounting costs necessitated by many federal assistance programs.

Finally, I would urge the Congress to consider, in funding all existing and future programs, the very considerable overhead, administrative and planning costs incurred by state education departments and local school systems which participate in federally aided projects.

Staff time and consultant services which are necessary in the planning and application stages; clerical, accounting and administrative costs incurred as the program moves into the operative stage—these all add up. Allowance should be made for such costs when funds are allocated. Moreover, a significant proportion of the total federal grant should be available immediately upon approval of each local project, so that monies will be at hand to meet financial obligations. In New York and some other states, federal funds cannot be commingled with other local budget funds, nor can the local school district borrow money to meet immediate obligations stemming from federal projects because no part of a federal grant may be used to pay interest.

The urgency of these recommendations should not be taken to imply any fundamental dissatisfaction with the federal aid to education program. The assistance provided by the Congress has been invaluable—in White Plains, and in school systems throughout the nation. We need these federal funds, and we shall need even more federal assistance in the years immediately ahead. We shall welcome any assistance that will enhance and enrich the elementary and secondary education of *all* children, any help that will enable us to take closer account of each

child's unique needs and talents, any support which will help educators keep abreast of new developments, evaluate them wisely and apply them to the benefit of all the boys and girls in our schools.

But whether we are planning a new remedial program, a new enrichment program, or an in-service training course for teachers, we must be able to count on receiving a definite sum of federal money on a definite date if the projected programs are to be staffed, equipped and instituted in an orderly and effective fashion. Hence, the plea for continued, expanded federal assistance, funded promptly on a basis longer than one year.

As superintendent of schools in a small city, I clearly perceive that the educational needs of even my relatively favored community cannot be met as they should be met without substantial assistance from both state and federal treasuries. The needs of schools in less-economically privileged sections stagger the imagination. Clearly, local, state and federal officials and legislators must work together to meet the needs of public education in the latter half of this century—and must together find ways to reduce paperwork, expedite funding, and maximize the value received for every local, state and federal dollar invested in education.

WEDNESDAY, APRIL 26, 1967.

THE FOOD AND DRUG ADMINISTRATION

WITNESSES

MRS. RUTH DESMOND, PRESIDENT, FEDERATION OF HOMEMAKERS
MRS. A. I. MALSTROM, BOARD CHAIRMAN, FEDERATION OF HOMEMAKERS

Mr. FLOOD. We now have Mrs. Gordon B. Desmond, president of the Federation of Homemakers.

Mrs. DESMOND. Thank you, Mr. Chairman.

The Federation of Homemakers is a nationwide organization of public-spirited individuals. I am accompanied by our board chairman, Mrs. A. I. Malstrom, who wishes to present to you on behalf of the board a copy of a book, "Dance With the Devil," by Gunther Schwab.

Mr. FLOOD. What is the nature of this book?

Mrs. MALSTROM. It deals with pollution.

Mr. FLOOD. Air or water pollution?

Mrs. MALSTROM. Everything, really. Environmental pollution.

Mr. FLOOD. Of course where I come from, the coal fields of Pennsylvania, that is a major disaster.

Proceed Mrs. Desmond.

Mrs. DESMOND. This is the eighth appearance of this organization before the members of this subcommittee. In the past we have always been personally welcomed and questions by the late Representative John E. Fogarty, chairman of this subcommittee. We are truly grieved over his untimely death. But we are hopeful that our views as concerned consumers, not experts, speaking for our members will continue to be welcomed. We have always appreciated this opportunity to appear in support of an adequate approriation for FDA—whose responsibilities for protecting the public from filthy food, contaminated food, from unsafe and ineffective and inadequately tested drugs (drugs—the side effects of which are not fully described in advertisements intended for physicians). Now the FDA has the duty of eliminating the black marketing of certain drugs deemed to be addic-

tive. It must see that veterinary medicines are not substandard and are safe. It now checks to ascertain the quality control in drug manufacturing. Surely it should be permitted to check the quality control with respect to food processing? Even animals feeds now must be inspected for contamination as well as for drugs permitted in them. These are but a few of the duties assigned to this agency—truly its burdens and duties are awesome. Although it must protect the public—it is admonished not to cause hysteria amongst the consumers. It is advised to cooperate with industry—be sympathetic to industry problems—but never told to consult with representatives of consumer organizations.

Since we last appeared here—the Commissioner's office has moved to spacious accommodations in Arlington where we have been happy to see the FDA Drug Bureau established for several years. There are still important FDA staff housed inefficiently in the South Agriculture Department Building and also in other buildings.

It is our custom to speak in general terms of the budget needs for FDA. Certainly it is evident that there should be additional laboratory facilities—and we understand Beltsville, Md. is the suggested location.

We applaud the use of recently graduated USPHS officers in FDA's programs and the continued use of special scientific committees for advice on matters which affect the public's health—perhaps its life. We have noted that FDA scientists will from time to time bring their scientific knowledge up to date at an area university.

We recall 8 years ago this agency first received a budget increase of any consequence. Previously it carried out its duties on a pittance and the first Citizens Advisory Committee, which made its report to the Congress in 1955, warned that unless its staff was increased and its facilities modernized this country could anticipate a catastrophe.

The publicity accorded the thalidomide tragedy and the part our FDA played in protecting U.S. infants from such pitiful deformations—also revealed the shocking inadequacy of FDA's Bureau of Medicine—insufficient staff and obsolete equipment.

Since the thalidomide revelation, the jolt of the late Rachel Carson's "Silent Spring," the coverage of damage to patients taking MER 29, the White House Report on Pesticides, the investigations of drugs by the late Senator Kefauver, the hearings on drugs conducted by the then Senator Hubert H. Humphrey, the hearings on pesticides by Senator Ribicoff, the publicity of the drug hearings of former Chairman Oren Harris, and the present hearings being conducted by the Senate on "Research in the Service of Man: Biomedical Development, Evaluation of Existing Federal Institutions"—all of this has alerted much of the thinking public to the need for more protection from environmental hazards, the need for purifying our environment before it is too late.

Officers of this group have attended the hearings mentioned as well as other pertinent congressional hearings on matters of hazards to the public and they have copies of the printed records for reference.

Therefore it seems obvious to our board that either the Food and Drug Administration will need, in the immediate future, enormous increases in its budget to provide more inspection re pesticide residues on foods, for scientific research (even having it done by colleges and universities), to provide the knowledge—admitted lacking—to protect

the captive public from the results of technological advances which have forged ahead of knowledge of possible effects on humans and ahead of medical knowledge to adequately diagnose the effects of said technological advances. There seems to be an unfortunate lack of knowledge of interaction of chemicals, of potentiation, of cumulative effects, lifetime effects, and genetic effects.

The "Report of the Committee on Environmental Health Problems to the Surgeon General" in 1962, chaired by Paul M. Gross; the speech by Richard A. Prindle, M.D., Assistant Surgeon General and Chief, Bureau of Disease Prevention, and so forth, before the Interstate Milk Shippers Association National Conference on April 3, 1967; the report of "Pesticides in the Environment" prepared by the Robert A. Taft Sanitary Engineering Center, in 1966; the report of the FDA's Advisory Committee, appointed to review the petition of the California State Departments of Public Health and Agriculture to establish a tolerance for DDT and related compounds in milk and milk products—all point to the need for published research on the extent of the risks humans are taking as a result of technological strides, and the legislation passed by the Congress which permits the use of many chemicals when their interactions, genetic effects, potentiation are either in doubt or unknown.

Perhaps information of benefit to humanity will be forthcoming from the New York Academy of Sciences Conference on "Biological Effects of Pesticides in Mammalian Systems," this May 2–5, at the Waldorf-Astoria.

Several years ago it came to the attention of federation officers that through the use of hypnosis on volunteers three Public Health Service scientists, Dr. Peter Mueller, Dr. Jacob Fishman, and Victor Loeffler, at the National Institutes of Mental Health, discovered that the stress of emotions—anxiety, depression and anger—release the free fatty acids from the human body's fat depots and these fatty acids circulate through the entire system. Immediately we asked for information as to whether the pesticides stored in the human fat also were released and circulated through the body and the effect on the individual. Perhaps the New York Academy of Sciences Conference will bring forth a reply to this question.

At this time we wish to present for inclusion in the printed report a review of this federation's unique experience when participating actively at the FDA hearing to establish a standard of identity for peanut butter—"A Capsule Account of FDA's Peanut Butter Hearing" together with this federation's letter to the FDA hearing clerk requesting a public hearing on its proposal to establish tolerances for DDT, DDE, and DDD in milk and milk products. Also included is the federation's resolution, passed in 1965, calling for the creation of a new House Committee on Health and Safety.

Mr. FLOOD. Without objection, this will be included at the end of your presentation.

Mrs. DESMOND. From our participation at the FDA peanut butter hearing, it became crystal clear that the representatives of consumer organizations need expert legal advice, not only in establishing the issues, but also in framing questions and making objections, and for interpretation of the legal phrases and the intent of past and contemplated legislation. We are now hopeful that the Congress will consider

creating an Office of Consumer Advocate. We were delighted to read in the Washington Post of April 19 that Mr. Ralph Nader, in addressing the District of Columbia Bar Association, spoke of this need for attorneys for consumers.

Because there seems to be a limited legal staff assigned to FDA to hold public hearings, we advocate a substantial increase in the budget for an enlargement of this department of FDA.

In the future FDA is expected to hold hearings on the DDT tolerances to be permitted in milk, et cetera, and on the unpopular regulations pertaining to vitamins and food supplements, and dietary foods, et cetera. Probably also on its regulations to enforce the new Fair Labeling Act. Therefore this agency should have an adequate and competent legal staff in order that these hearings shall not be postponed indefinitely, as were the peanut butter hearings, certainly to the disadvantage of the consumers.

Let us hope that Congress will decide to restudy and to strengthen its laws on pesticide residues, additives, color additives, and will write amendments to better protect the public. Again, FDA would require a competent legal staff to present its legislation, its amendments. Surely for this type of congressional hearing there is a need for an Office of Consumer Advocate.

There is much in the press today about the need for cleansing our rivers and streams and purifying the very air we breathe. But nothing seems to be mentioned about the ventilation of our homes, the possible dangers she incurs when a housewife stays home on a cold, rainy day or a snowy day to clean her house with windows and doors closed tightly. What of the effects from using floor wax removers—their strong fumes? What are the effects of a combination of wax remover, floor wax freshly applied, furniture polish, room fresheners, moth repellants, varnish, bathroom cleansers and deodorizers, combinations of chemicals in the washing machines—and then application of nail polish remover, application of fresh nail polish, even hair spray? Suppose the housewife is one of the predicted 7,000 residents of the United States who suffer heart attacks in 1 week, mentioned by Dr. Van Dellen in the Washington Post, April 5, 1967? Occasionally one sees warnings that alcoholic beverages and fluids for removing spots from clothing do not mix, could even be lethal. Should not there be additional warnings on household products which could produce the harm mentioned above? If it is harmful for the ill to be subjected to paint fumes—especially those with heart conditions and kidney disease—should not the public and physicians alike be warned?

If paint fumes, fumes from cleaning fluids, other household chemicals destroy required vitamins in the human body, then the public and its physicians should be notified, then additional vitamins can be taken. Even if this harm is now only suspect, there should be research to uncover the facts. The research of Dr. Boris Sokoloff, director of the Bio-Research Laboratory, Florida Southern College, on benefits of vitamin C have disclosed the benefits to be obtained from large amounts of said vitamin.

This spring, specialists in kidney diseases and their treatment appeared on TV for the National Kidney Foundation and disclosed that certain kidney defects were caused by congenital defects, individual sensitivities, effects of potent drugs, et cetera. The foundation

estimates that at least 3 million members of the public have serious undiagnosed kidney disease. If certain food additives, preservatives, dyes, drugs, pesticides, household chemicals, paints and their interactions are predisposing humans to kidney disease—this information should be publicized. We cannot eliminate these chemicals, mentioned above, from contributing to degenerative illnesses until they have been exonerated through scientific research. We have stated before when appearing here that in a decade or so every home will have an artificial kidney machine. Now after so much publicity about the deaths of victims of kidney disease because of lack of this type of equipment—there are reports of inexpensive kidney machines being developed. Our prediction may come true unless our environment is screened with many suspect pollutants removed.

For the second time in 4 years—nutritionists with FAO–WHO have called for a reevaluation of the additives used in processed infant foods. This December 1966 in Rome, 15 nutritionists with FAO–WHO recommended the elimination, wherever possible, of additives in infant foods. Again, this federation appeals to the members of this subcommittee, to FDA, and to the Congress for a study of this particular problem—possibly placing additives to be permitted in processing infant foods in a separate classification from those pertaining to additives in processed foods for adults. The fact that the United States has ranked only 12th amongst the nations of the world in infant deaths 1 year and under is not only disgraceful but indicates the need for a study of the processing of infant fare. Infant food should not appeal to the taste buds of mothers nor to the jaded tastes of those needing a bland diet. Infant food should be designed solely and exclusively for infants.

Mr. Chairman—we thank you again for this opportunity to speak in behalf of the needs of the public for protection through an adequate appropriation for FDA.

(The following was submitted for the record:)

A Capsule Account of FDA's Peanut Butter Hearing

Never before has an FDA Hearing received so much publicity! It seemed every newspaper in the Country carried stories of the first days of the Hearing. What Federation Officers said—what spokesmen for the manufacturers said—what a spokesman for the growers of peanuts said! From time to time an incident of the hearing would come out in the newspapers. Recall the coverage of the testimony of Dr. W. C. Hueper—noted cancer researcher—and the Federation's distinguished witness! The publicity accorded the Federation was amazing. It brought us many loyal new members. Letters to us came in care of FDA. Our Arlington P.O. brought us any letters addressed to Homemakers, Housewives, etc. Even Walter Cronkite carried the Federation's interview. So did other T-V stations throughout the Country. And many radio interviews were taped.

Our Charter members recall that in 1959, shortly after the Federation was formed this group supported the *Proposed* FDA Standard of Identity for Peanut Butter—published in the Federal Register in July 1959. What a pity FDA did not establish it by 1960. Consumers would now have a peanut butter of exceedingly high quality—no less than 95% peanut material and not more than 5% carefully restricted optional ingredients. That summer State Food and Drug Officials, Directors of State Health Departments, physicians, pediatricians, the American Home Economics Association, women's clubs, home economists, private individuals and small manufacturers of peanut butter all supported this FDA 1959 Proposed Standard of Identity Only the Peanut Butter Manufacturers Assn. and the three giant producers of peanut butter vehemently opposed this fair and honest Proposed Standard.

When an FDA inspector learned that Jif contained no more than 75% peanuts and at least 20% of a crisco-type stabilizer together with sweeteners and an artificial flavoring—the Agency felt it was high time to establish a fair and honest Standard of Identity for this product before other manufacturers started to change their formulas. It was then that FDA learned that both Peter Pan and Skippy had been manufacturing a peanut product since the 1940s which contained less than 90% peanuts (87% peanut material) with stabilizer and salt and sweeteners making up the rest. Until then it had been assumed that peanut butter consisted mainly of peanuts with a little salt and possibly sugar added to improve the flavor.

Both Skippy and Peter Pan argued that since the public had accepted their products as Peanut Butter all these years—then this should be the Standard for Peanut Butter—87% peanuts plus stabilizers and flavorings. Apparently these companies did not feel they had been tricking the trusting public. They also stoutly maintained this was not yet the time for a Standard for Peanut Butter since they were still engaged in perfecting their ART (or was it artifice?). The Trade Association soundly berated FDA for criticising JIF for its lack of peanuts. Instead, this Trade Association maintained JIF should be commended for its inventiveness—for its PROGRESS—for its improvement of this particular product. Amazingly—the small manufacturers of peanut butter now wrote second letters to FDA stating they opposed the Proposed Standard—at the request of the Peanut Butter Manufacturers Association.

FDA took no immediate action and many months later issued a Standard of Identity for Peanut Butter which would permit just 90% peanut material plus 10% optional ingredients. Were the giant manufacturers of this product delighted at this concession? Not at all! They continued to insist this was not the time to establish a Standard for this Product still in the process of being improved. Their Trade Association wrote a lengthy paper against such a Standard which permitted so little room for future improvements!

In July 1965 FDA issued a Standard for Peanut Butter still with 90% peanut material but permitting additional optional ingredients and also 3% hydrogenated cottonseed oil. Again, the Trade Association and the large manufacturers protested this was unfair to them, and requested a public hearing so they could prove there was no need yet for such a Standard of Identity and furthermore the Standard published by FDA would not permit improvements (changes) in the product in the future. They requested that FDA permit vitamins, artificial coloring and flavoring, preservatives in its final Standard. You recall that this Federation still endorsed the first FDA Proposed Standard which permitted only 5% optional ingredients and 95% peanut material? We maintained the spreadable product should be labeled Peanut Spread in fairness to the public—and we called for a public hearing.

The pre-hearings to determine the issues were an ordeal for your officers without any attorneys to advise them. But we maintained that it would be a tragedy if the voice of the consumer was stilled merely because it was impossible to obtain expert counsel. First the issue of Peanut Spread was deleted—then on the second prehearing day—it was restored—despite vigorous protests from the opposition attorneys. Attorneys for JIF invited the Federation to present its statement and then withdrew. The Federation pointed out that its officers and members had been interested in this Peanut Butter Standard since 1959 and felt it would be an injustice not to let its officers represent the informed membership merely because we had no counsel. We pleaded it would be a sad day when legal red tape and procedures prevented a consumer group from speaking for its membership. Despite the continuing protests of the industry lawyers—FDA permitted Federation officers to participate actively in this hearing—even to cross-examining witnesses and objecting to certain questions and answers.

From the beginning counsel for the Trade Association (two sets of attorneys no less) kept insisting that the Hearing Examiner—Mr. William E. Brennan—disqualify himself. This he refused to do. We considered him fair and most patient during an exceedingly bitter hearing. From time to time opposition counsel trouped to the office of Commissioner Larrick to protest Mr. Brennan's rulings and the fact that this Federation was permitted to participate. It is said that never before has there been such a bitter, vicious FDA hearing. Do you suppose it was because we were there daily—giving moral support to FDA? Standing up for its decisions, its witnesses against industry opposition? Perhaps if consumer organizations had participated this wholeheartedly at previous hearings—standardized foods would be of higher quality.

We learned that just before the preliminary hearings started—six trained lawyers in the General Counsel's office of HEW resigned! This left a young lawyer with little food and drug law experience representing FDA—with two assistants who had never taken law school courses. Despite this handicap—Mr. Foley rose to the challenge and, we feel, ably presented FDA's case. The attorney representing JIF sometimes had two law clerks dancing attendance and a personal secretary—along with a statistician—and experts to advise him on scientific matters. Most of the time Skippy had a senior and junior lawyer present—together with a scientist. Sometimes there were as many as thirty attorneys present—especially at the preliminary hearing. They would drop in when the issues they were arguing came up at the regular hearing.

We heard from a Trade Magazine writer that this Federation emerged looking just great, sensible and courageous, and in the right. The Food and Drug Adm. appeared slightly tarnished and as a procrastinator. But the industry appeared terrible. Perhaps that is why Doctor Frederick Stare wrote several articles about this hearing in his newspaper column. He expressed disgust in one article that the FDA stooped to play "footsie" with a far out group. I presume he meant us. It is also conceded that as a result of the publicity and the Federation's statements publicly that Peanut Butter should contain more peanuts in fairness to the public—the present peanut butter is of a better quality than when the hearing started. Do you recall the Skippy radio ads before the Hearing—stressing spreadability? Now they emphasize the melting quality.

And do you recall the JIF ads just before the Hearing commenced? They also stressed spreadability! A small child was shown spreading this spreadable JIF on his "soft" bread without tearing it. Counsel for the Trade Assn. would pleadingly ask witnesses if they wanted to deprive little kiddies of their spreadable peanut butter? Pointing out the Standard under consideration would do this. This Federation would ask if it would not be fair to call this spreadable product which did not wreck the "TEARABLE" bread Peanut SPREAD? Then JIF produced a *new* commercial after the papers brought out that in 1958–59 it had about 20% Crisco-type base as a stabilizer—this time showing adorable youngsters climbing and scampering about on a Mountain of Peanuts. A voice stated JIF had a better flavor than others because it was a Mountain of Peanuts in a little jar. Now there is the *newest* JIF commercial. A "Choosy" Mother chooses JIF for her family because of its wonderful peanut aroma and attractive appearance. Then a voice again proclaims that JIF is a mountain of peanuts in a little jar. Nevertheless at the hearing JIF wanted a relaxed Peanut Butter Standard requiring *less* peanuts than 90%. Why? Did you note the gimmicks JIF employed last summer and fall? Hand brushes or children's toys on the jar tops! Yet this firm does not want specific labeling of ingredients—charging it is expensive to print new labels when a different ingredient is used or substituted. However it changes labels at will for an advertising gimmick!

Federation officers felt this hearing encompassed more than developing a fair and honest Standard for Peanut Butter. It seemed an opportunity to fight for the integrity of this Country's food—against adulteration. It seems when food processors want to adulterate wholesome foods—they plead it will actually benefit consumers because it keeps prices from rising. Most of the time we displayed at this hearing peanut butter from Walnut Acres or Co-Op Stores. These contained only peanuts and salt.

The marvelous turnout of our area members the first day of the FDA Hearing (Nov. 1, 1965) helped to carry our point that homemakers want quality food for their families. At least 75 members attended some part of that first day. It seemed to upset opposition counsel and their clients to see these fine-looking, intelligent members attending this type of hearing. One young mother brought her healthy baby son—who never once cried. There were seven children there—some in the morning—some in the afternoon. Behavior superb. A credit to their parents, and all apparently in excellent health.

Many of the counsel representing the manufacturers were veterans in food and drug legislation. The Food and Drug Law Institute was founded by several of the attorneys present and the late Charles Wesley Dunn, who also helped found The Nutrition Foundation. These specialists generously assist Congressional Committees in writing our so-called protective food, drug and cosmetic legislation. Next, they aid FDA in writing its Regulations enforcing these laws. Finally, they appear with their clients at the FDA Hearings. The standards are supposed to promote honesty and fair dealing in the interests of consumers but

then they must also be "reasonable". Their interpretation of *reasonable* seems to cancel out "fair" and "honest"! Reasonable seems to mean accepting the manufacturing practices of the food processors rather than considering the side of consumers.

Throughout the entire hearing opposition counsel behaved as though this were a criminal proceeding. FDA witnesses were belittled in an attempt apparently to discredit their testimony as valueless—incompetent. Despite this Mr. Gufstanson, appearing for the National Tea Company, carried his point that their Hazel peanut butter (all peanuts and salt) was popular so they would continue to produce it after the FDA Standard was established. He stated it was packed under vacuum and the oil did not separate until it was opened. He testified that other peanut butters the Company produced would decrease in quality if FDA merely permitted 87% peanut material and 13% optional ingredients—to meet competition. The witness for the BAMA Company (a subsidiary of The Bordon Co.) stated peanut butter does not have a good flavor unless it contains at least 90% peanuts. Mrs. Nelson, California's Consumer Consultant, held her ground that the stayed FDA Standard seemed *reasonable* but that the proposed Standard of 1959 seemed fair and honest for consumers. She further testified that homemakers she queried already thought the FDA had established a Standard for Peanut Butter and that it was 90% peanuts. They believed some one in Washington was looking after the consumers' food interests.

Industry witnesses followed the concluding of FDA's case. Expert witnesses (some at $300 a day) attempted to discredit the over two thousand letters FDA had received from the public regarding its Standard for Peanut Butter. FDA was criticized for not conducting a survey to ascertain the views of the writing public respecting peanut butter. Otherwise how could the Agency accurately interpret these letters from consumers? It was maintained by opposition that most of these letters were written as the result of radio broadcasts and did not actually represent the views of the writers. We maintained that when consumers feel strongly enough about a food product to write to the FDA—then this Agency should give serious study to these views. At the same time that these letters were being discredited a survey made for P & G, among several companies, was offered as proof that the public is not worried about additives in peanut butter—not worried about hydrogenated oils or other stabilizers, antioxidants, flavorings, etc. FDA attempted to discredit this particular survey, and Fed. Officers felt it was not valid. Multiple choice questions which first tended to educate and then to lead those interviewed to the correct answers—or desired answers—were employed. The interviewers read these questions to the interviewed and wrote down their replies. It looked as though many of those interviewed were in the lowest income rank and had limited education—about eighth grade. We felt it might be easy to elicit the desired answers from these people—eager to conceal their lack of knowledge and anxious to please.

Doctors Frederick Stare and William Darby appeared as expert witnesses on nutrition for the manufacturers—not in behalf of FDA or the public! Dr. Stare has been for years Editor of *Nutrition Reviews* published by The Nutrition Foundation—sponsored by food processors and manufacturers. Dr. Darby has from time to time served as an Associate Ed. of said *Nutrition Reviews*. Both stated it would not impair the integrity or value of this product to have it consist of but 80% peanuts and 20% optional ingredients! They both stated mothers should purchase foods which the youngsters desire rather than teach good eating habits. Dr. Stare at one time was so crude in his description of a process that our members gasped in shock and disappointment. Both thought it all right to add artificial colorings and flavorings, preservatives and vitamins to peanut butter in the name of PROGRESS. Dr. Stare under Fed. questioning stated he was not aware that Dulcin and Coumarin were food additives (both banned by FDA as harmful). Peter Pan's President admitted it could meet FDA's Standard if it reduced the amount of sweetner. Peter Pan is *Spreadable* with just 1.6% of a stabilizer. This the Federation brought out.

This Federation produced the noted cancer researcher, Dr. W. C. Hueper, whose latest books are written solely for the medical profession. Dr. Hueper opposed using artificial dyes or flavoring or vitamins in this product. He spoke out for listing all ingredients on the labels. Our lovely housewife-witness—Mrs. Marshall—charmed even the opposition. Her sincerity was apparent and her desire to feed her family only wholesome and safe foods came forth in her testimony. She stated it is difficult to purchase the traditional peanut butter in area stores today. The Federation's President was placed on the stand

and opposition attempted to make the group appear insignificant and unrepresentative. We could hear words such as "perjury" and "jail sentences" in stage whispers. Perhaps to intimidate us? We are incorporated and we register as "unpaid" lobbyists. We testified about our Income Tax status. We refused to reveal names of our members. Gave approximate size. Without warning the next week I was called to the witness stand by Mr. Austern and told that for three weeks he had been endeavoring to get information on our Tax Status from the Wash., Balto., and Richmond offices of IRS but the answer always was "no record". He advised me to clear matters up at once. The Hearing Examiner, FDA attorney and many others were aghast at this attempt to smear this group. Fortunately the Director of IRS in Richmond furnished letters which proved we were in good standing. I was able to point out that the learned counsel had been searching for this Fed. under the *wrong* classification and naturally he received a negative response. Now we know how Ralph Nader must have felt with that detective snooping. Dr. Theron Randolph, noted allergist from Chicago, appeared as an independent witness. Corn Products Corp. was so distressed it had three allergists present to listen to his clear and concise testimony, after desperately attempting to bar him from testifying. Now we await the final verdict by FDA.

FEDERATION OF HOMEMAKERS,
Arlington, Va., April 14, 1967.

Re: Need for a Public Hearing to clarify position of FDA on granting tolerances for DDT, DDD, and DDE in dairy milk and dairy products without providing a specified date for termination of said tolerances

HEARING CLERK,
Food and Drug Administration,
Washington, D.C.

Dr. MISS MCCULLAR: This Federation's letter of February 13, 1966 requested a public hearing to clarify the reasons given for the need to set tolerances for residues of DDT, DDD and DDE in milk and dairy products and mentioned the need to determine a date for the banning of said tolerances when DDT and its related compounds had been eliminated from the soils and from the forage and other feeds of dairy cattle.

Because there is now before the Senate Agriculture & Forestry Committee a bill (S. 1025) to ban the sale and the interstate shipment of DDT—there seems justification for the argument that the FDA tolerances for DDT, DDD and DDE residues in milk and dairy products should be temporary.

It is sad to reflect that misuse, overuse and abuse of the pesticide DDT has resulted in a situation that milk—a product ingested by infants, the ill, the pregnant and the elderly, as well as many others—should be contaminated and will remain contaminated with said pesticide for some time. It is tragic to realize that mothers who hope to provide better nourishment for their infants by nursing them have probably higher residues of DDT in their breast milk than is permitted in commercial milk, because of the continued and extensive use of DDT.

A report of studies in hypnosis conducted by three Public Health Service scientists, Dr. Peter Mueller, Dr. Jacob Fishman and Victor Loeffler, in 1962, indicates that under emotional stress such as intense anger, fear or depression the free fatty acids leave the body's fat depots and enter the blood stream! This would indicate that DDT in the body's fat depots, as well as other pesticides of its type, may be released in times of emotional stress and again enter the human blood stream.

A public hearing on this proposed FDA Regulation would bring out what has been learned recently (because of improved techniques and more sensitive instruments) of the effect of DDT on both laboratory animals and humans. At this public hearing our foremost scientists in this field should be permitted to testify on the effects of DDT when ingested over a *lifetime* and its *interactions* with other chemicals and additives.

Because FDA failed to establish a definite time when tolerances for DDT, DDD and DDE should be ended—ignoring the legislation now before the Senate Agriculture Committee to ban the sale and interstate shipment of DDT—and apparently has not explored the hazard to humans from lifetime ingestion of said DDT—nor studied its interactions with other chemicals, drugs, food additives, etc.—a hearing on said proposed FDA regulation is requested.

Sincerely,

(signed) RUTH G. DESMOND,
President.

RESOLUTION OF THE FEDERATION OF HOMEMAKERS

Whereas, scientific and technological changes have proliferated in the last two decades as never before, and

Whereas, health hazards and threats to personal safety have also multiplied, and

Whereas, there has been a vast increase of problems involving health and safety attending the expansion of novel practices in industry, agriculture and Government, and

Whereas, the Committee on Interstate and Foreign Commerce has become increasingly burdened by the diversification of modern commerce and problems hitherto unknown to mankind, and

Whereas, it is unlikely that even so dedicated a group of legislators as the Committee on Interstate and Foreign Commerce can devote the necessary time and energy to the myriad tasks and responsibilities facing them, created by the aforesaid technological revolution, Now Therefore

Be it resolved that the Federation of Homemakers, a nationwide group of public-spirited individuals, requests the Congress of the United States to create a new Standing Committee in the House of Representatives to be known as the Committee on Health and Safety, and that this aforesaid Committee be assigned the task of studying and reporting to the Congress and the public on all National problems relating to health and safety, and considering legislation which would vitally affect the public in these specific fields.

Unanimously passed by the Board of Management of the Federation of Homemakers at its regular meeting, April 8, 1965.

RUTH G. DESMOND,
President.

Mr. FLOOD. That is one of the most interesting presentations I have heard in 3 months. Mrs. Flood would join you in this. You are certainly touching on an area about which we have heard too little.

Mrs. DESMOND. We do have these reports, you know.

Mr. FLOOD. Yes, I know, but apparently you need friends at the administrative government levels because this has not been presented here.

Mrs. DESMOND. We usually bring some facts every time we come in that eventually are considered seriously.

Mr. FLOOD. I think you had better go up and knock on Dr. Shannon's door at NIH.

Mrs. DESMOND. We might do that, sir, at your suggestion. About 10 years ago when I went out to NIH I was given some papers which I cannot find that research was going to be done between NIH and the Boston Children's Hospital on the effects of waxes on pregnant women. I did bring it to Chairman Fogarty about 3 years ago, and at your suggestion I will go see Dr. Shannon.

Mr. FLOOD. Tell him I sent you.

Mrs. DESMOND. Thank you very much.

Mr. FLOOD. Thank you, Mrs. Malstrom, for the book. I will read it and the next time you come back I will tell you about it.

WEDNESDAY, APRIL 26, 1967.

KIDNEY RESEARCH

WITNESSES

DR. GEORGE SCHREINER, PROFESSOR OF MEDICINE, GEORGETOWN UNIVERSITY; CHAIRMAN, SUBCOMMITTEE ON LEGISLATION, SCIENTIFIC ADVISORY BOARD, NATIONAL KIDNEY FOUNDATION
DR. NEAL S. BRICKER, PROFESSOR OF MEDICINE, WASHINGTON UNIVERSITY, ST. LOUIS, MO.
ROBERT J. SMYTHE, EXECUTIVE DIRECTOR, NATIONAL KIDNEY FOUNDATION, NEW YORK, N.Y.

Mr. FLOOD. We will now hear from representatives of the National Kidney Foundation.

STATEMENT OF DR. GEORGE SCHREINER

Dr. SCHREINER. Thank you, Mr. Chairman. I am Dr. George Schreiner, professor of medicine at Georgetown University. I am chairman of the subcommittee on legislation for the National Kidney Foundation. I am also secretary of the American Society of Nephrology. We have with us Dr. Neal S. Bricker, professor of medicine at Washington University, St. Louis, Mo., past president of the Scientific Advisory Board of the National Kidney Foundation and the first president of the newly formed American Society of Nephrology. This newly formed society now has 1,000 members and we expect to have 2,000 within a short period of time.

Mr. Robert Smythe is executive director of the National Kidney Foundation, and would like to present the prepared paper.

STATEMENT OF ROBERT J. SMYTHE

Mr. SMYTHE. The exact mortality rate from diseases of the kidney is unknown but lies between 25,000 deaths from primary kidney disease to perhaps 100,000 deaths from related conditions such as diabetes, hypertension, gout, or stroke which are often the cause or effect of kidney disease.

Mr. FLOOD. What is gout?

Dr. BRICKER. It is a disease that afflicts the joints caused by uric acid in the blood. It is in the arthritis family except people do not die from arthritis but they die from gout because of the kidney aspect.

Mr. SMYTHE. The mortalities, shocking enough at a time when the lives of most end-stage kidney disease patients can be preserved through dialysis, are merely the beginning of the story. The 1963–64 National Health Survey found that acute genitourinary tract disease—excluding venereal disease and menstrual disorders—was responsible for restricting the activity of 6.7 million people.

Chronic genitourinary disease limited the activity of anotther 1.1 million people, making chronic genitourinary disease the fourth most common cause of nonorthopedic impairment in people under the age of 45.

Of the estimated 3.3 million people in this country carrying infectious organisms in their urinary tract, a significant number will never know of their condition until survival is no longer a possibility.

Mr. FLOOD. Is this a virus in the walls of the urinary tract?

Dr. SCHREINER. We use that term to designate from the urethra to the bladder neck.

Mr. FLOOD. Is this a bacteria?

Dr. SCHREINER. Yes. It may affect one specific part or several parts. We speak of the kidney as the upper urinary tract.

Mr. FLOOD. But the whole tract is irritated?

Dr. SCHREINER. It may be. At the moment, viral disease of the kidney is an unknown quantity. We have a feeling it is there but we do not have the proof yet.

Mr. SMYTHE. These statistics are necessary to establish the fact that the problem of kidney disease is an important one in both humane and economic terms, more important than the "official" mortality rate shows.

The small amounts of money Congress has thus far appropriated for the fight against kidney disease have been largely directed to end-stage therapy—dialysis and transplantation. Yet, an estimated 4,000 to 6,000 medically suitable dialysis candidates still die each year because dialysis was not available to them. True, emphasis has been placed on research and development in dialysis technology. Between 1960 and 1965 our average yearly population net growth rate was 14.6 per 1,000, by no means the highest but high nevertheless. Improvements in dialysis technology will certainly lower the cost of dialyzing individual patients, but there will be, if only as a function of population growth, a great many more patients. Not only is dialysis or transplantation for all these people likely to require a vast investment but, in the long run, concentration on end-stage therapy lacks logic.

Mr. FLOOD. Transplantations? You have not come that far, have you?

Dr. SCHREINER. We have a little over 300 per year in the United States and there have been 1,400 done in the world.

Mr. SMYTHE. The answer to this burgeoning problem is prevention or, where preventive methods do not exist, early detection and effective therapy. At present, only a few of the diseases afflicting the kidneys can be prevented in the primary sense of that word. Research can undoubtedly lengthen the list. A number of others are susceptible to early detection and therapy, called secondary prevention in medical parlance. For the rest there is only dialysis and transplantation therapy, which at this point in time is available only to a few.

It is, therefore, becoming "too late" for more and more and more people. Most kidney ailments remain poorly understood, the extent of the problem in the population remains largely undefined, better methods of detection await development, the natural histories of most kidney disorders are yet to be clarified, available modes of therapy await definitive testing while new modes await discovery, and comprehensive kidney disease prevention centers are only a hope for the future. Basic research is, therefore, a continuing goal of the National Kidney Foundation and must be increased along with expenditure for therapeutic success. It is obvious that the overall quest for the prevention and cure of kidney disease cannot progress any faster than the basic research that provides the foundation for increasing knowledge.

Mr. FLOOD. We have had a parade of people pounding the table for centers. They are not backward about it. Why are you?

Dr. BRICKER. Perhaps we can speak to this in a moment, sir.

Mr. SMYTHE. Shall I continue?

Mr. FLOOD. Yes.

Mr. SMYTHE. We respectfully suggest that this serious threat to the health of our citizens requires a greater national investment. At least $30 million additional could be spent in the kidney area to support renal stations, training programs, and basic research. The sums of money needed, in view of nearly 8 milion people ill with genitourinary disease in 1963–64, are trivial.

Mr. FLOOD. Thank you.

STATEMENT OF DR. NEAL S. BRICKER

Dr. BRICKER. What I would like to do very briefly is to try to give you what I think the essence of this report is.

If I might back off one step and tell you—and if you know this please stop me—the kidneys themselves, the two we are born with, in each of them is a group of approximately 1 million small kidneys. Each little kidney has 1 million long hollow tubes that constitute the basic elements of the kidney.

Mr. FLOOD. Exactly 1 million?

Dr. BRICKER. There is a total of 2 million in a human being. They are compressed in a very small organ. Each is a hollow tube that makes urine and each remains patent so that the urine that enters at the mouth end will continue its journey and excrete in the environment the water we drink and all the substances we eat that must be excreted in the environment if we are to stay well.

A host of other diseases affect nephron units and destroy them.

Mr. FLOOD. So many nephrons can be destroyed but only so many?

Dr. BRICKER. That is correct. If over 90 percent are destroyed some help has to be had and usually that is the judicious use of salt and water.

Mr. FLOOD. How do you know when an attack begins?

Dr. BRICKER. There are sensitive tests that indicate the number of nephrons available. We now have available to us the artificial kidney and transplantation. These offer life to people who used to die when the nephrons were destroyed. This creates a problem no country in the history of the world has had to deal with. First there is the expense of the artificial kidney which costs $8,000 to $10,000 a year per patient. The second problem is we do not have the manpower to put these stations around the country and do the job right.

My own philosophy, and one I think is representative of much responsible thinking in this area, is that we need a broad based approach that will keep people alive to the best of our ability using the personnel available; but at the same time we should support the development of techniques of prevention and support research. If we were to support only stations of artificial kidneys we might end up in the position of the polio people two or three decades ago if they had only purchased iron lungs and not pursued research for a polio vaccine.

Dr. SCHREINER. Six years ago we had a combined Government-industry-medical personnel meeting in New York specifically directed to the very early prospects that these techniques of treatment would become more and more available and pose certain problems. The official

recommendation at that time was we should begin with a pilot program of at least six centers which were estimated at that time to cost $1.5 million apiece, to set them up in university centers. Unfortunately, although money has been appropriated from year to year, we are no closer to this goal 6 years later than we were at that time. What happened, some people have wanted to see money poured into the development of an artificial kidney unit outside of the university structure. Other people have wanted to go to the dialysis unit; and other people have wanted to go in particular areas. All these things are good; but if you do the simple arithmetic and take the ideal candidates today, 6,000, and try to maintain them, at the end of the year you would have 12,000 if you kept the first 6,000. This shows you will soon be out of manpower. So if we were just to take money and pump it at the end of the pipeline, it would be very dramatic. But this would not be a proper approach to the problem. We are stalemated in this prime objective.

Some of the objectives are to increase training fellowships, of which there are none. We would like to increase the contract program and we would like to increase the basic research funds for transplantation, but more important is doing something about how to get all these units in one place where they cofunction.

Mr. FLOOD. What do you mean by one place?

Dr. SCHREINER. To give money to the dialysis unit situation where there will never be the potential to do the transplantation is a very shortsighted approach. Therefore, if the Federal Government will put money into dialysis units that will never develop that potential, we feel this should be in an area where personnel can be trained and brought in so that the manpower can develop. We have all sorts of technology developed but we do not have the heartland from which eventually the quality will have to flow. If you just go somewhere and say, "Here is $100,000 for a program" this does not create the talent.

Mr. FLOOD. I know mere dollars are not always the answer.

Thank you, gentlemen.

WEDNESDAY, APRIL 26, 1967.

STATISTICS PROGRAMS IN DEPARTMENT OF LABOR AND HEALTH, EDUCATION, AND WELFARE

WITNESS

JOHN H. AIKEN, EXECUTIVE DIRECTOR, FEDERAL STATISTICS USERS' CONFERENCE

Mr. FLOOD. We will now hear from Mr. John H. Aiken, executive director of the Federal Statistics Users' Conference.

Mr. Natcher, will you take over while I answer that quorum call?

Mr. NATCHER. Yes. Mr. Aiken, will you please proceed.

Mr. AIKEN. My name is John H. Aiken. I am executive director of the Federal Statistics Users' Conference. I want to thank you on behalf of the conference for the opportunity to appear before you to express our views on certain items in the budget for statistics programs of various agencies in the Departments of Labor and Health, Education, and Welfare.

FSUC is an association comprising approximately 160 organizations generally classified as business firms, labor unions, and nonprofit research groups who have a common interest in obtaining adequate, timely, and reliable information from Federal statistical programs.

Our membership is highly diversified. More specifically, it includes representation from trade associations and industries engaged in: advertising, banking and finance, insurance, manufacturing, retail trade, printing and publishing, economic and market research, and so forth. Almost every segment of the economy that uses Federal statistics is represented in the conference. The statistical output of the departments under consideration are widely used by the types of organizations represented in our membership.

As regular users of all types of Federal statistics, our members recognize the need for and value of current, adequate data to measure growth, progress and change in the economy, particularly to aid in the making of policy decisions and the implementation of economic programs. Our concern is that policy decisions and implementation of programs be based upon the best measure of the economy it is possible to obtain. It is in these general terms that our members evaluate current and proposed programs of the Federal statistics-producing agencies.

The proposed program for the Bureau of Labor Statistics contains items which members of the Federal Statistics Users' Conference have long supported.

Increasing emphasis on the problem of poverty and the administration of manpower programs at the State and local level has increased our needs for additional locally oriented manpower statistics to supplement the present system of national manpower data. The proposed program of BLS to conduct intensive surveys to provide more detailed information about employment and unemployment and its causes in urban areas will greatly facilitate policy formulation and the planning and administration of a variety of new programs being undertaken at the local level. It should also lead to a better understanding of the problems of specific groups within the labor force and hopefully to indicate how those in certain areas fare under changing economic conditions. We urge favorable consideration of this proposal.

In the area of wages and industrial relations we support the proposal to inaugurate a semiannual survey of general changes in wage rates and benefits in the nonmanufacturing sector and the proposal to strengthen the program of information on employee benefits, particularly pension plans. The conference has long recognized the need for improved information in both of these areas.

The conference wishes to express its support for expanded programs designed to provide more adequate measures of price changes. These include—

Extension of the wholesale price index series to 75 additional industries, and collection of data on transaction prices rather than list or quoted prices for 40 major commodities;

Developmental work and collection of data on prices of the more important commodities entering into foreign trade;

Improving the work of BLS in adjusting for changes in the quality of goods and services included in the Consumer Price Index; and

Planning and testing consumer expenditures surveys to be conducted at the end of the decade to provide necessary weights for revision of the CPI and also indexes of prices paid by farmers.

In the industry sector, the causes, magnitude, and direction of price movements vary significantly. However, industry-sector indexes have been limited to only 52 industries, so there is a real need to expand the coverage to more industries. The additional indexes proposed will provide information on industries for which price data have been almost completely lacking. The expansion will also greatly facilitate analysis of the sources, sequences, and impacts of price changes.

Current indexes are based largely on manufacturers' list prices rather than on prices paid by buyers. They do not reflect large-volume discounts or other special concessions. The reporting of actual transaction prices will provide a more precise and realistic index of wholesale prices.

In the light of the persistent balance-of-payments problem, it is essential that more be known about the international competitive position of the United States. Our competitive position depends largely upon the level and trend of domestic prices for goods that move in international trade relative to those of other industrialized countries. Unfortunately, no comprehensive and systematic body of information on international prices is currently available. The need for more adequate foreign trade price data has been long recognized and has often been pointed out in various hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee, and that subcommittee has urged that the Government "undertake research on the building of an adequate measure of international competitiveness." The proposed new program is a much-needed first step.

It is recognized that one of the most difficult problems of index construction is in making adjustment for the introduction of new products and qualitative changes in the goods and services included in the index. While this problem has been the subject of a great deal of study by BLS, there is a pressing need for further improvement in its work.

Surveys of the ways consumers spend their money provide the foundation for the periodic revisions of the Consumer Price Index. Many significant advances have been made in recent years by private and public groups in techniques of obtaining socioeconomic data indicating how families and individuals dispose of their income. It is essential that BLS undertake a comprehensive review and examination of new and improved survey concepts and techniques and that they be tested and perfected. The wealth of available research holds promise for developing ways of improving consumer expenditure date.

The Bureau of the Census has just completed a dry run on the 1970 census in New Haven, Conn. Certain of the questions in the census pertain to education and educational attitudes. The National Center for Educational Statistics has asked for funds to undertake an analysis of the results in order to determine the feasibility of using these questions or modifications of them in the 1970 census.

In our opinion this is an appropriate step to insure that adequate and useful data are obtained from the final census.

The National Center for Health Statistics has expanded considerably over the past decade and its output of statistical surveys has

provided important additions to our basic information about the health of the American people. However, there are still gaps in our statistical knowledge of health conditions, and the National Center proposes two new programs that we consider will add greatly to our store of information.

The first asks for funds for necessary preparations to revise the present disease classification system in accordance with the World Health Organization's new "International Classification of Disease," and for implementation of plans for providing more meaningful and useful data relating to mortality through coding multiple causes of death rather than only the primary cause.

The second is for the initiation of a national fertility study to examine family planning and economic problems of population growth and change. We urge your support of these two proposals.

Statistical activities of the Social Security Administration are aimed primarily at meeting their own program needs, but its studies are also in relation to other social welfare programs and are found useful by many nongovernment users.

We hope the subcommittee will support the increase requested which is to be used primarily for two programs. The first is to undertake studies of the utiliation of hospital and medical services and patterns of care of the aged before and after medicare. The second is for a supplement to its 1966 survey of disabled adults which will obtain needed information on the adequacy of old-age survivors' and disability insurance benefits and the level of economic security for beneficiaries and nonbeneficiaries in nursing homes and other long-stay institutions.

Mr. Chairman, on behalf of the Federal Statistics Users' Conference, I wish to thank you and the subcommittee for giving us this opportunity to present our views on the budget requests for various statistical programs of the Departments of Labor and Health, Education, and Welfare.

Mr. NATCHER. Mr. Aiken, we want to thank you for an excellent statement and for your appearance before our committee at this time.

THURSDAY, APRIL 27, 1967.

NURSING PROGRAMS

WITNESSES

MISS JULIA C. THOMPSON, WASHINGTON REPRESENTATIVE, AMERICAN NURSES' ASSOCIATION

Mr. FLOOD. The subcommittee will be in order.

We will first hear Miss Julia C. Thompson. Miss Trompson is the Washington representative, American Nurses' Association. Five years ago, Good Friday, I learned never turn your back on a nurse. It is very ill advised.

STATEMENT OF MISS JULIA C. THOMPSON

Miss THOMPSON. I am the Washington representative for the American Nurses' Association, which is the national association of registered

nurses. We have approximately 170,000 members in the 54 constituent State and territorial associations.

Mr. FLOOD. And you need about another 150,000, don't you?

Miss THOMPSON. Yes; we do. Well, this is the membership and not the total number of nurses.

I have a prepared statement commenting on certain items in the budget for the Department of Health, Education, and Welfare, and the Department of Labor.

Mr. FLOOD. How many nurses do we have in round numbers—not your organization, but just round numbers?

Miss THOMPSON. About 600,000 in part-time and full-time practice now, but we have, according to a survey that was conducted around the country, we have approximately 300,000 nurses who maintain active licenses, but who are not practicing.

Mr. FLOOD. What is the matter with your membership committee?

Miss THOMPSON. This is a voluntary membership organization.

Mr. FLOOD. This is not a union?

Miss THOMPSON. No. They may or may not join.

I will summarize each of these statements that I have and then ask that the entire statement be included in the record.

Mr. FLOOD. It will be included.

(The statement follows:)

AMERICAN NURSES' ASSOCIATION STATEMENT

The American Nurses' Association is the national association of registered nurses. The Association has 54 constituent state and territorial associations with a membership of approximately 170,000 professional nurses.

I appear here today as a spokesman for the Association to comment on and to support certain items in the budgets for the Department of Health, Education and Welfare and the Department of Labor. I have two separate statements, one for each Department. I request that each be included in the appropriate record.

The ANA supports all of those programs for nursing which are administered by the Division of Nursing, USPHS. However, in our testimony we would like to comment on specific areas in which the Association has a special interest. Specifically, within the Nurse Training Act, we will comment on (1) authorizations for the nurse traineeship program; (2) educational opportunity grants, loans and recruitment monies; and (3) advantages of the transfer of funds. In addition, we will comment on the comprehensive planning grants (Partnership for Health), mental health appropriations, and appropriations for enforcement of regulations under Title VI of the Civil Rights Act.

First, we hope that you will make special note that funds for traineeships under the Nurse Training Act are not at the authorized ceiling. We recommend that the full eleven million dollars, which is authorized, be included in the budget. This is one area where complete funding would be of great value in helping to meet the critical nursing shortage both today and in the future.

These traineeship funds provide the teachers, the administrators, the supervisors and the clinical specialists who are crucial to the training programs which will supply the nation with well qualified nurse personnel. Teaching and supervisory personnel are necessary to enable schools to increase their enrollments. At present the faculty vacancy rate in all schools of nursing is 1,895.

In addition, the traineeship program is vital for the preparation of an adequate number of persons for such specialized procedures as heart surgery, kidney dialisis, organ replacement, vascular surgery, work in the operating theater—but more important, for post-operative care.

In order to meet these crucial needs, we urge that you appropriate the full eleven million dollars authorized for the traineeship program.

Second, the ANA supported the amendments to the Allied Health Professions Personnel Training Act which provide educational opportunity grants for nursing students and funds for recruitment into nursing. In addition, the amendments provide for transferability of construction funds.

The provisions for educational opportunity grants and recruitment funds are a most foresighted action by the federal government to reach young people and attract them into nursing. We feel that these provisions will be a real inducement for recruitment into nursing and that, in the future, consideration should be given to expanding both of these programs. Recent improvements in the economic rewards in nursing—coupled with these new federal inducements—should help to bring greater numbers of young people into the nursing profession.

Third, we would like to comment on the values of transferring funds unused under one provision of the Nurse Training Act to another provision of the Act where funds are obviously inadequate. The wisdom of this procedure has already been illustrated in action which has made it possible to transfer unrequested funds for hospital school construction to collegiate school construction where applications for existing funds have been oversubscribed.

This same pattern of unused funds has been evident in the provisions which provide formula grants to hospital schools of nursing. A large portion of the authorized funding for this purpose has been left unexpended simply because adequate numbers of applications have not been forthcoming. It appears that this pattern will continue, and we recommend that the unexpended funds which were authorized for this purpose be channeled into areas where funds are badly needed.

For example, there is a growing realization that the shortage of nurse personnel is not entirely a problem of numbers—but that poor utilization of nursing personnel contributes greatly to this shortage. Consequently, we feel that one meaningful way to attack this problem is through the investigation and study of the utilization of nursing personnel. We recommend that unused funds for formula grants to diploma schools be channeled into such studies.

In addition, we feel that these unused formula grant funds would also serve a valuable purpose for inservice and continuing education for employed staff as well as for development of innovative methods for improved teaching methods.

Before giving our comments on the Comprehensive Planning Grants and the mental health appropriations, we would like to bring to your attention the Association's position concerning nursing education. There is a direct relationship between the ANA's education position and our recommendations concerned with the transfer of funds. We hope that our comments may help to clarify some of the misinterpretations which have been made concerning the ANA's policies and beliefs regarding the education of nurses.

In December 1965, the American Nurses' Association issued *A Position Paper* on education for nursing. Since that paper was issued, the Association has received many communications and verbal comments from individuals, organizations, the government and Congress. In most instances, the Association has been commended for its stand concerning the education of nurses. In other instances, however, the comments have taken the view that the Association is "closing diploma schools of nursing."

First, we would like to point out that the American Nurses' Association is not in a position to close *any* schools of nursing. Neither can schools of nursing be closed by the National League for Nursing, the national organization which administers the accrediting program for schools of nursing.

Long before the American Nurses' Association issued its *Position Paper*, there was a trend underway which showed that diploma schools were closing while expansion was going on in baccalaureate and associate degree schools of nursing. We have attached for your information a table concerned with the opening and closing of various types of nursing schools.

In order to allay the fears of those who feel that the American Nurses' Association is "closing diploma schools", and doing so without consideration for the great need for nurses and the health needs of the entire nation, we quote below from a letter sent by the ANA on March 28, 1967, to the *Wall Street Journal:*

"The American Nurses' Association recognizes that the majority of the nation's nurses are currently being prepared by hospital-conducted diploma programs and that it will require a number of years for the complete shifting of nursing education programs into colleges and universities. We believe that accredited diploma programs should not close until the opportunity for enrollment in either an associate or baccalaureate education program is available for all qualified potential nursing students."

The ANA is not on the move to close diploma schools of nursing. However, the Association *is* on the move to alert all of those concerned that the facts show plainly that this is the direction in which nursing education is moving.

If sound national health care is our common goal, we hope that Congress will recognize this trend in nursing education—and that its legislators will provide the vision and support necessary. We urge that foresight be given in recognizing the actual movement taking place today in nursing education and nursing practice.

With this in mind, we hope that you would agree with the American Nurses' Association that, "New nursing programs require quality students, prepared faculty, buildings and monies. Sound clinical experiences must be arranged within hospitals and other health care agencies. The ANA recommends that these factors be carefully analyzed and sound community planning take place prior to the opening of new college programs" (from letter to *Wall Street Journal*).

In addition to the budget items mentioned above which give direct support to nursing programs, the American Nurses' Association supports PL 89–749, the Comprehensive Health Planning Grants Act, now referred to as the Partnership for Health. We believe that this Act is one of the most significant laws enacted by the 89th Congress. It was strongly supported by the ANA in 1966.

The concepts contained in PL 89–749 are concepts which keep pace with the needs of society in the delivery of health services. The Congress has visualized a plan not only for today, but also for tomorrow with this partnership for health between national, state and local jurisdictions.

We recommend that the full request of $143,628,000 for fiscal '68 be approved. The vitality and potential of this program will be hampered if the full appropriation is not authorized. The categorical programs needs continued funding while statewhile planning is being developed. As plans are developed at the state and local levels, the funds should be available for implementation of this planning. PL 89–749 is in the vanguard of legislative measures which will enable more effective delivery of health services to the American people. We urge the authorization of the full appropriation so that this Act may lead the way with force and success.

The ANA has been a supporter of the Community Mental Health and Community Mental Retardation Facilities Act, and has also favored federal support for initial staffing of these facilities. We have submitted a statement to the House Committee on Interstate and Foreign Commerce in support of extension and expansion of the Community Mental Health Facilties Act. We supported the legislation because we were aware that the treatment of the mentally ill in state hospitals was handicapped because of the size, location and difficulty in staffing. Too frequently care was, and still is, custodial rather than therapeutic.

The availability of services in localities where people live can result in early recognition of illness and intervention at a time when treatment can be more effective and lasting. Persons able to be discharged from the hospital can profit from followup in their homes. Establishment of the mental health centers is providing a means, not only for helping patients in their own communities, but also for developing new types of treatment programs that are less costly than the traditional confinement in a long-term institution.

We believe that the full authorization for this program is fully justified.

The American Nurses' Association wholeheartedly supports the $5,534,000 for enforcement of Title VI of the Civil Rights Act. The Association has long-supported the belief that all Americans should enjoy the same political and civil rights; and that health, education and welfare programs supported by tax funds, in full or in part, should be available to all regardless of race, creed, color or national origin. If the task of insuring these rights to all of our citizens is to be accomplished the administration's request for funds is modest. If we as a nation believe in the precept that every citizen should have an equal opportunity to benefit from the abundant resources of our country then support for this modest request is imperative.

Thank you for the opportunity to express our views on certain programs of the Department of Health, Education and Welfare.

NURSING PROGRAMS, 1959–66

Diploma, associate degree, baccalaureate [1]

Year	1959	1960	1961	1962	1963	1964	1965	1966
Total	1,137	1,137	1,126	1,136	1,148	1,158	1,193	1,225
Diploma	918	908	883	874	860	840	821	797
Associate degree	48	57	69	84	105	130	174	218
Baccalaureate	171	172	174	178	183	188	198	210

[1] Figures in the chart above show the trend towards a declining number of diploma schools, whereas increases can be seen in the associate degree and baccalaureate degree programs.

Miss THOMPSON. One of these is for the Department of Health, Education, and Welfare and one is for the Department of Labor.

The ANA supports all of those programs for nursing which are administered by the Division of Nursing in the U.S. Public Health Service. However, in our testimony we would like to comment on specific areas in which the association has a special interest. Specifically within the Nurse Training Act, we will comment on (1) the authorization for the nurse traineeship program, (2) educational opportunity grants, loans, and recruitment moneys, and (3), advantages of the transfer of funds. In addition, we will comment on the comprehensive planning grants, which is called the partnership for health legislation, mental health appropriations, and appropriations for enforcement of regulations under title VI of the Civil Rights Act.

The annual report of the Division of Nursing contains figures and descriptive material of their program. This report, we understand, has been furnished to the committee for the record, so I will not repeat—for we have not included in our statement any of the figures in relation to the programs which they have carried out.

Mr. FLOOD. Are you a registered nurse yourself?

Miss THOMPSON. Yes, I am.

I have a copy of the report with me, should you not have received one, at this time. But the Division said they would be furnishing you with such a copy.

First, we hope that you will make special note that funds for traineeships under the Nurse Training Act are not at the authorized ceiling. We recommend that the full $11 million, which is authorized, be included in the budget. This is one area where complete funding would be of great value in helping to meet the critical nursing shortage both today and in the future.

In order to meet the crucial needs for teachers, administrators, and supervisors and clinical specialists, we urge that you appropriate the full $11 million authorized for the traineeship program.

Second, the ANA supported the amendments to the aiding of Health Professions Personnel Training Act which provide educational opportunities for nursing students and funds for recruitment into nursing. In addition, the amendments provide for transferability of construction funds.

We feel these provisions will be of tremendous help in recruitment in nursing. In the future, consideration should be given to expanding both of these programs.

The supplemental appropriations bill contains a $750,000 budget to start the educational opportunity grant program in fiscal year 1968. We urge prompt action so that students can take advantage of these moneys this fall.

Third, we would like to comment on the values of transferring funds unused from one provision of the Nurse Training Act to another provision of the act where funds are obviously inadequate. The wisdom of this procedure has already been illustrated in action which has made it possible to transfer unrequested funds for hospitals, school construction, to collegiate school construction where applications for existing funds have been oversubscribed.

This same pattern of unused funds has been evident in the provisions which provide formula grants to hospital schools of nursing. We recommend that the unexpended funds which were authorized for this purpose be channeled into areas where funds are badly needed, and we have given an example in the testimony of what could be done with these funds in terms of improving service in hospitals and also improving the utilization of nursing personnel in the continuing education program.

Mr. FLOOD. What percentage of the time of the nurse is spent on paperwork instead of working with a patient? Just a ball park figure—40, 50, 60?

Miss THOMPSON. I really can't answer that because it varies from one institution to another.

Mr. FLOOD. How much time does the nurse spend away from the patient when she should be with the patient?

Miss THOMPSON. This varies from one institution to another. There is no real average, because some institutions or agencies use their nurses to much better advantage than others and do not require them to do as much of the clerical work, the dietary work, or transporting patients and things of this nature. It would be difficult to give you an average figure. If you would like to have it, we can see whether it is available.

Mr. FLOOD. My guess would be 40 percent.

Miss THOMPSON. In some institutions it could be that much.

Mr. FLOOD. Most.

Miss THOMPSON. We feel that this contributes to the shortage of nurses considerably and that perhaps the shortage is not a real one, but one of misuse.

Mr. FLOOD. To a degree, yes.

Miss THOMPSON. Before giving our statement to the comprehensive planning grants and the mental health appropriations, we would like to bring to your attention the association's position concerning nursing education. There is a direct relationship between the ANA's education position and our recommendations concerned with transfer of funds. We hope that our comments may help to clarify some of the misinterpretations which have been made concerning the ANA's policies and beliefs regarding education of nurses.

In December 1965, the American Nurses' Association issued a position paper on education for nursing. Since that paper was issued, the association has received many communications and verbal comments from individuals, organizations, the Government and Congress. In most instances, the association has been commended for its stand con-

cerning the education of nurses. In other instances, however, the comments have taken the view that the association is "closing diploma schools of nursing."

First, we would like to point out that the American Nurses' Association is not in a position to close any schools of nursing. Neither can schools of nursing be closed by the National League for Nursing, the national organization which administers the accrediting program for schools of nursing.

Long before the American Nurses' Association issued its position paper, there was a trend underway which showed that diploma schools were closing while expansion was going on in baccalaureate and associate degree schools of nursing. We have attached for your information a table concerned with the opening and closing of various types of nursing schools. That is attached to the back of our statement and it shows in the 5 years preceding the issuance of the position paper that there were 97 diploma schools of nursing closed, so this is not something that the paper created.

In order to allay the fears of those who feel that the American Nurses' Association is "closing diploma schools," and doing so without consideration for the great need for nurses and the health needs of the entire Nation, we quote below from a letter sent by the ANA on March 28, 1967, to the Wall Street Journal:

> The American Nurses' Association recognizes that the majority of the nation's nurses are currently being prepared by hospital-conducted diploma programs and that it will require a number of years for the complete shifting of nursing education programs into colleges and universities. We believe that accredited diploma programs should not close until the opportunity for enrollment in either an associate or baccalaureate education program is available for all qualified potential nursing students.

The ANA is not on the move to close diploma schools of nursing. However, the association is on the move to alert all of those concerned that the facts show plainly that this is the direction in which nursing education is moving. If sound national health care is our common goal, we hope that Congress will recognize this trend in nursing education—and that its legislators will provide the vision and support necessary. We urge that foresight be given in recognizing the actual movement taking place today in nursing education and nursing practice.

With this in mind, we hope that you would agree with the American Nurses' Association that:

> New nursing programs require quality students, prepared faculty, buildings and monies. Sound clinical experiences must be arranged within hospitals and other health care agencies. The ANA recommends that these factors be carefully analyzed and sound community planning take place prior to the opening of new college programs (from letter to Wall Street Journal).

In addition to the budget items mentioned above which give direct support to nursing programs, the American Nurses' Association supports Public Law 89–749, the Comprehensive Health Planning Grants Act, now referred to as the partnership for health. We believe that this act is one of the most significant laws enacted by the 89th Congress. We recommend that the full request for this program, $143,628,000 for fiscal year 1968, be approved.

In addition, the ANA has been a supporter of the Community Mental Health and the Community Central Retardation Facilities

Act and has also favored Federal support for initial staffing of these facilities. We supported the legislation because we were aware that the treatment of the mentally ill in State hospitals was handicapped because of the size, location, and the difficulty in staffing.

The establishment of the mental health center is providing a means not only for helping patients in their own communities, but also for developing new types of treatment programs that are less costly than the traditional confinement in a long-term institution.

We believe that the full authorization for this program is fully justified.

We also support the $5,534,000 authorization for the enforcement of title VI of the Civil Rights Act. The association has long supported the belief that all Americans should enjoy the same political and civil rights and that health, education, and welfare programs supported by tax funds in full or in part should be available to all, regardless of race, creed, color, or national origin. If the task of insuring these rights to all of our citizens is to be accomplished and the administration's request for funds is modest, we believe that the full amount should be made available.

Thank you for the opportunity to express our views on programs of the Department of Health, Education, and Welfare.

I have the statement on the Department of Labor which I will ask if you will put in the record.

In this statement we are supporting the budget for the Bureau of Labor Statistics which we believe is extremely important. They have conducted surveys of hospitals every 3 years since 1956–57. These figures have been extremely valuable to us, but with the rapid shift in salaries now for hospital workers, we believe that these surveys need to be made more frequently.

The Bureau is planning to do wage rate changes in nonindustrial or nonmanufacturing institutions every 6 months and they expect to include hospitals. However, this will be data which is all lumped together, all hospital workers, and will not give us any specific data as far as nursing is concerned. We believe we still need annual data in relation to the hospital nurse salaries.

Mr. FLOOD. I think you are grossly underpaid.

Miss THOMPSON. In some areas the salaries are improving considerably, but this is not true of the country as a whole.

Mr. FLOOD. I think so. Over the country as a whole I think registered nurses are grossly undrpaid.

Secondly, the idea of a nurse as a servant or handmaiden to the patients, is outrageous. A nurse is a professional person. She is not a tray carrier, a nose wiper for any patient, on private duty or on regular staff duty.

The idea of people pushing buttons, or roaring down the halls for a professional person to come trotting down to their whim and fancy is outrageous. A registered nurse is a professional person. The sooner we establish this, the better. This is no servant, this is no handmaiden. I would expect the hospitals to set themselves up accordingly and arrange for staff people to take care of these things; not nurses. The name is badly misunderstood. I have seen this for some time in the last 5 years, and I resent it.

I would expect you to lead a crusade to establish the fact that you are not servants; you are a nurse, and the sooner the public knows it and the patients, the better.

Miss THOMPSON. I agree with you. However, there are certain personal services that are included in nursing that must be carried out by the professional person.

Mr. FLOOD. Without them, we have nothing. I am sure you understand what I mean.

Miss THOMPSON. I certainly do.

Mr. FLOOD. In addition to that, the paperwork. To have you people down at that station as mere clerks for almost half the tour of duty is outrageous and wasteful. The administrators must realize this and arrange for somebody to do that job other than the nurse. I think you should push that.

Miss THOMPSON. We are trying to and this is one of the reasons we are recommending that there be more utilization studies done in institutions to find out how nurses are being used, and in those instances where studies have been done we have been able to prove that with the same number of staff, by reassigning responsibilities, that better nursing care could be given to the patient.

Mr. FLOOD. If you never had a mouthpiece before, you have one now.

Miss THOMPSON. Very good.

With regard to the Department of Labor, we have always supported the work of the Women's Bureau although the American Nurses' Association is not necessarily a women's organization. It is composed primarily of women and therefore we are concerned with the programs that it carries out. We are concerned that the budget for the Women's Bureau has usually remained very static.

Mr. FLOOD. I have been intrigued by this development in the last few years of the male nurses. It is very interesting.

Miss THOMPSON. We are encouraging them to come into the field. We believe that with the increased economic rewards that we might be able to attract more men into nursing. Most of them had not been encouraged because of the fact that the salaries were so low.

I think that that concludes my statement now.

Mr. FLOOD. Your Department of Labor statement will be included in the record at this point.

(The statement follows:)

AMERICAN NURSES' ASSOCIATION STATEMENT

The American Nurses' Association is the national association of registered nurses. The Association has 54 constituent state and territorial associations with a membership of approximately 170,000 professional nurses.

The ANA has an interest in a number of programs operated by the Department of Labor. These remarks will be addressed to three specific areas:

1. Manpower, Development, and Training Act
2. Bureau of Labor Statistics in the Wage and Hour Division
3. Womens Bureau

First, in 1965 the Manpower, Development, and Training Act was amended to include refresher courses for graduate, licensed nurses. Information about the training programs was furnished to the ANA's constituent associations to stimulate nurses not currently practicing, to return to practice following a period of organized retraining. The ANA is cooperating with the Department of Labor to carry out a mandate of the administration to return 10,000 nurses to active practice within this fiscal year. In any occupation that is over 98 percent female there is a continual need to replace those leaving the field for marriage and

families. We are now concentrating on returning many of these nurses to practice, as well as recruiting new persons into the nursing profession.

Approximately 42 percent of non-practicing nurses are married and have children. These women have usually been away from nursing practice for five or more years. With the rapid changes in medical science, nurses who return to work must update their skills. With the coordinated planning between the Department of Labor and the Department of Health, Education and Welfare, we expect to influence many more non-practicing nurses to return to full- or part-time work. Therefore, we strongly support the funds for the Office of Manpower, Development and Training for the training and retraining of health manpower.

The Bureau of Labor Statistics has been conducting salary surveys in hospitals every three years since 1956–57. These data have been extremely useful. They have shown dramatically the disparity in the salaries and wages paid to hospital employees. The low economic rewards for hospital employees undoubtedly has had a deleterious effect on recruitment into the health occupations.

With the spectacular rises in nurse salaries in certain parts of the country during this past year, and the expectation that this trend will continue, BLS data is outdated before it is published. The survey completed in 1966 still has not been released .

The BLS has been collecting data in industry on semi-annual measure of rate of wage changes. The Bureau now will also collect data on non-manufacturing industries and will include hospitals in the surveys. It is expected that hospitals can be identified separately. The surveys will lump all hospital personnel and will be shown on a national basis only. While this will provide a valuable measure of the rate changes in hospitals, particularly as it compares with other industries it is no substitute for the kinds of data we receive from the studies of hospital employment conditions. Because of the rapid changes in hospital salary information we urge that the surveys be conducted annually, rather than every three years.

The ANA has continuously supported the programs of the Womens Bureau. Although the ANA is not a women's organization, the profession is predominately female, so we are interested in the programs that are carried on by the Bureau. The Bureau has been restricted by a static budget for many years which reduces the possibility for expansion of programs. The limited number of staff cannot fulfill the many requests for consultative services. With the additional work involved in assisting the 54 state, territorial, and municipal commissions on the status of women, other creative programs cannot be developed. The addition of several more professional staff would ease the workload and provide for a more dynamic Womens Bureau.

Mr. LAIRD. Mr. Chairman, we have a very delightful lady before the committee today. We have had a great many witnesses with Wisconsin backgrounds before the committee during the hearings, but we have a very lovely one before us today. I am glad to see her before us again this year.

Her association has done a great deal, I think, in breaking the barriers that existed between practical nurses, nurses' helpers, and others that existed for a long time.

When you first came with the association and started working with it, there were many nurses in this country who resented practical nurses doing what they were doing, and nurses' aids doing some of the things they were doing because they felt anything that took place in the hospital room was their responsibility and theirs alone.

Miss THOMPSON. You might call it the territorial imperative.

Mr. LAIRD. Yes. I think the association, during the last few years, has been able to get recognition of the fact that, under proper supervision by nurses, many of these other activities can be carried out effectively, but this took an educational program in your own association, and I want to salute you for the progress you have made.

Miss THOMPSON. Thank you.

Mr. SMITH. I think you have made a very good statement and I compliment you for it. Under the Health Professions Act, there is a loan program for student nurses.

Miss THOMPSON. Yes.

Mr. SMITH. I have advanced a proposal for some time that the repayment of those loans be made at the rate of 5 percent of the net taxable income per year. It seems to me that this is peculiarly important to nurses because we still do depend mostly upon women for nurses and we must recognize that women do have a different situation, and I want to secure advice about this.

I have found some of the girls graduating from high school are reluctant to enter into some kind of contract that requires a rigid repayment schedule. They don't know what plans they will be making later with regard to marriage and children, but if they could get a contract where they could repay whenever they work, a certain percentage of their income, until the loan is repaid, they would like that a lot better than the present rigid repayment schedule.

Do you think this would help?

Miss THOMPSON. It sounds like it would have advantages. We have not taken a position on it yet, but I would be glad to look into it for you.

Mr. SMITH. I wish you would do that.

Miss THOMPSON. This is one area we have found to be somewhat of a problem, that generally female students aren't as apt to take loans as men students because of the repayment and other responsibilities that they have in our society.

Mr. SMITH. Because they are on a rigid repayment schedule?

Miss THOMPSON. Yes.

Mr. SMITH. But if they were on a flexible schedule, they wouldn't have that kind of reluctance, would they?

Miss THOMPSON. Probably not.

Mr. FLOOD. Well, of course, the nurse of whom I speak especially is the regular staff nurse in the hospital and not the private-duty nurse. She has her special problems and she knows what best to do. But my position is that the regular staff-duty nurse on a regular shift must command everybody on that floor, including the patients, and the private-duty nurses must understand that.

Miss THOMPSON. We have also observed that the practice of private duty is diminishing as the care in hospitals in the intensive care units is increasing. Hospitals are talking care of the needs themselves in terms of the acutely ill individual.

Mr. FLOOD. With this new intensive care of heart patients, the responsibilities of the nurse are moving beyond what even you dreamed and this is the way it should be.

Miss THOMPSON. We are increasing the number of clinical specialists that we have. We are going into so many very complicated areas.

Mr. FLOOD. They are being highly trained and they should be.

We are indebted to you. Thank you very much.

THURSDAY, APRIL 27, 1967.

USE OF ANIMALS IN RESEARCH

WITNESSES

CHRISTINE STEVENS, PRESIDENT, ANIMAL WELFARE INSTITUTE
MRS. PEYTON HOWES DUNN, SECRETARY, WELFARE OF ANIMALS USED FOR RESEARCH IN DRUGS AND SURGERY

Mr. FLOOD. Christine Stevens is the president of the Animal Welfare Institute. Mrs. Stevens.

STATEMENT OF MRS. CHRISTINE STEVENS

Mrs. STEVENS. The Animal Welfare Institute, which I represent, is an educational organization whose chief aim is the advancement of laboratory animal welfare. Matching funds for construction of well-designed accommodation for research animals are available to scientific institutions under the provision for health research facilities construction. Numerous institutions have used these funds to replace substandard animal facilities. More need to do so.

Good care and housing of research animals is essential for the conduct of sound research. Bad care and housing may lead to confusion in the data collected when animals under experiment sicken and die owing to cramped, dirty, ill-ventilated quarters with no space for normal exercise nor any provision for comfortable rest. It is to the interest of the entire research program of the National Institute of Health to provide adequate funds to raise standards of animal care and housing wherever they have been allowed to decline owing to pressure for keeping too many animals in too small a space or in inadequate cages or enclosures.

The Laboratory Animal Welfare Act, Public Law 89–544, requires that scientific institutions that use dogs and cats and receive funds from Government sources meet minimum standards published in the Federal Register on February 24, 1967. Though the standards set are minimum standards and do not require that the animals be housed as well as they are, for example, in the animal hospital section of the National Institutes of Health at Bethesda or its farm section at Poolesville, nevertheless, even to meet minimum standards many institutions will need to make substantial expenditures in order to comply with the law. Registration of scientific institutions covered by the law is required by August 24, 1967, although extension of time may be granted in special cases where necessary construction cannot be completed by that date.

It might be argued that institutions receiving Government funds ought to have kept their standards of animal care and housing above minimum standards without the force of law; and it is true that in previous years when larger appropriations were included in administration budget requests, the institutions did not take full advantage of the availability of funds to keep their animal facilities in proper shape. However, recriminations do nothing to help the present situation, which calls for long overdue improvements by many institutions. These institutions themselves can inform the committee of their plans

for better animal accommodation and the cost thereof. On behalf of the AWI, I would like to add that expensive materials such as stainless steel and glazed tile are not necessary for animal comfort or health and that limited funds ought not to be spent to make show places for research animals.

Animals are easily satisfied, and their needs are simple: enough space to move about in comfortably, an opportunity for exercise and companionship with their own kind to the extent that experimental protocol permits this, a comfortable, dry resting place, adequate light and ventilation. If these basic needs are not met, both the animals and the research suffer in varying degrees. If a research program is worthwhile, it is worthwhile to keep the subjects of the experiments contented and healthy so as to reduce the variables to a minimum.

On behalf of the Animal Welfare Institute, I urge appropriation of the full amount of the budget request for health research facilities construction. We hope that the subcommittee on HEW appropriations will encourage use of these funds to bring the facilities of all grantees to a point where all the animals involved are properly housed.

Mr. FLOOD. These minimums are not met generally?

Mrs. STEVENS. Generally I would say no.

Mr. FLOOD. Why wouldn't they be?

Mrs. STEVENS. A great deal of the reason is what I mentioned, that so many more animals are now being used without corresponding provision for more space for the animals. Medical research has grown much more rapidly than provision for animal care and housing.

Mr. FLOOD. It would appear to me the people chiefly concerned would be the researchers.

Mrs. STEVENS. That is right. There is no question that many errors have been made because animals haven't been properly cared for and housed but, nevertheless, whatever the reasons, I would say that quite often the research worker doesn't really look into it with great care. He is interested in the experiment; he sees the animal mainly in that connection.

Mr. FLOOD. He is upstairs with a white coat on and he doesn't get out there, does he?

Mrs. STEVENS. Not nearly enough. That is one of the factors involved.

Mr. FLOOD. That is too bad. He should.

Mrs. STEVENS. That is right, he should, but the main thing is to get the job done of getting the animals properly cared for. We are very happy about the law that has been passed Public Law 89–544, but in order to implement it from the standpoint of institutions, many of them will need extra money.

Mr. FLOOD. You are the best friend the researcher has and he apparently doesn't know it.

Mrs. STEVENS. Some do and some don't, Mr. Chairman. I am glad that you say that.

We have these two manuals "Comfortable Quarters for Laboratory Animals" and "Basic Care of Experiment Animals," which we give to institutions. They show photographs of what we consider good animal housing for various species of animals. This is already in effect in some laboratories.

Mr. FLOOD. What is your relationship to the Society for the Prevention of Cruelty to Animals? Why are you here and why are they not here?

Mrs. STEVENS. The Animal Institute was founded particularly to help laboratory animals. My father was head of physiology at the University of Michigan Medical School. He used many animals and you will see in this manual the quarters which he designed when he first went there, and they are still outstanding at the university.

There is a great lack of activity in this field, though it is now growing, owing to the fact that there are antivivisection groups on one side and people who don't want to consider anything about the animals on the other, and actually we founded the Animal Welfare Institute in 1951 really to fill that gap, to do something.

Mr. LAIRD. Your group really represents the very moderate middle-of-the-road position in this area, recognizing the problems, and it is needed very much in order to fill the important gap that existed.

Mr. FLOOD. These people are the best friends the researchers have and apparently the researchers are not clear about that.

Mrs. STEVENS. Some of them are not. Some are very hostile because we do criticize things that are wrong.

Mr. FLOOD. Hostile?

Mrs. STEVENS. Hostile would be the very least that could be said.

Mr. FLOOD. If they want well-preserved and healthy animals, you are their friend.

Mrs. STEVENS. That is right, and we do our best to be their friend. For example, we have a scientific committee made up entirely of medical, veterinary medical, and research people.

Mr. FLOOD. I have the impression this subcommittee might go out of its way to help you help them.

Mrs. STEVENS. That would be simply marvelous, Mr. Chairman, if you could give money specifically for this purpose, and at this time it would make so much difference.

Mr. FLOOD. We will at least preach the gospel in their ear.

Mrs. STEVENS. Thank you very much.

Mr. FLOOD. Mrs. Dunn, you are no beginner either, are you?

STATEMENT OF MRS. PEYTON HAWES DUNN

Mrs. DUNN. I have been in this since 1953. Actually, the real trouble is that animal care has been nobody's business. We really haven't a discipline of research—animal care within research.

We have nursing care. There has to be a discipline of animal care, if we are to have a prideful, well-integrated service.

The Animal Welfare Institute and our group are going in the same direction, only with a different angle. Now, these are the quarters we helped build in Washington at different institutions [indicating].

The second sheet tells the kinds of things that we really need. We want those direct programs that organize care within research. We would like this analysis of programs included in the record here.

As we see it, the reason for the present waste and neglect in animal care is not so much because many people are deliberately cruel, but because we have not backed professionals to do a decent job. Funds for use of animals in experiments have piled up but animal care is still organizationally in the subbasement. It has not been allowed to mature as a rightful profession in research. This must be established by law.

The only way to get our money's worth in animal care is to put it in charge of professionals in the field and support them directly. With-

out this, any department would be a national scandal. And animal care is not even a department. Here is a chart of the "Resources of the U.S. Public Health Service (Effective January 1, 1967)." Never once is the word "animal" mentioned. Yet many of the important activities on this chart depend on the use of animals. Still for years unfit animals have been dragged in from the highways and the byways, stuffed into small cages, hosed off along with the cages and operated on and left unattended to die.

While the subject of animal care at the national level tosses in this administrative mixmaster at the local level, the disorder is the logical consequence as funds flow in from the many sources to experiment on animals. Here is a story from a WARDS leaflet of a man who resigned his post as an animal caretaker because of the frustrations and confusions resulting from the necessary animal neglect which he couldn't stomach [indicating].

Mr. FLOOD. By the way, I have before me an article from the Waukegan News-Sun dated Friday, July 15, 1966. I showed this to Mr. Laird, who, with me, for many years, has served upon the Appropriations Subcommittee for the Department of Defense. Without objection I am going to ask that this be transmitted to the Surgeon General of the Navy with a full report made to this subcommittee of all the circumstances surrounding this incident.

When Mr. Laird and Mr. Flood request this from the Surgeon General, my belief is that we will get some attention.

Mrs. DUNN. We are very grateful.

Only as we analyze the situation based on facts can we solve the problem. Those who want to maintain the status quo are still confusing us.

In Business Week for February 18, 1967, an article entitled "The Sharper Bite on Laboratory Animals," we are told in the first sentence: "Laboratory animals are already a major cost factor in biomedical research and the cost is going a lot higher."

Much later in the same article we learned that, in a budget of $28 million for research, a drug firm spent $500,000 for animals. This is one fifty-sixth of the budget. We can hardly class this as a "major cost factor." In any case, is their solution to the problem cheaper and even more unsuitable animals.

In the New York Times of February 26, 1967, we are told that for the operations on research animals there is "close attention to recovery afterward, as much relief as possible for postoperative pain."

The Institute of Laboratory Animal Resources of the National Academy of Sciences completed a report on animal facilities in medical research in 1964 which said that only 41 percent of the institutions surveyed had postoperative recovery rooms for animals.

The New York Times—in this same article, we learned that it costs $40 to $45 a square foot to build quarters for laboratory animals.

By the way, Mrs. Stevens' remarks that the animals don't need much is very good. We can build as workmanlike quarters that don't look so pretty or cost as much.

We asked a local contractor about prices of buildings for humans. We were told that modern apartments with all facilities, elevators, heating, air conditioning, cost $10 a square foot. That steel-concrete office buildings likewise complete at $16 to $19 a square foot. With

differences ranging from $26 to $35 a square foot for animal quarters, we suggest there might be a place for great savings in the hands of animal experts.

In the confusing fight for space in research institutes across the country, animal care is the consistent loser. The same ILAR report said:

> In many laboratories animal care has been housed in quarters originally planned for other purposes. This has increased the difficulty and cost of operating such facilities.

We need a crash program for professional supervision, trained manpower, decent places to work, research on needs of animals. Some of this must be centralized nationally for the sake of economy and availability. This should be the joint effort of all the departments of government using animals. All programs must be financed directly as you can see, by the analysis included at the beginning.

The animal facilities and staffs to which we can point with pride are just a very thin icing on a rotten cupcake. You would be ashamed if you visited many of these places supported by Federal funds; you would be horrified at others. Here in Congress, where the funds originate, the right to decent care must be established or the situation will continue to deteriorate. In the vast research operation this is less than a cupcake in size, but it spreads waste and disorder everywhere it touches. It has been proved that good care can more than earn its own way.

Won't you look into this? Thank you for your interest.

Mr. FLOOD. Who is responsible for these conditions at one given place? Let's take place A. A university or center. Who is responsible for the care of these animals at one place?

Mrs. DUNN. Well, there are different people. They can be anybody. They can be an untrained person like the one at the naval base, or they can be somebody with a B.S., who doesn't understand animals, knows nothing about care. The animals are bought by the man who buys the supplies in some places.

Mr. FLOOD. Must this be veterinarians?

Mrs. DUNN. I think it is better to have the veterinarian.

Mr. FLOOD. You don't have them. What do you do?

Mrs. DUNN. I think that gradually this thing can be done with a veterinarian part time or full time in direct care of a unit. The only reason for having the veterinarian is because animal care has to be established as a profession. It can't continue to be just putting an animal in a cage.

Now, the other difficulty is that funds come in from every place, and so as the medical center gets grants to use animals it just piles up the cages and puts more animals in. There is no profession of "animal care" in many places.

What happens too is, when the funds come in, they go into a general budget and then animals must compete with everything all the way down the line. In the end the authorities say, "What will we do with the animal?"

Now, in order to present to research a decent animal, we are going to have to have people there who know what they are doing. In addition, just like you couldn't take patients into a hospital without any beds for them, so there has to be a way to plan the population of animal quarters.

It is something to be thinking about, that is all. I am not saying exactly how to do it, but I am saying that is the way to mature a discipline of animal care.

Mr. FLOOD. I certainly hope we can help you.

Mrs. DUNN. I think you sound like you are going to.

Mr. FLOOD. How can we? What do we do?

Mr. SMITH. Mr. Chairman, the question is, How do you get people in animal husbandry? This doesn't have to be a veterinarian. How do you get people in this business to hire people who have graduated in animal husbandry to supervise the animals?

Mrs. DUNN. The way you do it is to set up departments where a man in animal husbandry can work without getting ulcers.

Mr. FLOOD. Who sets up a department? How do you do this?

Mrs. DUNN. I think it has to start where the funds originate nationally.

Mr. FLOOD. You show us an exhibit with regard to Georgetown University which is an attractive place.

Mrs. DUNN. We helped to build that.

Mr. FLOOD. What do you mean, "we?"

Mrs. DUNN. WARDS.

Mr. FLOOD. What do you mean, you built it?

Mrs. DUNN. We gave money for it. We just contributed to it.

Mr. FLOOD. Somebody designed this?

Mrs. DUNN. We raised funds for it.

Mr. FLOOD. This is attractive, well-ventilated and clean.

Mrs. DUNN. This is the kind of thing that we hope to have.

You were talking about animal husbandry. Congressman Smith; we must have places where men want to work, who like animals and who know animals.

Mr. SMITH. Someone should require that these men have that kind of degree.

Mrs. DUNN. I do not ask so much for a degree. I think some degree is desirable. There are a number of degress. There are animal technicians; there are 2-year courses. We are giving two scholarships for a 2-year course in New York.

Mr. SMITH. Let's say "training" rather than "degree."

Mrs. DUNN. I really like the good old-fashioned word "animal care." It is a job with less status than a janitor now, and it has to be raised up to a place where people like to do it.

Mr. LAIRD. I was just looking at the Federal Register, which contains rules and regulations. It would seem to me they are recognizing many of the problems you bring out here. The kind of veterinary care shown in paragraph 3.10. It loks to me as if these regulations, if they are actually carried out, will take care of the problem that you are discussing. I would like to put those regulations, 3.8 and 3.10, in the record.

Mr. FLOOD. Mr. Laird inserts in the record from the Federal Register volume 32, No. 37, Friday, February 24, 1967, part 2, Department of Agriculture, Agricultural Research Service, Laboratory Animal Welfare, page 3275, that part which is section 3.8, employees; 3.9, classification and separation; 3.10, veterinary care.

(The document follows:)

§ 3.8 **Employees.**

A sufficient number of employees shall be utilized to maintain the prescribed level of husbandry practices set forth in this subpart. Such practices shall be under the supervision of an animal caretaker who has a background in animal husbandry or care.

§ 3.9 **Classification and separation.**

Animals housed in the same primary enclosure shall be maintained in compatible groups, with the following additional restrictions:

(a) Females in season (estrus) shall not be housed in the same primary enclosure with males, except for breeding purposes.

(b) Any dog or cat exhibiting a vicious disposition shall be housed individually in a primary enclosure.

(c) Puppies or kittens shall not be housed in the same primary enclosure with adult dogs or cats other than their dams, except when permanently maintained in breeding colonies.

(d) Dogs shall not be housed in the same primary enclosure with cats, nor shall dogs or cats be housed in the same primary enclosure with any other species of animals.

(e) Dogs or cats under quarantine or treatment for a communicable disease shall be separated from other dogs or cats and other susceptible species of animals in such a manner as to minimize dissemination of such disease.

§ 3.10 **Veterinary care.**

(a) Programs of disease control and prevention, euthanasia, and adequate veterinary care shall be established and maintained under the supervision and assistance of a doctor of veterinary medicine.

(b) Each dog and cat shall be observed daily by the animal caretaker in charge, or by someone under his direct supervision. Sick or diseased, injured, lame, or blind dogs or cats shall be provided with veterinary care or humanely disposed of unless such action is inconsistent with the research purposes for which such animal was obtained and is being held: *Provided, however,* That the provision shall not effect compliance with any State or local law requiring the holding, for a specified period, of animals suspected of being diseased.

Mrs. DUNN. Representative Laird, as I see it we will have to organize the inside to meet the outside.

Mr. FLOOD. What does that mean?

Mrs. DUNN. In other words, we have the law under the Department of Agriculture. It is coming in from the outside, but the inside has to be organized so that it can carry out and respond to this.

It is the difference between having a school superintendent and a school system. Through appropriation and organization, we must find an intelligent means to respond to Public Law 89–544 on the inside of the research establishment. We have organized everything else to use animals.

Mr. FLOOD. We have an extensive power of investigation within this committee. I expect you to bring your complaints here.

Mrs. DUNN. I brought them.

Mr. FLOOD. Any specific complaints, you bring here. It doesn't matter where the chips fall. We will take a look at them.

Mrs. DUNN. Good.

Mr. FLOOD. Thank you.

Mrs. DUNN. Thank you.

(Supplementary material follows:)

ANALYSIS OF PROGRAMS BEING PRESENTED TO APPROPRIATIONS COMMITTEES OF THE SENATE AND HOUSE OF REPRESENTATIVES TO HELP RESEARCH ANIMALS; SUBMITTED BY WARDS: WELFARE OF ANIMALS USED FOR RESEARCH IN DRUGS AND SURGERY

In analyzing any proposed national budget for animal care in research, it should be understood that the subject has been practically ignored for at least 15 years and now requires a crash program. Also, that the expenditures should be

seen as *necessary to protect our huge investment based on experiments using these animals* . . . crude, immature care means wasted and crude immature findings. There are two classifications of requests:

I

Typical of these rquests, that need to be filled immediately, are the following made by NIH. These funds are granted DIRECTLY to do a job. Such programs are scattered in other departments of government. They should be brought together in a single cooperative program *for efficiency and availability.*

a. Programs to provide directly for better care of research animals. NIH now has several *pilot programs which supply directly equipment and some strategic personnel.* Something similar is already being set up for humans used for research. This formulae may prove the solution for animals too.

b. *Disease control centers* where diseases of animals are studied so that problems arising in surrounding research institutions are given prompt expert attention. A speaker at an animal care convention said, "If we think we know 5% about the needs of these animals, we are kidding ourselves."

c. *The study of special species to find the best animal to use for a given experimental problem.* According to BUSINESS WEEK for February 18, 1967, drugs "must be tried on three or four species." Think of the time, money and suffering that could be saved if it was necessary to use only one or even two species.

d. *Scholarship and training programs* to fill the tremendous manpower gap in this long neglected area of research.

II

With the avowed purpose of Congress and the American people to clean up the present disorder in research animals care, it will be found that funds granted into collective budgets will never serve this purpose until every other need is filled. This is why it is necessary to grant funds for animals DIRECTLY. So they will *not* continue to compete for the leftover funds.

a. *Funds for Construction.* According to an article in the NEW YORK TIMES for February 26, 1967, "$390-million has gone into building research facilities but only about $25-million was spent for animal housing." We believe that even this is a very generous figure. In any case we are told that another $100-million may be needed. If spending is under the same management, animal care will get about $9-million or less while subjects that have had the lion's share for years will continue to short-change animal care.

b. The same is true of *funds for maintenance* at research centers across the country. It is almost impossible to obtain any meaningful figures on this disorganized subject. Even when figures (5%–8%) are available, such refinements as prorating charges for supervision and labor time are not included. Animal care bears the financial burden of disorderly accounting. The job of animal care can be definied and organized in the same way as a nursing department and budgeted accurately.

THURSDAY, APRIL 27, 1967.

STATISTICAL PROGRAM OF THE U.S. PUBLIC HEALTH SERVICE

WITNESS

CARL H. KNUEMANN, WHEATON, MD.

Mr. FLOOD. We will now hear from Mr. Carl H. Knuemann of Wheaton, Md.

Mr. KNUEMANN. I am of German descent and immigrated to this country in 1954.

Mr. FLOOD. Where were you born?

Mr. KNUEMANN. In Poland, of German parents.

Mr. FLOOD. What part of Poland?

Mr. KNUEMANN. Bromberg.

Mr. FLOOD. Up in the old corridor.

Mr. KNUEMANN. Yes.

Mr. FLOOD. What is your subject?

Mr. KNUEMANN. Sir, I would like to refer to a collection of race or color data and vital statistics records and also the statistical program of the U.S. Public Health Service in general and in particular related to this one variable.

Mr. FLOOD. What is your business?

Mr. KNUEMANN. I am a sociologist.

Mr. FLOOD. Where?

Mr. KNUEMANN. I am actually with a private consulting firm now. I am talking as a private citizen here. I have been working with the Bureau of Social Science Research, with Gallaudet College. I did research with deafness.

Mr. FLOOD. Are you an American citizen?

Mr. KNUEMANN. Yes, sir.

Mr. Flood, I have a prepared statement. I know this problem I am dealing with is lately in the news.

Mr. FLOOD. You may proceed.

Mr. KNUEMANN. As I told you before, I was living in Berlin from 1932 until 1954. As President Kennedy said, Berlin seems to have a heart for people. That I appear before you here is a matter of conscience.

I should like to thank you for the opportunity to appear before your committee. In my remarks, I wish to draw your attention to procedures and policies of the U.S. Public Health Service, which might be worth your consideration. In many ways these procedures tend to increase costs of the public health services unnecessarily, and create situations which are incompatible with good government.

First, I would like to deal with the issue of collecting "race" or "color" data in the Vital Statistics Division, of the National Center for Health Statistics, Office of the Surgeon General, U.S. Public Health Service.

The Surgeon General's Office, through its National Center for Health Statistics, under Forrest E. Linder, distributes guidelines to all States in the United States, in which vital registration data to be collected are identified. If States want to be included in the national vital statistics system established by the U.S. Public Health Service, they are forced to comply with these guidelines of the U.S. Surgeon General. One of the items requested by the National Vital Statistics Office is labeled "color" or "race."

The whole vital statistics data program apparently hinges on this one item, since the major variable of almost all statistical tabulations is "race" or "color." In the final tabulations of the U.S. Public Health Service—race or color becomes the white or nonwhite population segment. The nonwhite population includes the Indians on the reservations, the Eskimos in Alaska, the urban Negro, the rural and urban Hawaiian, the Ainu, the Philippino, the East Indian and many more, who have all one characteristic in common—nonwhite skin or not so white skin. Whether their white or nonwhite skin had any significance healthwise has never been established, certainly we have difference in health levels for those groups, but never have there been enough environmental factors isolated, as to draw conclusive judgments whether being Negro or Ainu in itself causes public health problems. I there-

fore suggest that this committee limit the collection of race data by the U.S. Public Health Service to those instances where concrete medical justification is provided for the race item collection. Second, the U.S. Public Health Service should be advised to attach explanatory notes to each statistical table published containing race variables, stating that significant statistical differences between race variables might be caused by environmental conditions rather than race itself—for instance, lack of health facilities, and so forth—or differences might be explained by the ready supply of health facilities for wealthier racial groups. By reducing the amounts of racially stratified statistics, the U.S. Public Health Service could easily reduce the costs of most of its statistical programs by 20 percent or more, without losing meaningful data. The insistence of the U.S. Public Health Service to collect race data has already caused friction in the relationships with Northern, Western, and Southern States.

In 1962 and 1963 New Jersey abolished the race item from all its vital records: birth certificates, death records, marriage, and divorce records.

Mr. FLOOD. What does the U.S. Civil Service do, do you know?

Mr. KNUEMANN. I have heard about this problem.

Mr. FLOOD. Do you know?

Mr. KNUEMANN. They do not do this any more.

Mr. FLOOD. Doctor, do you know? They do not, do they?

Mr. KNUEMANN. They do not.

Mr. FLOOD. Thank you.

Mr. KNUEMANN. The U.S. Public Health Service did not like that a bit, and applied pressure on that State. Finally in 1964 New Jersey reintroduced the item. Several court cases are pending to test the presence of the race item on marriage certificates—wherever possible the U.S. Public Health Service supports the retention of this item with all its might. Southern States complain that U.S. Public Health Service inspectors barge in on them, checking on the equality in health care—it is easy to understand that health statistics stratified by racial variables can never be made a measurement of anything. Rather, the knowledge about the presence of an individual medical problem or public health problem alone should be and can be the only guideline for effective public health administration. There is not such a thing like the Indian TB, or the Negro TB—or the Japanese typhoid. They are only human beings or groups of human beings in need of health care, readily identified by their postal addresses. That is all we need today to help.

Whether race should be given some political consideration in public health planning is likewise debatable—race information on birth, death, or marriage records is unreliable since it is in most cases an arbitrary entry, reflecting the social and political power setup in a given community. It does not reflect anthropological classifications. What might pass as "white" in North Carolina, might not be white in Georgia or Missouri. A nurse in a Philadelphia suburb, for instance, indicated on hundreds of birth records in 1965 that the babies born in her ward were colored, because most of the mothers had a sun tan when they entered the hospital—it was during summertime. Just a coincidence brought this "error" to light. There are 10,000 of the same errors committed each year, without being detected.

I should like to mention now common occasions when race information on birth, death, or marriage records might effect an individual directly. Vital registration records are public records and can be inspected by anyone. Race information on birth records tend to open the door for discrimination when:

A birth record is supplied with school registration.
A birth record is supplied with school job application.
A birth record is supplied with school security check.

Race information on death records is used to the disadvantage of individuals. In insurance claims settlements, U.S. Public Health Service life-expectancy tables distinguish between whites and nonwhites, nonwhites having lower expectancies. Therefore, beneficiaries—widows and orphans—do not benefit from a national average and get lower awards. Burial permits are copies of death certificates, the race item on these bar nonwhites from being buried on certain cemeteries. The United States is the only Nation in the Western Hemisphere collecting vital statistics on a racial basis, with regularity. The World Health Organization does not seem to feel the need for race-health statistics, the United Nations Vital Statistics Office does not attach importance to race statistics, and not even Mr. Forrest E. Linder, the former editor of the Vital Statistics Principles Publication—of the U.N. Social Science Division—did not mention "race or color" specifically in his publication.

Mr. FLOOD. Are you concerned only with color?

Mr. KNUEMANN. I am concerned with all types of inequal treatment or tending to provide inequal treatment. But here we can lay our hands on a very minor item. I do not want to convey that this is an intentional attempt to have a segment of the population with slightly lower treatment. In effect, this item really has had these implications as I outlined before. I am on the side of human beings. The Government should be for the people. It is by the people and it should be for the people. If a segment of the population seems to feel that there are procedures which mete out disadvantage conditions to them, they should raise their voice and they have done so and Government should responsibly respond to this type of thing.

May I continue, Mr. Chairman?

Mr. FLOOD. Yes. I was just wondering.

Mr. KNUEMANN. The same man, who today heads the Statistics Office of the U.S. Surgeon General and trains vital registrars from foreign countries in U.S. vital statistics matters. In fact there are only a handful of nations in this world who seem to feel the need for race-health statistics, South Africa, Rhodesia, and there again one could even be in agreement with them, because their colored populations live exclusively in geographically restricted areas—but what can race mean in the United States, where your neighbor might be a Japanese, a Chinese, a Negro, or who knows what? I ask you gentlemen, why not pull our Nation together—rather than tearing its population administratively apart. The United States of America needs people—colored, black, white, and brown—to survive. To mark a human being down by an entry on his birth certificate as being different is certainly the task of a vulgar bureaucrat.

The Surgeon General, Dr. William C. Stewart, told me in an interview in November 1965 that he is only willing to remove the race item

from vital registration forms when public pressure forces him to do so. I have asked myself is this Federal creative thinking?

Mr. FLOOD. Did you say the Surgeon General told you that?

Mr. KNUEMANN. Yes, sir.

Mr. FLOOD. We will have the Surgeon General reply to that. You may proceed.

Mr. KNUEMANN. The Urban League and other minority organizations have long protested against the race item on vital records.

Mr. SMITH. In the last year or two some have changed their minds.

Mr. KNUEMANN. Not really.

Mr. SMITH. Some minority organizations are now saying we have to have more information and that we cannot make enough progress if we cannot find out where the members of minority groups are or are not, in fact, present.

Mr. KNUEMANN. In 1963 Urban League had a very strong resolution on this matter. Actually, it is a matter of strategy more or less for them. I think they are still in agreement to remove it, but apparently they feel that they can obtain more Federal funds if they point out the needs of their group more directly, and so forth. They have sort of abandoned this.

I think to measure the health standards of minorities, other techniques could be applied to get even more correct data than vital statistics records. I have my grave doubts whether vital records are really a proper tool for this type of analysis.

The Urban League and other minority organizations have long protested against the race item on vital records. But the Surgeon General of the U.S. Public Health Service has managed to stay on top of this movement; and here is how: almost all Health and Population Statistics Organizations have a strong link to the Surgeon General's Office.

The American Public Health Association operates its Statistics Section practically out of the Surgeon General's Office; the American Population Association is likewise operated from the Surgeon General's Office. Government file space, Government secretaries and other services are provided from taxpayers' funds in order to keep these private organizations going. The "scientists" in the Surgeon General's Office receive adequate moral support for their policies from these organizations. U.S. Public Health Service Advisory Committees called in as alibis for the shaping of public policies are likewise heavily impacted by Federal officials, who advise their own offices about the "right" policies.

Mr. Chairman, members of this committee, it is not often that a politician can do so much with so little. By applying budgetary controls on the berserk running statistical programs of the U.S. Public Health Service, much money could be saved for more worthwhile purposes. By eliminating the overemphasis of "race," more meaningful analyses of health data could be obtained in the vital statistics area. The occupational, industrial and educational, as well as the economic aspects of individual health problems could be more thoroughly stressed. A restrictive rider should be attached to the laws regulating the U.S. Public Health Service, enforcing the above mentioned goals.

Mr. FLOOD. Of course, that is not the province of this committee, to write laws. This is an appropriations committee.

Mr. KNUEMANN. I am sorry.

The present staff in the Surgeon General's Office is hardly of the caliber to effect changes. Constantly, this Office got stuck with the sediment of federally available personnel. Professionals with ideas have been frequently expelled from this Offic. Federal talent has been muted and condemned to inactivity by concerted action of top management, led by Dr. Gehrig, the Assistant Surgeon General, or Mr. Linder, the Director of the National Center for Health Statistics. I wonder what the thoughts of the American public might be when it becomes known that professional persons in the Public Health Service receive their salaries for not doing their job?

Thank you, Mr. Chairman.

Mr. FLOOD. Did you have any military duty?

Mr. KNUEMANN. Yes.

Mr. FLOOD. What outfit?

Mr. KNUEMANN. I served for 3 or 4 weeks in the German Army and then joined the resistance movement in Denmark. I was later arrested by the Nazis and spent the rest of the war in jail.

Mr. FLOOD. Thank you, Doctor.

Mr. KNUEMANN. Thank you, Mr. Chairman.

THURSDAY, APRIL 27, 1967.

U.S. EMPLOYMENT SERVICE ACTIVITIES

WITNESSES

JOHN W. WILLARD, FIRST VICE PRESIDENT OF THE NATIONAL EMPLOYMENT ASSOCIATION

WM. E. STUART, PRESIDENT, BETTER EMPLOYMENT AGENCIES COUNCIL OF METROPOLITAN WASHINGTON, D.C., AND MEMBER, LEGISLATIVE COMMITTEE, NATIONAL EMPLOYMENT ASSOCIATION

WM. S. BERGMAN, LEGISLATIVE REPRESENTATIVE, NATIONAL EMPLOYMENT ASSOCIATION

DANIEL J. MOUNTIN, DIRECTOR, GOVERNMENTAL AFFAIRS, NATIONAL EMPLOYMENT ASSOCIATION

Mr. FLOOD. We will now hear from Mr. Daniel J. Mountin, director, governmental affairs, National Employment Association.

Mr. MOUNTIN. Mr. Chairman, our witness is Mr. John Willard.

Mr. FLOOD. Will you introduce your associates?

Mr. WILLARD. I will introduce myself and then the others. I would like to introduce to my left Dr. William Stuart, who is president of the Better Employment Agencies Council of Metropolitan Washington, D.C.

Mr. FLOOD. You have a Ph. D. I suppose?

Mr. STUART. Yes.

Mr. FLOOD. What is your specialty?

Mr. STUART. International relations.

Mr. WILLARD. Mr. William Bergman, legislative representative for the National Employment Association, and Mr. Daniel Mountin, director of government affairs for the National Employment Association.

Mr. FLOOD. What is the National Employment Association?

Mr. WILLARD. I describe this in my statement.

Mr. FLOOD. Tell me now.

Mr. WILLARD. This is an organization of private employment agencies in the United States. We have submitted for the record a rather lengthy statement but in order to conserve your time I have a digest of it here.

Mr. FLOOD. Do your associates have statements to insert?

Mr. WILLARD. They do not. They are here to support me and to answer any questions.

Mr. FLOOD. After this meeting if they wish, they can submit statements. I know your problem.

Mr. WILLARD. Mr. Chairman and members of the committee, my name is John W. Willard. I am the first vice president of the National Employment Association, the single nationwide trade association representing approximately 6,000 private employment agencies in the United States. I am also the owner and operator of a private employment agency in Syracuse, N.Y.

Mr. FLOOD. How long have you been with this outfit?

Mr. WILLARD. The National Employment Association? I have been a member of the predecessor groups.

Mr. FLOOD. How long have you been in the job you are in?

Mr. WILLARD. Ten years. Pardon, as vice president of National Employment Association I am serving 1 year. I have been a member of the board of directors prior to this.

Mr. FLOOD. You are no beginner.

Mr. WILLARD. In the association this is true.

The National Employment Association is the trade association of private employment agencies. It is the outgrowth of three predecessor organizations dating back to 1920. The private placement industry is composed of approximately 4,000 small business firms engaged in employment agency business on a full-time basis and an additional 2,500 who are engaged in such an activity on a part-time basis. These firms employ some 30,000 people and make approximately 1,500,000 placements per year with total annual salaries of $6¾ billion. Also there are an additional 3,300,000 temporary placements, defined as lasting from 1 to 90 days, plus the several million assignments made by temporary help service firms many of which operate in conjunction with private employment agencies. The total placements and assignments made by the private employment agency industry is estimated at 11 million per year.

We have asked to appear before this committee today in the hope of sharing with you the knowledge which we, as the only nongovernmental placement organization in the country, have gained in our more than 40 years of experience as the organization of placement agencies.

While there are innumerable ways in which people secure jobs, there are actually only three "organized channels"; those being the U.S. Employment Service, the private employment agencies, and labor organizations. Employment through labor organizations cannot accurately be measured since figures on placements by all of the other employment channels are included in the number of placements made by labor. It has been estimated and can generally be agreed that both

the private and public employment services place approximately 25 to 26 percent of new hires, leaving 75 percent of the available manpower supply to be placed through direct hiring by employers; relatives and friends; newspapers; or a variety of other channels. It is generally agreed that of that portion of the market which the two organized placement bodies serve, the division is relatively equal, taking the country as a whole.

Mr. FLOOD. Why do you come to us? This is an appropriations subcommittee.

What are you doing here?

Mr. WILLARD. We are speaking with respect to the appropriation for the U.S. Employment Service.

Mr. FLOOD. In what way?

Mr. WILLARD. We wish to support the appropriation and suggest certain things about it.

Unemployment today is, we agree, lower than at any point during the past 10 years. However, figures do not adequately depict the situation. It would be inconsistent with the Nation's manpower policies if we were not to undertake a concerted effort, even with high employment, to provide services to the 2.8 million people unemployed, of which 450,000 are long-term unemployed—15 weeks or longer. A closer examination of the unemployed discloses that unemployment rates in slums of our Nation's metropolitan cities averages three times the national average; that large numbers of people work only a few hours a week because they are unable to find the full-time work they seek, and large numbers of our work force are forced to find employment at or below poverty wages, and that nearly one-third of those that should or could be employed at self-supporting wages are not.

These problems, however, are not brought about because of a lack of jobs but rather because of a lack of qualifications or motivation on the part of these individuals; nor is the problem one of locating jobs since newspapers across the country carry an unprecedented amount of classified help wanted advertising. The National Industrial Conference Board's latest help wanted index, for March 1967, is near an alltime high of 189 (1957–59=100 percent).

The problem then is essentially that of motivating or improving the skills of the unemployed. This can only be done through a concentrated effort designed to seek out and rehabilitate or retrain and place the unemployed.

Mr. FLOOD. How are your relations with the Department of Labor, generally?

Mr. WILLARD. At a distance.

Mr. FLOOD. Arm's length?

Mr. WILLARD. Yes.

It is therefore necessary if we are to have effective implementation of our national manpower policy, that services tailored to meet the needs of the unemployed be forthcoming in the near future. Such an undertaking obviously will require the full resources of all employment channels, and the National Employment Association supports all activities designed to cope effectively with this problem.

At the outset of a discussion of placements, one basic point must be remembered; placement services do not create jobs. The employer is looking for the best applicant meeting the highest standards. There-

fore, the job of the placement service is one of "selling" the applicant to the employer and the employer to the applicant.

Inherently within any placement of an individual the orientation of the placement agency and counselor must be toward servicing the applicant. By and large, difficult placements are accomplished only through counselors whose interests are in servicing the individual. Should his interests be in servicing the employer, he would screen out the very people we are discussing—the disadvantaged and long-term unemployed.

Inherently within any labor market there is a degree of competition between the private and public employment services.

In many job classifications, the term unemployment is erroneous since the professional, managerial, technical, and even clerical classifications are experiencing skill shortages. Statistical information indicates that in these areas, employment has steadily been less than 2 percent and of those making up that fraction, most if not all, are either transitional or voluntary short-term unemployed.

Our point is that white collar job applicants are not in need of Government supported services since the majority of people in this classification obtain employment through their own initiative or voluntarily seek out organized placement channels. Competition then resulting from USES recruiting activities for and on behalf of employers in these areas tend to provide that excessive and unnecessary degree of competition we term questionable. But even more important is—at what cost is the white collar recruiting service being performed by the public employment service thus depriving service to unemployed and disadvantaged people?

Recently the National Industrial Conference Board reported on a study of preferred recruitment practices on nonmanufacturing firms. The tabulations of their report (No. 195) is as follows:

[In percent]

	List job orders with—		Consider most effective	
	Private agencies	USES	Private agencies	USES
Gas and electric	65	68	33	8
Banking industry	91	71	41	3
Wholesale trade	96	72	50	16
Retail trade	74	88	21	22
Insurance industry	83	75	36	9
Average	82	75	36	9

It is obvious that employers and white collar employees prefer to use private employment services in securing applicants and jobs.

This is even clearer when the above tabulations are compared to the NICB correlated study (No. 197) in manufacturing and construction.

Methods considered most effective for recruiting employees

	Blue collar employees (percent)
Direct hiring (unsolicited applications)	54
Local newspaper advertising	6
Public employment office	22
Private employment agencies	--
Employees recommendations	18

It is clear then to solve problems in unemployment, the public employment service must make maximum use of its resources in a full and concentrated effort in the areas of its competence and acceptance by employers and employees. The need for solving the problems of the unemployed was made clear in the President's Economic Report for 1967 when he said in part:

> The co-existence of job vacancies and idle workers unable to fill them represents a bitter human tragedy and an inexcusable economic waste. One of societies' most creative acts is the training of the unemployed, the under employed or the formerly unemployable to fill these vacancies.
>
> A dynamic economy demands new and changing skills. By enabling workers to acquire these skills, we open opportunities for individual development and self fulfillment. And we make possible higher production without inflationary pressures.

We believe that the Federal-State employment system, as the front-line agency charged with resolving unemployment, is currently capable, qualified, and adequately financed, provided this committee encourages proper channeling of their requested funds into the area of servicing the disadvantaged and unemployed.

Until quite recently there has been no concerted effort on the part of the Employment Service toward dealing with the disadvantaged and unemployed.Instead, the Employment Service has considered itself an employment agency with responsibilities toward placing applicants in all job classifications from professional, technical, managerial, through the labor scale to the blue collar and domestic worker. Thus the Employment Service has been and continues to be employer-oriented rather than oriented towards solving the needs of people.

In 1965 the Secretary of Labor appointed a high level task force to review the operations and activities of the Employment Service with an eye towards developing a broad new mandate. As an intricate part of this task forces findings, they recommended that the Employment Service "must be oriented to serve the needs of people." Further emphasis was given this recommendation by Dean Schultz, chairman of the task force, in his statement before the Subcommittee on Employment and Manpower in the joint hearings of last year when he said, "the Employment Service must of necessity be oriented toward meeting the problems of the individual."

Yet we submit that these recommendations and the recommendations of other labor economists and congressional and governmental studies are not being followed. Advertising for professional placement has been and presumably still is, on the increase. In May 1966, the Department of Labor released figures indicating that its professional placements were up 29 percent over the previous year. Yet during that same time period, unemployed rates in the blue collar, teenager, and older workers reached the highest level during 1966 and and professional and technical unemployment remained almost nonexistent.

Employer-oriented activities and services which in no way benefit the disadvantaged and unemployed include: specially designed tests produced to meet individual employer demands; use of free radio and television time devoted toward filling employer requests in the area of technical personnal; expanding relationships with professional associations to provide placement services at their conventions; interarea recruitment campaigns for technical, professional, and scientific personnel; Employment Service representatives and assigned to arrange

specific recruitment itineraries, prepare newspapers, radio and television advertisements, and to generally assist in attracting employed workers from one area to another and from one employer to another.

Mr. FLOOD. Isn't that piracy?

Mr. WILLARD. This is what it is commonly called. In connection with this there is attached to the full statement a few samples of advertising from recent newspapers from the various State employment services around the country.

Such activities as these have been highlighted in various reports dealing with the activities of the Employment Service. Of most significance however, is the report of the General Accounting Office, who in the last three reports on activities of the Public Employment Service, has consistently recommended that Federal funds be limited to those employment services which do not supplant employment services already performed by others.

The most recent of these reports was that of July, 1965, in which the General Accounting Office questioned—

> whether Federal funds should be used to provide employment services which are normally provided by the employer. (The Employment Service) did not provide additional placement services, but merely assumed, at Federal expense, functions, such as reception and secretarial services, advertising, and the preparation of company records, which properly belong to the employer [parenthesis ours].
>
> We recommended in a prior report to the Congress dealing with similar types of employment services provided by the States of Oregon and Washington (B–133182, dated November 13, 1964), that the Secretary of Labor limit the application of Federal funds to employment services which do not supplant services adequately performed by others and to services which may be expected to result in significant overall increases in job placements.

In line with the National Employment Association's sincere desire to achieve an effective policy of full employment and our knowledge of the placement problems, we have taken the liberty of setting forth for the committee, several policy guidelines, which in our opinion if incorperated by this committee in this year's report covering the Employment Service's appropriations, would do much toward fulfilling the basic objectives which we all seek.

(*a*) The Federal-State Employment Service must serve people.

(*b*) Full employment opportunity is proper, and practicable and should be a priority national objective.

(*d*) The underlying rationale for a public, tax-supported employment service in a free enterprise economy, is that it can contribute to a reduction of unemployment through offering a host of specialized manpower services to those who are in need of them.

(*d*) For maximum acceptance, the Employment Service must supplement rather than supplant the role and activities of other job finding channels.

(*e*) Utilization of any job finding channel must be completely voluntary on the part of jobseekers and employers.

(*f*) The Employment Service must not be operated so as to absorb normal recruiting costs of employers at the expense of other employers.

(*g*) The Employment Service must not be operated as to force its "disadvantaged" applicants to compete with the "advantaged."

(*h*) The Employment Service should function as a multiservice clearing center for all Government programs related directly to employment.

(*i*) Unemployment compensation and placement activities of the Employment Service should remain a single unit.

Our statement today is intended only to highlight the complexity of the job market, and the difficulties in placing the disadvantaged and unemployed. We have attempted to briefly set forth ideas which we of the placement industry, through our experience, know to be necessary, if unemployment as it presently exists, is to be reduced. The human resources development program recently inaugurated by the Department of Labor in conjunction with the Office of Economic Opportunity is a start, but we submit that it is too little.

Mr. FLOOD. What is the unemployment caseload by percentage as against the work force this morning, do you know?

Mr. WILLARD. The unemployed in relation to the employed?

Mr. FLOOD. From the Bureau of Labor Statistics, what is it?

Mr. WILLARD. We are talking about 3.8 percent, I think, or in that neighborhood.

Mr. FLOOD. What about male family heads, do you know what it would be? Would it be 2.1?

Mr. WILLARD. I do not know, myself.

Mr. FLOOD. Did you ever hear of it being lower?

Mr. WILLARD. No, I do not believe I did.

To insure full development of our human resources we believe that a congressional directive eliminating the use of Federal funds for advertising by the Employment Service should be a part of the appropriation act. Secondly, that services designed specifically to meet employers' problems be discontinued. Third, that the practice of recruiting of employed persons who have not voluntarily approached the Employment Service is a dangerous policy of Federal "pirating" from one employer to another employer and should be discontinued. Fourth, we would hope that the statistical information on permanent placements would be based on those lasting 90 days or more.

(The appendix follows:)

APPENDIX 1. ADVERTISING

[Newark Sunday News, Sept. 18, 1966]

HELP WANTED MEN

ATTENTION PROFESSIONAL WORKERS!

The job openings listed below are with some of New Jersey's leading employers and are typical of many we presently have.

If you will call at our office, we will be glad to interview you and match your qualifications against these or other suitable openings. Hours 9–5 Daily.

NO FEE CHARGED

Acct.-Auditor ---------- $6,211–$7090 DOE
B.S. Acctg.; car and license req.; travel allowance.

Acct., Cost ---------- $6,500–$8,500 DOE
H.S. + related Acctg. courses; 1–5 yrs. cost exp. Industrial organization.

Architectural Draftsman ---------- $700+ mo.
3–4 yrs. experience.

Art Layout Man ---------- $75 wk. start
Will train Art School grad.

Electronic Draftsmen ---------- $113–$130+ wk.
2–3 yrs. experience.

Jr. Chemists ---------- to $7,500
B.S. Chemistry; no exp. necessary.

Lab Technician ---------- $100–$135 wk.
H.S. Chem.; min. 1 yr. analytical exp.
Medical Technologist ---------- $87–$105 wk.
Hosp. exp. specialized areas; ASCP or eligible.
Office Mgr.-Accountant ---------- $8–$9,000 DOE
Deg. pref.; min. 5 yrs. exp. ind. organization.
Product Designer ---------- $150–$175 wk.
5 yrs. exp. in mech. or product design.

PROFESSIONAL PLACEMENT CENTER

New Jersey State Employment Service, Newark—Affiliated with U.S. Employment Service

(Male-Female May Apply)

[The Morning Call, Allentown, Pa., Feb. 10, 1967]

ATTENTION WAREHOUSE AND CLERICAL PERSONNEL

(All Departments)

WESTERN UNION

Opening New Warehouse in Allentown, Pa.

We Offer:
Permanent Employment
Automatic Salary Progression
Excellent fringe benefits

WESTERN UNION TELEGRAPH CO.

Friday, February 10, 8:30 to 5 P.M.
Saturday, February 11, 8:30 to 4 P.M.

[The Shreveport Times, Nov. 6, 1966]

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORP.

Has Immediate Openings at Gary, Indiana, Plant for: Productions Workers—$2.38½–$2.53 Per Hour.
No Previous Experience Necessary.
Tenth Grade Education Required, and Ability to Pass Pre-Employment Physical and Mental Tests.

APPRENTICES

MACHINIST

ELECTRICIAN AND PIPE FITTERS

High School Education Required With Background in Geometry, Trigonometry or Physics.

DRAFTSMAN

High School Education Required With 1½ Years Classroom Drafting Experience—Also High School Trigonometry Required.

MANAGEMENT TRAINEES

College Graduate With Bachelor's Degree in Accounting, Business Administration, Industrial Management or Marketing.

INDUSTRIAL ENGINEERS

College Graduates With Bachelor's Degree in Any Engineering Field and an Interest in Working in the Industrial Engineering Field.

Interested Parties Should Contact:

LOUISIANA STATE EMPLOYMENT SERVICE, 2900 DOWDELL

Personal Interview Will Be Conducted by: Mr. Bill Pollard Between 9 a.m.–4 p.m., Nov. 6, 7, 8, 9, 10.

An Equal Opportunity Employer

[Fort Worth Star-Telegram, Nov. 27, 1966]

FREE!!

Training Courses Now Forming

Here are excellent opportunities to learn a profession in these challenging career fields. This valuable training will lead to an interesting and profitable position in the rapidly expanding aerospace industry.

IN . . . TOOL PLANNING

Requires high school education plus one year technical training or one to three years sheet metal, machine shop or tool making experience and the ability to read blueprints.

IN . . . TOOL DESIGN

Requires high school education plus one year technical training, knowledge of shop mathematics including trigonometry, descriptive geometry and mechanical drafting. Machine shop or tooling experience acceptable in lieu of technical training.

LTV AEROSPACE CORPORATION

9314 W. Jefferson, Dallas, Texas

an equal opportunity employer—m/f

ELECTRONICS TEST EQUIPMENT TECHNICIANS

ELECTRONICS TECHNICIANS

TECHNICIANS ELECTRONIC REPAIR CENTER

With experience in calibration and repair of electronics test equipment, either service connected or in private industry. Knowledge of electronics circuitry, microwave, computers (Analogue and or digital), first class commercial license and/or amateur license desirable. Experience gained in airborne electronic systems military school desirable.

Ad paid for by General Dynamics

[The Lowell Sun, Nov. 29, 1966]

THE LIGHT WE'VE SHED ON NEW TECHNOLOGIES MAKES FOR A PRETTY BRIGHT PICTURE . . . COME SEE!

In the last fifteen years 'Sanders' has meant the last word in an ever-increasing variety of advanced technologies. This reputation has brought us unprecedented growth which shows no signs of slackening.

This kind of expansion could mean big things for your career, too. Opportunity, job stability, and promotion, for instance.

No wonder people like it here. Our wages are competitive with any in the area, and better than most. And we've got an unbeatable benefit package, too, including health and life insurance, 8 paid holidays, two weeks vacation your first year, pensions, prepaid tuition, and a lot more besides.

Sanders is the place to go if you feel a job should offer more than just a place to work. If you'd like more details on how Sanders can spell opportunity for you, why not investigate one of the jobs listed below.

Immediate openings exist for the following:

DRAFTSMEN

With 2 to 5 years experience in schematics, sheet metal, castings, electrical components, fastenings, or MIL specs.

ELECTRONICS TECHNICIANS

New assignments at all levels in expanding R&D groups for technicians with military and/or technical schooling, or industrial training. Requires electronic background in theory and techniques for constructing, testing, and repairing electronic and electromechanical devices, and testing equipment.

ELECTRONIC INSPECTORS & TESTERS

Requires a basic knowledge of electronics theory for construction and testing of techniques and procedures used to test, evaluate and inspect a variety of electronic systems. Must be able to work from specifications, drawings, sketches and verbal instructions to conduct performance tests.

PRECISION MECHANICAL INSPECTORS

To plan, lay out, and set up sequence of operations to inspect a wide variety of mechanical parts and assemblies. Must be able to utilize various instruments and perform all required mathematical calculations in order to determine acceptability and conformance to specifications.

ENGINEERS & PRODUCTION EXPEDITERS

Positions involve proceurement, movement and processing of materials, supplies and equipment. Requires understanding of nomenclature and identification of equipment and tools used in fabricating electronic and electromechanical products. Applicants must be familiar with routines and procedures used in expediting and following materials.

SYSTEMS TEST TECHNICIANS

Duties on both 1st and 2nd shifts include testing and troubleshooting on systems and sub-assemblies, i.e., receivers, transmitters, traveling wave tubes, and video circuits. Technicians with ECM or radar experience are preferred, but TV repair experience would be applicable.

ASSEMBLERS—MALE & FEMALE

Requires a basic knowledge of assembly techniques used on electronic and-or electromechanical products, including tools, machines, soldering and checking instruments. Trainee positions are avaliable with full pay.

UTILITY MEN

To generally assist various tradesmen—electricians, millwrights, etc.

JANITORS

Duties include cleaning factory and office areas. 2nd shift openings—5 p.m. to 1 a.m. Applicants must be able to pass rigid physical exam.

Opportunities are also available for Secretaries, Stenographers and Clerk-Typists.

LOWELL INTERVIEWS

Wednesday thru Friday, November 30–December 3, 9 a.m. to 4 p.m. See our Representative, Mr. R. Cook, Massachusetts Division of Employment Security, 291 Summer St., Lowell.

If an interview is inconvenient at this time, please send your resume to Mr. David A. Williamson.

SANDERS ASSOCIATES, INC., NASHUA, N.H.

NEW DIRECTIONS IN ELECTRONICS SYSTEMS

An Equal Opportunity Employer

EARN WHILE YOU LEARN A TRADE

Ambitious, trainable workers are needed now to help build the F–111 and to fill other interesting jobs in the fast growing aircraft industry. General Dynamics, Fort Worth Division will offer on-the-job training to high school graduates who are able to use shop math, and who qualify for employment in the following classifications:

TOOL & DIE MAKERS

JIG & FIXTURE BUILDERS

FORM BLOCK MAKERS METAL & WOOD

Must be high school graduate and have at least 1 year's experience in form block making.

PATTERN MAKERS

PLASTER TEMPLATE MAKERS

TOOL MAKERS PLASTIC

DIE FINISHERS

Additionally, openings for experienced people exist in following classifications:

FIBERGLASS LAYUP

TEMPLATE MAKERS

TOOL MAKERS PLASTICS

HELIARC WELDERS

Must have held aircraft welding certification.

TOOLING INSPECTORS

2 to 5 years experience in jig and fixtures and tool and dies.

TOOL & OPERATIONS PLANNERS

Must have at least 3 years recent experience in tooling and processing of machine shop, sheet metal details and assemblies.

TOOL DESIGNERS

Must have at least 3 years recent experience.

Excellent wages and fringe benefits including: Group Insurance Plan, Company Paid Retirement Plan, Liberal Vacation Plan, Seven Paid Holidays per Year, Extensive Recreational Facilities.

An equal opportunity employer.

GENERAL DYNAMICS—FORT WORTH DIVISION

Ad paid for by General Dynamics

Mr. WILLARD. Mr. Chairman, that is the end of the formal statement.

Mr. FLOOD. As an old district attorney, that is a very impressive indictment.

Mr. STUART. I would comment: as he said, our group feels that basically we are trying to help, and particularly having emphasis to the disadvantaged and the unemployed rather than the employed. This is our basic premise here.

Mr. BERGMAN. I would only add to that and indicate that an organization whose basic premise is to serve people, the practice of serving the needs of the employer——

Mr. FLOOD. You serve people for pay.

Mr. BERGMAN. We serve people and employers for pay, that is correct. The Employment Service maintains this double service, too. When they serve employers the function is not to place people but to screen out people so that you come up with a single individual meeting the employer's specifications and demands.

This is no way, in our opinion, to solve the problem of unemployment, particularly in cases of long-term unemployment, because the longer a person is unemployed, the more difficult it becomes to place him.

Mr. FLOOD. Yes, in my district in the coal fields we are aware of this.

Mr. MOUNTIN. I have nothing to add, except to underline our request that the committee include in its report guidelines for the Employment Service to follow in order to better serve the unemployed and disadvantaged with the end in mind of restoring these classes of individuals to the status of full employment.

Mr. FLOOD. Thank you gentlemen.

Mr. WILLARD. Thank you.

THURSDAY, APRIL 27, 1967.

OFFICE OF EDUCATION PROGRAMS

WITNESSES

JOHN M. LUMLEY, DIRECTOR, DIVISION OF FEDERAL RELATIONS OF THE NATIONAL EDUCATION ASSOCIATION

WILLIAM H. McLIN, ASSISTANT DIRECTOR, DIVISION OF FEDERAL RELATIONS

Mr. FLOOD. We will now hear from John Lumley, who is director of the Division of Federal Relations of the National Education Association.

Mr. LUMLEY. I have with me Mr. McLin of our staff.

Mr. FLOOD. I might add Dr. Lumley is an old friend of mine and at one time resided in my district in his capacity as an educator. I am sure he is glad to remember those days.

Mr. LUMLEY. I listened with interest to the testimony of the people from Iowa and I wanted to say to you, sir, that Pennsylvania has a very outstanding special education program and your city of Wilkes-Barre has the Dr. Kirby Health Center, the Workshop for the Blind and working with the city schools. It has been doing a tremendous job.

Mr. FLOOD. I was very interested in that young man's statement. It was well documented.

Mr. LUMLEY. It was a good statement. You have right in your district some things that have been going on for quite some time.

Mr. FLOOD. Indeed we have.

Mr. LUMLEY. It was done before you had Federal funds to stimulate it.

Mr. FLOOD. You would know, you were there.

Mr. LUMLEY. I have to confess that we made an error on the last page of our statement and we corrected it. If we can enter this into the record to save you time, we will not read this to you. We will pick out two or three things we want to call to your attention.

Mr. FLOOD. We will do it your way. Without objection this will be inserted in the record as corrected and you will comment.

(The statement in full follows:)

TESTIMONY ON FISCAL 1968 APPROPRIATIONS FOR THE U.S. OFFICE OF EDUCATION IN BEHALF OF THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES, PRESENTED BY JOHN M. LUMLEY

Mr. Chairman and Members of the Committee, I am John M. Lumley, Director of the Division of Federal Relations of the National Education Association. The NEA, as you know, is an independent association of professional educators. Our membership includes educators in the public and private schools and colleges ranging from pre-school teachers to university presidents. Of our 1,025,000 members, 95% are classroom teachers.

Our testimony on Fiscal 1968 appropriations for the U.S. Office of Education is based on the policies of the parent Association as defined by the platform and resolutions adopted by the 7000 delegates to the annual convention of the Association. With me today is Mr. William H. McLin, Assistant Director of the Division of Federal Relations.

The National Education Association believes that the social legislation enacted by the Congress during the past four years marks a significant turning point in the life of this nation. At long last, we have begun to accept the principle that the Federal Government can and should assist the state and local governments in providing the opportunity for every citizen to develop and use his talents, to lead a healthy and productive life, and to participate more fully in shaping the destiny of his country. Of particular importance is the commitment of the Congress to the goal of equal educational opportunity, as embodied in legislation affecting the public schools.

Within the span of a few short years, we have seen concrete results of this commitment. These new programs have kindled new public interest in the problems of the schools. Federal funds have been directed, in highly selective ways, to attack those problems. Countless young people who would never have succeeded in school are staying in school. Thousands of our teachers are upgrading their skills with federal help. The promise of the new federal commitment to education is attracting qualified people into the teaching profession.

Now there are those—sadly, some within the Administration—who would ask us to "pause, reflect, reexamine," to hold back a bit on federal spending to see whether these programs are working. We know perfectly well that they are working. Some of the programs may be limping a bit, some need a major overhaul, but the solution to the problem is not to be found in reducing appropriations. In many cases, the problem is that the intent of Congress in passing the legislation is thwarted by inadequate funding. Administrative adjustments can be made as necessary without suspension or reduction of the appropriations.

In its legislative procedure, the Congress authorizes certain sums to be appropriated for the designated purpose. It is the belief of the NEA that the authorization reflects the minimum needs envisioned by those who write the legislation—not an arbitrary "ceiling" on the appropriation. Examination of existing programs shows that in virtually every case the intent of Congress would be realized (or at least substantially advanced) if the programs were fully funded. However, NEA is aware that the exigencies of the time prevent full funding. We therefore call to the attention of this Committee five programs which we believe worthy of priority treatment:

1. *Title III of the National Defense Education Act.*—This program is probably the most popular and successful education measure ever enacted. It has

been broadened to include every subject taught in elementary and secondary schools, with the exception of physical education and health. We emphatically reject the argument that other federal programs, such as Title II of PL 89–10, reduce the need for this legislation. And we deplore the proposal that the Fiscal 1968 appropriation be reduced to $50 million—from the present, inadequate, level of $82 million. We propose that the full authorization be provided so that subject areas newly covered may benefit without encroaching on the benefits for the others.

We question the wisdom of the proposal to place the supervisory services program (Part B of this Title) under Title V of PL 89–10. The services rendered by the states to local education agencies have been developed to a high degree, personnel have been trained and placed in supervisory positions. There is no guarantee that this program will continue, develop, and flourish if placed under the vague unmbrella of Title V, PL 89–10.

2. *Title XI of the National Defense Education Act.*—The Administration requests only $35.5 million of the $50 million authorized for Fiscal 1968. Again, the recent addition of new subject matter areas to this program demands full funding.

3. *Title V, Part C, Higher Education Act of 1965.*—The authorization for fellowships for teachers in Fiscal 1968 is $275 million, but this figure presumes full operation of the program during the preceding two years. The Administration asks only $35 million for 1968. The judgment of the U.S. Office of Education was that $90.5 million would be appropriate to the purposes of this part during the next fiscal year, and we concur, on the basis of information available to us.

4. *Title V, Part B, Higher Education Act of 1965.*—The Teacher Corps has had a rougher time in Congress than it deserves. The attached NEA survey indicates the degree of popularity enjoyed by the Corps in the field. In addition, we believe that this program is unique in its impact on the minds of young people who are deeply concerned about the educational plight of the disadvantaged, and that it offers master teachers a chance to convey their insights to a new generation of teachers. Also, we believe that this program, through its recruitment of dedicated persons, is an effective means to stem the flow of teachers from depressed neighborhoods into the suburbs. It is sound in concept, and we are heartened by steps being taken to improve its operation. For this reason, NEA supports the full $36 million requested by the Administration for Fiscal 1968.

5. *Title I of the Elementary and Secondary Education Act of 1965.*—In 1966, the Congress amended this Title to provide for a new allocation formula. The effect of this new formula would be to require $2.5 billion for full operation of the program in Fiscal 1968. Yet, the Administration requests only $1.2 billion. We submit that this affluent nation can ill afford the social consequences of hedging on a program so desperately needed by so many. There is a moral issue here: Is it right and proper to raise the expectations of the poor, to give them hope and opportunity, and then curtail the program? The answer is obvious.

In closing, we would comment on what we consider a most unfortunate development. The U.S. Office of Education proposes to establish regional offices around the nation, larger in scope and authority than those which exist at the present time. The purpose of this move is, according to the Administration, to bring the U.S. Office "closer to the people," and to free the Washington staff of dealing with everyday local problems. It is argued that the Washington staff could spend its time analyzing existing programs, make adjustments and refinements where necessary, and plan new projects.

We say that this is foolishness. The establishment of regional offices and the supposed decentralization of authority will not insulate the Commissioner of Education and his top aides from problems in the field, phone calls and letters from frustrated and disgruntled schoolmen. In any event we suggest that such insulation would probably serve only to remove policymaking from reality.

From the financial point of view, decentralization would be wasteful and inefficient. It is proposed that 955 persons be hired for the nine regional offices. A smaller staff could easily handle the administration of the federal programs in Washington and make field trips as needed. The modern jet aircraft can put the Commissioner and his staff on the scene of any crisis within a few hours.

We propose that this Committee insert language into the appropriation bill specifically prohibiting the staffing of regional offices for the U.S. Office of Education with personnel to administer and supervise elementary and secondary education programs.

[Congressional Record, Mar. 20, 1967]

National Education Association Poll Supports the Teacher Corps

Extension of remarks of Hon. John Brademas, of Indiana, in the House of Representatives, Wednesday, March 15, 1967

Mr. Brademas. Mr. Speaker. I would like to call the attention of my colleagues to a recent statement by the National Education Association expressing full support for the Teacher Corps.

In testimony this week before the House Education and Labor Committee, John Lumley, director of Federal relations, said that the NEA has "supported, and continued to support the National Teachers Corps as an innovative experimental program to provide teachers for urban and rural schools with large concentrations of children from low-income families."

Mr. Speaker, the NEA speaks not only from what its representatives here in Washington see, but from reports from its nationwide membership. In particular, the NEA surveyed superintendents and principals who have Teacher Corps programs in their schools. Of 88 superintendents who responded, 80 found that the impression of their regular staff towards the corpsman was either excellent or favorable.

Of 196 principals responding to the same question, 171 gave a similar favorable response and another 18 found at least a neutral attitude.

Mr. Speaker, this is compelling evidence from the people in the field, from the men and women responsible for running our schools, that members of the Teacher Corps are doing their job and are well received by their fellow teachers. I can think of no higher praise for the Corps men and women than this tribute from their fellow teachers.

Under unanimous consent, I insert the NEA statement and a compilation of the results of their nationwide poll in the Record at this point:

Testimony of John M. Lumley, Director, Division of Federal Relations, National Education Association, Presented to the Education and Labor Committee of the U.S. House of Representatives, March 14, 1967

By focusing attention on the economically disadvantaged, the Congress has recognized the importance of education in overcoming the problem of the poverty cycle if each individual is to have an opportunity to achieve economic and social well-being. This recognition has activated public interest in an appreciation of the vital role of education. Although improved educational opportunities alone cannot solve all the problems faced by those who live in poverty, it is encouraging to note a national recognition of the fact that without improved educational programs none of the problems will be solved.

Unfortunately, the handicap of limited state and local financial resources has resulted in many school districts being unable to meet the special needs of the economically disadvantaged.

We have supported, and continue to support, the National Teacher Corps as an innovative experimental program to provide teachers for urban and rural schools with large concentration of children from low-income families. We believe that the transfer of this program from the Higher Education Act to the Elementary and Secondary Education Act is a wise and constructive action. NEA's support of the program is based on the principle of assisting school districts with large numbers of disadvantaged children to secure highly qualified teachers.

NEA questionnaire on teacher corps

Questionnaires were mailed to the 111 school districts participating in the National Teacher Corps program. We received a response from 79% of the superintendents and 50% of the principals. A copy of the tabulated results is attached.

[From division of Federal relations, National Education Association, Feb. 17, 1967]

NEA questionnaire on Teacher Corps

1. How do you rate the preservice (summer) training program of the teacher corpsmen assigned to your school or school system? (Check one.)

Excellent:
Superintendents ---- 31
Principals ---- 59
Adequate:
Superintendents ---- 44
Principals ---- 73
Inadequate:
Superintendents ---- 6
Principals ---- 12
Uncertain:
Superintendents ---- 7
Principals ---- 46

2. How do you rate the inservice (followup) training that the teacher corpsmen are receiving at the cooperating college or university? (Check one.)

Excellent:
Superintendents ---- 39
Principals ---- 73
Adequate:
Superintendents ---- 39
Principals ---- 82
Inadequate:
Superintendents ---- 5
Principals ---- 15
Uncertain:
Superintendents ---- 5
Principals ---- 33

3. What do you see as the greatest benefit from the Teacher Corps program? (Check one.)

A source of personnel available now for work in schools serving the poverty areas:
Superintendents ---- 42
Principals ---- 84

A future source of qualified teachers for work in schools serving the poverty areas:
Superintendents ---- 41
Principals ---- 97

Other (please explain):
Superintendents ---- 5
Principals ---- 19

4. How do you rate the motivation of teacher corpsmen compared with other beginning teachers in the schools serving the poverty areas? (Check one.)
Corpsmen are more highly motivated:
Superintendents ---- 60
Principals ---- 111

No difference is observed between corpsmen and other beginning teachers:
Superintendents ---- 20
Principals ---- 56

Corpsmen are not as highly motivated:
Superintendents ---- 4
Principals ---- 21

Uncertain:
Superintendents ---- 4
Principals ---- 8

5. In general, how would you describe the cooperation of corpsmen with your regular school staffs? (Check one.)

Corpsmen are working well with the regular staff:
Superintendents ---- 79
Principals ---- 176

Corpsmen are not working well with the regular staffs:
- Superintendents ---- 3
- Principals ---- 10

Other (please explain):
- Superintendents ---- 6
- Principals ---- 12

6. What is your impression of the attitude of your regular staff toward the Corpsmen? (Check one.)

Very enthusiastic:
- Superintendents ---- 30
- Principals ---- 54

Favorable:
- Superintendents ---- 50
- Principals ---- 117

Unfavorable:
- Superintendents ---- 3
- Principals ---- 7

Neutral:
- Superintendents ---- 5
- Principals ---- 18

7. Please explain briefly your answer in Question 6 above: (The following statements are indicative of the responses of the superintendents and principals.)

(a) "There have been many requests by regular teachers to have NTC members work with them in their classrooms."

(b) "Regular teaching staff is grateful for additional assistance, however, some teachers are envious of the fact that corpsmen are released two days a week to attend classes at the university while making the same salary."

(c) "The regular staff and the community are very enthusiastic."

(d) "Our teachers are pleased with the teacher corps and are real proud of the help the corps has given them. We would like to see the program continued."

(e) "At first there was distrust and suspicion. Most of it is gone. Still there is envy and it is based on the payment received to go to school."

(f) "At first they did not understand the purpose of teacher corps. This is understandable in view of all the delays involved. Congress could improve this for the future years by passing appropriations sooner."

(g) "Our staff is highly pleased with the enthusiasm and progress in two schools now using the NTC program. Both pupils and teachers are happy in the unusual accomplishments of this enriching approach to learning."

(h) "The interest of the corpsmen not as great as was anticipated. The cooperating college did not send us the team that we requested; therefore, we had to make numerous changes when they arrived in our system."

8. What are your plans for next year? (Check one.)

I plan to ask for additional corpsmen:
- Superintendents ---- 49
- Principals ---- 67

I plan to keep the present corpsmen for the second year and then ask for replacements:
- Superintendents ---- 26
- Principals ---- 74

I plan to keep the present corpsmen for the second year, but I do not think I will ask for replacements:
- Superintendents ---- 5
- Principals ---- 14

I plan to dismiss the present corpsmen at the end of the first year:
- Superintendents ---- 2
- Principals ---- 3

Other (please explain):
- Superintendents ---- 5
- Principals ---- 33

NOTE.—If you are a *principal*, please answer Questions 9 and 10, skip Questions 11, 12, and 13, and continue with Question 14.

If you are a *superintendent*, please skip Questions 9 and 10 and continue with Question 11.

9. How many Corpsmen are now assigned to your school?
——— Number of Corpsmen.

10. Including the Corpsmen now in your school how many Corpsmen could you use efficiently to supplement the services of your regular staff?
——— Minimum number.
——— Maximum number.

11. How many schools in your system now have Corpsmen?
——— Number of schools.

12. How many Corpsmen are now working in your system?
——— Number of Corpsmen.

13. What are your *additional needs* for Corpsmen?
——— Estimated number of additional schools.
——— Estimated number of additional Corpsmen.

14. Please give your evaluation and any other comments you care to make about the effectiveness of the Teacher Corps as a program for training teachers to work in poverty areas. (The following statements are indicative of the responses of the superintendents and principals.)

(a) "We believe the NTC can help us to do a better job in preparing children for productive learning. We think the school must do more than offer the students the traditional curriculum during the regular school day. Corpsmen can introduce these pupils to the world outside the routine and provide learning situations during the school day that are appropriate for the individual and small groups."

(b) "The National Teacher Corps members are highly motivated, concerned with the individual child, demonstrate concern. Good model for traditional teachers. Establish rapport with students."

(c) "The Teacher Corps members are much more highly motivated to work with poverty areas than the average teachers."

(d) "It is a very good program for training teachers to work in poverty areas."

(e) "Unlike teachers who are hired directly from teacher colleges or other teacher training institutions, Teacher Corps personnel have been prepared for some difficult situations which they are likely to find in the inner-city schools. Because they treat the children with more understanding, they are more likely to reach the children and to do a more effective job than the teacher trained in a traditional manner."

15. Please give any additional comments about the usefulness of the work the Corpsmen are doing now. Include here your comments about any new services or programs that have been possible this year because of the help of the corpsmen. (The following statements are indicative of the responses of the superintendents and principals.

(a) "Our Corps members have served our area well in the short time we have had them. The interns have performed invaluable services in remedial programs for individuals and small groups. The contact with the community and its problems have been useful both to the community and to the Corps members themselves."

(b) "Such activities as home visits, creative writing, tutorial services, remedial reading instruction, and 4–H Club work are some of the services being performed by the Corpsmen. We find the members most willing to accept responsibility and to have a good attitude toward the children."

(c) "The Corpsmen on the whole are doing community work and have been able to greatly enrich and assist in our Title I work."

(d) "Use of NTC has enabled us to reduce the pupil-teacher ratio."

(e) "The shortage of teachers has been such that we had five classrooms without teachers from September to Christmas. We integrated the Corpsmen with a language arts remedial program under Title I. They have introduced new methods into teaching. They work both with the parents and with the children. They are very devoted and conscientious with the children. I only wish we had 25 instead of 5 that I might put them in all our schools. We have not had a single incident or problem with the Corpsmen. Please help to get more adequate funds so we can have more."

(f) "Because the interns and the team leader are not required to teach a full load of classes, they can offer individual help to some children. They are planning also to offer a new type of seminar in order to help some of our under-achieving

students who might benefit from small group work. The preservice and inservice training stresses the use of innovative material and the Teacher Corps team is planning to experiment with the use of some new materials which might be valuable in this school and which might be valuable in similar schools."

(Reproduced by the NEA Division of Federal Relations, March 28, 1967.)

STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION,
Des Moines, Iowa, April 6, 1967.

Mr. JOHN M. LUMLEY,
Division of Federal Relations,
National Education Association,
Washington, D.C.

DEAR MR. LUMLEY: During the past few weeks we have received a number of communications dealing with Titles III and X of the National Defense Education Act. Without exception, all have painted a rather gloomy picture concerning the future of this Act. May I prevail upon you to give a hearing to the following letter which sets forth the somewhat detailed attitude of the Department of Public Instruction of the State of Iowa.

It was the expressed purpose of the National Defense Education Act of 1958 (Public Law 85–864, as Amended) "to provide substantial assistance in various forms to individuals and to States and their subdivisions in order to meet the national defense needs of the United States." To insure trained manpower of sufficient quality and quantity the Act further declares that "The national interest requires that the Federal Government give assistance to education for programs which are important to our defense." If this was true at the time of the passing of this original legislation, it is even more of a necessity today.

The State of Iowa, the State Board of Education, and the Department of Public Instruction accepted the provisions of this Act and have made every effort to assure its successful implementation. This has been done through a very substantial matching funds effort and a strong buildup of personnel within the Department.

The said National Defense Education Act of 1958 as amended is designed, among other things, to meet antional needs for personnel skilled in the areas of science, mathematics, modern foreign languages, and the other critical subjects in the pubic schools. Other critical subjects have been added until today Iowa has people assigned as consultants in the following critical subjects:

Mathematics
Science
Modern Foreign Languages
English
Reading
Civics
Geography
History
Industrial Arts

As critical subjects were added to the Act proportional budget increases were not made but undivided effort of the State made it possible through matching funds to carry out the great need in these critical subject areas.

Not only has Iowa developed its personnel in the critical subject areas but through state effort has added numerous related area consultants to supplement NDEA personnel.

With this as a background I should now like to center our attention on the following proposals:

1. This Act is unique in that it is general aid to all pupils in the public schools and is not limited to the educationally or economically deprived. In reality it is for all boys and girls.
2. The Act should be continued for five years until June 30, 1973.
3. It should be left to Congress to establish the amounts of money to be authorized in each of these fiscal years. However, each time a new critical subject area is added a proportionate amount should be added to the appropriation. This is especially imperative should be subject categories be eliminated. If such an open-end approach be passed, it would become necessary that a definite category of ineligible materials be listed such as athletic and recreation materials.

4. Iowa protests vehemently any transfor of state administrative funds into any other title. We also object strenuously to state administration expenses being paid out of the Title III project funds and to the "in lieu" of separate funding in the amount used for the administration of the state plan for any year in a given state in the amount not to exceed 3% of the amount paid to the state under Title III for that year, or $50,000, whichever is greater. If this recommendation is accepted by Congress, it would undoubtedly result in confusion, substantial reductions, and the possible elimination of this valuable and essential program.

5. One of the great contributions to education through Title III has been the fact that Iowa has had an excellent supervisory approach to all public schools. If provisions for this phase of the program were to be transferred to Title V of ESEA and not be earmarked, it could well be lost to Title III. This is because our State Title III, NDEA funds are appropriated by our General Assembly to match Federal funds allocated to Iowa for administration and supervision of the Title III program. If the matching provision is removed from the Federal requirement we will most certainly lose our State appropriation. The Iowa appropriation provides $80,000 for fiscal 1967. Our Governor has recommended an appropriation of $125,000 for each year of the next biennium.

We are in a similar situation in regard to Title X, NDEA. If the Title X Federal program is eliminated and funds shifted to Title V, ESEA, without a matching requirement for funds spent in the Title X program, we will lose our State matching funds. Our State matching appropriation under Title X for fiscal 1967 is $75,000. Our Governor has recommended that this be increased to $80,000 for each year of the next biennium.

Our statistical program has been growing rapidly. Iowa is recognized nationally as having a strong program. We strongly urge that the Federal Title X program be continued and strengthened.

I realize this letter is lengthy but careful study of a program of this magnitude is necessary before drastic sweeping changes are made.

I am willing to appear at the hearings and testify on behalf of Title III, NDEA.

Sincerely yours,

PAUL F. JOHNSTON,
State Superintendent of Public Instruction.

Mr. LUMLEY. The No. 1 item is the National Defense Education Act. Title III of the National Education Act last year expanded the subject matter that could be included. Yet the request for appropriations this year is lower than last year. In other words, industrial arts education was added to the list of categories in title III. This is for the purchase of equipment and instructional materials, which is on a matching basis. There are two parts of this title III that I want to call to your attention. They reduced the $82 million to $50 million.

We believe it should have a full funding which would be $90 million because of the additional subject matter that has been added.

You cannot do a job and you cannot add more categories to purchase material and reduce the money without somebody losing. That is the point I am trying to make. As I have said, there are two parts to title III. The other part is part B, which provides for supervisory services. The recommendation of the administration which I realize you do not legislate but which has gone to the Elementary and Secondary Schools Act in the Education Committee would be to transfer this supervisory service from title III to title V.

We again believe this is wrong because under title III you have a matching requirement of 50 percent on the part of the States. For every subject matter in title III, English, reading, all of the subjects, you now have State supervision. A State supervisor is being employed to supervise the programs in title III. If this part B is eliminated and taken over into title V of the Elementary and Secondary Act there is no reason to believe that the States will necessarily pick it up.

We have as an attachment to our testimony a letter from Paul Johnston, the State superintendent of Iowa, who brings out this point and who has given me permission to submit his letter to you. Because of his schedule he could not get here to testify himself. He is very much concerned that the Iowa Legislature, without the requirement of matching, would drop this.

Mr. FLOOD. How can we help you in the appropriation?

Mr. LUMLEY. We think that the appropriation should be made for title III in full. We hope to get the Education Committee to put part B back where it belongs.

Mr. FLOOD. You are talking about the 1968 budget?

Mr. LUMLEY. That is right.

Mr. FLOOD. Effective July 1?

Mr. LUMLEY. That is right.

Mr. FLOOD. How can I help?

Mr. LUMLEY. You have to increase this $50 million in title III to the degree that it can be increased. As the appropriation bill goes through we believe we will convince the Education Committee to keep part B in title III and then your Appropriations Committee can make the appropriation.

Mr. FLOOD. Aren't you in the position of which comes first, the chicken or the egg?

Mr. LUMLEY. We are in that position. We have testified to the Education Committee and they have agreed with us on this. I think they have agreed.

Mr. FLOOD. So you hope.

Mr. LUMLEY. So we hope. The part B section I am calling to your attention because we will come back to you later. TitleXI of the National Defense Education Act is exactly the same thing. Here again we have expanded the number of categories and there is a proposal from the administration that we even eliminate categories and give the Commissioner the opportunity to expand even further to any category that he believes is necessary.

But again we reduce the amount of money that is available. We are saying two things: One thing is that the appropriation should go back to the full authorization. We are saying to the Education Committee that we should keep the categories here or provide some way that there can be a State survey of needs, and not have it all here in Washington. In title V of the Higher Education Act there is an authorization for fellowships for teachers of $275 million. The administration has asked for $35 million in 1968. The Office of Education tells us that the minimum figure they believe we should have would be $90.5 million to operate the fellowship program for teachers.

Mr. FLOOD. Who told you that?

Mr. LUMLEY. We got this figure from the Office of Education. In other words, this was their original request which has been reduced.

We believe that the need for the upgrading of teachers is so great that here is a priority item in the fellowship program for teachers just like title XI of the Institutes for Teachers is a priority item. If we are going to get better teachers we have to do something to improve them and this is the way to do it.

One item I know that I need not go into any great detail with you about, because I am sure you have heard of the Teacher Corps. I believe everybody in Congress has heard of the Teacher Corps.

Mr. FLOOD. Yes, more or less.

Mr. LUMLEY. We have included here, for your information, a survey that we made of the districts that have had Teacher Corps operations.

Mr. FLOOD. What is your position?

Mr. LUMLEY. We are asking you to fund the Teacher Corps at the full $36 million.

Mr. FLOOD. What do you mean by "we"?

Mr. LUMLEY. The National Education Association.

Mr. FLOOD. You are asking what?

Mr. LUMLEY. The full funding of the Teacher Corps. We have asked the Education Committee to extend the Teacher Corps for the coming year. Again you are going to ask me, which comes first, the chicken or the egg. Again, I think the chicken is going to lay the egg for the Teacher Corps, or at least we hope it is, and if this is true we believe that the $36 million is money well spent.

Mr. FLOOD. Your organization supports the Teacher Corps?

Mr. LUMLEY. Yes, sir.

We have included in the statement one thing which we are not pressing because we are realistic as far as money is concerned. In our opinion one of the greatest things that happened was the enactment of the Elementary and Secondary Education Act and title I, in particular, because it forced local school districts to take care of the disadvantaged.

A lot of districts that knew that they had problems received this money and they were ready to use it. Other districts were vaguely aware that something should be done and this gave them the opportunity. There was a third group and there funds stimulated them to act.

One of the great things, we believe, Mr. Chairman, was the fact that it solved at the national level this problem of the church-state issue and it put it back where it belonged. It made the local school superintendent become acquainted with the parochial school superintendent and it made it possible for them to sit down and resolve the problem: How do you do things for kids in your local school district?

Unfortunately, the administration asks only for $1.2 billion and the Education Committee has delayed the changing of the formula. I call it to your attention because we believe it would have been better if we had more money, but I know there is only so much money to go around and you have to divide it.

I speak now not only for the National Educational Association, but I also speak for the American Association of School Administrators. This is the program of staffing HEW regional offices as Office of Education groups, and putting an Assistant Commissioner at the head of each of these regional offices and assigning to them people who are going to be able supposedly to make decisions on certain matters.

Now, they already have started on the small grants and so on.

We oppose this. We oppose this as far as it relates to the elementary-secondary program because we believe this puts in between the State departments and the Office of Education an unnecessary layer. We believe if there is a problem in your school district, and it goes to the regional office, and the regional office makes a decision which is not satisfactory, that the thing has to end up in Washington anyway. So all you have done is to delay the process.

The other reason that we object is that—we don't believe that you can have flexibility. If one region makes a decision and another region finds that is a little more liberal than theirs, there is going to be a complaint here and so the first thing we are going to have is an inflexible set of regulations coming out of Washington that will be more inflexible than if the decision is made right here in the first place. I am paraphrasing what I have included in our statement.

Now, we have limited this and we are asking you as an Appropriations Committee to include a rider in your bill saying that money should not be spent for salaries for administrative and supervisory personnel in regional offices to administer and supervise elementary and secondary programs.

We believe that the Commissioner and the U.S. Office of Education should deal directly with the State departments of education, and thus you have 50 regional offices; there is no reason why there has to be an intermediary.

We are not saying this about higher education because there are different problems involved. You have the student loans and you have the contact with certain institutions which State governments are not geared up to handle. The State of Pennsylvania does have a higher education commission.

Mr. FLOOD. You are talking about restrictive language in the act?

Dr. LUMLEY. That is what we are talking about. We have no other way to approach it. There is no way unless we can get Congress to pass a law which would prohibit the Commissioner's doing something that he can do administratively.

Mr. FLOOD. Well, why don't you? We don't write law here, you know.

Dr. LUMLEY. No, but many times you restrict expenditure of money. We are not restricting the positions. We say restrict only insofar as regional officers are concerned. Actually it is a matter of speed because the regional offices are being staffed and staffed very quickly now. The one in Atlanta has been fully staffed. The one in Dallas will be fully staffed by the first of May and I would assume by fall the plan is to have them all staffed to do this job.

We believe there is a third thing that I haven't mentioned to you, Mr. Chairman, and that is that once you get a regional office establishment you will then tend to have more Federal control over your State operations. If a man takes a project to the State department of education even though title I of the Elementary-Secondary Act says that the State department shall make the decision, that man may appeal to the regional office and that office could have a great influence on what happens.

I realize it is unusual to ask an appropriations committee to do this, but, as I say, we have talked to the Commissioner; we have met with the Commissioner; we have expressed our concern; we have expressed our opposition—not only the two groups I say that I represent here today, but also the Congress of Parents and Teachers and the State boards of education, and the National School Boards Association, and the State commissioners of education. They joined in this opposition, but I am only speaking for two and am not authorized to speak for the others for this limitation.

Very quickly, that is what I say here.

Mr. FLOOD. Did you consider whether this would be legislation in an appropriation bill? It would be subject to objection, you know, if it were.

Dr. LUMLEY. We understand that and we believe that it is possible and legal to do and we have said to the Commissioner that leaves us only this one choice because of the speed at which the thing is going. There is no secret with the Commissioner about our request to you. He has a copy of it.

Mr. FLOOD. Thank you, gentlemen.

THURSDAY, APRIL 27, 1967.

FLUORIDATION

WITNESS

CLINTON R. MILLER, NATIONAL HEALTH FEDERATION

Mr. FLOOD. We will now hear Mr. Clinton R. Miller of the National Health Federation. What is the National Health Federation?

STATEMENT OF CLINTON R. MILLER

Mr. MILLER. Mr. Chairman, the National Health Federation is a national organization of aware and concerned citizens who are organized to fight for their right to exercise an informed, responsible, freedom of choice in matters of health, if the exercise of that freedom will not endanger the health and safety of some other individual and thereby deny him an equal freedom.

I am vice president and registered lobbyist of the National Health Federation.

We believe in matters of health, Mr. Chairman, that an American citizen should be as free to exercise his free agency as he now is in matters of religion and politics. Unfortunately, this is not now the case. We find that funds appropriated by Congress and recommended by this subcommittee in the past have been used by the Dental Division of the U.S. Public Health Service to promote compulsory fluoridation of our public water supplies. Compulsory fluoridation violates the free agency of many people living in American communities. This is the main purpose for my appearing before this subcommittee today. We want to see if we can't get this subcommittee, in its recommendation this year, to prohibit the use of any more Federal funds being used by the U.S. Public Health Service to promote fluoridation.

Mr. FLOOD. Have you ever taken your cause to the Federal courts?

Mr. MILLER. The National Health Federation has never taken this to the courts.

Mr. FLOOD. Why not? This is a constitutional question, isn't it?

Mr. MILLER. Surely.

Mr. FLOOD. Why haven't you?

Mr. MILLER. The National Health Federation has not because we have not had the finances to properly undertake this ambitious and expensive task. It has, however, been undertaken by other local groups.

One case got as far as the Supreme Court. In every case, to my knowledge, the courts have either upheld the constitutionality, or refused to rule upon the constitutionality of fluoridation.

To my knowledge, the only case that got as far as the Supreme Court was the *Chicago* case.

Mr. FLOOD. Your organization has not, in itself, sent a petition to the courts?

Mr. MILLER. No, sir.

Now, we have felt, frankly, that the congressional error occurred in very good faith, in two ways:

First, the fluoridation of the District of Columbia's water supply was started simply by a rider to an appropriations bill some 15 years ago.

Mr. FLOOD. That was done in the Senate.

Mr. MILLER. In the Senate, that is correct. There are many people who feel this is an improper way——

Mr. FLOOD. I agree. It is an improper way to write law.

Mr. MILLER. We know this is not the proper subcommittee to make objection to that rider.

Mr. FLOOD. I agree. I don't necessarily embrace your premise, but you are certainly right about the procedure.

Mr. MILLER. We intend to challenge District of Columbia's fluoridation appropriation this year before the Subcommittee on District of Columbia Appropriations.

Dr. John C. Vann, a prominent California dentist who is on our board of governors, has urged that I bring a new factor on the fluoridation problem to this subcommittee's attention, this year. He gave me a pamphlet compiled by Charles Klint called Fluoridation Fallacies, which I would like to have included in the record.

Mr. FLOOD. It will be included.

(The document follows:)

FLUORIDATION FALLACIES

EXPOSÉ OF FLUORIDATION CLAIMS BASED ON ADVOCATES OWN STATISTICS

In February 1951 the United States Public Health Service published pamphlet No. 62, entitled "Better Health Through Fluoridated Water", in which it promised "65% less dental decay. Lower dental bills . . . The protection obtained by children continues throughout life."

Six years later, on Dec. 3–6, 1957 the House of Delegates of the American Medical Association in its published "Statement on Fluoridation of Public Water Supplies" took exception to the above promises, proving by actual figures and facts that fluoridation of drinking water does not reduce dental decay, but only delays it for a short time, hence now lower dental bills nor life protection for adults.

This is the verdict of the House of Delegates:

"The chief criticism of the apparent effectiveness of fluoridation is directed against the practice of expressing improvement due to fluoridation as a percentage difference in caries incidence. The children using fluoridated water are compared with children of the same age in a control community, using water of low fluorine content, taking the caries rate in the control as 100%.

This gives high figures for improvement, especially in the younger ages, when in fact the children on fluoridated water have caries rates similar to the control children a very few years junior."

Dr. Robert Weaver proves this by comparing fluoridated South Shields with non-fluoridated North Shields. Taking the 12-year-old children in South Shields he found the number of decayed, missing and filled teeth 56% lower than those of the same age group in North Shields. He calls this "a remarkable result", but

quickly adds "I suggest, however, that such a comparison can be most misleading. The question which really needs to be answered is: How many years does it take for the figure 2.4 DMF permanent teeth in South Shields to reach 4.3 in North Shields? The answer is approximately three years . . . the fact remains that children 15 years of age in South Shields have the same average amount of caries as is found in North Shields at 12 years of age. A further investigation of aduits in the two towns showed in them caries was postponed for about five years".

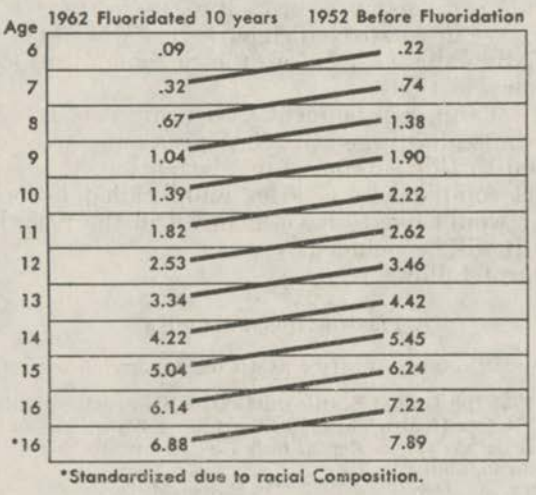
This survey with accompanying charts serves to prove the correctness of Dr. Robert Weaver's findings as well as to establish the fact that fluoridation is not a decay preventative, but delays the dentition on an average of 1–3 years with the consequent delay in detection of caries.

Failure to recognize this delay is the principal reason for the statistical illusions on which promoters of fluoridation base their reduction claims. The fact remains that childrens' permanent teeth, whether subject to fluoridation or not, are subject to the same rate of decay year after year.

The following chart and graph, submitted by Dr. Ostrow, D.D.S., Chief of Dental Health, Washington, D.C., shows a fictional versus a factual evaluation of caries in the city mentioned.

WASHINGTON, D. C.

Decayed - Missing - Filled Teeth per Child

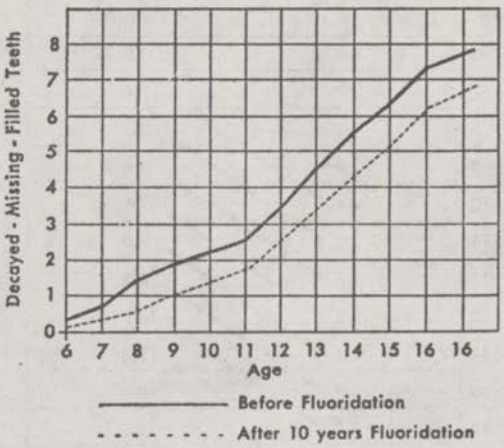


*Standardized due to racial Composition.

Emphasizing the reduction in caries in only the 6–7 and 8 year old groups, after 10 years of fluoridation, Dr. Ostrow is claming 50–60% reduction, unaware that the AMA in its "Statement on Fluoridation" warns that "Such a comparison can be most misleading". Actual reduction for all age group allowing for the one-year delay was 2/10ths of 1 percentage point.

WASHINGTON, D. C.

Rate of Decayed - Missing - Filled Teeth shown graphically.



Since the rates are practically the same, two factors hold true: First, the promised "lower dental bills" due to fluoridation are non-existent, and secondly, no protection from decay from adults is in the cards.

Grand Rapids before fluoridation employed 100 dentists. After 10 years of fluoridation and a 8½% increase in population, the city claimed 177 dentists an increase of 77%.

In all cities, checked so far, that have had fluoridation 5 years or longer, the number of dentists has increased much faster, percentage-wise, than the population. Wouldn't you think that with a decrease of 65% in tooth decay there would be some decrease in the demand for dentists? How on earth can we reconcile these fantastic claims with a big increase in the number of dentists per unit of population?

78-242 O—67—pt. 6——29

KINGSTON-NEWBURGH, N. Y.

Decayed - Missing - Filled Teeth per child

Age	Newburgh Fluoridated 10 Yrs.	Kingston Non-Fluoridated
6	0.0	0.5
7	0.7	1.8
8	1.3	3.0
9	2.0	4.4
10	2.6	5.6
11	3.3	7.0
12	4.4	8.8
13	5.5	10.7
14	6.8	12.6
15	8.2	14.4
16	9.8	16.5

3-year delay

D. B. Ast. D.D.S., Table 5, page 319, Journal Amer. Dental Association, Vol. 52, 1956.

This chart shows a 3-year delay in DMF teeth after 10 years of fluoridation in Newburgh. Hence Kingston's 7-year olds have about the same percent caries as Newburgh's 10-year olds. Kingston's 9-years olds have the identical same 4.4 DMF as Newburgh's 12-year olds etc.

Tables 1 and 4 (Journal Am. Dental Assn., Vol. 52, March 1956) show that in the 10–12 year old groups only 15.8 permanent teeth had erupted (other than first molars) per child in Newburgh, whereas Kingston children in that age group had 17.7. This delay is reflected in the decay rate, of course, since unerupted teeth cannot decay.

GRAND RAPIDS, MICHIGAN

Decayed - Missing - Filled Teeth per child
Before and after 10 years fluoridation

Age	1954	1944
6	0.19	0.78
7	0.69	1.89
8	1.27	2.95
9	1.97	3.90
10	2.34	4.92
11	2.98	6.41
12	3.87	8.07
13	5.05	9.73
14	6.78	10.95
15	8.07	12.48
16	9.95	13.50

3-year delay

Official P.H.S. Data (Publ. Health Rep. 71:652, 1956

EVANSTON, ILLINOIS

Decayed - Missing - Filled Teeth per child
Before and after 12 years fluoridation

Age	1958 (after 12 yr.)	1946
6	0.04	0.46
7	0.63	1.53
8	0.93	2.49
9	2.00	3.60
10	2.40	4.80
11	3.00	6.00
12	3.56	7.63
13	5.11	10.09
14	7.25	11.65

2-year delay

J. R. Blayney, D.D.S., at Hearings, Schuringa et al verus City of Chicago. Values for 9-10-11 inter-polated from graph.

BRANTFORD, ONTARIO

Before and after 10 years fluoridation

Age	1955	1945
6	0.16	0.40
7	0.55	1.66
8	1.13	2.44
9	1.71	3.18
10	2.21	3.80
11	2.84	4.68
12	3.30	6.31
13	4.52	7.78
14	5.54	8.60
15	6.51	9.94

2-year delay

1959 Report, Dept. Nat. Health and Welfare, Ottawa

MILWAUKEE, WISCONSIN

Before and After 6 years fluoridation

Age	1959	1950
6	.16	.30
7	.53	1.29
8	1.20	2.21
9	1.75	3.00
10	2.37	3.62
11	3.20	4.47
12	4.41	5.77
13	5.09	7.49
14	6.64	8.46

ONE-year delay only.

Data: Table 9, Dental Survey
Milwaukee Health Dept., 1959

PHILADELPHIA, PENN.

Before and After 5 years of Fluoridation
Decayed - Missing - Filled Teeth per child

Age	After 5 years	Before Fluoridation
6	0.14	0.34
7	0.44	0.87
8	1.28	1.20
9	1.70	2.45
10	2.62	3.29
11	3.25	4.43
12	4.39	5.58
13	4.97	6.27
14	5.99	7.22

1-year delay

Ref. Division of Dental Health, Philadelphia,
Dept. Public Health, 1960.

SAINT LOUIS, MISSOURI

Before and After 5½ years of Fluoridation
Decayed - Missing - Filled Teeth per Child

Age	After 5½ Years	Before Fluoridation
6	0.1	0.2
7	0.4	0.8
8	0.9	1.5
9	1.3	2.1
10	1.8	2.6
11	2.5	3.2
12	3.0	4.4

1-year delay

Ref. "The Effect of Five and One Half Years of Fluoridation,
Saint Louis, Missouri
By Earl Smith, M.D. and Ozias Paquin, Jr., D.D.S.

These charts which prove a delay in caries from 1 to 3 years are representative of the general experience of fluoridated communities. Having examined many other city statistics in U.S. and abroad, we find they all follow the same delay-pattern. How ineffective fluoridation is in caries prevention is shown in the following Newark, Delaware chart. It will be noted that at the age of 6 there were more caries-free children after fluoridation than before (88.8 to 54.8) but when the age of 10 was reached, the opposite held true; there were fewer caries-free children after fluoridation than there were before (6.4 to 7.5 after).

NEWARK, DELAWARE

Decayed - Missing - Filled Teeth Percent Caries - Free Children

Age	After Fluor.	Before Fluor.	After Fluor.	Before Fluor.
6	0.2	1.1	88.8	54.8
7	1.1	2.3	44.9	22.7
8	1.7	2.9	31.5	8.6
9	2.8	3.7	11.3	4.8
10	3.4	4.9	6.4	7.5

Ref. Journal of American Dental Assn. Vol. 54, June 1957
Note: 1-Year DELAY in DMF per child. At age of 10 FEWER caries-free children AFTER fluoridation than BEFORE.

In the Sheboygan, Wisconsin Dental Survey of 1958 the 4th Grade Children furnish a good example of the ineffectiveness of fluoridation in caries prevention. The decayed—missing—filled teeth per child (caries-free excluded) in 1946 amounted to 3.8. Twelve years of fluoridation reduced this in 1958 to 3.0—a net reduction of 0.8 of one DMF unit.

T. Masaki of Japan (Shikwa Oakuho 36:875, 1931) in a survey of "Geographical Distribution of Mottled Teeth in Japan" observed that permanent teeth, especially first molars, appeared normally on an average of age 5; in fluoride areas at age 8 (the usual 3-year delay).

The delay phenomenon

Fluorides in drinking water cause a definite delay in eruption of children's teeth. This phenomenon has been extensively investigated by the following authorities:

1. Reuben Feltman: Dental Digest, Aug. 1956, Prenatal and Postnatal Ingestion of Fluorides, a Progress Report.

2. De Eds: American Med. Sciences, Vol. 303 #5, 687–92, May 1942. Journal ADA, 568–74, April 1936.

3. L. J. Baume and H. Becks: Journal Dental Research 33: 80–90, Feb. 1954. Journal Dental Research 33: 91–103 Feb. 1954.

4. B. Orban: Oral Histology and Embryology, St. Louis, page 304, 1949.

5. Robert Weaver: Fluorosis and Dental Caries, British Dental Journal 77; 185–93, 1944.

6. S. F. Deatheridge: Fluoride Domestic Waters and Dental Caries Experience, Journal Dental Research 22; 129–37, 1943 and 22; 173–80.

7. M. C. Smith, E. N. Lantz and H. V. Smith: Further Studies in Mottled Enamel, Journal American Dental Assn. 817–29, May 1935.

8. M. C. Smith: Effects of Fluorine upon Rate of Eruption of Rat Incissors, Journal Dental Research 14; 139–44, 1934.

9. H. K. Cowan: Fluorine and Dental Caries. Med. Officer 88: 281–82, 1952.

10. K. K. Paluev: Fluoridation Causes a Delay in Onset or Recognition of Caries. Australian Journal of Dentistry 51; 13, 1955.

Conclusions

1. The statistics published by advocates of fluoridation prove conclusively its non-effectiveness as a caries preventive.
2. Those same statistics show that the number of decayed teeth in children rises by about one tooth for each successive age group in fluoridated as well as non-fluoridated communities.
3. In artifically fluoridated communities the delay-phenomenon in detectable caries averages from 1 to about 3 years.
4. Dental bills, therefore, are no lower in fluoridated areas than elsewhere, but payable from 1 to 3 years later with the added cost of fluoridation.
5. Since there is no reduction in caries as a result of fluoridation, but only a short delay, the cost of fluoridation is prohibitive.
6. In as much as children do not obtain protection against caries due to fluoridation, it is obvious that adults cannot realize the promised caries security "throughout life".

CHARLES KLINT.

All charts used in this publication are made from statistics put out by the U.S. Public Health Service. The diagonal lines were drawn by Mr. Charles Klint of Fresno, California, who is the author of this little booklet. He has merely given a common sense interpretation of the charts. These folders may be obtained from the following sources:

Charles Klint, the compiler, 949 Santa Fe Avenue, Fresno, California.
Miss Vera A. Edams, National Committee Against Fluoridation, Inc., Room 504, 1311 G Street, N.W., Washington 5, D.C.
Greater New York Committee Opposed To Fluoridation, Inc., 342 Madison Avenue, New York 17, New York.

Mr. MILLER. Dr. Vann pointed out to me that these charts prove there has been a delay in eruption but no reduction in decay from fluoridation. Till now, I have always acknowledged and conceded every claim for decay reduction by fluoridation advocates was true. I then opposed fluoridation for moral, political, economic, medical, and dental reasons. However, if the evidence which Charles Klint has compiled from the advocates' own statistics and charts, especially in Washington, D.C., are true, then a fantastic error has been committed by a Federal agency with Federal funds.

Evidence is accumulating showing that, especially among the aged, many are becoming sick and chronically poisoned. In the last few years there has been very substantial evidence of injury reported in world medical journals of people who are being poisoned unquestionably by this powerful cumulative poison in their water supplies in the concentration of one part per million.

The first death from drinking fluoridated water has been recorded in medical journals. I have here an article from the Washington Daily News reporting this first death. It occurred at a level of 2.6–3.5 parts per million which is less than one twenty-fifth the safety factor that the Public Health Service assured us there was in the fluoridation program. They assured us there was a fifty- to one hundredfold safety factor.

Mr. FLOOD. You are submitting this for the record?

Mr. MILLER. I would like to submit this article on the first reported death.

Mr. FLOOD. When was this published?

Mr. MILLER. December 23, 1965, in the Washington Daily News. The death occurred about 3 years ago. It was first reported in the Annals of Internal Medicine by Drs. Sauerbrunn and Ryan of the Veterans' Administration.

Mr. FLOOD. The article will speak for itself and may be included in the record.

(The document follows:)

[From the Washington Daily News, Dec. 23, 1965]

NATURAL FLUORIDATED WATER KILLS TEXAN IN FREAK CASE—EXCESSIVE CONSUMPTION

(By John Troan)

Excess consumption of superfluoridated drinking water was blamed today for the death of a 64-year-old man in Texas.

It was the first such case ever recorded in the U.S. altho similar occurrences have been noted in tropical areas of India.

The incident has nothing to do with ordinary drinking water to which fluoride is added to prevent tooth decay. About 60 million Americans live in communities that have such "controlled fluoridation."

TOO LONG

Veterans Administration doctors who reported the strange case indicated the victim apparently drank too much water containing too much fluoride for too long a time.

Even so, they added, he must have been peculiarly susceptible to "chronic fluoride intoxication" because a brother who drank the same water developed only harmless mottling of his teeth, which is common among people who consume excess fluoride.

The VA doctors said the victim suffered, for at least 20 years, from a condition called polydipsia—an unquenchable thirst that drove him to drink one to two-and-a-half gallons of water daily.

Most of his life, he drank well water containing natural fluoride in amounts 2.8 to 3.5 times the level recommended by health authorities for prevention of tooth decay.

Over the years, the excess fluoride settled in the man's spine. This eventually distorted his backbone and squeezed the life out of vital nerves linked to the kidney and bladder, knocking them out.

For a year before the man died at the VA hospital in McKinney, Tex., he was "a complete invalid," the doctors said.

The death occurred in 1962 but the case, including follow-up studies has just been reported thru the journal, Annals of Internal Medicine, by Drs. Bertram J. L. Sauerbrunn, Charles M. Ryan and James F. Shaw.

THREE YEAR REPORTING LAG—WHY?

Thoughtful Americans are asking: Since fluorine is a CUMULATIVE poison, has the Texan's brother really escaped fluoride poisoning?

How do we know the Texan's case is a "freak" case?

How long will it be till the first death is reported from "controlled (artificial) fluoridation"?

How many deaths have gone unreported?

To what degree will any human escape mild to fatal side effects from drinking fluoridated water at one third the fatal dose?

How many Americans suffer from "polydipsia" or drink excess water for other reasons?

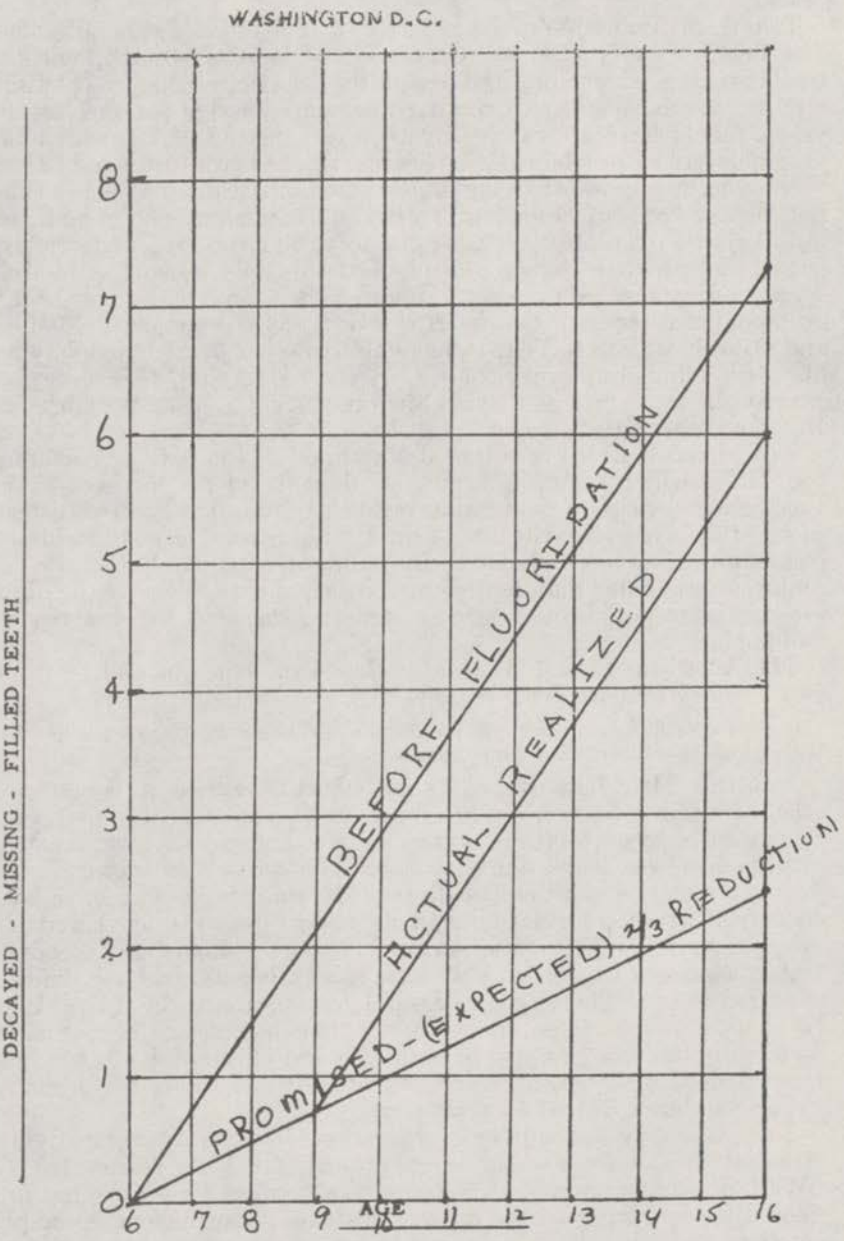
Has Science Writer John Troan evidence to support his sweeping statement: "The incident has nothing to do with ordinary drinking water to which fluoride is added to prevent tooth decay."

Has the discovery of the first fluoride death caused the ADA and USPHS to expand or disband their research along this line? (Mark this question and forward this to your Congressman and ask him to give you an answer. When the answer is received, forward it to The National Health Federation, 121 2nd St., N.E., Washington, % Clinton R. Miller.)

Mr. MILLER. This death, Mr. Chairman, is not the main burden of my testimony today. The purpose of my testimony today is to focus the committee's attention to these charts which—unless there is another answer for it which I am unable to find—the entire practice of fluoridation is built on a fallacy. It appears fluoridation is based upon an error which anyone could have made up to within 3 years after it was started, but nobody should make now.

Now, in addition to Mr. Klint's chart, I have made a straight-lined chart of my own showing what was promised by the U.S. Public Health Service when they told Congress we would have a two-thirds reduction in dental caries. I have charted for the Washington, D.C., area a 10-year history. It starts with a 6-year-old child. I have charted the two-thirds reduction in dental caries that was promised as contrasted with the previous 10 years' experience with nonfluoridated water.

(The chart referred to follows:)


WASHINGTON D.C.
DECAYED - MISSING - FILLED TEETH
0
1
2
3
4
5
6
7
8
6 7 8 9 10 11 12 13 14 15 16
AGE
BEFORE FLUORIDATION
ACTUAL REALIZED
PROMISED - (EXPECTED) 2/3 REDUCTION

Mr. MILLER. Before fluoridation, by the time District of Columbia children were 16, they had just a little over seven decayed, missing, or filled teeth. Seven decayed, missing, or filled teeth developed in 10 years.

Two-thirds reduction of 7.4 is just a little over 2.3, so this line [indicating] is exactly what was promised and expected by the fluoridation advocates. Every boy and girl in the District at the present time who is 16, who has been drinking fluoridated water for the last 10 years, should have an average of 2.3 caries instead of 7.4, which 16-year-olds had before fluoridation because this is a two-thirds reduction.

Now, according to Mr. King, fluoridation only caused a delay in the eruption of teeth of from 1 to 3 years. This phenomenon caused the initial charts graphing actual results to be identical to what was expected and predicted by proponents. But this only lasted for the first 2 years. Of course, you are not going to have a tooth decay if it hasn't erupted, but after eruption the rate of decay is exactly parallel before and after fluoridation. That is, in a child who is 2 years late in having his teeth erupt and decay, once they start decaying, they decay at exactly the same rate as they did before fluoridation in Washington, D.C., and other cities.

Now, I was startled the other day to find out that we, in Washington, D.C.—which has been completely fluoridated for 15 years—have the highest dentist-to-population ratio in the United States. Instead of two-thirds less than the rest of the United States, or nonfluoridated communities, we have exactly the opposite of what would be expected and was anticipated and implied by the proponents. We have the highest dentist-to-population ratio in America here in the District of Columbia.

The American Dental Association has also come out and reported just recently that for some reason—and I quote them:

> For reasons that we don't know, the income of dentists in fluoridation areas is higher than those in nonfluoridated areas.

Now this, Mr. Chairman, as I state, could have been an honest mistake, up until 2 years after the fluoridation experiment started, but from that point on, as these curves began to sharply diverge, then the mistake has been increasingly obvious. There has been raging for 22 years in America a bitter debate between the people who have been concerned about fluoridation and its effect upon the aged and the allergic, and those who have been anxious to see it universally accepted.

At the present time I think we have this rather unusual and delicate situation because the American Dental Association and the U.S. Public Health Service stated unequivocally that fluoridation of municipal water supplies was going to be both safe and effective. Unfortunately they made this statement, in effect, before the District of Columbia experiment even started 15 years ago.

Now, it is very difficult for organizations like the American Dental Association and for the U.S. Government, for some reason, to say, "Well, we were wrong. We apologize. We thought we were going in a good direction, but we have made a mistake." A turnabout is complicated because they have been rather intolerant and unkind to those who have opposed the fluoridation program.

I think that it is high time that one thing take place immediately and that is that the Federal Government immediately prohibit any

funds appropriated to the U.S. Public Health Service from being used to promote, to hawk, to peddle, to sell fluorides to States or cities. In a city like Wilkes-Barre, or Detroit, any city, the city government is overwhelmed when the Federal Government comes in with scientists paid by the Federal Government to assure them that fluoridation is safe and effective. When local citizens raise questions, proponents say, "Well now, the Federal Government certaintly couldn't possibly have made an error of this great magnitude, and they're promoting it."

Now, we have no objection to research being made as to the effect of fluorides or any other chemical upon teeth and upon other tissues of the body. We should be engaged in studying the effect of all trace elements, calcium, magnesium, and all other nutrients. But there is a decidedly and easily recognizable difference between promotion and research—between getting out and peddling and coercing local communities to accept a position which the Federal Government has taken, and doing good, clean objective research which allows and encourages the opposition to challenge theories.

I hope, Mr. Chairman, that you yourself would sponsor an amendment to prohibit Federal funds being spent to promote fluoridation. We would enlist support of Congressmen who have been deeply concerned about this matter, such as Congressman Delaney and others. He appeared with us last year, to oppose Federal funds promoting fluoridation. To take this matter out of the name-calling stage and put first things first, this subcommittee should determine whether it is proper for the Federal Government to be involved in the promotion of fluoridation.

Mr. FLOOD. It would be difficult for you to have a better spokesman than the gentleman from New York, Mr. Delaney. I have spoken with him about this over a period of years. Your presentation this morning has been certainly within the realm of reason. The realm of reason has not been too much in evidence on both sides of this discussion for a number of years. You are to be complimented upon your presentation.

Mr. MILLER. Thank you, Mr. Chairman.

Now, to save the time of the committee, because I know you have many witnesses, the medical and dental aspects which we have discussed this morning would be well covered by inserting in the record this recent treatise by Dr. Albert W. Burgstahler, professor of chemistry at the University of Kansas. In a very reasoned way he has summarized the literature.

Mr. FLOOD. Without objection, this will be inserted at the end of your testimony.

Mr. MILLER. Thank you very much, Mr. Chairman.

(The document follows:)

Dental and Medical Aspects of Fluoridated Drinking Water

ALBERT W. BURGSTAHLER

Transactions of the Kansas Academy of Science, Vol. 68, Nos. 2 and 3, 1965
These issues were published August 31 and November 10, 1965

Corrigenda and Addenda: Dental and Medical Aspects of Fluoridated Drinking Water

ALBERT W. BURGSTAHLER

[Trans. Kans. Academy of Science, Vol. 68, No. 2, pp. 223–243 (1965)]

Page 229, line 18: Change the sentence beginning "More recently, Ast. . ." to read: "An eruption-delay effect has also been noted by Sutton[51] in the data reported for the studies conducted at Newburgh, N. Y., and Evanston, Ill."

Page 230, line 17: Change "Abkewitz,[65]" to "Abkewitz,[67]".

Page 232, line 5: After "parotid,[90]" insert "pancreas,[91]".

Page 235, line 33: Change "cataracts" to "blindness".

Page 241, ref. 80: Change YUDIN to YUDKIN.

Page 241, after ref. 88: Insert missing ref. 89: E. SPEDER and M. CHARNOT, Maroc médical, *17:* 405 (1937).

In a recent study on the caries experience of 9 to 12-year-old children residing continuously from birth in three fluoridated Kansas communities (El Dorado, Ottawa, and Parsons), W. Bellinger and C. D. Mankin [J. Kans. State Dent. Assoc., *49:* 117 (July, 1965)] have reported a 50 per cent reduction in dental caries for permanent teeth compared with the experience of children in three low-fluoride control communities (McPherson, Newton, and Wellington). Twice as many caries-free permanent teeth were also found among the 9 to 12-year-old children in the fluoridated cities as in the non-fluoridated ones.

With respect to the fluoride content of gelatin (p. 233, line 18; p. 237, line 8), J. C. Bartlet [Analyst, *86:* 200 (1961)] has found values in the range 1–25 ppm, with a median of 6.5 ppm for 74 samples from 10 countries. Of eight samples from the United States prepared with water containing fluoride at 1 ppm the range was 29–34 ppm.

—Department of Chemistry, The University of Kansas, Lawrence 66045

Transactions of the Kansas Academy of Science, Vol. 68, No. 3, 1965.
Published November 10, 1965.

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Vol. 68, No. 2 Summer, 1965

Dental and Medical Aspects of Fluoridated Drinking Water

ALBERT W. BURGSTAHLER*

EDITOR'S NOTE: *Unlike most other public health measures, fluoridation of municipal water supplies has remained a subject of controversy ever since its inception. This extensively documented survey of the subject by Professor Burgstahler of the Department of Chemistry at the University of Kansas, who is also Associate Editor for Chemistry of the* Transactions *of the Kansas Academy of Science, should therefore be of interest to the general public as well as to members of the Academy. Since scientific and medical opinion continues to be divided on this topic, it is obviously important that the thoughtful reader make every effort to evaluate the effectiveness and safety of fluoridation solely on the basis of convincing factual evidence.*

Abstract

Findings concerning the role of water-borne fluoride in relation to the occurrence of mottled enamel (dental fluorosis), reduction of tooth decay (dental caries), delayed eruption of permanent teeth, and other physiological effects are reviewed. In particular, attention is drawn to clinical reports of allergy and chronic illness whose origin has been traced to fluoridated drinking water.

Introduction

The term "mottled enamel" was apparently first used in the medical literature in 1915 by Black and McKay[1] to designate a dental defect that

Transactions of the Kansas Academy of Science, Vol. 68, No. 2, 1965. Published August 31, 1965.

* The author's interest in this subject arose from research on the synthesis of a fluorinated amino acid which he has been directing in cooperation with Professor Seymour Bakerman, M.D., Department of Pathology, University of Kansas School of Medicine.

has been a subject of comment practically throughout the history of medicine. As early as 1771 Hunter[2] wrote of "dark spots" sometimes seen underlying an otherwise intact enamel surface. And Meredith[3] in 1878 stated:

> "White, yellow, or brown spots of various sizes and irregular shapes may exist on the outer surfaces of the teeth . . . . The incisors are the only teeth attacked in the great majority of cases, but occasionally others are also. Sometimes several of the teeth in one or both jaws may be so severely affected as to scarcely look like teeth, appearing as if they had been badly eaten and discolored by some corrosive agent."

In 1901 Eager[4] communicated an equally graphic account of blackened teeth he had observed in and around Naples, Italy. Known there as "denti di Chiaie," after the celebrated Neopolitan physician who first described them (but commonly called "denti neri" or "denti scritti"), such teeth were believed to owe their markings to volcanic gases or other products that had entered the water supply. In 1916 Black and McKay[5] published reports of an extensive study of mottled enamel, particularly in relation to its occurrence among native residents of Colorado Springs, Colo. They also proposed that the condition was probably due to an unidentified component in the drinking water.

Later McKay[6] and also Bunting and co-workers[7] reported findings that offered further support for the previously noted[5] apparent resistance of mottled teeth, especially in children, to dental caries (tooth decay). However, it was not until 1931 that fluorine (as fluoride ion, F^-) in the drinking water used from infancy through early childhood was discovered as the primary cause of mottled enamel.[8] Shortly afterwards the mean annual concentration of F^- in the Colorado Springs water was found to be 2.5 parts per million (2.5 mg. per liter),[9] which was considerably higher than the average for most other regions of the country (less than 0.5 ppm). In the ensuing years Dean and his collaborators[10] conducted extensive surveys throughout the United States to determine the exact relationship between mottled enamel (then more accurately termed "endemic dental fluorosis") and dental caries on the one hand and the concentration of F^- in the water supply on the other. That F^- in "optimum" trace amounts might help to produce decay-resistant teeth had been suggested already in the last century.[11]

Fluorine and Dental Health

In Kansas in 1934 Gottlieb[12] reported that "fluorides in excess of two parts per million occur only in waters from the few communities in

which mottled enamel has been reported." "However," she added, "the limit of safety cannot definitely be set at two parts per million until it is proven clearly that amounts slightly less than this are entirely safe."

Dean's studies, like Gottlieb's, confirmed Black and McKay's earlier observations[5,6] that mottling of the first permanent teeth by water containing F^- occurs only during the first seven or eight years of life, when these teeth are being calcified. They also showed that the extent of such fluorosis, in which the teeth frequently become stained or progressively more pigmented in early adulthood (apparently oftentimes from manganese[13]), generally bears a direct relationship to the F^- concentration in the drinking water. In addition, Dean also concluded that at a fluoride level of approximately one part per million (1 ppm) the amount of "esthetically objectionable" dental fluorosis is negligible (except in hot, dry climates where more water is consumed), while the caries incidence at this concentration in children aged 12 to 14 is, on the average, reduced by some 50 to 60 per cent.[14]

Parallel investigations in England by Weaver[15] and by Forrest, Parfitt, and Bransby[16] did not explicitly confirm Dean's conclusions but instead "suggested that the consumption of water containing fluorides had a delaying action on the onset of caries rather than a lasting preventive effect."[17] Other disputed aspects of Dean's caries-mottling-fluorine correlations, particularly in terms of the role played by other water-borne minerals, such as calcium and phosphate,[18] have been analyzed critically by Exner[19] and by MacKenzie.[20] In addition, Smith and Smith,[21] in their study of the durability of mottled teeth in St. David, Ariz. (1.6 to 4.0 ppm F^-), observed that:

> "Although only 33 per cent of the children in the age group from 12 to 14 years showed any carious lesions, the percentage of persons with carious teeth increased with age as was expected. Beyond the age of 21 years, there were relatively few individuals in which caries had not developed. That the result of the onset of caries was especially severe is reflected in the high percentage of all age groups with extracted teeth. Caries once started evidently spreads rapidly. Steps taken to repair the cavities in many cases were unsuccessful, the tooth breaking away when attempts were made to anchor the fillings, so that extraction was the only course. That decay was widespread and repair was highly unsuccessful among the the young adults is shown by an incidence of more than 50 per cent of false teeth in the age group 24 to 26 years. This high incidence of false teeth appeared in all subsequent age

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groups. Very rarely, adults were found whose teeth, though mottled, were free from caries. It was the exception rather than the rule to find dentitions from which there had been no extractions because of inability to repair carious teeth successfully."

In recent years the role of adequate dental care and of other nutritional factors besides F^- in the development of caries-resistant teeth has received renewed study.[22] The well-known importance of the calcium-phosphorus ratio in the diet,[18] especially during the period of tooth formation, has been re-emphasized,[22] and now the dental benefits of trace amounts of molybdenum[23] and vanadium[24] have also been recognized.

With respect to optimum "timing" of fluoride ingestion in relation to its cariostatic effect, various studies have shown that F^- accumulates, even prenatally, in the enamel before the teeth emerge.[22] However, current work also appears to indicate that "maximum dental benefit is obtained only if fluoride continues to be available for several years after tooth eruption."[25] In fact, from an examination of published data, Rose and Marier[25] have expressed the view that "at least 70% of the dental benefit can be conferred post-eruptively." This conclusion conflicts with findings reported by Russell and White[26] and others reviewed by Tank,[22] although earlier observations by Russell[27] as well as results of a more recent study by Carlos and co-workers[28] are in agreement with it. Experiments by Madsen and Edmonds[29] on the effects of short-term treatment of newly-erupted first molars in cotton rats also indicate that the post-eruptive benefit far outweighs the pre-eruptive one.

The exact manner in which F^- exerts its cariostatic effect is still not entirely clear.[22,30,31] There is considerable evidence, however, that F^- produces a "harder" or more impervious outer enamel layer by surface ion-exchange processes leading to the formation of fluorapatite in place of hydroxyapatite.[30-32] Enamel modified in this fashion shows an increased but not necessarily permanent resistance to attack by acids produced metabolically in the mouth, especially from highly cariogenic foods, such as sucrose.[22,33] Another possibility is that F^-, particularly when lodged in the dental plaque in contact with the enamel surface, can reach a sufficiently high concentration to be antibacterial[22,30] as well as anti-enzymatic.[31] In this latter role F^- is known to inhibit the acid phosphatase that has a dissolving (decalcifying) action on tooth structure, but not to affect the protective alkaline phosphatase.[31] In addition, an anti-proteolytic role of F^- in the dental structure may be of importance.[30]

It is also of interest that although the F^- content of teeth, particularly in the outer layers of the enamel surface, is greater in individuals living in high-fluoride water areas than in those residing in low-fluoride ones, the amount of F^- in sound and carious teeth in persons of the same age in a given area is practically the same.[34] This means, in effect, that there is little or no difference in the amount of F^- in healthy and decayed teeth in a given population with the same exposure to water-borne fluoride. Mottled teeth, however, have been reported[30] to contain more F^- than unmottled teeth.

Artificial Fluoridation

Consideration of F^- in relation to "the possibility of partially controlling dental caries through the domestic water supply" was first suggested in 1938 by Dean,[35] who later became known as "the father of fluoridation." The real impetus for *artificial* fluoridation, however, came from specific proposals made by Cox[36] in 1939. A few years later, following a conference on "Fluorine and Dental Health" held under the auspices of the American Association for the Advancement of Science,[37] Ast[38] offered a detailed plan for the implementation of such a program. Pilot studies involving the "adjustment" of F^- levels in municipal water supplies to approximately 1 ppm were then initiated between 1945 and 1947 in Newburgh, N. Y.; Brantford, Ont. (Canada); Grand Rapids, Mich.; Southbury, Conn.; Sheboygan, Wisc.; Marshall, Texas; and Ottawa, Kans.[39]

In 1946 it was stated by an official[40] of the U. S. Public Health Service that studies concerning the effectiveness as well as the safety of artificial fluoridation "may take 12–15 years before the final answer is clearly delineated." However, only four years later, in June 1950, the Public Health Service gave its general approval and recommendation of fluoridation for the entire country.[41] In January 1951, fluoridation was also approved by the Kansas State Board of Health.[42] "In September 1953, there were known to be 786 communities in 43 states with a total population of 15,220,000 where fluoridation was in operation."[39] By July 1, 1958, there were 29 municipalities in Kansas serving 321,714 persons that were artificially fluoridated.[43] As of December 31, 1964, 40 out of a total of 440 municipal water systems in Kansas were using artificial (or "controlled") fluoridation, and 72 were using "natural" fluoridation.[44] At this same time over 48 million persons in more than 2,750 communities in the United States were estimated to be using artificially fluoridated drinking water.[44]

Trials of artificial fluoridation have been or are being conducted in many other countries, including Australia, Belgium, Canada, Finland,

Great Britain, Holland, Japan, New Zealand, the Soviet Union, Switzerland, and West Germany.[45] Fluoridation has not been approved for general use in Denmark, France, Italy, Norway, Spain, or Sweden. In January 1964, after many years of study, the Danish Ministry of the Interior issued the following statement of an action confirmed by the Parliament: "Fluoridation of public water supplies, as well as of all other consumables, is prohibited with the exception of the addition of fluoride to tooth paste under certain conditions."[46]

Reports of the dental benefits of fluoridation, particularly to children, are well verified and too numerous to cite. Many of them have been summarized by MacKenzie,[20] Stadt,[39] Dunning,[47] and Ast and Fitzgerald,[48] and most recently by Tank.[22] In general, a 60 to 65 per cent reduction in the incidence of dental caries (compared to previous decay levels or to nonfluoridated controls) has been claimed for children 12 to 14 years old who have resided in a fluoridated community from birth. Similar or even greater benefits have been described for younger children, particularly if they were breast-fed for three months or longer after birth.[22] Moreover, the 1- to 6-year-old children living in a nonfluoridated community (Albany, Ore.) who had been nursed for at least three months after birth were found to have about the same reduction in dental caries as those who lived in a fluoridated community (Corvallis, Ore.) but had not been breast-fed.[22]

With respect to the Ottawa, Kans., study, Bellinger[49] reported only a 10 per cent reduction of caries in the deciduous teeth and 15 per cent in the permanent teeth of 6-year-old children after three years of fluoridation, while Scrivener[50] found that the percentage of *caries-free* teeth among a representative sample of 5- and 6-year-olds in Ottawa had decreased from 82.5 per cent in 1946 at the start of fluoridation to only 45 per cent three years later. Citing Bellinger's report, Stadt[39] commented: "After 52 months of fluoridation in Ottawa, Kansas, where the communal water supplies previously had contained 0.3 ppm fluoride, the results were indecisive for both the deciduous and permanent teeth of 6- and 7-year-old children." It is conceivable that other changes[50] in the water supply or an increased consumption of cariogenic sugar products following rationing in World War II[33] may have largely offset the expected anti-caries benefit of the extra fluoride.

In virtually all the published data[22,39,47,48] on caries reduction by artificial fluoridation, an interesting 2- to 3-year "caries-delay" pattern[51] of the type previously noted by Weaver[15] and by Forrest, Parfitt, and Bransby[16] can be seen. This means that the amount of tooth decay in an 8-year old residing from birth in a fluoridated community is approx-

imately the same as that in a 5- or 6-year-old living in a nonfluoridated one (if the latter child has not been breast-fed for at least three months after birth[22]). Likewise, the amount of dental caries in a 10-year-old who has been drinking fluoridated water all his life is roughly equal to that in a 7- or 8-year-old who has been using nonfluoridated water; and the caries-incidence in a 12-year-old in a fluoridated community is comparable to that in a 9- or 10-year-old in a nonfluoridated one. In other words, during childhood the *rate* of tooth decay is approximately the same with or without fluoridation, but the starting point for decay is delayed by about two to three years with fluoridation.[51]

A contributing factor that may in part account for this "caries-delay" effect can be seen in the findings of Short,[52] who observed that the permanent teeth of 12-year-old children in Colorado Springs, Colo. (2.5–2.6 ppm F^-) "show an appreciably lower eruption rate" than do the teeth of children in fluoride-free cities. Even at the recommended level of 1 ppm Russell and White[53] determined that there were "substantially more deciduous teeth present" in 8-year-olds after seven years of fluoridation in two Maryland counties. More recently, Ast and Fitzgerald[48] have reported data showing that this eruption-delay effect from water at 1.0 to 1.2 ppm F^- can extend even to age 16. Since careful animal studies[54] have confirmed the generally accepted belief[55] that thyroid dysfunction inhibits tooth development, it has been suggested[56] (but not yet proved) that this slower rate of eruption may be related to the reported,[57] although strongly disputed,[58] ability of low level water-borne F^- to interfere with normal thyroid function.

The fact that naturally fluoridated water is usually quite "hard" (high Ca^{++} and/or Mg^{++} concentration, especially in the United States[32]) has been considered by some workers[59] to be an important factor bearing on the effectiveness of such water to produce a lower incidence of tooth decay. However, according to Wagner,[60] "the results of dental-caries studies in widely separated areas clearly suggest that within broad limits no differences are seen in the ability of fluoride to inhibit dental decay, regardless of the ionic environment of the fluoride in ordinary drinking water." Nevertheless, in the absence of adequate calcium in the total dietary intake, F^- in softer waters has been shown not only to be less effective in preventing dental caries but also to favor increased dental fluorosis.[61] In this connection it is also of interest that the amount of periodontal (gum) disease has been reported to be unaffected or even decreased by fluoridation, particularly among children,[62] although the contrary view has been advanced, especially for adults.[63]

The degree of mottling associated with the 0.7 to 1.2 ppm F^- concentrations recommended[64] for artificial fluoridation has been investigated

extensively, especially by Russell and co-workers. In a survey of children in grades 7, 8, and 9 in Central High School in Grand Rapids, Mich. (1.0 ppm F^-), in the seventeenth year of fluoridation, Russell[65] reported that 19.3% of the white children of continuous residence had "fluoride opacities" while more than twice this percentage (40.2%) of the Negro children were similarly affected. Among the white children 6.6% had "very mild" fluorosis, and 1.0% had "mild" fluorosis. Among the Negro children the figures were 9.9% and 4.2%, respectively. (In the former classification not more than 25% of the anterior surfaces of the upper incisors are affected, and in the latter between 25 and 50%.[66]) Although Russell offered no explanation to account for these large differences in the incidence of fluorosis between the white and Negro children, he did state that in no case was the condition obvious enough "to impair the appearance of the examinee in smiling or in speech."

That endemic dental fluorosis can be a serious problem in a warmer climate, even at much lower concentrations of F^- than 1 ppm, has been reported recently by Rosenzweig and Abkewitz.[65] These workers examined the teeth of children in Qiryat Haiyim, Israel, where water supplies from 20 wells ranged from 0.35 to 0.95 ppm F^- (average 0.66 to 0.75 ppm). From their survey they concluded that "the amount of fluorosis observed is not justified by the slight reduction in caries prevalence."

Nondental Effects

The fact that drinking water containing less than 1 ppm of F^- can produce a significant incidence of detectable dental fluorosis strongly suggests that it might have other side effects as well. Nevertheless, abundant data are available and have been compiled[68] to support the view that water fluoridated at the recommended level is completely safe for general consumption, and that no short or long-term chronic toxicity other than dental fluorosis has ever been demonstrated from the use of such water. Thus a recent editorial[69] in the *British Medical Journal* commented: "But many investigations in a variety of climates have now been carried out, and none of them even suggests that any danger could result from having 1 part per million [of F^-] in drinking-water."

Leading organizations that have endorsed fluoridation include the U. S. Public Health Service, the American Dental Association, the American Medical Association, the American Association for the Advancement of Science, the National Research Council, the American Pharmaceutical Association, and the World Health Organization.[70] In addition, many other dental, medical, and health councils, on local, state, and na-

tional levels have stated their approval and recommendation of fluoridation on the grounds that "All evidence on fluoridation . . . attests the safety and effectiveness of the measure for the partial control of dental caries."[70]

The current medical literature, however, does contain numerous disclosures of harmful effects from fluoridated drinking water, even at concentrations in the recommended ranges. Many of these reports have been partially summarized recently, particularly by Marier and co-workers,[25,32] Polya,[71] Schatz and Martin,[72] Steyn,[73] and Waldbott.[74] Others were also reviewed in the *Lancet* in 1960.[75]

Water-borne fluoride is known to be readily absorbed[76] and to give rise to widely varying levels of F^- accumulation in the body.[32,74,77,78] In general, the amount of F^- deposited in bones and teeth (mainly as fluorapatite, $Ca_{10}(PO_4)_6F_2$) increases with age in proportion to the fluoride level of the drinking water and is capable after 55 years of reaching a concentration of approximately 2,000 ppm in bones from water containing 0.5 ppm.[32] Ordinarily the concentration of F^- in soft tissues is very small (usually less than 0.8 ppm).[74] Under certain circumstances, however, as in the presence of kidney impairment, malnutrition, or skeletal saturation, relatively high accumulations of F^- have been found in such organs as the kidneys (up to 181 ppm), bladder (185 ppm), liver (19 ppm), and aorta (166 ppm).[77–79]

Fluoride retention from water fluoridated at 1 ppm has been shown to be significantly greater in persons suffering from nephritis (inflammation of kidneys) than in normal persons.[80] Since the principal pathways of fluoride metabolism are directed toward detoxification through elimination and storage,[81,82] the consequences of excessive accumulation of F^- in the body are not always predictable. As in the case of teeth, F^- levels in bones and soft-tissue organs that do not appear to cause ill-effects in some individuals have been found to do so in others.[25,71–75]

Owing to its marked binding and complexing ability, F^- has a strong tendency, even at very low concentrations, to interfere with Ca^{++} metabolism[83] in much the same manner that oxalate ion does.[73] Similarly its affinity for magnesium and manganese ions enables it to deplete their availability for vital enzyme functions.[84] The hydrolytic activity of lipase (in liver extracts) on acetate esters, for instance, is reported[85] to be inhibited by 35–50 per cent by NaF at 0.2 ppm. Moreover, inhibition of other enzymes by F^- has been demonstrated experimentally *in vivo*[86] as well as *in vitro*.[84,87] Hence it is not surprising that the effects of F^- have been found to include a wide range of physiological disturbances,[72]

particularly as a result of relatively low levels of intake over a long period of time.[88] There is, in fact, considerable evidence, especially from animal studies, that prolonged ingestion of F^- can interfere with the normal enzyme-dependent functioning of the thyroid,[57] parathyroid,[89] parotid,[90] adrenal,[91] and possibly the pituitary[72] glands.

It is also now recognized[73] that factors which tend to alter available calcium, phosphate, and other ion levels in body fluids, even to a very minor extent, are frequently involved in the manifestation of various types of hypersensitivity or allergy. It is not unexpected therefore that cases of extreme susceptibility to toxic effects of fluoride in drinking water have been reported. Among the reactions to water containing 1 ppm of F^- that have been observed and confirmed by double-blind tests in sensitive individuals are urticaria, dermatitis, gastrointestinal symptoms, pruritus, conjunctival edema, ulcers in the mouth, migraine-like headaches, and nasal disturbances.[74,92] In every instance the symptoms were found to disappear within a few days after the patient discontinued the use of fluoridated water. They also returned promptly upon resumption of its use and were readily reproduced by a single dose of 15 mg. of sodium fluoride (6.8 mg. of F^-) or a daily dose of 2.2 mg. of sodium fluoride (1 mg. of F^-) taken in distilled water on a carefully controlled "blind" basis. (A daily intake of one liter of water fluoridated at 1 ppm provides 1 mg. of F^- per day.)

Just how widespread such reactions are to fluoridated drinking water remains to be determined. It may be relevant, however, that Feltman[93] found that one per cent of 1100 patients receiving 1 mg. of F^- per day in tablets reproducibly experienced such symptoms as eczema, urticaria, epigastric pains, vomiting, and headaches. He also reported delayed eruption of the teeth of children exposed to such therapy. Despite the carefully documented nature of Feltman's reports, Grossman[94] has claimed not to have observed any adverse effects from such use of fluoride tablets by "most" of 3,000 patients.

Chronic fluoride intoxication,[74,88] as distinguished from allergic sensitization,[92] has also been demonstrated to result from fluoridated drinking water. The clinical features of chronic fluoride poisoning,[95] especially in the incipient stages, are often quite variable, but they have been shown to involve such target areas as:

(1) the bones and joints, especially the lower and cervical spine (lumbar pains, aching in joints);

(2) the central nervous system (cephalalgia, deterioration of mental acuity, nerve deafness, retinopathy);

(3) neuromuscular structures (pain, paresthesias in extremities, disturbances of cutaneous sensitivity); and

(4) organs of intake and elimination (gastritis, ileitis, colitis, stomatitis, pruritus, lower urinary tract disease).[74,95]

In many instances "marked fatigue" is a common complaint. "Skeletal changes may not be demonstrable by X-ray and are not obligatory features for diagnosis," except in more advanced cases. In certain individuals the effects have been found to include "pains in the spine prevailing while resting and their improvement (relief) upon moving about." In other cases a well-recognized condition of polydipsia (excessive thirst) is present, which is made "more pronounced upon drinking water."[74]

In these patients whose illness with such symptoms has been traced to fluoridated drinking water, double-blind tests were used, as in the allergic cases, to confirm the diagnosis.[74] The time needed for a given individual to recover from symptoms of suspected chronic fluoride intoxication after ceasing to use fluoridated water and avoiding foods known to be high in F^-, such as tea, seafoods, and gelatin,[96] was found ordinarily to range from a few days to several weeks. Since blind tests with F^- in distilled water readily and consistently caused recurrence of the symptoms, the possibility of a psychosomatic origin[97] of the illness would appear to have been definitely excluded.

Other indications of long-term toxic effects of fluoridated drinking water can be seen in the extensive animal and epidemiological findings that are now available. Thus in a study involving 645 mice (3 strains), Taylor[98] found that a 9 to 10% reduction in lifespan occurred with 1 ppm F^- in the drinking water and 0.5 ppm F^- in the food (as compared to controls on distilled water and the same food). Fluoride-containing urinary calculi were also detected in the experimental group but not in the controls. Similarly, Ramseyer, Smith, and McCay[99] reported renal hypertrophy as well as extensive periodontal disease in older rats after lifetime exposure to drinking water containing as little as 1 ppm of F^-. These results have since been essentially duplicated but reinterpreted in terms of normal aging rather than fluoride damage.[100] Very recently, Taylor and Taylor[101] have shown that sodium fluoride at 1 ppm in drinking water produced "a statistically significant acceleration of tumor tissue growth" in tumor transplant experiments involving 991 mice.

In terms of human exposure, the Bartlett-Cameron, Texas, study[102] is often cited[68] as convincing proof that F^- in water even at 7–8 ppm causes no significant ill-effects other than moderate to severe dental

fluorosis. However, as has been pointed out,[25,32,73,74,103] crippling skeletal fluorosis is found elsewhere with F^- concentrations in the range of 1 to 3 ppm, particularly in warmer climates where malnutrition is prevalent. Thus Azar and co-workers[104] have described cases of serious skeletal fluorosis in Qatar near the Persian Gulf where water supplies contain from 0.8 to 3.45 ppm of F^- (average for wells—1.76 ppm, for pipewater—0.93 ppm). Singh and his collaborators[105] have recently extended their studies in the Punjab area of India and report debilitating fluorosis in areas where the water supplies contain between 1 and 2 ppm of F^-. In addition, Kumar and Kemp Harper[106] have recorded 19 cases of skeletal fluorosis accompanied by "vascular calcification, anemia, and albuminuria" in persons in Aden, age 18 to 55, whose water sources average 2.7 ppm of F^- (6 ppm as NaF). Severe "backache" was also common among these persons.

Mortality data in fluoridated communities in the United States are reported not to have shown any abnormal trends during the first five or ten years of fluoridation.[107] "Unfavorable" trends that have been cited more recently [75,108] are found on close examination of the relevant 1950–1960 U. S. Census Reports to show considerable correlation with the larger numbers of older-age persons in the higher death-rate communities (e.g., Colorado Springs, Colo., vs. Utah County, Utah,[75,109] and Grand Rapids, Mich., vs. Flint, Mich.[108]). In two communities in which the populations have almost identical age distributions (fluoridated Newburgh, N. Y., and nonfluoridated Kingston, N. Y.), a steady increase in the number of deaths from cardiovascular causes (as recorded in U. S. Vital Statistics Records) occurred in the fluoridated city from 1955 through 1961, but in 1962–1963 this trend was reversed. Other mortality differences that may be related to fluoride effects have been cited in the *Lancet* survey[75] and by Pappalardo,[110] but their real significance remains highly uncertain.

Studies in the north central United States by Rapaport[111] on the relationship of mongoloid births (Down's syndrome) to F^- levels in the drinking water indicated that the number of such births was more than double among mothers who resided in communities where the F^- concentration in the water supply was 1.0–2.6 ppm as compared to the number among those who lived where it was only 0.1–0.2 ppm. These findings have been severely criticized,[112] chiefly on the grounds that no such correlation has been found in England or Europe. Moreover, in his review Dunning[47] states that they are contradicted by unpublished but "apparently better designed studies . . . performed in the same part of the United States by A. L. Russell, of the United States Public Health Serv-

ice." However, Rapaport had indicated in his 1959 report[111] that his data were collected "following the advice of Dr. A. L. Russell."†

In a more recent article,[113] Rapaport has presented a cogent summation and discussion of his findings on the frequency of mongolism, along with new data showing a significantly elevated F^- content of the teeth in relation to the previously noted higher incidence of dental fluorosis and lower caries rate among mongoloid children. In addition, he has also shown[114] the F^- can induce mutational effects (melanic tumors) in *Drosophila* that would appear to be analogous to the trisomy of chromosome 21 associated with mongolism in humans.

Although not necessarily related to water-borne or other sources of ingested fluoride, it is of interest that investigations concerning periodic variations in the incidence of mongoloid births in Victoria (low-fluoride), Australia,[115] and Watertown (fluoridated since Nov. 1953[44]), South Dakota,[116] have demonstrated that "there is an environmental factor [tentatively identified as viral] operative in a high proportion of these congenital anomalies."[115] Since there is also some evidence in these studies for the presence of a "predisposing factor" in the etiology of mongolism,[115] the well-known higher incidence of mongoloid births among older women[117] may possibly be related to the normally greater fluoride accumulation with age. In this connection it is of interest that Rapaport has noted[113] an increased incidence of mongoloid births among *younger* women in *higher* fluoride areas, where greater accumulation of F^- in the body would be expected to occur earlier. A slight but inconclusive trend toward younger maternal age was also observed by the Australian workers[115] during periods of higher overall incidence of mongolism.

Renewed efforts to counteract osteoporosis (excessive bone porosity) and Paget's disease (bone enlargement and deformity) by sodium fluoride therapy[47] have likewise led to reports of serious side effects. In a thorough study of six cases, Rich and co-workers[118] detected gastrointestinal and arthritic symptoms. In addition, Geall and Beilin[119] have reported optic neuritis leading to cataracts from such treatment. More recently, Higgins and co-workers[120] have presented data showing no improvement in the retention of calcium in three patients with Paget's disease, but these treatments lasted only 6 to 17 weeks, whereas those of Rich and co-workers extended up to 80 weeks and revealed a satisfactory increase in calcium retention only after about the tenth week.

Finally, a striking instance of a fatal outcome from a clinical procedure involving a nondrinking use[36] of fluoridated water has been dis-

† For an account of recent correspondence concerning this matter, see Ch. 12 of ref. 127.

closed recently. The patient, a nurse in her early forties suffering from glomerulonephritis, was reported by Kretchmar and co-workers[121] in 1962 to have died in a state of convulsive seizures following her fourteenth hemodialysis (artificial kidney treatment, with fluoridated Rochester, N. Y., tap water). Two years later a second article[122] concerning this case appeared which drew attention to the expected concentration-gradient transfer of F^- from the dialysate water to the blood, as confirmed by F^- analyses. The authors of this second paper, Taves and co-workers,[122] did not attribute the patient's death to this cause. Surprisingly, they also did not cite the original detailed clinical report[121] of 1963. The authors of the first report, however, stressed that some unidentified toxic factor was probably operative in the hemodialysis procedure, since the patient's condition became progressively worse immediately following, and even during, each subsequent treatment.

Fluoride analyses of the blood serum and dialysate bath water were reported by the authors of the second paper[122] to have been made before and after all but the first two hemodialyses. They also noted that autopsy revealed an abnormally high concentration of F^- in the bones which suggested to them that the patient had been "ingesting and retaining more fluoride than usual for some time." Excessive accumulation of F^- from impaired elimination has long been recognized as a prime factor in fluoride intoxication. Although the authors of the second paper[122] advised that "it would seem prudent to use nonfluoridated dialysate baths for long-term hemodialysis," it is not clear why they did not refer to the earlier report[121] containing the clinical details of this case, nor why they did not regard the features of the patient's death as characteristic of acute fluoride poisoning.[123]

Conclusions

From the foregoing it is obvious that a great deal more is yet to be learned about the effects of water-borne and other sources of ingested fluoride on the human organism. The dental benefits of F^- are now fairly well defined, but otherwise, apart from its possible contribution to bone structure,[47,118,122] fluorine has no known essential role in human nutrition or metabolism.[124]

It is clear, moreover, that the acknowledged importance of dietary factors in the origin of tooth decay[22] requires continuation of a more fundamental approach to the problem of preventing dental caries. Fluoridation has provided a partial solution to this problem, but it obviously does not hold the complete and final answer. New approaches based on the concept of complete dental nutrition, especially during the

period of tooth formation,[125] would appear therefore to hold considerable promise for producing teeth that remain sound and caries-free throughout life.

Owing to its presence in phosphate fertilizers and other agricultural chemicals, as well as its current widespread introduction into municipal water supplies, F^- is now found in higher concentration than before in a wide variety of food products, including canned goods, brine-cured meats, cereals, gelatin, baked goods, and many types of beverages.[25,96] Thus the average daily intake of F^- from all sources has almost certainly increased in recent years,[25] and because of this it is difficult to estimate to what extent levels of threshold toxicity are being approached or even exceeded.

Physicians undoubtedly would be able to detect many more cases of illness arising from or augmented by fluoridated water if they were to ask patients with suspected symptoms to change to nonfluoridated water sources. Then if the symptoms disappeared appropriate blind tests with minute amounts of fluoride in distilled water could be administered to confirm or disprove the diagnosis. It is also evident that more attention to fluoride analyses of affected organs at autopsy in cases of death due to cardiovascular calcification or kidney impairment would be of considerable value to determine whether or not fluoride was a contributing factor in the cause of death.

While it is true that an impressive body of evidence is available which "attests the safety and effectiveness of fluoridation," it is equally true that there is a steadily growing number of detailed accounts of adverse findings. Hence the recent statement[126] by a leading dental health official that "fluoridation is a controversial subject though not *scientifically* controversial" (italics in original) is clearly contrary to the picture that emerges[127] from a careful examination of the relevant current medical literature. And certainly the more recent clinical reports[74,92] of allergic and chronic toxic effects from fluoridated drinking water serve to call to mind what was so prophetically written 25 years ago by Smith and Smith,[21] who were among the first[8] to discover fluoride as the cause of mottled enamel:

> "A word of warning is thus offered to any plan to build caries resistance into teeth by addition of fluorides to public water supplies as a public health procedure. . . . The range between toxic and non-toxic levels of fluorine ingestion is very small. Any procedure for increasing fluorine consumption to the so-called upper limit of non-toxicity would be hazardous. This would be especially true in the case of addition of fluorine to

public food or water supplies where uncontrollable individual fluctuations in intake would be encountered."

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THURSDAY, APRIL 27, 1967.

EDUCATIONAL APPROPRIATIONS

WITNESS

DR. ROBERT GIBSON, REPRESENTING THE POLK COUNTY (IOWA) BOARD OF EDUCATION

Mr. FLOOD. We will now hear from Dr. Robert Gibson, from the great State of Iowa.

Mr. SMITH. Mr. Chairman, before he starts, I want to explain one thing. You know 11 States in the United States, from the very beginning, had county education systems. They had county school boards and no intermediary units, but in the rest of the country, including Iowa, we have local school boards and we have a State school board and an intermediary unit.

Dr. Gibson represents the Polk County School Board, which is an intermediary unit and I would say one of the model ones in the whole country. I happened to have been the attorney for this school board for several years before I came down here and am well acquainted with them. Dr. Gibson came with the board since I left.

Mr. FLOOD. I might suggest that the great Commonwealth of Pennsylvania, the Keystone State, is about to get around to what you have done for some time with the intermediate system.

Dr. GIBSON. I think this is a joint enterprise, gentlemen. A model bill for the formation of intermediate units is now under study by representatives from Pennsylvania, Iowa, and other States.

Mr. FLOOD. What is your subject?

Dr. GIBSON. I want to speak to you concerning the appropriations for title VI of the ESEA Act of the past Congress.

Mr. Chairman and members of the subcommittee, my name is Robert C. Gibson. I am director of pupil personnel services of the Polk County school system, Des Moines, Iowa. It is indeed a privilege to appear before this committee on the behalf of handicapped children. I am representing the Polk County Board of Education, Ralph C. Norris, county superintendent. The information presented describes in part the special education program and needs of the State of Iowa. Richard Fischer, State director of the division of special education, State department of public instruction, served as consultant for this testimony.

Our administrative philosophy is based upon a mutual obligation of school districts to cooperate with each other when considering the educational needs of all children. The size of districts in Polk County vary in student enrollment from 46,054 to 513.

Mr. FLOOD. What is the population of your school district, the basic unit, about?

Dr. GIBSON. The total county school system is the total of these two figures, 46,567. Pardon me, sir, that is the total of the extremes. The total population is over 60,000. (See exhibit No. 5.)

Mr. FLOOD. That is student population?

Dr. GIBSON. That is student population, yes, sir.

Together, the local districts in counsel with the county school staff determine services to be submitted to their respective boards of education. Programs thusly approved are solutions to the educational needs

of children regardless of place of residence whether it be an urban tenament or county estate, a farm home or town cottage.

Educational programs which benefit the children and adults of our country are also provided elsewhere in Iowa. Exhibit No. 1 map and table illustrate the distribution of special education programs for handicapped children.

Mr. FLOOD. Do you present this for the record?

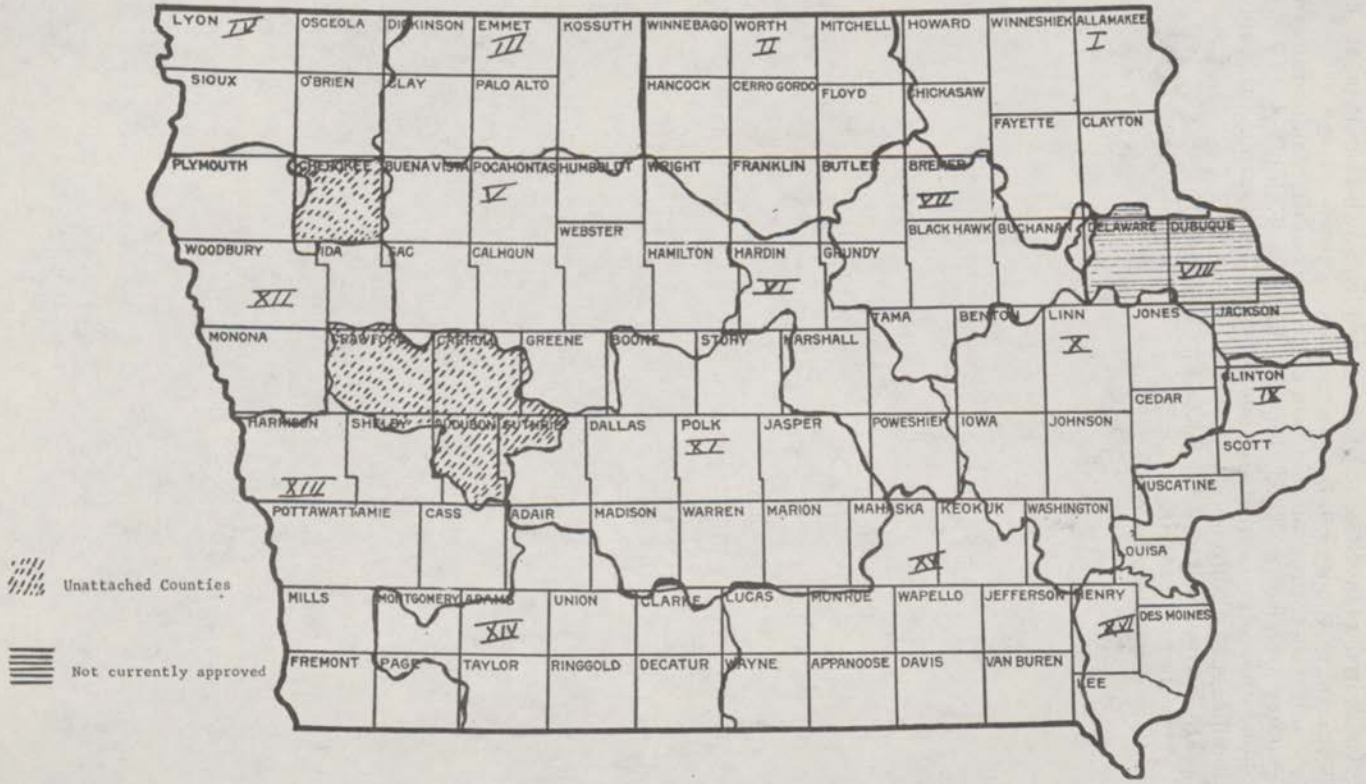
Dr. GIBSON. Yes, sir.

(The documents follow:)

EXHIBIT NO. 1

MAP: IOWA SIXTEEN AREA INTERMEDIATE UNITS

TABLE: SPECIAL EDUCATION PROGRAMS AND STAFF



Special education programs and staff, State of Iowa, Department of Public Instruction

	Average daily attendance	Property valuation	Special education directors	Psychologists	Speech clinicians	Hearing clinicians	Classes for mentally retarded
Area I	21,842.2	$230,392,835	2	2	6	1	27
Area II	32,190.2	364,560,216	1	6	10	0	37
Area III	18,982.9	248,025,160	0	1	5	0	15
Area IV	13,996.3	182,455,909	1	2	3	1	10
Area V	40,281.8	482,990,596	4	2	11	2	20
Area VI	23,172.19	252,386,112	2	1	7	0	32
Area VII	94,758.2	405,798,775	2	11	18	1	52
Area VIII	17,042.8	229,114,119	1	5	5	0	27
Area IX	49,062.7	443,557,773	4	24	17	2	97
Area X	63,888.3	608,110,704	2	28	35	0	85
Area XI	106,374.0	916,843,576	5	14	30	2	102
Area XII	31,638.2	304,349,562	1	4	10	0	43
Area XIII	41,101.3	382,094,327	2	2	8	0	36
Area XIV	16,979.0	183,884,473	0	4	2	0	16
Area XV	34,038.3	301,101,076	1	7	12	0	43
Area XVI	23,155.1	207,402,615	0	3	5	0	34

A note of background is pertinent to interpretation of this map and the table attached.

Iowa educational administration is in a state of consolidation. During the past 20 years the number of local school districts have been reduced from 4,661 to 503. Larger local community school districts now are more effectively providing the regular instructional services for their children. At the county level the original 99 county school systems are organizing themselves into multicounty intermediate units.

Mr. FLOOD. Do you have a yardstick for establishing lines of jurisdiction for these school districts or do you do it arbitrarily?

Dr. GIBSON. These lines, as depicted on the map, are geographical boundaries of school districts within that area.

Mr. FLOOD. How do you draw the lines? Do you just do it arbitrarily?

Dr. GIBSON. As determined by a joint study between these local and county areas and the State department of public instruction.

Mr. FLOOD. Then the local people have an opinion to express?

Dr. GIBSON. Yes, sir. By joint county boards of education action, centralization of administration and pooling of resources are being affected.

Presently, there are 46 single county and 23 joint county administrative areas. Legislation is currently being studied by the Iowa Legislature to establish by 1968, 16 intermediate school units as pictured on the map.

Exhibit 2, which I submit for the record, is this month's issue of the "Educational Bulletin" and describes the projected role and need for these units.

(The exhibit follows:)

EXHIBIT NO. 2

IOWA DEPARTMENT OF PUBLIC INSTRUCTION "EDUCATIONAL BULLETIN," APRIL 1967

[From the Educational Bulletin of the State of Iowa Department of Public Instruction. April 1967]

REGIONAL EDUCATIONAL SERVICE AGENCIES IN IOWA

(By E. Robert Stephens, assistant professor of educational administration; and John Spiess, lecturer, College of Education, University of Iowa)

Since the late 1940's there has been an interest in Iowa to provide an intermediate level of school administration. Such a unit is generally conceived to operate between local school districts and the state education agency. The primary function is to provide services, and in some instances programs, for local school districts which can be offered more efficiently and economically at the intermediate rather than the local level. Iowa's 99 county school systems established in 1948 were a first step in offering such intermediate programs and services.

It has become increasingly clear, however, that the single Iowa county is not an adequate base for such intermediate programs. Over the past several years, several proposals have been developed for the establishment of a state-wide network of multi-county intermediate units. With this multi-county approach, the term "Regional Educational Service Agency" is beginning to replace the term "intermediate unit."

This interest in Iowa parallels simlar action in a large number of states in all parts of the country. The Regional Educational Service Agency (RESA) units are viewed to be one of the major approaches to the solutions of numerous educational problems faced by local school districts, which, because of limited student population or insufficient financial resources, are unable to provide a variety of needed educational programs and services.

ROLE OF COUNTY SUPERINTENDENTS

To the distinct credit of the county superintendents of Iowa, it has been their organization that has been quickest to point out that in most situations, county offices, as structured in the past, cannot completely adapt to needed changing service roles. The Iowa Association of County Superintendents has given much impetus to the recognition of the potentials inherent in intermediate units serving a larger geographic area, with larger student enrollments and financial bases. Evidence of this need is to be found in the fact that during the past several years an increasing number of voluntary arrangements between county school systems have developed. Illustrative of such arrangements are (1) the many situations in which a single administrator serves two or more counties and (2) the large number of multi-county special education agreements.

Only 46 of the original 99 Iowa county school systems are still employing a superintendent for an individual county. The other 53 counties are served by 23 superintendents. During the 1966–67 school year 60 counties were involved in some multi-county agreements for the purpose of offering programs of special education.

RECENT ACTION

In 1965, the 61st Iowa General Assembly enacted several statutes that were related to the regional educational service concept. Two of the most significant of these were Senate File 550 and House File 553. S. F. 550 permitted the creation of up to 20 area community colleges, or area vocational schools in the state. H. F. 553 enacted permissive legislation allowing two or more contiguous counties to merge by joint resolution of the county boards of education under a single common tax base and the administration of one superintendent. This bill thus made the Regional Educational Service Agency possible for Iowa.

In the summer of 1966, the State Board of Public Instruction adopted a policy that mergers of county school systems approved under the provisions of H. F. 553 must fall within the same basic boundaries established for the area vocational and area community college districts organized under S. F. 550.

To date, three multi-county mergers have been approved, and several more are in the discussion stage. The regional agencies or multi-county mergers already

approved include: (1) Scott-Muscatine Counties, (2) Floyd-Mitchell-Worth-Cerro Gordo Counties, and (3) Black Hawk-Buchanan Counties. The Scott-Muscatine merger became effective July 1, 1966, while the latter two will take effect July 1, 1967.

STUDY UNDER WAY

In the spring of 1966, after consultation with groups representing the Iowa State Department of Public Instruction, the Iowa Association of County Superintendents, State College of Iowa, Drake University, Iowa State University, and The University of Iowa, an application for a federal planning grant to study the intermediate structure in Iowa was filed. This proposal, submitted in the name of the Linn County Board of Education, Cedar Rapids, Iowa, was approved and funded in the amount of $97,000, in June 1966 by the U.S. Office of Education, Division of Plans and Supplementary Centers. Funding was through Title III of the Elementary-Secondary Education Act. The Linn County Board of Education then entered into a contract with The University of Iowa's Center for Research in School Administration to conduct the study.

Dr. E. Robert Stephens is serving as director of the project. John Spiess is the assistant director. Eldon Archambault and Dale Findley, graduate students at The University of Iowa, are serving as research assistants. Dr. Franklin D. Stone, associate director of the Iowa Center for Research in School Administration, is the liaison official for the study.

OBJECTIVES

The two major objectives of the current study, which is to be completed in July 1967, are:

1. To create an awareness among county boards of education, educators, and the general public of the potential for better education in Iowa through the formation of adequate multi-county intermediate units.
2. To determine the appropriate role of the multi-county intermediate unit with respect to functions and services and related considerations of organization arrangement, staffing, space needs, equipment needs, and other details related to the establishment of a multi-county intermediate unit office.

Examples of the many functions and services under study are: curriculum development; consultation services for teachers, administrators, and board members; in-service programs for professional and non-professional personnel; instructional materials centers; data-processing centers; special education services; pupil personnel services; and cooperative purchasing programs.

Although the current study will recommend criteria and guidelines for the establishment of a network of regional educational service agencies for the entire state, the primary focus of attention will be upon developing a model RESA unit to serve the seven-county school systems of Area X (Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington Counties). The findings and recommendations of this study will have applicability to other areas of the state.

As part of the study, the staff and members of the State Advisory Committee visited outstanding intermediate units in the states of Washington, Oregon, Michigan, California, Pennsylvania, and Wisconsin, in addition to several county and multi-county programs in Iowa.

STATE ADVISORY COMMITTEE

Assisting the staff in an advisory role is a State Advisory Committee representing various educational levels and interests in the state. Ira Larson, Linn County superintendent of schools, is committee chairman and Dr. Mel Everingham, superintendent of the Iowa Tech (Area XV) District, is vice-chairman. Other members are: Dr. William Anderson, superintendent of schools, Sioux City; David Bechtel, administrative assistant, Department of Public Instruction; State Senator Joseph Cassidy, Scott County; Dr. William Dreier, professor of education, State College of Iowa; Marshall Field, superintendent, Johnson County Schools; David Gilliland, reorganization consultant, Department of Public Instruction; Edwin Green, administrative assistant, Iowa Tech (formerly superintendent of Jefferson-Henry County Schools); Perry Grier, superintendent, Black Hawk-Buchanan County Schools; Ellis Hanson, Iowa director, Great Plains Organization Study, Department of Public Instruction; Ralph Norris, superintendent, Polk County Schools; Louis Pickett, superintendent, Scott-Muscatine County School System; E. Paul Reher, superintendent, Allamakee Com-

munity Schools; Mrs. Marian Savage, member, Linn County Board of Education; A. W. Schuler, superintendent of schools, Atlantic; and Vance Stead, superintendent of schools, Le Mars. Dwight Bode, president of the Iowa Association of County Superintendents, and Dave Little, president of the Audio-Visual Education Association of Iowa, all serving as ex-officio members of the State Advisory Committee.

It is anticipated that the results of this planning grant study will be of significance to Iowa in further developing the concept of Regional Educational Service Agencies. Many areas of the state are seriously investigating the advantages to the total education program through forming such multi-county mergers. Iowa has legislation that allows the development of RESA units in a sound logical manner. It is hoped that through the concepts gained from the planning grant study Iowa can continue to remain a pace setter in its total pattern of educational organization. .

Iowa Schools Take Part in Self-Evaluation

Eight public and two nonpublic school systems of Iowa are now participating in a "pilot project" of self-evaluation under the direction of the State Department of Public Instruction. The project is to be completed by September 1.

Administrators, teachers, and lay people will work on committees within the district for self-evaluation on a K–12 basis. These results will then be compiled for use as guidelines for state department regional consultants in annual or periodic visits. The self-evaluation machinery may also be reatcivated anytime over a five-year period.

Earl Miller, DPI director of supervision, said the following systems are engaged in the evaluation: Cherokee, Iowa City, Nishna Valley (Hastings), Sac City, Saydel (Des Moines), Starmont (Strawberry Point), Story City, Wapsie Valley (Fairbank), Pocahontas Catholic, and Western Christian (Hull).

Among topics that may be considered by the evaluation teams or committees are: administrative staff, business management of district, subjects offered and subject content taught, professional staff qualifications and preparation, supervision of extracurricular activities, released time allowed teachers.

Also salary scale, tenure system, fringe benefits, summer jobs in the system, additional college training required of teachers, merit pay, pre-school, nursery school, and status of adult education.

Reading Workshops

Summer school workshops in reading, carrying one to three hours, will be offered at these colleges: Augustana College, Sioux Falls, South Dakota, June 19–23; State College of Iowa, Cader Falls, June 12–23; Upper Iowa College, Fayette, June 12–30; Colorado State College, Greeley; and Northwestern College, Orange City, Iowa.

For further information, contact the colleges.

ICTE Meets April 21–22

The Iowa Council of Teachers of English will hold its annual Spring Conference on the Iowa State University campus at Ames, Friday and Saturday, April 21 and 22. Dr. Ruth Strickland, Indiana University, will be the major speaker.

Experiencing Music

(By Norma Van Zee, consultant, special music project)

Experience is the skill, knowledge, and wisdom gained through observing, feeling, and doing.

Experiencing music, then, must involve the individual in listening to, composing, or performing music. The degree to which the individual perceives the expressiveness of music as an art form will determine the depth of his aesthetic experience and his reaction to it. Therefore, the development of musical perception is the foundation of a music education program, and the musical experiences should be part of a total plan of instruction.

ELEMENTARY LEVEL EXPERIENCES

Elementary-age children perceive the elements of music and learn to respond to them by listening, singing, clapping, chanting, moving, and playing. As they become physically, mentally, and emotionally involved in listening to and making music, children develop skill and understanding.

Research, new methods, materials, and curriculum designs are doing much to stimulate and develop aesthetic perception in the elementary-age child.

New approaches.—The Zoltan Kodaly and Carl Orff approaches based on rhythm, physical movement, and the use of special instruments, are being used in some Iowa schools. The object is to stimulate self-expression and improvisation in students while making the elements of music more meaningful. Research will evaluate the results of these approaches in relation to the musical growth of the students. They are partly supported by the Federal Arts and Humanities Fund allocation for Iowa.

Creativity.—The West Des Moines school systems was one of 14 school systems nationally to participate in a "creativity" program as part of a U.S. Office of Education project to study new concepts, procedures, and achievements in music learning. The project results are expected to play a major role in future curriculum development.

Cultural experience.—Under Title I of the Elementary and Secondary Education Act, attempts are being made to provide cultural experiences for children who are considered economically and educationally deprived. The program makes available new and improved materials, instruments, lessons, concerts, and additional teachers in an effort to broaden the students' horizons, thereby enriching their lives.

Educational television.—Television is providing quality music experience for many students on a scale never before possible. A state-wide network would offer unlimited avenues for its use as an educational tool in the classroom.

SECONDARY LEVEL EXPERIENCES

Musical experiences at the secondary level should be a continuation and expansion in depth and scope of the elementary program. They should be intellectually challenging and aesthetically satisfying. Provision should be made for special courses for the talented student as well as general music courses for the nonperformer. Such provision creates a need not only for performance groups, but for courses in music theory, literature, and the humanities.

Curricular courses.—A music literature course developed by Robert Glidden and Dr. Neal Glenn, University of Iowa, is now being evaluated in eight Iowa high schools. Course methods and materials include audio-visual aids for listening, individual study, and classroom discussion of selected music masterpieces. Schools participating in this pilot project which is partly financed by the Arts and Humanities Fund, are West Des Moines, Muscatine, Camanche, Olds, Sac City, Aurelia, Fairfield, and Estherville. Student interest in certain units of the course has led to their involvement in a creative writing project, attendance at live musical performances, and school exchange programs.

The Glidden-Glenn course is only one example of how individual schools can provide a unique musical experience to fulfill the special needs of their students. Other approaches center around the humanities, allied arts, development of appreciation, and understanding of various forms and styles of music.

Support for musical and other cultural experiences is being given by foundations, national and state governments, and local educational groups.

Performing groups.—Large group musical experiences have long been a part of the educational scene in Iowa. Many outstanding instrumental and vocal performing groups are developed each year.

On a statewide level, through competitive selection, talented vocalists and instrumentalists gather in Des Moines for the "all state" festival at Thanksgiving. Working under eminent directors, these young musicians prepare fine musical works, which they present in an evening concert.

Small groups offer an outlet for additional participation and self-expression. These experiences many times lead to an avocational, long-lived interest in music. Many festivals and contests are held throughout the state during the year, providing an opportunity for these small groups and ensembles to prepare and present works suitable to their group and level of proficiency.

Professional concerts by visiting symphonies and local community groups are available on a limited basis to some Iowa students. Musical masterpieces per-

formed "live" with skill and understanding can be a very exciting and aesthetic experience for those with the background and perception to become involved in the communicative and expressive elements of the music.

CURRICULUM GUIDES FOR MUSIC EDUCATORS

Necessary tools in developing student perception and sophisticated reaction to music are curriculum guides at the state and local levels. The guides should set forth the philosophy, objectives, experiences, and means of evaluating the music education program. Development of the guide and the program can only be effective if it is in charge of a qualified person.

In addition to a guide now in preparation, the DPI is developing a new series of filmed lessons to illustrate the concepts, skills, and appreciations appropriate to the musical program at the kindergarten level. These films are made possible through the Hawks fund. Other grade levels will be treated similarly at a later date.

GOALS OF THE PROFESSION

Music educators should unite in developing the scope and sequence of the music program; in supporting their state and national groups; in keeping abreast of the trends, methods, and materials in education; in showing school boards and administration, students and fellow teachers, that music is an academic subject with well-defined objectives, experiences, and means of evaluation. It is also an aesthetic experience that can lift the sights and enhance values while providing a means of personal expression and satisfaction.

"Art is, indeed, the epitome of human life, the truest record of insight and feeling." [1]

About the Author

Before joining the Department of Public Instruction in July 1966 as consultant for a special music project, Mrs. Norma Van Zee taught elementary music four years on Des Moines' educational television station, KDPS–TV. She was also a part-time music consultant in the Des Moines Public School System and during the spring of 1965 taught the Saturday music education methods course for classroom teachers at Drake University.

Some of her original songs for children have been published in the new Ginn & Company series, *The Magic of Music*, for which she also planned and recorded the lessons in the kindergarten and first grade albums.

Under the auspices of the DPI, Mrs. Van Zee is developing a film series for kindergarten and primary grades from funds provided by the Glen Hawks estate. Mr. Hawks, who died in 1959 in Cambridge, Iowa, left almost a quarter of a million dollars to "promote instruction in vocal music and proper development of the lungs of children attending kindergarten, first and second grades."

Mrs. Van Zee is a voice major with the B.M.E. and M.M.E. degrees from Drake University. She is a member of Sigma Alpha Iota and Pi Kappa Lambda, as well as state and national music organizations.

SEX EDUCATION IN KEOKUK

The editors of the EDUATIONAL BULLETIN called attention to an article scheduled to appear in the May-June issue of *Midland Schools*. It is "Sex Education Pays Off in Keokuk Senior High School." Administrators feel the 24-year-old course has been a significant factor in reducing promiscuity among the senior high students.

ART EXHIBIT

Exhibits of art work done by pupils from the fourth grade through high school will be on display at the Iowa State Fair, August 18–27, 1967. Entries will be made in the name of the school—not the individual. Premiums and ribbons will be given. Interested teachers should write for complete rules and instructions to Iowa State Fair, State House, Des Moines, Iowa 50319.

U OF IOWA ANNOUNCES NDEA SUMMER INSTITUTES

Dr. Howard R. Jones, dean of the College of Education and director of the summer session at the University of Iowa, has announced three summer session institutes to be held at the University under authorization of the National

[1] Suzanne Langer, "The Cultural Importance of the Arts," *The Journal of Aesthetic Education*.

Defense Education Act. These are in addition to the NDEA institute on economics previously publicized in the BULLETIN. The institutes, all of which provide stipends for accepted participants, are as follows:

NDEA Institute in Educational Media, June 19-July 28;

NDEA Institute in Advanced Composition for High School English Department Chairman and Secondary English Curriculum Supervisors, June 14–August 9;

NDEA Institute in Molecular Biology for Secondary Teachers, June 13-August 9.

Write for further information to Summer Session Office, W–113 East Hall, Iowa City, Iowa, 52240.

ADMINISTRATORS ELIGIBLE FOR INDIA STUDY GRANT

Grants will be available for American school administrators to participate in a special two-month seminar to be held in India and another country, such as Japan, from approximately February 19 to April 12, 1968. The seminar will include a study of the school systems of India and another country, visits to selected schools, and lectures on the history and social and economic conditions in those countries as they affect the educational system.

Six weeks will be spent in India, with an academic program for four weeks, followed by two weeks of educational travel. Two additional weeks will be spent in a second country.

For further information and application forms, write: International Exchange and Training Branch, Office of Education, U.S. Department of Health, Education, and Welfare, Washington, D.C. 20202. The deadline for application is May 1, 1967.

FIRE MARSHAL CITES LAW ON PORTABLE CLASSROOMS

The State fire marshal's office has issued a word of caution to school boards purchasing portable one-room structures for regular classroom use. These buildings must comply with "Fire Safety Regulations for Schools and Colleges." Among the requirements are the following:

Two means of exit (second door or qualifying window);

Furnace room located outside the classroom—one-hour fire-resistive electric baseboard heat excepted;

Limited flame spread in rooms where open flame is used for instruction;

Construction of non-combustible or one-hour fire-protected material;

One-hour fire protection from beneath (crawl space or basement);

Adequate fire alarm system;

Electric wiring Underwriters Laboratory-approved and run in metal raceways.

This is an abbreviated statement of the regulations. The fire marshal's office urges school officials to "play it safe" and make sure the building can be approved before any contracts are signed.

RENEWAL OF CERTIFICATES BASED ON LESS THAN COLLEGE DEGREES

(Prepared by Orrin Nearhoof, director, teacher education)

THE PREVIOUS article in the series on certification (see March issue of EDUCATIONAL BULLETIN) outlined the requirements for renewal of Iowa teachers' certificates based on college degrees. This fourth article focuses on the renewal requirements for certificates issued on less than college degrees, or in exchange for old-type certificates which were based on less than college degrees. The names of the certificates involved are:

Preprofessional certificates;
High school normal training certificates;
Uniform county certificates;
Standard elementary certificates;
Special certificates, exclusive of one-year certificates;
Limited elementary certificates;
Old-type life renewed; and
Second- or third-grade state certificates

When renewal requirements are met, these certificates will be converted to pre-professional certificates.

Every person renewing a certificate based on less than a college degree must present a statement signed by the registrar of the single approved institution

where the credits for renewal are on record. The statement should show: (1) that all credit from other colleges has been received and evaluated in terms of the requirements for the completion of the program leading to a professional certificate, and (2) that the credits being offered in support of the application for renewal count toward the completion of the requirements for the professional certificate.

The application and fee for renewal may be filed as early as 12 months prior to expiration date.

If a certificate is renewed at date of expiration, the credits presented for the renewal are acceptable if earned during the term of the certificate. Term refers to the period of time between the issue date and expiration date of the certificate. If a certificate is not renewed at date of expiration, the credits presented for its renewal must have been completed within the five-year period immediately preceding the date of application for the renewal.

Every applicant must file evidence of successful teaching experience during the term of the certificate, and, in addition thereto, file evidence of having completed six semester hours of credit earned since the date of issuance of the certificate.

If the applicant has not had teaching experience during the term of the certificate, he must complete eight semester hours of additional college credit.

It is suggested that ever person seeking to renew a certificate based on less than a college degree first identify with an approved institution in order to have all credits evaluated and a program leading to a degree and regular certification outlined.

Holders of limited elementary certificates, old-type life-renewed certificates, or old-type state certificates should refer to the following:

Limited elementary certificates are renewable once only, for one three-year term. After the expiration of one renewal, however, they may be converted to pre-professional certificates upon completion of 12 additional semester hours of credit at one institution.

Old-type certificates renewed for life remain in force only as long as the holder permits no five-year period to pass in which he has not been employed in school work for at least eight months. This employment must be in administration, supervision, or teaching (160 days of teaching is considered the equivalent of eight months). A life certificate which has lapsed may be reinstated upon filing eight semester hours of college credit earned in an approved institution within the five-year period immediately preceding the date of application for reinstatement. A lapsed life certificate is reinstated, not as another life certificate, but as an equivalent term certificate, issued for a specified term of years.

Prior to June 30, 1935, authorizations to teach known as "state certificates" were issued. These certificates were designated as second- or third-grade state certificates when issued on the basis of two years of college preparation. Holders of these expired certificates may, upon meeting requirements, exchange them for the pre-professional certificates, and the endorsement will always be for elementary-school teaching. Eight semester hours of credit must be earned within the five-year period immediately preceding the date of application for exchange, and at least three semested hours of this total must be completed in elementary-school professional education.

Holders of certificates based on less than a degree must also meet special "approved standards" in order to be eligible to teach in the elementary grades of a high school district. This special type of approval is granted to any person holding an Iowa certificate endorsed for elementary-school teaching and who, before August 31, 1958, held such a certificate and had completed at least 30 semester hours of college credit. Eight hours of this credit must have been in enducation, including three hours of elementary-school methods. Any person who taught in the elementary grades of an approved high school district prior to the 1956–1957 school year on a regular certificate is approved by virtue of "previous approval."

Business Occupations Meetings Well Attended

Over 1,300 students, coordinators, and guests attended statewide conferences in Des Moines sponsored in March by the Business Occupations Section of the DPI Vocational Education Division.

The Second Annual Vocational Office Education Leadership Conference March 3–4 attracted 500 persons representing 37 high schools and 50 persons involved in post-secondary programs.

The 11th Annual Distributive Education Conference March 12–13 brought 700 to Des Moines. Forty-seven high schools took part in the 18 competitive events for students. The first DE conference for post secondary students attracted 50 persons representing seven programs.

The photo above was taken at the DE banquet and dance March 12 at the Hotel Fort Des Moines. Among those at the head table were the DPI-ers Windol Wyatt, director, Vocational Education, and Doyle Carpenter, associate superintendent.

A Suggestion

You are always welcome at the Department of Public Instruction, but we suggest that you might be a little happier with your visit if you avoid these dates: May 8, 1967, and July 10, 1967.

These are dates for all-day staff meetings away from the premises.

Thanks for your cooperation and understanding.

Carpenter Named Area Head

Doyle O. Carpenter, associate superintendent in charge of vocational education, recently was named superintendent of the Area III Community College, centered at Estherville. He will begin his new duties May 1. Before coming to the DPI, Mr. Carpenter served as superintendent at Milo, Onawa, and Spencer.

Dr. Gibson. The services illustrated in the table of exhibit No. 1 are presently provided by local districts as well as by county and joint county boards of education. These are locally determined and State-approved programs with the most feasible unit providing the services. The responsibility for the children remains with the local district regardless of where the service is provided or by whom the program is administered.

Chapter 281 of the Code of Iowa, 1946, established the division of special education in the State department of public instruction as the instrumentality to establish and carry out the special education programs and facilities. It states in legal form the philosophy and objectives regarding handicapped children and defines the handicapping conditions with which the State would be concerned.

The philosophical bases of that legislation are simply these:

(1) All children, regardless of educational potential or handicapping conditions are entitled to an equal opportunity for education;

(2) This opportunity should be an integral part of the general educational system;

(3) The principle of "excess cost" is the policy of the State. This principle acknowledges that the State accepts the responsibility of reimbursing for the additional costs, that which is over and above the expense of educating a normal youngster within a given school district; and

(4) Program plans determined by local needs must be submitted for State approval if reimbursement is to be claimed.

The growth in the numbers, kinds, and the quality of these programs reflect the acceptance by the people of Iowa of the leadership of their multidisciplined professional staffs. From 1953–54 school year to the present 1966–67 term these increases have occurred:

(1) Psychologists from 5, employed by the State division, to 121, employed at the local county of multicounty level.

(2) Speech clinicians from 46 to 186.

(3) Special class teachers for the educable mentally retarded from 118 to 550.

(4) Special class teachers for the trainable mentally retarded from none to 110.

Today there are approximately 1,100 professional people employed in Iowa public schools to serve our handicapped youth. The total expenditure by all educational units presently exceeds $7½ million annually, of this amount the State expenditure is $2½ million as compared $30,000 in 1946.

Services presently provided in Polk County include research presently concerned with adult education and dropout prevention programs for the disadvantaged; special instruction for the emotionally disturbed, the neglected and dependent, and detained juvenile offenders; and special classes and resource teacher services for other handicapped children. It is in the context of these services for which I appear before you today.

Truly, gentlemen, we are pleased by this impressive expansion and developments. However, we are not exceedingly proud. We know we must quicken the pace of growth and stretch out our stride of effort if we are to make more decisive gain on the negative conditions which beset the handicapped in our society. Our major emphasis, as illustrated by the indexes of our growth, has been to those children whose conditions which have the greatest incidence—namely, the mentally retarded and the children with speech handicaps. As a matter of fact, we are currently providing service to only about 40 percent of children in need. The exhibit No. 1 table illustrates the "spottiness" of the distribution of these services. In the populous areas facilities and services tend to be good, while in the sparsely settled area they are woefully lacking. One-tenth of Iowa's total school population resides in Polk County, yet we have 102 or 17 percent of all special classes, 9 percent of all psychologists and speech clinicians, and 22 percent of all hearing clinicians. Concurrent with unequal distribution is the lack of consistency and followthrough in meeting the total developmental needs of these exceptional children. The Des Moines Independent Community School District has been a leader in secondary work-study programs for 15 years yet our suburban and rural districts in Polk County will begin their first such programs for the high school aged retarded next term.

Duplication of effort where it exists is inexcusable in face of shortage of staff, facilities and programs. Public preschool programs and post-secondary school vocational and recreational activities for the blind, partially sighted, deaf, hard of hearing, and physically handicapped are in the throes of multiagency concern. This is particularly true of programing for the emotionally disturbed and those children with multiple handicaps.

The complexity of these problems are not unresolvable.

In Blackhawk County, Waterloo, Iowa, an areawide multivolunteer agency, Exceptional Persons, Inc., is in operation, primarily because of Federal assistance in the form of mental health funds. The entire 1966 Iowa allocation of $300,000 was joined with the security tendered by a private foundation on the basis of public school as well as civic government financial assistance and cooperation. A multimillion-dollar structure and program will be able to serve innumerable handicapped persons.

The Honorable Harold E. Hughes, talented and forthright Governor of Iowa, spoke to this issue last Saturday while addressing the Iowa Federation Council for Exceptional Children. With your in-

dulgence and his expressed permission may I share one of his thoughts with you.

A few years ago, before capital punishment was repealed in Iowa, a request for commutation of sentence was submitted to me in the case of a young man sentenced to death for murder.

The history of this man's life, as revealed by the criminal records is something I'll never forget.

His first crime of record was the stealing of a yo-yo from a five and ten cent store at the age of eleven.

From that point on, his case history was a grim, twilight narrative of poverty, mental retardation in an entire family, parental neglect and social indifference.

I think that no reasonably compassionate person could have studied this man's case history without concluding as I did that we as a society shared the guilt for the henious crime he had committed.

I commuted the sentence which was a clumsy, *ex-post facto* way of dealing with a crime that could and should have been prevented by attention given to a handicapped child and a handicapped family many years before in the murky past.

Governor Hughes concludes by stating that:

"The exceptional child of yesterday may be the nuclear physicist of today or he may be a criminal imprisoned for life.

"Our responsibility as a society in this area is very great . . ."

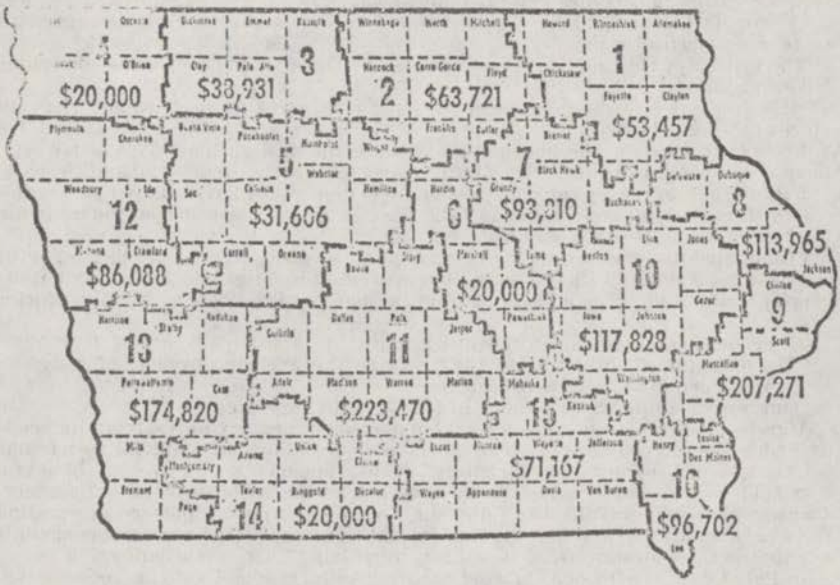
May I suggest that Iowa has a working plan, an ingenuity in resolving its needs and with federal assistance we can do the undone. In our agricultural vernacular we need "seed" money and "fertilizer" funds. You gentlemen are our bankers. You hold our national savings to be invested to the betterment of our society. Please weigh thoughtfully the following "seed" programs which we are finding to be producing "marketable" results. In addition, also listed are some comments expanding these programs, if funds for "fertilizing" are forthcoming.

In Polk County, with our eight neighboring county school systems cooperating, we have one educational program which is a part of a statewide library plan under Title II of the ESEA. This area-wide audio-visual and book library is described in the photocopy of the newspaper report attached as Exhibit #3. The federal assistance in this area is providing improved instruction to all children.

(The exhibit follows:)

EXHIBIT No. 3

TITLE II AREA LIBRARY REPORT



School Officials Plan a "Stockpile" in Each of These 16 Areas

Figures in the map show how the new federal grant is being distributed

[From the Des Moines Sunday Register, Apr. 17, 1966]

LIBRARY "STOCKPILES" TO SERVE IOWA SCHOOLS

(By Roy Reynolds)

Teachers and students in Iowa's public and private schools will soon be able to borrow library books, film strips and other instructional material from stockpiles serving the 16 areas on the adjoining map. This material will be paid for with a $1.4 million federal grant just received by the State Department of Public Instruction, under Title II of the Elementary and Secondary School Act of 1965.

The most unusual aspect of this program is that it allows public and private schools to draw from a common source to supplement teaching material they choose independently of each other. Unlike some aid provided by the new federal education act, this program will not be limited to schools in economically-depressed areas.

Title II sets up a five-year program of grants, requiring no state matching funds, for buying "library resources, textbooks, and other printed and published instructional materials." The U.S. Department of Health, Education and Welfare says this means books and "any other printed and published or audio-visual materials * * * which with reasonable care and use may be expected to last more than one year."

Only "materials intended for religious instruction" and "materials consumed in use, furniture or equipment" are excluded.

STORAGE DESIGNATED

The 16 areas being used in administering this program are roughly the same as the state's community college districts. One county school superintendent in each each area has been assigned by the Department of Public Instruction to store Title II material, and to appoint an advisory committee which will decide what to buy.

Each committee has about 15 members, representing public and private schools. Material they choose will be available for loans up to three months to teachers

and pupils in both types of schools. It will be state-owned, and must be approved by the Department of Public Instruction. All 16 areas have been asked to have their orders in by May 10. There is little chance that the material will be available before fall.

When the department applied for Title II money late last December, it suggested guidelines that would have allowed the 16 advisory committees to spend up to half their shares in any of three categories: library books, audio-visual materials, or "other materials." The 16 county superintendents serving as sub-agents for Title II money expressed enthusiasm for this approach when they met Feb. 24 with Paul F. Johnston, superintendent of public instruction, and Clifton L. Kessler, chief of the department's media division.

"In other words," asked one, "we could spend 50 per cent for audio-visual, 50 per cent for other materials, and forget the books?"

Kessler replied, "If that's what your advisory committee deems advisable, yes. * * * We might have to change the proportions after seeing what is ordered this year."

The proportions already have been changed. The U. S. Office of Education has informed Iowa education officials there are really only two categories in which Title II money can be spent: books and other instructional materials.

Iowa's Title II application was accepted this month after the Department of Public Instruction worked out a formula which allows the money to be spent this way: 40 to 50 per cent for library books and 30 to 50 per cent for other materials. Any money left after the 16 advisory committees plan their first orders can be spent on other materials—meaning audio-visual materials, not library books. Iowa, unlike some states, will spend no Title II money for textbooks—only books for supplementary reading.

Several superintendents at the February meeting said they think teachers and pupils will not make much use of books stored in centrally-located stockpiles serving several counties. Title II does not provide transportation costs or allowances for operating a bookmobile, and the state's guidelines allow no more than $1 for processing each item.

Some superintendents contended that school libraries in their areas are well-supplied with books and need no outside help. Most agreed that audio-visual aids—particularly film strips, which can be mailed easily—will "really move."

CHEAPER TO COPY?

Modern technology is making it easier to reproduce printed materials. The National Education Association, apparently expecting developments that will make it cheaper for schools to copy books and other printed materials than to buy them in large quantities, is opposing an effort by the U.S. Copyright Office to tighten the copyright laws. These laws date back to 1909.

Iowa's Department of Public Instruction originally planned to distribute Title II money according to shortages of library books and audio-visual aids reported by the 16 advisory committees. But the U.S. Office of Education says "need" must also be measured by the number of school-age residents (5 to 21), and the value of taxable property, in each area.

Five per cent of the $1.4 million will go to the Department of Public Instruction to cover administration costs in the first year of this program. The remaining 95 per cent will be split two ways.

VALUATION AND STUDENTS

Thirty per cent will be divided among the 16 areas on the basis of their school-age populations. Kessler estimates this will give each area about 30 cents per student—"perhaps enough to spur them into buying some things for their schools they should get themselves."

Seventy per cent will be divided according to the value of taxable property per student. The four areas with the highest valuation per student will not get any Title II money beyond the grants based on student population. These are areas 14, 5, 4 and 6 on the map, which shows the amount of Title II money all 16 areas can expect this year.

Special education materials can likewise be provided through this statewide distribution system. We have been designated as center for sightsaving instructional materials belonging to the State. Materials such as large-print books, magnifiers, talking records, books of Braille

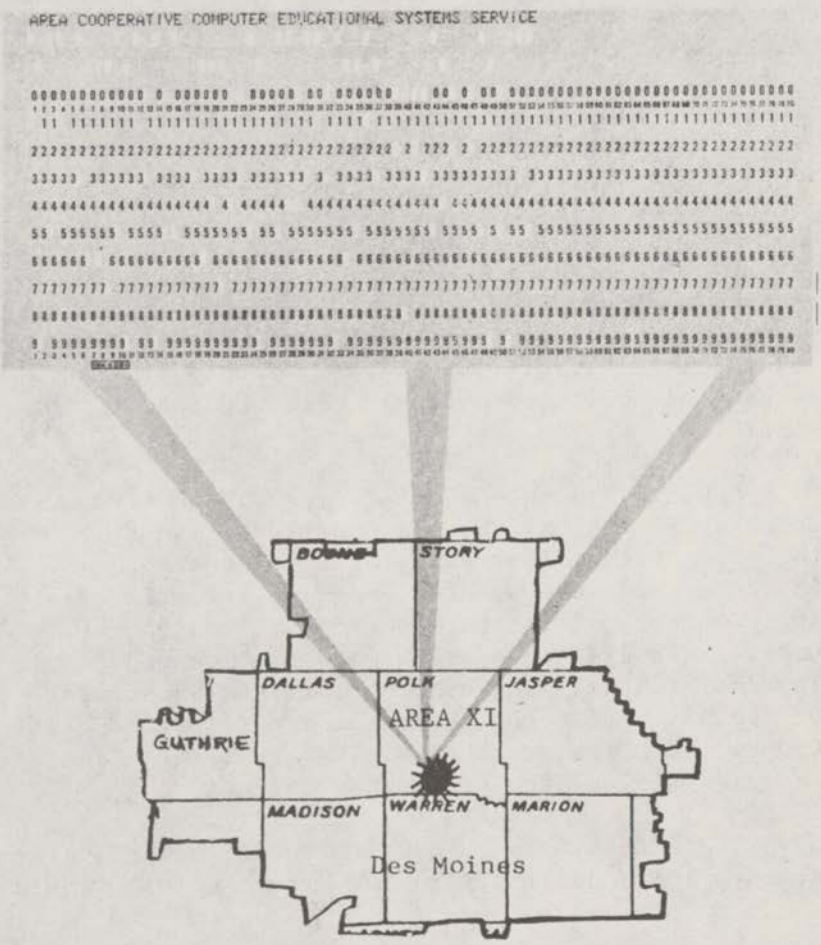
which had accumulated in a single State library are being processed and distributed to the area libraries for availability to handicapped in the given area. By use of data processing methods we have an instant inventory and locating procedure. When a child in a small isolated school needs the next level reader; by contacting the area library, it is loaned for his use. If that area does not have the book available, they notify our State central librarian who can locate it in one of the other centers or obtain a copy from appropriate suppliers.

The ACCESS folder, exhibit 4, briefly describes our area cooperative computer educational system services. This center has been established and is operational under title III funds serving 115,531 pupils in 58 local districts. Further uses in research, data analysis, and computerized machined instruction of handicapped children are additional possible uses for this federally supported service. We are already underway in compiling psychological test data on key punchcards and data tapes.

(Exhibit follows:)

EXHIBIT No. 4

ACCESS *Data Processing Center*



Polk County Board of Education
112 Eleventh Street
Des Moines, Iowa 50309
Telephone: AC - 515 - 284-6171

The ACCESS Data Processing Center is operated by the Polk County Board of Education, Des Moines, Iowa.

The Polk County Board of Education represents the intermediate educational unit of the local district, intermediate unit, and state-level structure. There are nine local school districts in Polk County, ranging in size from the Des Moines Public School District with a 46,129 student enrollment to the Bondurant-Farrar Consolidated School District with 513 students.

In 1962, the Polk County Board of Education entered the data processing field by scheduling the students of the Des Moines Roosevelt High School (1700 students) into classes. From that time on, scheduling services have been extended to all nine districts.

ACCESS is an acronym for Area Cooperative Computer Educational Systems Services, and it is the Area concept that has placed the operation of the data processing center under a Title III grant. As of October, 1966, the center has been operational under Title III funds, serving a nine county area in central Iowa. The combined student enrollment of the 58 local school district is 115,531. Polk County is the heart of this nine county area and comprises 56% of the student enrollment.

The ACCESS Data Processing Center makes available to local districts in the area the following:

I. Student Scheduling

A. Collection of parent-student information*
B. Collection of student course requests
C. Tally of course requests
D. Conflict matrix of courses
E. Assistance in coding master schedule
F. Loading students into classes
G. Printed Student Schedule
H. Printed class lists for teachers (including study hall)

II. Attendance and Grade Reporting

A. Provides mark sensing cards for teachers to mark grades
B. Provides mark sensing cards for attendance
C. Prints progress reports
D. Prints class lists for teachers showing grades
E. Provides printed pressure-sticking, cumulative record stickers showing the grades for each student

III. Payroll Services - The following items are included in the payroll service.

A. Warrant printing (including both current and year-to-date information)
B. Register (again showing both current and year-to-date)
C. Quarterly reports printed
D. W-2 Form printing

* including optional information on activity interests

IV. Machine Test Scoring

The ACCESS Center houses a 1230 IBM optic scanner and provides test scoring services in two fields, teacher-made tests and standardized tests.

The Area classroom teachers are provided with answer sheets, designed for multiple choice and/or true-false testing. These answer sheets can be scored at a rate of 1200 per hour and test result information is provided. Information such as; an item analysis of test questions, a percentile rank of scores, mean score, and standard deviation of a set of test scores is returned to the teacher.

The second area of use is standardized tests. A limited number of standardized tests have been scored by the center, and norming groups are being developed for the Iowa Algebra Aptitude Test and Iowa Plane Geometry Aptitude Test.

Some ranking of scores has been done of standardized test scores submitted. (Percentile rank, mean score, and standard deviation)

V. School Administrator Education

The Center has sponsored a seminar on data processing for the school administrator. Leaders in the field were called in to discuss the history, applications and future of electronic data processing in the educational field.

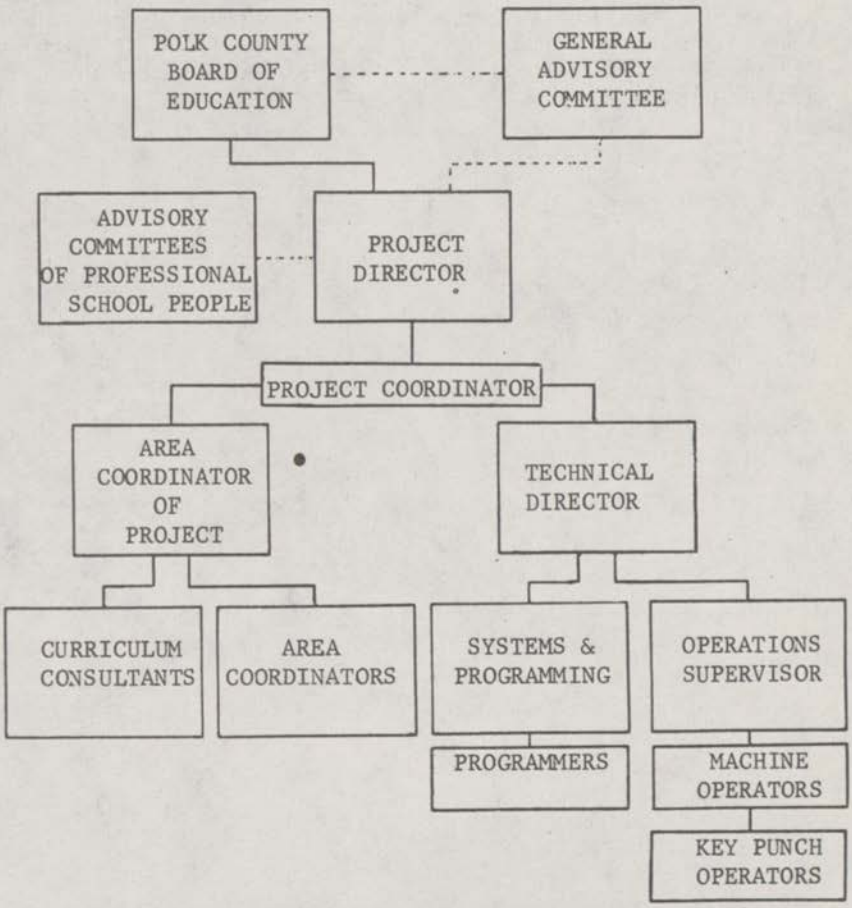
VI. Teacher Education

FORTRAN programming workshops have been conducted and will continue to be held for interested teachers to take a problem solving approach to the computer as an educational tool.

VII. Student Education

The ACCESS Center makes its computer available to student groups on a Saturday morning basis. This activity is an outgrowth of the teacher training operation.

ORGANIZATIONAL PATTERN
ACCESS DATA PROCESSING CENTER STAFF



Both the area library and data processing programs are shared with the parochial private school organizations. Members of their faculties and other groups are on the advisory committees and help to determine programs and administrative policies, yet the actual control remains with the administration of public boards of education. Exhibits 5a and 5b indicate the enrollments figures for Polk County. Totally within area XI there are 7,470 elementary and 2,608 secondary parochial school pupils. A bare minimum of 10 percent incidence rate of handicapped children would indicate that over 1,000 handicapped parochial pupils are not now receiving the special education programs that their public school peers can. With Federal funds, and local public and parochial school cooperation, these pupils could be served in shared programs. (Exhibits follow:)

Exhibit No. 5

Polk County, Iowa, Public and Parochial School Enrollments

Total number of pupils by grades in the town elementary and high schools, Polk County, Iowa

[Reported September 1966 for school year 1966-67]

District	Kinder-garten	1st	2d	3d	4th	5th	6th	Special education	Total	7th	8th	9th	Special education	Total	10th	11th	12th	Total	Grand total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Ankeny Community	273	294	274	218	218	193	180	17	1,667	150	178	173	0	501	142	144	123	409	2,577
Bondurant-Farrar Community	58	42	42	31	39	41	44	0	297	33	46	37	0	116	37	23	40	100	513
Johnston Community	83	84	97	75	89	93	78	8	607	77	84	84	0	245	75	80	62	217	1,069
North Polk Community	71	66	72	58	60	69	59	0	455	73	66	58	0	197	67	58	53	178	830
Saydel Consolidated	256	248	215	180	219	208	200	42	1,568	213	208	181	14	616	158	155	142	455	2,639
Southeast Polk Community	262	250	288	237	250	243	220	23	1,773	240	224	173	16	653	205	189	151	545	2,971
Urbandale Community	252	276	220	235	222	194	208	0	1,607	190	185	154	0	529	162	153	114	429	2,565
West Des Moines Community	514	433	445	393	404	407	419	23	3,038	382	386	361	8	1,137	335	316	308	959	5,134
Subtotal	1,769	1,693	1,653	1,427	1,501	1,448	1,408	113	11,012	1,358	1,377	1,221	38	3,994	1,181	1,118	939	3,292	18,298
Des Moines Community	4,559	4,168	3,734	3,450	3,489	3,488	3,350	739	26,977	3,333	3,100	3,232	436	10,101	3,243	3,040	2,693	8,976	46,054
Grand total, county	6,328	5,861	5,387	4,877	4,990	4,936	4,758	852	37,989	4,691	4,477	4,453	474	14,095	4,424	4,158	3,686	12,268	64,352

Total number of pupils by grades in the parochial elementary and high schools, Polk County, Iowa

[Reported September 1966 for school year 1966–67]

	Grade school										High school					Grand total
	Kindergarten	1st	2d	3d	4th	5th	6th	7th	8th	Total	9th	10th	11th	12th	Total	
Dowling											285	289	240	228	1,042	
St. Joseph Academy											275	258	232	230	995	2,037
St. Ambrose		39	25	15	25	19	34	14	17	188						188
Christ the King		0	0	34	33	43	38	45	43	236						236
Holy Trinity		86	99	84	96	92	90	85	77	709						709
St. Augustins		71	80	69	69	70	69	71	76	575						575
All Saints	25	32	39	33	37	35	37	29	30	297						297
Des Moines Christian	7	7	8	4	10	5	7	9	4	61	7					68
St. Josephs		35	37	35	31	29	24	17	23	231						231
St. Pius X		0	72	81	66	84	69	58	57	487						487
St. Theresa		72	69	81	79	82	72	88	72	615						615
Mount Olive Lutheran	25	13	20	11	12	11	9	0	0	101						101
Visitation		52	44	36	47	37	34	49	44	343						343
St. Anthonys		82	77	77	68	74	82	83	72	615						615
St. Johns		46	42	43	56	48	41	47	42	365						365
Sacred Heart		42	55	55	53	55	52	52	43	407						407
St. Peters		31	28	23	22	28	22	23	22	199						199
Seventh Day Adventist		2	5	2	5	2	4	2	3	25	5					30
Total	57	610	700	683	709	714	684	672	625	5,454	572	547	472	458		7,503

A third program—IMPACT—innovation and motivation in Polk County for the advancement of creative teaching has received approval during the past month as a title III program which is limited to our Polk County educators. This inservice program of education and training for teachers will be of particular significance to special educators who are in the classroom. Improvement in skill in motivating by "creative teaching" is equally important, if not more essential, for special class teachers than normal classroom instructors. The learning environment and its skillful manipulation is all important to distractible, limited, and confined children.

A fourth program, locally financed and in need of expansion, is career motivation of young people in the area of health, education, and welfare vocations. Considerable research indicates that experiences, early in adolescents, which bring handicapped and normal youth into social intercourse aids greatly in influencing the normal youth into careers with concern for handicapped persons. It appears obvious that the "usual" negative reaction toward "different people" is lessened by positive interrelationships.

These comments support our case of wise use of present "seed" money grants and indicate ways in which expansion by currently applied assistance can go. Remember gentlemen, we in Iowa are reaching only 40 percent of the children in need. The full authorization of $150 million can likewise be efficiently and effectively used. Interest is there. Iowans used twice as much of its title 1 funds for handicapped children than that portion so used nationally (6 percent or $680,000 as against 3 percent). We are looking forward to your appropriation of the full authorized amount. We have the need, the interest and concern, and the means for its productive use. Anything less will delay and prolong the handicap of all America's handicapped children.

Urgently needed are investment funds for services such as these:

1. Secondary school programs for multiply handicapped children. In Iowa we do not have a single public secondary school for these children, not a one. In the Nation the majority of these are private institutions. Can you imagine the greater than college tuition fees the parents of handicapped children who are able must pay? Talk about tax credit for college student supporters—what about these parents' needs?

2. Transportation programs for getting mobile clinical services to the children in sparsely populated areas are needed. There must be treatment facilities not merely diagnostic in nature.

3. Teachers in rural areas who have the children with handicaps in their regular classes need inservice training to be made aware of the condition manifestations, and of effective ways in dealing with these exceptional children.

4. Professional aides such as matrons, teacher aides, and laymen with good speech patterns are needed to extend the skills and time involvement of the industrious professional staff members.

5. Joint use of local professional personnel and university staff members as instructors for off campus inservice course credit work leading to certification for professional positions.

6. Audiovisual, machine and computerized instruments, amplifiers, magnifiers, and other technological means for extending the abilities of handicapped children need a great amount of field research.

7. Plant and facilities must be developed for these unique tasks.

Construction funds to house these programs must not be limited by a nationally determined percentage, as in the exceptional persons incorporated program, previously mentioned, 100 percent of our State's share of a Federal fund was used in a single project. This was determined at the State plan level. Let us mediate this need at the State level.

Mr. FLOOD. What does that mean?

Dr. GIBSON. We would like to see the appropriations not have a percentage figure set aside for construction funds, or a percentage limitation of funds available to the State as in some previous legislation. Construction has been set on a percentage limitation, and therefore some projects which are costly may have to be turned down just because of a few extra dollars over the percentage figure.

Mr. FLOOD. You are not building Taj Mahals in Iowa.

Dr. GIBSON. No, sir.

For example, in contrast to previous speakers (on animal shelters) here (today), in Iowa air conditioning came to our rat laboratories before it comes to the children who were mentally or physically handicapped at the university campus. We are not building Taj Mahals.

Mr. SMITH. In other words, if that money had been distributed equally between the 16 area schools you would not have had anything. But by being free to take all of it and putting it in one place you got one good one going.

Dr. GIBSON. That is right. The allocation for Iowa not having a percentage limitation, that mental health fund $300,000, was not limited to a certain percentage. All $300,000 went as "seed" money into one project.

Each of the first three programs which need expansion for handicapped children were originally $110,000 to $230,000 projects. The proposed services are yet to withstand cost analysis. One project in the area of professional aids for which we have a budget proposed is the use of lay audiometricians to screen the hearing acuity of all children in a six-county area. Presently, we envision a $104,000 request for next year.

Mr. FLOOD. How long have you been running this show?

Dr. GIBSON. I have been in Polk County 8 months. Prior to that I was finishing my doctor's degree at the University of Iowa and assistant principal of the Hospital School.

Using these figures as guides only 20 to 30 such projects would be possible in Iowa should the full authorized amount be appropriated.

Anything less decreases the programs which will mean that the handicaps of these children will be prolonged. The net cost of treating handicapped adults plus the loss of potential revenue will place a greater financial burden on our concerned citizens at this later date. Let me assure you that parents and professionals have the interest and ability working to resolve these handicaps. Will you put maximum funds into their programs?

We are most appreciative of this opportunity to present this information to you. If I can be of further service, please call upon me.

Mr. FLOOD. You are very impressive. How many copies of this exhibit do you have?

Dr. GIBSON. I have eight copies here. I can provide more at your request.

Mr. FLOOD. I would like about 25.

Dr. GIBSON. Thank you, sir.

Mr. FLOOD. Mr. Smith?

Mr. SMITH. When I was representing school districts as an attorney before I came to Congress, we found many people who promoted the cause of the gifted and consequently there were many programs for gifted children, but there were very few who promoted help for the nongifted or handicapped. Is that still the case?

Dr. GIBSON. I believe this is so.

Mr. SMITH. They have to depend upon Congress and the professional educators to really help the handicapped.

Dr. GIBSON. The Association for the Mentally Retarded which is primarily a parent organization is very active in this area; the National Society for Crippled Children, also. But for the most part your suggestion is correct, that the professional people who see the total needs, the educators who see all children, recognize the relationship of all handicaps and how they can fit into the total program.

Mr. SMITH. That is all I have, Mr. Chairman.

Mr. FLOOD. Thank you very much. That is an excellent presentation.

Dr. GIBSON. Thank you, sir.

(Supplementary material follows:)

MAY 1, 1967.

To: Mr. Ralph C. Norris, Polk County Superintendent.
From: Speech Clinicians and Director of Pupil Personnel Services.
Regarding: Summer Speech Therapy Program.

The summer speech therapy program will be similar to last year's program with the following arrangements:

A. The length of the program will be 6 weeks and each child will receive therapy daily.

B. The enrollment will be limited to 20 pupils per clinician to allow optional concentration of therapy.

C. A minimal registration fee of $6.00 per pupil will be charged.

Estimated cost of 6 weeks summer speech program (assuming 20 pupils and one clinician):

Therapist's salary (month and a half)	$965
Estimated expenses ($150 per clinician)	150
Total cost of program	1,115
40 percent State reimbursement	446
Tuition fee	120
Total	566
Total cost to Polk County Board of Education	549

A BILL For an act to amend chapter two hundred eighty-one (281), Code 1958, relating to the education of handicapped children

Be It Enacted by the General Assembly of the State of Iowa:

Section 1. Section two hundred eighty-one point one (281.1), Code 1958, is hereby amended by striking line five (5) and inserting in lieu thereof the following: "of education for children requiring special education".

Sec. 2. Amend section two hundred eighty-one point two (281.2), Code 1958, as follows:

1. By striking from lines one (1) and two (2) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

2. By striking from line three (3) the word "either" and inserting in lieu thereof the word, "any".

3. By striking from line twelve (12) the words, "by a practicing physician".

4. By adding a new subsection following subsection two (2) as follows:

"Children under twenty-one (21) years who are certified to be intellectually superior to the degree that they cannot profit sufficiently from ordinary instruction methods.".

5. By striking from lines sixteen (16) and seventeen (17) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

Sec. 3. Amend section two hundred eighty-one point three (281.3), Code 1958, as follows:

1. By striking in subsection one (1), line three (3), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

2. By striking in subsection one (1), lines four (4) and five (5) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

3. By striking in subsection two (2), line four (4), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

4. By striking in subsection four (4), line four (4), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

5. By striking in subsection six (6), line three (3), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

6. By striking in subsection six (6), line six (6), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

7. By striking in subsection seven (7), line three (3), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

8. By striking in subsection eight (8), line two (2), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

9. By striking in subsection nine (9), line three (3), the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

10. By striking in subsection ten (10), line eight (8), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

11. By striking in subsection eleven (11), lines two (2) and three (3), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

Sec. 4. Amend section two hundred eighty-one point four (281.4), Code 1958, as follows:

1. By striking from line twelve (12) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

2. By striking from line thirty-six (36), the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education."

Sec. 5. Section two hundred eight-one point five (281.5), Code 1958, is hereby amended by striking from lines four (4) and five (5) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

Sec. 6. Amend section two hundred eight-one point six (281.6), Code 1958, as follows:

1. By striking from line four (4) the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

2. By striking from line twelve (12) the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

Sec. 7. Amend section two hundred eight-one point seven (281.7), Code 1958, as follows:

1. By striking from lines two (2) and three (3) the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

2. By striking from lines three (3) and four (4) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

3. By striking from line nine (9) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

4. By striking in line ten (10) all after the word "be" and by striking lines eleven (11), twelve (12), thirteen (13), fourteen (14), and fifteen (15) to the word "Final" and inserting in lieu thereof the words, "prescribed by the state division of special education.".

5. By striking from the line seventeen (17) the words, "director* of the".

Sec. 8. Amend section two hundred eighty-one point eight (281.8), Code 1958, as follows:

1. By striking from lines three (3) and four (4) the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

2. By striking from line seven (7) the words "handicapped child" and inserting in lieu thereof the words, "child requiring special education".

3. By striking from line eight (8) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

Sec. 9. Section two hundred eighty-one point nine (281.9), Code 1958, is hereby amended by striking from lines three (3) and four (4) the words "handicapped children" and inserting in lieu thereof the words, "children requiring special education".

THURSDAY, APRIL 27, 1967.

FLUORIDATION

WITNESS

DR. ROBERT J. H. MICK, LAUREL SPRINGS, N.J.

Mr. FLOOD. We will now hear from Dr. Robert Mick of Laurel Springs, N.J.

Having talked with the doctor, I can guess what he is going to talk about.

STATEMENT OF DR. ROBERT MICK

Dr. MICK. Representative Daniel Flood and members of the committee considering appropriations to be used at the sole discretion of the U.S. Public Health Service and/or the Department of Labor, Health, Education and Welfare, my name is Dr. Robert J. H. Mick. I maintain a dental practice in Laurel Springs, N.J., and Treasure Island, Fla., and have been in dental practice for almost 32 years.

I have been involved with fluorides or fluoridation since 1944. I trust that part of my 22 years on this subject will be received with interest by this committee. I trust that I can help you, and you, in turn, help those that follow both you and me.

At one time I was 100 percent in favor of fluoridation. I am now legally qualified to appear before courts of law to give expert testimony against fluoridation. I directly or indirectly am associated with many groups and many millions of people who oppose the addition of fluorides to their drinking water, based on many concrete reasons. I personally obtained my knowledge by actual research experiments with fluorides and by research studies in the United States and Africa on a relationship of fluorides to dental fluorosis and freedom of dental decay. I have conducted research studies on waters and their relationship to protection of dental decay.

I appear before this committee not to seek appropriations for any specific cause, but to plead that no appropriations shall be made to any department of our Government that can be used to promote any specific chemical that would have any physiological reaction on any and all humans that would be forced to use artificially fluoridated waters as the result of this promotion.

This is the result of 2½ months' effort. If you lived in Laurel Springs, N.J., you would find we have 100 parts per million of total

solids. Sixty different minerals in all your drinking water. There is gold and strontium and all the things that go into making better bodies.

Now, this represents approximately 600 quarts of water. This would be equivalent to approximately 1½ to 3 years of what you or your child might drink as far as water is concerned. Every time you take a glass of water, you are not taking water, you are taking a solution. Water is H_2O without any minerals in it. If you are a farmer, or know anything about farming, which I am sure you do, we know without minerals in the soil the quality of the soil—that is what makes the quality of the vegetables, the quality of the animals, the quality of the backbone and so forth, for this generation and next.

But, anyway, this is how much minerals your child would have consumed in approximately 1½ to 3 years, just out of the drinking water. In here there is approximately 60 different minerals alone. There isn't just fluoride.

Mr. Flood. The witness is now showing the committee a collection of solid materials about which he speaks.

Dr. Mick. There are many necessary minerals that are found in soil, in food, and water that go into the making of the quality of bodies of the animals and humans. The quality of the food product and the good it can do to the bones, the heart, the muscles, the teeth is in direct relation to the top soil, the fertilizers, and the waters in a particular area. No particular chemical, such as fluorides can contribute to or take the credit for superior quality of those bones, muscles, teeth, and so forth. As a farmer or a practical nutritionist, you know of what I speak.

Congress, last year, set a precedent that had never taken place before in any session of Congress—namely, the appropriations of funds to promote (not experiment with) a specific chemical in the name of a health program, that has been and is being promoted by certain employees of the U.S. Public Health Service and certain employees of the American Dental Association, namely, public relations men or men not having a medical degree. There is only one man with a dental degree who is head of any bureau of the American Dental Association.

Appropriations, if so desired, could have been made to support bonafide research experiments on the many facets of dental health. The manufacturers and distributors of fluoride compounds now have the U.S. Government promoting their products at Government expense even to the extent of influencing State and National laws to promote mandatory/compulsory use of fluorides.

There are many other chemicals or minerals that are known to be more advantageous to the animal organisms than this most toxic of protoplasmic poisons, namely fluorides. Air and water pollution are one of our major projects.

Fluorides in air are major contaminants and again recently received national coverage over television on Walter Cronkite's program. Fluorides are known nerve depressants. A report regarding Philadelphia, Pa., January 26, 1967 is most interesting. Headlines of the Philadelphia Inquirer stated "Basic Skills of Philadelphia Pupils Fall Below United States Averages." The article states "the vast majority of children in Philadelphia public schools failed to reach the national average in basic skills such as reading and arithmetic." It goes on to

state "even in the northeast district No. 8, the number of pupils surpassing the national average in any grade did not reach 60 percent in any of the five skills." We must assume that the food of Philadelphia, Pa., Los Angeles, Calif., Seattle, Wash., would all average out as far as quality as it would all come from different sections of our country. Philadelphia, Pa., has had artificial fluorides added to their drinking water for the past 12 years. It can only be assumed that the addition of these fluorides would be or could be a contributory factor in those children who would now be attaining the age to be in sixth, seventh, and eighth grades. There was no mention by the Philadelphia Department of Health that fluorides had any part in this condition of pupils falling far velow U.S. averages in the five basic skills. If these skills had been above average the promoters of fluoridation as the result of 12 years of use of fluorides by Philadelphia would certainly have taken partial credit for such a condition. As part of my statement, I request that this news item from the Philadelphia Inquirer be accepted as my entire statement and be incuded in the record as if read. The article will stop at the point so marked. (Exhibit No. 1.)

(The exhibit follows:)

EXHIBIT I

BASIC SKILLS OF PHILA. PUPILS FALL BELOW U.S. AVERAGES

(By John P. Corr)

The vast majority of children in Philadelphia public schools failed to reach the national average in basic skills such as reading and arithmetic, The Inquirer learned Wednesday. In only one of the city's eight school districts, comprised of the Northeast above Devereaux st., did more than 41 percent of the children in any of the six grades tested score above the national average in any of the five basic skills tested.

BELOW 60 PCT.

Even in the Northeast District 8, the number of pupils surpassing the national average in any grade did not reach 60 percent in any of the five skills.

Scores were lowest in districts embracing low-income Negro and Puerto Rican neighborhoods. In some tests fewer than six children in 100 reached the national average.

The scores also indicated that the numberof children achieving national norm fell off in the higher grades. For example, in District 3, south of Girard ave. and east of Broad st., 20 percent of third graders reached the norm, but only 11 percent of the eighth graders reached it.

WIDE DIFFERENCE

The report, delivered at a closed meeting of the Board of Education on Wednesday, spotlighted the wide difference in pupil scores in basic skills between schools in different areas of the city.

As stated before fluorides are known major contaminants. Assuming fluorides were of some value only one one-hundredth of a given amount is recognized as being used by those for whom it is intended. Out of 10,000 pounds of poisonous fluoride compounds that are placed in a city's drinking water approximately 1 pound is consumed and the other 9,999 pounds finds its way into our streams, lakes, and rivers.

This, now, is one of your major sources of pollution that is going into our waters and lakes from the cities having fluorides. It has to go some place. Assuming that the cost per pound was 25 cents, this would be equivalent to $2,500 spent to get 25 cents worth of use. If it was 10,000 pounds at 10 cents, it would be $1,000 worth of fluorides to get 10 cents worth of use.

To provide the most recent reports and court actions concerning fluorides and the effects of fluoride pollution and for the sake of brevity, I request the full printing of the Missoulian Story published Sunday, October 30, 1966 in the Missoulian, published in Missoulia, Mont., be accepted as my entire statement and be included in the record as if read. This report is from Garrison, Mont. (exhibit No. 2) and is entitled "Garrison's Desperate Trial." This report shows the bone disease of animals caused by fluoride poisoning.

This hit TV several weeks ago over the Walter Cronkite program.

Mr. FLOOD. Without objection this article will be included.

Dr. MICK. Thank you.

(The exhibit follows:)

EXHIBIT 2

[From the Missoulian, Oct. 30, 1966]

Hollow victory

GARRISON'S DESPERATE TRIAL

(By Clarence C. Gordon and Elizabeth Hannum)

"There are no grounds at present that would justify this court to issue an injunction terminating the defendan't operation at Garrison."

These were the words of District Judge W. W. Lessley in May of 1966 when he denied a petition by Garrison ranchers to close the Rocky Mountain Phosphate plant.

Two months earlier, in a highly publicized trial in Bozeman, these same ranchers had been granted $123,000 in damages. Evidence had proved to a jury that fluorine gas from the plant was disabling cattle and destroying vegetation in the Garrison area.

But more important to the rancher plantiffs than any compensation for past damages was the requested permanent injunction, for here was their only guarantee against continuing damage, and this was not a decision for the jury, but for the judge.

In deciding for Rocky Mountain Phosphate and against the plantiffs, Judge Lessley held that due to improvements made to remove fluorine gas from its smoke the plant was no longer polluting the air to the extent that it posed a threat to ranching operations in the area.

The judge's opinion was based solely on evidence of the defendant, which, only days before the trial, had made the "improvements" it claimed would eliminate hazardous emissions.

No longer polluting! Let's look at some statistics.

But first let us understand that minimum concentrations of the death-dealing fluorine gas (hydrogen fluoride) on vegetation are set in parts per billion (ppb), while readings at testing stations are given in parts per million (ppm). For example, at .01 ppm (or (10ppb) for 44 hours, cancerous growths appear in tissues of ponderosa pine.

Now, according to data released by the Montana State Board of Health in which grasses in the vicinity of Garrison were analyzed for fluoride content, the following concentrations were found in August of 1966:

North station ¾ of a mile from Garrison, 52 ppb (or 52,000 ppb) fluoride content in grass; East station ¾ of a mile from Garrison, 412 ppm (or 412,000 ppb) fluoride content in grass; West station five miles from Garrison, 235 ppm (or 235,000 ppb) fluoride content in grass.

From May, when Judge Lessley refused to shut down the plant, to August is a very short time. From 10 ppb (and even less)—at which vegetation begins to suffer noticeably—to 412,000 ppb is a very large span.

But so much for statistics. What do such figures mean in terms of life and livelihood in Garrison, Montana?

Garrison is in a broad valley flanked by low ridges. Stands of Douglas fir and ponderosa pine pattern the hills. It is ranching country in which, over the years, inhabitants have raised their herds of cattle and the hay to feed them.

Since Rocky Mountain Phosphate moved to Garrison in 1963 (after being enjoined to cease operating in Butte), the firs and pines have become brown or

defoliated and the cattle have been crippled and deformed. Twice—for 34 days in 1964 and for seven days in early 1965—the plant has been closed by court order on complaints of residents suffering from its malodorous emanations.

Six months after the trial, and four months after the permanent injunction was denied, Garrison livestock are showing the same symptoms of fluorosis as they did in the years before the trial, supporting themselves stiffly and painfully on fluoride-damaged bone.

New foliage on conifers and cottonwoods has withered, as it did in the years before the trial.

By day, a gray pall hangs over the community, and at night, when the RMP stack pours out its fumes, the valley is filled with choking smog.

In Garrison, the landscape and its community of life are dying—slowly succumbing to the threat which Judge Lessley found no longer existed.

In the past few weeks, Garrison residents have brought us this summer's fluoride-killed gladioli and cottonwood boughs, have told us of driving miles from the town in the night, with their families, to escape the stinging air, and have given us new reports of diseased cattle, hoping that we could do something to help.

But scientists and educators can do little at this point, for the facts have long since been established: Hydrogen fluoride is a deadly poisoner of mammals and plants.

And even if additional facts were needed (to specify the precise amounts of flouride being emitted each day, for example) the residents of Garrison and not afford to gather them. According to Dr. R. C. Suiter of Montana State University, the minimum cost for monitoring the stack at the phosphate plant would come to approximately $2,600 a month plus equipment, or $33,200 a year.

Nor can the State Board of Health offer any effective assistance beyond checking the three grass stations. It lacks personnel and funds for comprehensive analysis of conditions in Garrison, and it cannot legally call for an investigation by the U.S. Public Health Service without a direct request from the governor.

Such a request has never been made.

Locally, too, the situation is awkward: Dr. Gordon Anderson, Powell County Health Officer, is a director of Rocky Mountain Phosphate.

What then can the people of Garrison do to protect their children, their homes, their livestock, and their environment from the killer in their midst? Several alternatives are open to them:

One was tried recently, when there was an abortive attempt to blow up the Rocky Mountain stack—a deplorable, but understandable, manifestation of utter frustration with judicial inaction.

Another would be to prepare another lawsuit. This means staggering expense, and the $123,000 due the ranchers from their previous litigation has not yet been paid—the plant has appealed the damage decision to the Montana Supreme Court.

Or the residents of Garrison could pool their resources, purchase the phosphate plant, and dismantle it. Speaking of expense—!

Or they can wait for passage of strong legislation—a state Air Pollution Act not tailored to the needs of Montana's industry, as the governor envisions it, but the health and welfare of Montana's citizens; one that would curb the activities of such menaces as Rocky Mountain Phosphate.

Or the people of Garrison can wait even longer, if the next legislature fails to pass such an act, until Montana air pollution becomes even more of a national scandal than it is now—until inevitably the federal government intervenes, with or without the governor's consent.

Last April, the jury's "guilty" verdict against Rocky Mountain Phosphate gave hope to the many Montanans who respect our land, its resource, and its human occupants.

The Missoulian's editorial of April 4 welcomed the "Garrison Pollution Victory" and stated that "The Garrison case is a warning to potential polluters."

But are the results to date of the plaintiffs' "victory" at the Bozeman trial a warning to Montana polluters, or a welcome mat?

EXHIBIT 3

FLUORIDE POLLUTION SCANDAL IN "TIME" MAGAZINE

On January 27, 1967, Time magazine published a spectacular cover story, "The Polluted Air." Included in it is the disclosure that "In semi-rural Florida, east of Tampa, large amounts of fluoride emitted from phosphate plants have

rained down on nearby citrus groves, ranches and gladiolus farms. Orange and lemon trees that absorb the fluorides produced smaller yields and gladioli turned brown and died. A national air-pollution symposium reported that cattle grazing on grass that was contaminated with the fluorides developed uneven teeth that hindered chewing and joints so swollen that many of the animals could not stand. Fluorides have also etched windowpanes, giving them the frosted appearance of a light-bulb."

"WALL STREET JOURNAL" AND MONTANA POLLUTION

A front-page, lead story, January 24, 1967, in the Wall Street Journal, entitled "Cleaning the Air," also reports examples of pollution: "The service [PHS] says pollution is worse in the nation's five biggest cities, but it notes that a good many smaller towns are now facing the problem for the first time. Ranchers in the little community of Garrison, Montana, for example, are asking for $123,000 in damages from a phosphate plant that they claim has emitted fumes which have caused their animals to lose their appetite, give less milk, produce more malformed calves, and develop bad teeth." Please note that the pollutant is not named in the foregoing!

ORIGINAL MONTANA STORY REVEALS ALL

Being most interested in what this pollutant is, we obtained a copy of the original Garrison, Montana, story, which appeared in the Missoulian Centinel October 30, 1966, as a full-page editorial feature. It describes in detail the damage caused by fluoride pollution from the Rocky Mountain Phosphate Company. "In Garrison," says the Missoulian, "the landscape and its community of life are dying—slowly succumbing to the (fluoride) threat."

HOLLOW VICTORY

The Missoulian reveals further that the damage suit for $123,000 was won by Garrison ranchers in their court case, with no help from neighboring communities or from their state or national government. (The defense, while seeking to show that its plant was clean and safe, attempted to blame other sources than flouride for damage to the cattle, incidentally.) However, this was a hollow victory. To quote the Missoulian: ". . . more important to the rancher plaintiffs than any compensation for past damages was the requested permanent injunction terminating the defendant's [the phosphate plant] operation at Garrison, for here was their only guarantee against continuing damage." The injunction has been refused—so the agony and the bickering continue—and the destruction.

NO FLUORIDE NAMED IN VARIOUS VERSIONS

As additional versions of the Garrison tragedy came to our desk in a variety of newspapers, we discovered that, with few exceptions, the pollutant involved is usually not named! Yet the original story, in the Missoulian Centinel, which was picked up by the press services, emphasizes fluoride as a culprit throughout, including three captioned photos. One shows "the lower jaw of a fluorotic Garrison cow"; the second shows a cow hobbling on its knees, "suffering from exostosis, a bone disease caused by fluoride poisoning"; the third discloses "fluoride-killed and damaged conifers."

ONE NOTABLE EXCEPTION

One exception to this fluoride "blackout" was a special feature from the New York Times, carried in the San Jose Mercury News, in California. This says: "It is charged among other things that fluoride-laden smoke from the phosphate plant has caused malformations and deteriorating teeth in cattle and horses, that trees have been afflicted by cancerous growth and that people have developed symptoms akin to bronchitis, sinus trouble and heart attacks. . . . Opponents of the phosphate plant say that one of the problems that perplex and frustrate the smog sufferers here and elsewhere is the complex and difficult task of proving human health damage. They point out that it is relatively easy to pinpoint damage to plants and animals, but that humans live longer, cannot be dissected at will, and frequently move from area to area."

IS THERE A "CONSPIRACY?"

Save for the above exception, we found that deletion of any reference to fluoride in the Garrison story is the rule rather than the exception. And the reason for same will be fully apparent to Bulletin readers, when they recall that, four years ago, F. R. Exner, M.D. pinpointed what can only be considered a "conspiracy"! Dr. Exner, a radiologist (who received the richly deserved NHF Humanitarian Award this year), and Clinton Miller collaborated on a special feature in the May, 1963 Bulletin, "The Economic Motives Behind Fluoridation." The preface says: "It is now clear that the one utterly relentless force behind fluoridation is American 'big industry,' and the motive is not profit as such but fear."

VERIFICATION OF INDICTMENT

Interestingly, in the November 26, 1965 Wall Street Journal verification of Dr. Exner's indictment is to be found: "It is frightening to see how the competitive structure of our economy has played the devil with pollution. . . . Some companies have been extremely slow to install even minimum controls . . . because the cost is so great it could impair or destroy their ability to compete, to survive." The article continues: "The cost of correcting the problem in industry as well as in municipalities is so staggering as to take your breath away." Such was the Wall Street Journal admission about pollution generally, though not naming fluoride specifically.

PUBLIC HEALTH SERVICE INVOLVED, TOO

Also involved in this "conspiracy" is the USPHS. To again quote the May 1963 NHF Bulletin: "Dr. Exner . . . claims the Public Health Service has made every effort to suppress knowledge of the hazards associated with environmental pollution by fluorine. For reasons best known to themselves, the PHS has accommodated certain industries by pretending fluorine does not any longer exist as a general air pollutant. The evidence not only shows that they have ignored a vital aspect of the total problem, but that a deliberate and obvious attempt has been made to suppress a reporting of damage by, or even the presence of, air-borne fluorides."

CHARGES CORROBORATED

The all too obvious avoidance of reference to fluoride in versions of the current Garrison struggle surely corroborates Dr. Exner's earlier charges. And to really tie up the whole outrageous package: "If the entire nation's water supply is fluoridated, how can fluoride poisoning of people, damage to livestock, pets, crops, nursery stock, etc. be blamed on the industries which pour fluoride fumes into the air?" (NHF Bulletin, May, 1966.)

REAL MOTIVE DEVELOPED EVEN BEFORE FLUORIDATION

Actually, the real motive behind fluoridation began to develop long before the fluoridation scheme was devised. Even in 1923, pollution of the atmosphere and rivers had become a problem. But from the day the late Andrew Mellon, president of the Aluminum Company of America, become Secretary of the U.S. Treasury and head of what is now the Public Health Service, which was then under his department, no mention of harm from fluorides was ever published by the PHS. Later, the PHS became a department of the Federal Security Agency, which was headed by another Alcoa executive, Oscar Ewing.

ALMOST NO ESCAPE ANYWHERE

Readers are reminded that few areas in the entire U.S. are free of environmental hazards from fluorides, since the deadly fumes are emitted from sources other than phosphate plants. These include the fertilizer, steel and aluminum industries, as well as brickworks. Surrounding areas for as much as 50-mile radius are afflicted! As John J. Miller, Ph. D., a biochemist, has stated: "There is fluorine in foods, beverages, insecticides, rodenticides, fertilizers, drugs, numerous industrial wastes, soil, and the atmosphere itself. As the fluoride content of all these rises from year to year, the rain and snow return the increased quantities of fluorine to vegetation, soils, sewage, and then to rivers and lakes wherein this toxic element is stored. From these reservoirs of fluorine we then take our 'fresh' drinking water—so the vicious cycle goes on from year to year."

Yet fluoride advocates are determined to justify purposeful addition of the chemical to our public water supplies, making frantic efforts, meanwhile, to keep the image untarnished, as witness the failure to identify fluoride as the devastating agent in versions of the front-page Garrison story.

THREE MUSKETEERS

By the way, it so happens that the County Health Officer for Garrison (Powell County) Montana, is, according to the Missoulian, a director of the Rocky Mountain Phosphate plant, source of the deadly fluoride fumes there. This was considered "awkward"!!

A second example of industrial bias—unabashed—is to be found in an Associated Press dispatch, dated February 10, 1967, which reports that Dr. Carl U. Dernehl, Assistant Medical Director of Union Carbide Corporation, "said yesterday low levels of air pollution may actually prolong life rather than shorten it."!

But perhaps these two are topped by Harvard's Nutrition Department oracle, F. J. Stare, M.D., ruthless and persistent fluoridation promoter, who made a great issue in a letter to the New York Times, 9/9/66, of explaining that "fluorides [as air pollutants] do not add up and they are no hazard."!!!

Many universities, of course, are greatly dependent on grants from big industry as well as the PHS for their very survival. To quote a recent open letter to the Wisconsin Public Health Commissioner: "The Public Health Service, the first to promote fluoridation in behalf of big business, has one billion dollars per year to give its friends and to withhold from its critics. The University of Wisconsin (for example) could hardly exist without the 14 million dollars per year which it gets from that source."

Dr. MICK. I wish to make special note of the editor's comment that prefaced this report; namely, the following column on the serious situation caused by the phosphate plant at Garrison is written by two University of Montana faculty members. Clarence C. Gordon is an associate professor of botany, and Mrs. Elizabeth Hannum is a publication's specialist in forestry. Signed, the Editor.

As part of my statement I request that the opposite side of this Missoulian publication be accepted as my entire statement and be included in the record as if read (exhibit No. 3). It is entitled "Page 1." During these past few weeks, at great effort and expense, these series of documented reports were made available for committees such as this congressional committee, so that members might have the most recent reports of 1967, 1966, and so forth, on effects of pollution from fluorides and the effects caused by fluorides on land, vegetation, and animals.

We have conducted animal research with fluorides, and as international representatives of the American Academy of Nutrition, Dr. William Odom and I conducted studies in equatorial Africa on the relationship of fluorides, food and water to quality of teeth and to dental decay in 1949.

It was our privilege in Africa to witness one group of 72 individuals that had perfect teeth, perfect shape of jaws and no signs of any defects. This was at the Ilbissel School, in Kenya, British East Africa. This condition of perfection was attained without fluorides being added to food or water.

We also had the privilege of examining children at Kisumu, Kenya, that showed the effects on the teeth of the presence of fluorides in the drinking water. There were three distinct schools in Kisumu, one for the natives, one for the English and one for the Indians from India. One group had approximately 600 percent more dental decay than another group in the same town although receiving the same so-called protection from or benefits of fluorides. Our report as a

professional project was sent by courtesy of the Amural Co. to every dentist in the United States and Hawaii. As part of my statement I request that this report, entitled "The Kisumu Story," be accepted as my entire statement and be included in the record as if read. (Exhibit No. 4).

Mr. FLOOD. Without objection, that will be done

Dr. MICK. Thank you.

(The exhibit follows:)

EXHIBIT 4

THE KISUMU STORY—A NATURAL EXPERIMENT WITH FLUORIDATION

(Robert J. H. Mick, D.D.S.)

The name of the town is Kisumu, in Kenya, British East Africa. Everyone living in this town, white and native alike, has a common water supply containing fluorine, and the source and type of food for all is the same. All inhabitants do not eat the same foods, but if money were available, the privilege of doing so would be equal.

MIDDLE CLASS CHILDREN

In this town, the middle class and merchants are natives of India whose children have been born and raised in Kisumu. There is such a large group of these Indian children that there is a separate school called The Government Indian High School, to which they alone go. The ages of these pupils range from 6 to 16 years.

The parents of these children are the ones that can afford the luxuries of life. Though the mark of their fluorine water is indelibly stamped on the dentition, the teeth of these Indian children are the only ones that look like "American teeth," of all groups seen in Africa. One can find broken down teeth, roots, compound cavities, malformations of the jaws and irregularities. Of 274 pupils we examined, we found 476 cavities. (6.2% of all teeth), and 37 malformations of the jaw.

NATIVE CHILDREN

We also examined 276 natives at the African Anglican Church Primary School, where the largest group of pupils were from the Luo Tribe. Their ages ranged from 11 to 16 years. There were 78 defects in all, being present in the mouths of 30 pupils. Most were faults due to excess fluorosis, and usually only the sharpest explorer would catch. There was only ONE bad tooth, and upon questioning, the pupil said he consumed much sugar in his tea. Using the total number of teeth examined as 7728 teeth (in 276 individuals) this would give a figure of 1.01% defects.

PERCENTAGE OF FLUOROSIS AND CAVITIES

But here are the most interesting of all these figures. The natives had 72 cases of brown fluorosis out of the 276 examined, or a total of 26%. The type of fluorosis in the teeth of the Indian children and natives was exactly the same. And, of the 274 Indian children examined, there were 61 cases of fluorosis or 22%.

When one obtains figures of 26% and 22% of fluorosis in two groups, one would certainly expect the rate of decay to be comparable. That, however, was not so. The Indians were the group that could afford to buy the luxuries of civilization, the sweets and the cookies; and the natives could afford just to live. Compare 26% of fluorosis of natives accompanied by 1.01% defects of all their teeth with 22% fluorosis of Indians accompanied by 6% defects.

CONCLUSIONS

These figures are most valuable in bringing to light an area that has been used naturally as an experimental ground for fluorine and its possible protective qualities. If refined foods are consumed, fluorine will have no beneficial results.

Though the 1.01% of cavities in the mouths of natives is low compared with the 94% in the mouths of children in many cities of our civilized United States, it is still not the lowest.

The only school, though not the only group, in the world that I have seen that is 100% free of decay is the Ilbissel School, on the Namango Road, out of Nairobi, Kenya, British East Africa. There were 70 pupils, 67 boys, 3 girls and 2 teachers. There wasn't a crooked tooth, a malformed arch, a stained tooth (green, orange or black) and, the most important revelation of all, there *wasn't one* case of fluorosis. This group of Masai consumed a high protein diet, with raw milk and practically no greens of any kind. The Masai School is near no city and there is no source of refined foods or sugars. The official fluorine analysis of their water is 0.25 parts per million.

Dr. MICK. During 1964 I conducted studies at Belle Glade, Fla., and of Lake Okeechobee, Fla.

Mr. FLOOD. The Seminoles.

Dr. MICK. Not the Seminoles, on the lake itself. This report is entitled "Water Pollution in Belle Glade, Fla." The report was presented in 1966 at an international conference on fluorides (not a conference on fluoridation) held at Detroit, Mich. The report tells of the accumulation of fluorides in the waters of Lake Okeechobee up to 0.7 parts per million and that the poisonous fluorides from fertilizers and insecticides used on farmlands around Lake Okeechobee and Belle Glade, Fla., are pumped into the canals supplying the drinking waters and into Lake Okeechobee following heavy rains. This source of fluoride pollution is used to prove the benefits of fluoride in Florida by the Florida State Department of Health. This very day your associate, Representative William Cramer, of Florida, is heading a committee of Congress that is hearing reports on air and water pollution. As part of my statement I request that this report entitled "Water Pollution in Belle Glade, Fla." be accepted as my entire statement and be included in the record as if read (exhibit No. 5).

Mr. FLOOD. We will have these included but we will not transgress against the legislative committee.

Dr. MICK. No, but I happen to know Mr. Cramer.

(The exhibit follows:)

EXHIBIT 5

WATER POLLUTION IN BELLE GLADE, FLORIDA

(By Robert J. H. Mick, D.D.S.)

This presentation is to point out that pollution of drinking water sources by fluoride is being approved by designating it naturally fluoridated water and to emphasize the difficulties encountered in maintaining an even fluoride and mineral content in such water supplies.

With the cooperation of water officials I studied the manner in which drinking water is being polluted at Belle Glade, Florida and Lake Okeechobee. Belle Glade has had fluoridation for approximately ten years. The Florida Board of Health considers Belle Glade a control city for the purpose of determining fluoride's effect on teeth.

The source of fluoride, presumed to be in the water naturally, was found to be derived from insecticides and fertilizers which are being pumped into Lake Okeechobee and into the canals that supply Belle Glade with drinking water.

The Florida State Health Department analyses during 1966 disclosed that Lake Okeechobee had a fluoride concentration of 0.7 ppm one half mile from Belle Glade's shoreline. The total solids at this half mile location were found to be 448 ppm. It is from this point that a new source of water is to be pumped for Belle Glade. The fluoride content at this point is higher than has been recorded from present pumping station in canal. Clewiston goes out six miles into Lake Okeechobee to obtain its water. Analyses obtained during 1966 show the fluoride level ranged as low as 0.2 to 0.4 ppm, with total solids varying between 193 and 274 ppm at this six mile point. This shows that the farther from shore the less the water is contaminated with fluoride.

The Florida State Department of Health instructed Belle Glade during 1964 to keep the fluoride content of water between 0.6 and 0.8 ppm. There has been no control of Belle Glade's source of what is called "natural" fluoride. Belle Glade's water is also artificially fluoridated. Analyses of treated and finished water show the the fluoride varied 100% between 1958 and 1964. After fluoridation, the concentration ranged from 0.6 to 1.2 ppm fluoride.

After a heavy rain, fluoride from fertilizers and insecticides on the surrounding farm lands are pumped with the rain water into the canal one quarter of a mile away from Belle Glade's pumping station. The level of these so called "natural fluoride waters" was 0.6 ppm on Jan. 7, 1964, according to the city's water report.

Belle Glade's water is analyzed for calcium. According to the Florida State Dept. of Health, all other minerals present are to be considered as magnesium. The fluoride content of the finished, treated, fluoridated water of Belle Glade was kept first by order of Florida Department of Health between 0.9 and 1.1 ppm, at times reaching 1.2 ppm. During 1960 the Florida Department of Health ordered the water company to lower the fluoride level and maintain it in finished water between 0.8 and 1.0 ppm. About November, 1963, the water company was required to further reduce the fluoride content and maintain it as 0.6 to 0.8 ppm.

The following official analyses will give examples of fluctuations of Belle Glade's minerals and fluorides in the raw state. On March 10, 1964 the minerals were at the lowest point.

[In parts per million]

	Minerals	Fluoride
Mar. 10, 1964	116	0.45
Mar. 20, 1964	204	.5
Apr. 12, 1964	186	.5
May 28, 1964	320	.45
June 3, 1964	186	.42
June 17, 1964	520	.4
July 17, 1964	180	.3
July 29/30, 1964 (rainy spell coming up)	480	.35
Aug. 18, 1964	460	.35
Sept. 1, 1964	560	----------
Sept. 4, 1964	580	----------
Sept. 7, 1964	396	.4
Sept. 12, 1964	264	----------
Sept. 18, 1964	210	.4
Aug. 3, 1966	----------	.5
Aug. 15, 1966	----------	.5
Aug. 18, 1966	----------	.5
Aug. 19, 1966	----------	.5

As the content of fluoride in Belle Glade's water varied, depending on canal contamination, so did the levels of minerals and total solids. These variations ranged as high as 300%. The drinking water of West Palm Beach is similar to that of Belle Glade, according to press release, except for it's fluoride content. Actually, Belle Glade's water contains 300% to 400% more minerals than West Palm Beach water. After rains, up to 600% more minerals have been noted in Belle Glade's water.

Official Florida State Reports show pollution of water by fertilizers and insecticides as the source of what is called "natural" fluoride. Further findings of pollution of Lake Okeechobee are provided by official water analyses of Florida State Dept. of Health. Lake Okeechobee is approximately 25 miles wide and 30 miles long. Pumping stations from farm lands that control flood waters are at various sections. The fishing areas of Lake Okeechobee are now influenced by the degree of pollution at various sections.

My findings at Belle Glade, Florida and West Palm Beach, Florida are:

1. There has been no control of the fluoride content of Belle Glade's finished water from 1958 to 1964.

2. There is no similarity between the water of Belle Glade and of West Palm Beach because there is no control of the total solids or minerals of Belle Glade. This is bound to effect the action of fluoride.

Dr. MICK. There was a meeting held in Washington, D.C., on June 6–8, 1951, at the Security Building under auspices of the U.S. Public Health, Service. The meeting was entitled "Promotion and Applica-

tion of Water Fluoridation." The main address was presented by Dr. F. A. Bull. According to a letter dated July 15, 1959 received by Congressman William Cahill, New Jersey, from the Department of Labor and Health, Education, and Welfare, U.S. Public Health Service, he states "I have been advised by the Health, Education and Welfare, Department that all copies of these proceedings had been destroyed. I further checked with the Government Printing Office and they did not have a record of these proceedings." Signed, William Cahill.

From letter of Miss M. Bailey, Chief, Reference Service, Division of Dental Health, Department of Health, Education and Welfare, Public Health Service, Washington, D.C., January 11, 1966, she states, "We have searched in the area and cannot find a copy of the "Proceedings of the Fourth Annual Conference of State Dental Directors With the Public Health Service" in any library. These minutes were accidentally discovered by a Congressman from the State of Washington in 1953. It is estimated that approximately 10 copies got out of the U.S. Public Health Service before the above action was taken. From one of these copies I have recently had published, in full, the entire minutes of June 6, 1951. As part of my statement I request that these minutes of June 6 be accepted as my entire statement and be included in the record as if read. (Exhibit No. 6.)

Mr. Flood. This is a rather lengthy document. It is 51 pages. I will leave this to the discretion of the full subcommittee. I will not act upon this myself.

Dr. Mick. I have been trying to get the gentlemen to only put excerpts of this into congressional records. You know how hard it is. I don't have time, you don't have time. Assuming that the committee would have any objections for posterity's sake this should be put in. In fact, the whole 3 days should be put in. But for posterity's sake I am here pleading with you to at least put in the excerpts. I have made excerpts that would only involve five and a half pages.

Mr. Flood. This I will present to the subcommittee.

Dr. Mick. I only ask that the additional pages of the last paragraph on page 5, all of 6, 7, 8, 9 and 10 down to the last line, where marked, be included in addition to these excerpts.

Mr. Flood. I will present your request to the subcommittee at the earliest possible minute.

Dr. Mick. If I have only done this, all my time and effort in all my past years will be rewarded.

This is the meeting where the plan for the promotion of flouridation was set down in 1951. To give an example of what took place at that meeting under the direction of Dr. John Knutson, Chief, Division of Dental Public Health, Public Health Service and John T. Fulton, Dental Services Adviser, U.S. Children's Bureau, cochairman, presiding and both of whom were under the direction of the Surgeon General of the Public Health Service, Dr. Leonard Scheele, who also addressed this meeting of approximately 50 dental directors and the representative of the American Dental Association, Dr. Phil Phair. I will only read from several pages of the reprint. The gentleman speaking for the U.S. Public Health Service and giving the direction on how to promote fluoridation gave the following advice. (From page 12 of reprint). Members of the committee, remember this is now 1951, 7 years after fluoridation was started, 7 years after research

work was thought to have been conducted. Incidentally, we never had any "experiments" in Wisconsin—to take a city of 100,000 and say "We are going to experiment on you, and if you survive we will learn something"—that is kind of rough treatment on the public. In Wisconsin, we set up demonstrations. They weren't experiments.

Now in regard to toxicity—I noticed that Dr. Bain used the term "adding sodium fluoride." We never do that. That is rat poison. You add fluorides. Never mind that sodium fluoride business because in most instances we are not adding sodium fluoride anyhow. All of those things give the opposition something to pick at, and they have got enough to pick at without our giving them any more. But this toxicity question is a difficult one. I can't give you the answer on it. After all, you know fluoridated water isn't toxic, but when the other fellow says it is it is difficult to answer him. I can prove to you that we don't know the answer to that one, because we had a city of 18,000 people which was fluoridating its water for 6 or 8 months. Then a campaign was started by organized opposition on the grounds of toxicity. It ended up in a referendum and they threw out fluoridation. So I would hate to give you any advice on that deal. It's tough. So when you get the answer to the question of toxicity, please write me at once, because I would like to know. We have answers, but apparently, in some places, they don't work.

Gentlemen of the committee, as I stated before, this was 7 years after fluoridation had been started in several cities in the United States. From page 15. "One thing that is a little hard to handle is the charge that fluoridation is not needed. They talk of other methods, and when they get through adding up all the percentages of decay that we can reduce by such methods, we end up in a minus. When they take us at our own word they make awful liars out of us." From page 20. "If it is a fact that some individuals are against fluoridation, you have just got to knock their objections down. The question of toxicity is on the same order. Lay off it altogether. Just pass it over, 'We know there is absolutely no effect other than reducing tooth decay,' you say, and go on. If it becomes an issue then you will have to take it over but don't bring it up yourself." From page 21. "Let me tell you the PTA is a honey when it comes to fluoridation. Give them all you've got. They will pay you back."

The minutes of June 6, 1951, involve approximately 35,000 words of the most important Government documentation on this subject that is not available to Members of Congress, this committee or to the public in any library. In volume V of hearings before a subcommittee on the Committee on Appropriations, House of Representatives, 89th Congress, approximately 73 pages mainly of approximately 140 hypothetical "objections" to fluoridation supposedly to have been made by men such as myself and followed by "appraisals" which were answers by promoters of fluoridation to answer their hypothetical objections were devoted to giving reasons for appropriating money to promote fluoridation. An example of "objection" on page 420 "Fluorides in the drinking water will cause tonsilitis"—no reference is given as to who stated same. It is ridiculous to prove benefits of fluoridation or to seek appropriations of funds to promote fluoridation by use of such material. This was followed by a lengthy "appraisal." This was presented as scientific information. Another "objection" on page 421,

"Fluorides will cause people to be lefthanded or may make them amidextrous." This was followed by a lengthy "appraisal." No reference was given as to who made such an assinine statement, and so forth, and on this type of "scientific" information, appropriations were made that could be used in one manner or another to promote fluoridation. The 73 pages of material accepted for testimony on behalf of fluoridation and appropriations for its promotion contain approximately 58,000 words of hypothetical "objections" to fluoridation that research men are supposed to have made, and "appraisals" by those who desire to force compulsory, mandatory fluoridation on all of these United States under a health scheme.

I request that excerpts from proceedings, Fourth Annual Conference of State Dental Directors with the Public Health Service and the Children's Bureau, June 6, 1951, be accepted as my entire statement and be included in the record as if read. (Exhibit No. 7.) Excerpts are marked with corresponding pages of enclosed reprint. They will only represent approximately 4,300 words.

I attended a meeting in 1944 of the leading experts with fluorides and dental decay. This meeting, entitled "Fluorine in Dental Public Health," took place at New York City at the New York Institute of Clinical Oral Pathology, October 30, 1944. This was 4 months after fluoridation was started at Newburgh, N.Y. I received a printed copy of the minutes of that meeting in 1944. There are no copies available in any library. The known and unknowns of fluoride reactions as stated by those experts at that meeting should be a matter of this committee's concern and worthy of accepting for use of documented testimony. I personally had these minutes reproduced for the House of Representatives. Many, many hours have been spent on same. I also made excerpts from these minutes by the page. Examples of the contents of these minutes are page 18/B "Newburgh has become another 'biological experiment station' in which the rationale is applied directly to humans without previous laboratory experiments on animals." From page 14/D: "having seen the devastating effects fluorine, one of the most active of all elements, in disrupting the orderly process of enamel production * * *." Page 41/B: "The first evidence of toxicity manifests itself in the form of mottled enamel." Page 42/A: "Fluorine is a potential toxic substance." 41/F: "if the suggested demonstration proves successful * * *." 44/E: "safe and practical methods of fluorinating potable water supplies must be developed and demonstrated." 50/B: "There is no data on the proportion of ingested fluorine that is stored in children * * *." As part of my statement I request that the entire minutes of this meeting for the sake of posterity be accepted as my entire statement and be included in the record as if read. (Exhibit 8.)

A special document I would like to make available to this committee is the fantastic research study that was conducted by Fred L. Losee, B.S. D.D.S., M.S., lieutenant commander, U.S. Navy, as a Bureau of Medicine surgery research project-NM008017. This was conducted under the direction of Dr. H. Trendley Dean. This research study was entitled "Results of a Year's Research on Dental Caries in American Samoa—1950." This report was presented at the convention of the American Academy of Applied Nutrition, California, in 1952. It was reprinted in part by the magazine of that organization. After

15 years this report has not been made available by the U.S. Public Health Service or any department of the Government or by Dr. Losee. It is the most elaborate survey that could possibly be conducted. Various departments of our Government took a part in it to conduct soil, water and urine analyses. Assuming that a duplicate research study could be conducted, it could cost hundreds of thousands of dollars to duplicate same. The partial findings of this Bureau of Medicine and Surgery research project were—as per last sheet of enclosures—that the common trends were that the teeth get worse as—

Partial trends for dental decay when getting less solids, residue, silica, bicarbonate.

The report showed that where there was fluoride in the water there was up to 300 percent more dental decay. The last paragraph of the report states: "One point that reinserts itself time and again, by store food assay and the use of sea products and the locations of taro plantations, is that of minerals."

These same conclusions have been reached by every research investigator from Dr. Weston Price, on. As part of my statement I request that the "Results of a Year's Research Dental Caries in American Samoa in 1950" be accepted as my entire statement and for the sake of posterity be included in the record as if read. (Exhibit No. 9.)

The promotion of fluoridation is based upon one-half of a paragraph taken from the Reader's Digest, February 1943. This article was a reprint from Colliers magazine, December 19, 1942. Both articles are entitled "The Town Without a Toothache" by Ratcliff. There is no such original article and the original author is given no credit for the story. The orginal article is an elaborate article entitled "Preliminary Studies on Caries Immunity in the Deaf Smith County (Tex.) Area," by Edward Taylor, D.D.S.,, which was published in the Journal of the American Dental Association in July 1942. The first paragraph of the original article published by the American Dental Association states that they believed that a formula could be devised which will assure a high degree of immunity to caries by the proper combination of phosphorus, calcium, vitamin D and possibly other factors in the food and water intake. That half of the paragraph in Reader's Digest that is used to promote fluoridation states: "To determine the cause of this fantastic low rate of decay, peculiar to a small region in and around Hereford, research men first investigated the drinking water, which proved to contain 2.5 parts per million of fluorides per million parts of water." The next half of the same paragraph is never mentioned; namely: "but fluorine alone wasn't the answer." In another Texas town with exactly the same concentration of fluorides, the decay rate, though low, was more than twice the rate at Hereford. The story was written mainly about calcium and phosphorus and stated in the next to last paragraph: "It seems possible that tooth decay is merely the first outcropping of phosphorus deficiency." Promoters of phosphorus should have been forcing phosphorus on the public before promoters of fluorides.

But to add insult to injury, in 1954, 3 weeks before global fluoridation was decreed for military posts, by General Armstrong and General Snyder, there was published in the Army newspaper, Stars and Stripes, a reprint of the reprint of a reprint of the original article and in this last reprint was inserted the following paragraph: "An analysis of drinking water in the county revealed that it contained

about the same amount of fluorides recommended by proponents of municipal fluoridation." This paragraph was inserted by professional promoters of fluoridation. No author was given or date of original story. The first municipal fluoridation was started 3 years after this original article was published. The title of this last reprint was "Town Without Toothache Bares Secret: Calcium Diet." No authority given. I request that the two pages of "The Town Without a Toothache," the first page of original article published by the American Dental Association, entitled "Preliminary Studies on Caries Immunity in the Deaf Smith County (Tex.) Area," and the short news item published May 16, 1954, in the Stars and Stripes, entitled "Town Without a Toothache Bares Secret: Calcium Diet," be accepted as my entire statement and be included in the record as if read. (Exhibit No. 10.)

I would like to remind the committee that at one time I was 100 percent in favor of fluoridation and actively promoted same. As the result of my research studies and experiments I learned in 1948 that I had willingly but unknowingly become a party to this program, the promotion of which is based on the use of half-truth and complete falsifications. As a result of my experiments and analyses of animal tissues for fluoride retention I learned that animals accumulated up to 500 percent more fluoride in organs such as the bones, teeth, kidneys, liver, and spleen as compared to the controlled animals. Cripples were born in the third generation. These same bony and crippling defects were reported in the Journal of the American Dental Association in July 1936. That research project was sponsored and paid for by the Research Commission of the American Dental Association. The project involved many years and was conducted at the West Texas Technological College by Dr. Chester Pierle. He presented his findings at the American Dental Association's convention at Louisville, Ky., in 1935. The harms from natural fluorides were reported at that time. There had been reported harms from fluorides by the naval division of our Government at Bethesda, Md., June 15, 1951, in Science magazine. Harms have been reported in many, many scientific journals, by Cornell University, and by our Department of Agriculture. One paragraph from "Keeping Livestock Healthy," published by the U.S. Department of Agriculture, sums up the potential harms from fluorides:

> Flourine is a cumulative poison and long-continued consumption of relatively small quantities produces chronic fluorosis in all farm animals and poultry. The general symptoms of chronic fluorine poisoning are abnormal teeth and bones, stiffness of joints, loss of apppetite, emaciation, reduction of milk flow, diarrhea, salt hunger, kidney damage, and injury to other organs such as liver, heart, adrenal glands, testes, and thyroid.

It took me 14 years to learn how the District of Columbia had become fluoridated. This action took place in 1952 by Public Law 453, 82d Congress, chapter 576, second session, H.R. 7216, as part of the District of Columbia Appropriations Act, 1953. Fluoridation was included under the Washington aqueduct section, page 14, Public Law 453. I request that the first page of Public Law 453, 82d Congress, page entitled "All 66 Stat. 374" and page 14, "All 66 Stat. 387" of Public Law 453, including the first two paragraphs included under section, "Meters on Federal Services," and stopping with the words "* * * and the Secretary of the Army" in the second paragraph be

accepted as my entire statement and be included in the record as if read (exhibit No. 11).

Fluoridation was added to the District of Columbia by insertion of four words under this Washington aqueduct section; namely, operating expenses (payable from water fund) for expenses necessary for "* * * * and fluoridation of water, $1,942,000." This section of public law by which fluorides were added is under "Meters on Federal Services."

The meeting that was held by the U.S. Public Health Service to teach State dental directors how to promote fluoridation took place in Washington, June 1951. The minutes of this meeting were unknown to the public. During the following year the words "and fluoridation of water" were added to the Washington aqueduct section of Public Law 453, page 14, H.R. 7216. In 1953 the minutes of that 1951 meeting were accidentally discovered. These minutes exposed part of the fraud and deceit upon which the promotion of fluoridation was to be conducted.

Two of our most popular and powerful tranquilizers used in State mental institutions and upon patients who have mental disorders and behavior problems are Stelazine and Prolixin. These two tranquilizers are compounds containing fluorides. The many contraindications for discontinuing the use of these fluoride-containing tranquilizers are listed by the drug manufacturers and inserted in the bottles containing these tranquilizers. For guidance of this committee I request that the entire brochures which are required by law to accompany bottles of Prolixin and Stelazine be accepted as my entire statement and be included in the record as if read (exhibit No. 12).

In summary, I trust that anyone appearing on behalf of the merits of fluoridation and seeking appropriations for promotion of same supply documented, bona fide research that has been conducted that proves the value of and insurance from harms from long-term use of fluorides. To present a series of hypothetical "objections" made up by promoters and then answered by these same men under "appraisals" is not the type of scientific information that this committee should receive to substantiate efforts for national mandatory compulsory fluoridation as is being promoted by employees of the U.S. Public Health Service. These employees of the U.S. Public Health Service will remain there under the civil service system. Fine Congressmen have been influenced by this group to attain their ends. These Congressmen can come and go: they can be given dinners and provided honorary medical and dental degrees for their part in fluoridation promotion at congressional levels. The powers behind fluoridation continue when those who have aided their program are long forgotten.

Mandatory, or compulsory anything should be obnoxious to every American and every Congressman. We trust that somehow we can preserve a little of our freedom of choice of medication and freedom of religion. Page 22 of those minutes of 1951 should outlaw fluoridation by even stating: "Keep flouridation from going to a referendum." Imagine employees of our State and Federal Governments suggesting control of when and when not to vote. For information of this committee six out of six cities in Nebraska, alone, voted down flouridation this month, the House of Representatives of the State of New York turned down a bill that would have forced compulsory fluoridation

and the House of Representative of Massachusetts defeated a bill that would have denied the people the right of referendum and would have forced compulsory, mandatory fluoridation if this bill had not been defeated.

As an example of how the promotors of fluoridation could even use the President of the United States, as part of my statement I request that the three sections of mimeographed copies of President Kennedy's speech as published by the American Dental Association, his speech as it was actually presented and the letter from the Department of Health, Education, and Welfare, dated June 18, 1962, in answer to the American Dental Association's misuse of President Kennedy and his address, be accepted as my entire statement and be included in the record as if read (exhibit No. 13).

Mr. FLOOD. As I indicated earlier, the material you request be placed in the record is much more voluminous than we usually allow. However, I will take this up with the full subcommittee.

Thank you, Doctor.

THURSDAY, APRIL 27, 1967.

ESTABLISHMENT OF A NATIONAL MYOPIA CENTER

WITNESS

MRS. SYLVIA RACHLIN, EXECUTIVE VICE PRESIDENT, MYOPIA RESEARCH FOUNDATION

Mr. FLOOD. The subcommittee will come to order.

We will now hear Mrs. Sylvia Rachlin, executive vice president, Myopia Research Foundation.

Mrs. RACHLIN. First, I would like to express our sorrow again on the passing of Congressman Forgarty and our everlasting appreciation since he gave us our first hearing.

Now, I would like to report happiness, members of the committee. We have made great success this past year in strengthening our program. Many more American doctors are now interested and we have more than 250 new friends in some 60 foreign nations. Some of these men are very distinguished. Also, a large number of health, civic, educational, and public service groups are very interested in our progress, and Mr. Flood, and as other members know, the intention of our crash program is to save the eyesight of at least 1 million children in this country alone who are doomed to blindness because of progressive degenerative myopia, and this need not happen.

As a myope myself, I appeal to you to please consider our program.

Thank you.

(The prepared statement and attachments follow:)

MYOPIA RESEARCH FOUNDATION, INC., 1963,
New York, N.Y., April 27, 1967.

Memorandum to: Congress of the United States, House of Representatives, Subcommittee on Appropriations for Labor, Health, Education, and Welfare.
From: Myopia Research Foundation, Inc., 415 Lexington Avenue, New York, N.Y
Subject: Petition for the establishment of a National Myopia Center.

More than a million American school children with progressive nearsightedness are destined for blindness or near-blindness unless the riddle of the causa-

tion and treatment of this condition is solved. Countless adults have suffered loss of employment and become financial burdens to their families and the community because of pathological or degenerative changes in myopia. There is no presently known cure for this blindness.

According to the United States Bureau of the Census, the population of the United States, as of July 1, 1964, was 196,842,000. It is generally estimated that more than a third of the population has myopia in one form or another. At least 1 to 3 percent have progressive degenerative or pathological myopia. These figures speak for themselves.

Certain eminent ophthalmologists estimate that 12 to 18 million myopes are the patients of ophthalmologists. Leaders in optometry compute the number of myopes involved with their discipline to be between 40 and 45 million.

For centuries, myopia has been considered a hopeless affliction. We know that this need not be true. However, in order to effect a breakthrough and halt the alarming increase in myopia, a crash program is urgent.

To accomplish this, the Myopia Research Foundation recommends the establishment of a *National Myopia Center* under the egis of the United States Public Health Service to make possible nationwide, organized and comprehensive interdisciplinary research into the causes, treatment, and prevention of nearsightedness. Doctors, institutions, colleges, and universities with particular interest in, and facilities for, research and treatment of myopia and its related problems would participate in a coordinated approach.

Among the areas in which research is urgently needed are:

General health (including specific eye research; circulo-vascular and other studies in the realm of internal medicine; neurology; biochemistry; and the many other disciplines which should be involved in myopia research), heredity, environmental factors, nutrition, psychology, lenses (including contact lenses), vocational surveys, living habits of nearsighted children and adults, and many other facets involved in comprehensive research.

The National Myopia Center would encompass:

1. A Myopia Service Program under the Neurological and Sensory Disease Service Program of the United States Public Health Service, Washington, D.C.

(a) Collaborative study permitting the creation and development of service programs for myopes throughout the United States, and a standardization of records and reporting forms.

(b) Grants enabling Myopia Service Programs:

1st year	$1,000,000
2d year	1,500,000
3d year	2,000,000
4th year	2,500,000
5th year	3,000,000

2. Myopia Research Projects in the National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda, Maryland.

(a) Establishment of statistical and analytical procedures by the Biometrics Branch of the National Institute of Neurological Diseases and Blindness.

(b) Grants to the National Institute of Neurological Diseases and Blindness, enabling Myopia Research Projects and establishment of statistical and analytical procedures.

1st year	$1,000,000
2d year	1,500,000
3d year	2,000,000
4th year	2,500,000
5th year	3,000,000

3. The National Registries of Myopia Pathology, a myopia eye study bank, should be developed under the United States Public Health Service. All universities, hospitals, other laboratories involved in eye research and Eye Banks throughout the United States could participate in coordinated clinical research. Participating laboratories would receive eyes of myopes and their families, which have been donated for the purpose of research into the pathology of myopia from its incipience through its advanced stages. Findings would be correlated with other research.

The plan for the National Registries of Myopia Pathology, originated by the Myopia Research Foundation, has received the enthusiastic support of many individuals and organizations across the nation.

A National Myopia Center structured upon this three-phase program would stimulate nationwide interest and participation by myopes with their families and friends in research under public and private health facilities.

The Myopia Research Foundation pleads for your favorable consideration of this program so necessary if our young are to enjoy all the blessings of life.

STATEMENT OF MRS. SYLVIA N. RACHLIN, EXECUTIVE VICE PRESIDENT MYOPIA RESEARCH FOUNDATION, INC., NEW YORK, N.Y.

Mr. Chairman and Members of the House Subcommittee on Appropriations for Labor, Health, Education and Welfare:

In appearing before this Committee again, I wish first to express my sorrow at the passing of Congressman John E. Fogarty.

The Myopia Research Foundation, Inc., 415 Lexington Avenue, New York, N.Y., is rapidly strengthening its crash program intended to save the eyesight of more than a million American children doomed to blindness because they have progressive degenerative or pathological myopia.

Increasing numbers of American doctors are expressing their interest in a comprehensive research program as outlined in our petition.

Since our last appearance before your Honorable Committee, interested doctors from over 60 nations have expressed their willingness to participate in an international research structure in myopia.

More and more, health, civic, and educational groups have offered to cooperate in our all-out program.

Dr. Clifford H. Cole, Chief of the United States Public Health Service, Neurological and Sensory Disease Service Program, Division of Chronic Diseases, Washington, D.C., has shown great interest in helping the myope in every way in which his service program can possibly be involved.

For further details, I refer you to the attached petition and letters from:

Robert H. Bedrossian, M.D., Vancouver, Washington
Mary C. Fletcher, M.D., Houston, Texas
Merton C. Flom, O.D., Richmond, California
Abraham L. Kornzweig, M.D., New York, New York

As a myope, in behalf of the more than a million children similarly afflicted in this country alone, I implore the attention and interest of your Honorable Committee in this vital project.

VANCOUVER, WASH., *March 19, 1966.*

MRS. SYLVIA N. RACHLIN,
Myopia Research Foundation,
New York, N.Y.

DEAR MRS. RACHLIN: I should like to compliment you and encourage you for your efforts in behalf of the Myopia Research Foundation. The problem of myopia is multiple. The complications that can result from extreme myopia are many. The severely myopic person has a much greater incidence of retinal degeneration and retinal detachments than that which is found in the normal population. Such diseases can lead to markedly decreased vision and even total blindness.

The great majority of people under 35 who wear glasses, wear them because of nearsightedness. Though it is true that most of these individuals do not suffer from any blinding complications of their nearsightedness the need for glasses or contact lenses to enable them to see better is a factor which is important in the general cost of medical care. There is also the inconvenience of having to wear glasses and the dependence on them.

Since a great majority of the nearsighted people do not have a dramatic loss of vision like that which occurs in other diseases, research in myopia has been somewhat limited and less glamorous than that of other eye diseases. The importance of myopia in the overall incidence of eye conditions is however very great. Any research which is done on a scientific basis that could lead to a decrease in the amount of myopia would be of considerable significance. In a great majority of incidences, myopia increases rapidly during the grade school and high school years. My particular efforts to date have been directed along the lines of attempting to discover some of the factors which may be present in causing this increase in nearsightedness and also, what can be done to prevent it. Adequate and scientific studies to determine some of these factors have been

very limited. It is often times difficult to obtain research funds to study diseases which are not dramatic or acute in their progress or do not produce many obvious symptoms. Increased funds for research for reducing or eliminating the progress of myopia and to help prevent myopia and the complications of severe myopia would be of great benefit in analysing and solving some of the problems accompanying these conditions.

I believe that the Myopia Research Foundation has goals and ideas which are worthy of considerable support on a National level.

Yours truly,

ROBERT H. BEDROSSIAN, M.D.

HOUSTON, TEX., *March 14, 1966.*

MRS. SYLVIA N. RACHLIN,
Myopia Research Foundation,
New York, N.Y.

DEAR MRS. RACHLIN: I am pleased to hear that your Myopia Research Foundation is to appear before the Subcommittee on appropriations of the House of Representatives.

My particular field of interest is the pathenogenesis of simple or school myopia. This disease does not result in a handicap such as those produced by cancer, heart disease, or stroke, but it is significant. Approximately 20% of our adult population is myopic; the cost of one eye examination and one pair of glasses is approximately $1,000,000,000.00.[1]

In addition, there is the inconvenience of wearing glasses, the job limitations, eye injury hazard, and retinal detachment hazard. The reduction or elimination of school myopia would be significant.

I am currently endeavoring to conduct careful clinical investigation as to the etiology, treatment, and prevention of school myopia. One of my greatest problems is obtaining funds for this research.

I do feel your organization will help stimulate interest in myopia, stimulate and support good research, and foster better communication. I wish you success in your endeavor.

Sincerely,

MARY C. FLETCHER, M.D.

STATEMENT OF MERTON C. FLOM, O.D., Ph. D.

Mr. Chairman and members of the Committee, because my life's work is teaching and research in vision, it might be assumed that I would automatically favor any proposal for expansion of research in vision. This is not the case. My life extends beyond the research laboratory. I am aware of other vital problems besides those of health, of many health problems besides those affecting vision, and of numerous vision problems besides myopia. In fact, my own research at Berkeley is not on myopia. And I do not have myopia. So it is not automatic that I favor a proposal to support research on myopia. But I do.

About one out of seven (or about 25 million) Americans has clinically significant myopia. What is myopia? If we were to ask a typical myope to describe his condition, he would tell us of indistinct vision whenever he looked at distant things and relatively clear vision for close things. If his nearsightedness were extreme, he would tell us that near objects had to be held within a few inches of his eyes to be discerned. In spite of clearness of objects at close range, he might volunteer having headaches or double vision which forced him to close one eye continuosly when reading. His history might bring out the fact that neither of his parents had myopia and that his own condition was discovered in grade school after he had silently suffered through not being able to see the chalkboard and not being able to see well enough to participate in sports. After an eye examination he received glasses which allowed him for the first time to see distant things clearly.

But now there was almost surely a new problem: in spite of being careful in his play, he would regularly break his glasses, bringing financial hardship to his parents and educational and social hardship to himself. His parents inquired about curing myopia and found someone who promised that his glasses could

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[1] Estimated population 14 years and over, 1965—127,000,000 x 20% estimated myopic x $30.00—cost of glasses and examination (estimated) = approximately $1,000,000,000.00 yearly.

be thrown away if he did special exercises. He was diligent for months but his myopia nonetheless worsened and each year or so he needed a new pair of glasses to see clearly. He recounts his limited military duty, restricted driver's license, and being denied certain jobs because of his myopia. In adulthood, his myopia his finally stopped progressing but he is still entirely dependent upon his glasses to see clearly at distance and to see comfortably at near.

I have chosen to describe myopia in this fashion to emphasize that it is *people* who are afflicted with this condition and that myopia affects far more than a person's eyes. Myopia affects their educability, physical development, choice of career, social maturity, safety, and productivity. Not every myope fits this picture. Some are as unaffected by their myopia as if their vision were normal. And in other people, the effect is so profound that it may impair their mental health.

Moreover, there are different kinds of myopia. There is a "transitory myopia" associated with use of many drugs, with changes in blood sugar level, and with menstruation. There is "night myopia" which quickly developes at low levels of illumination (as in night driving) and reduces the distance vision or *normal* as well as already myopia eyes. There is "traumatic myopia" which often follows impact to the head as is common in many accidents. In this type, there is often detachment of the retina resulting in blindness. There is an "acquired myopia" which affects a proportion of people only in later life. "Degenerative" or "pathological myopia is a type that usually begins in infancy and runs a progressively worsening course into adulthood. Even with lenses, the vision in degenerative myopia is characteristically subnormal and, not infrequently, blindness ensues in what is generally considered to be a diseased eye. When myopia developes to a much greater extent in one eye ("anisometropic myopia") the vision of that eye tends to deteriorate to a form of blindness called amblyopia.

But, the commonest form of myopia is the one I described at the beginning, the so-called "simple myopia." The modifier "simple" is used to connote that it is the most common type of myopia; there is no implication that we know what causes this myopia, or that we know how to prevent it or cure it. Like the "common" cold, we can only treat myopia's symptoms, in this case, by means of lenses.

Unlike the "common" cold, however, myopia does *not* run its course and disappear; once myopia begins, it practically never vanishes.

As a matter of fact, "simple" myopia is a complicated disorder. Testimony to this is the observation that what we do most for myopia in today's technological society; namely, prescribe spectacle lenses, was done similarly in the Ming Dynasty! Considering the prevalence of myopia and the intervening centuries, one can only conclude that myopia is not uncomplicated. With our present state of scientific knowledge, why are we unable to cure or prevent myopia? Perhaps myopia is incurable and cannot be prevented. But have we really tried? There is only a small body of solid scientific evidence on so elementary a question as, "which structural elements of the eye contribute to myopia?" And nearly all of this evidence has been done by workers in other countries, principally England and Sweden. Myopia seems to be a phenomenon of uncoordinated growth of various elements of the eye, but we know virtually nothing of what *regulates* their growth. We are similarly ignorant about possible environmental factors that might influence the development of myopia.

Scientists now have the tools to study and potentially solve the problem of myopia: controlled X-radiation, ultrasound, lasers, Fourier optics, electrophysiology, electron microscopy to mention several. A little encouragement to a handful of widely scattered scientists would help. But a lot of encouragement and financial support to one or more interdisciplinary groups would almost certainly give us the answers we need. It is imperative that we call upon all disciplines that can contribute: biochemistry, genetics, physiology, anatomy, physiological optics, biophysics, pathology, endocrinology, ophthalmology, optometry, and many others.

Not to be overlooked in a financially supported team effort on myopia is the great probability that one or more fundamental problems in other areas will be solved. Just as solving the genetics of human color blindness was instrumental in understanding a general phenomenon of inheritance, so is it possible that general knowledge can emerge from research on myopia.

The topic that I was asked to comment upon was, "the need for research on myopia." I have spoken specifically to that question and no other. I would like to close with an important related point on vision research.

People are attracted to research that is dramatic. Thus, in the health fields we observe agencies and researchers being occupied with diseases that kill and maim.

This is understandable and justifiable. But looking ahead, the day is not far off, if not to a large extent already here, when we will be obligated to direct our attention to the less dramatic human disorders. I refer to the multitude of health problems that impair the well-being, comfort, safety, and productivity of people. Myopia, and indeed most of the vision problems with which the optometrist is concerned, fall in this category.

BIOGRAPHICAL SKETCH OF MERTON C. FLOM

Born in Pittsburgh, Pennsylvania in 1926.
Public School education in Los Angeles.
Two years in U.S. Navy (electronics), 1944–46.
Preoptometry education at U.C.L.A., 1946–48.
Optometry education at University of California at Berkeley; B.S., 1950; M. Opt., 1951.
Education in Physiological Optics: Graduate Student at University of Californa, Berkeley, 1951–57. Ph. D. in Physiological Optics in 1957.
American Optometric Foundation Research Fellow, 1952–56.
Appointments at University of California School of Optometry:
- Clinical Instructor in Optometry, 1951–57.
- Instructor in Physiological Optics and Optometry, 1957–58.
- Assistant Professor of Physiological Optics and Optometry, 1958–62.
- Associate Professor of Physiological Optics and Optometry, 1962–.
- Vice-Chairman, 1962–63.
- Chairman of Curriculum Committee, 1962–63.
- Member of Executive Committee, 1962–64.
- Director of Orthoptics Clinic, 1951–61.
- Director of Strabismus Clinic, 1954–64, 1965.
- On Sabbatical Research Leave in Residence, 1964–65.

Other Positions:
- President of U.C. Optometry Alumni Association, 1963–64.
- Member of Editorial Council of American Journal of Optometry, 1963 to present.
- Member-in-Charge of Orthoptics Subcommittee of American Academy of Optometry, 1961 to present.
- Member of A.O.A. Committee on Orthoptics and Visual Training, 1964–65.

About 100 oral presentations and outside lectures on vision.
Published 21 original papers on vision and the chapter on "Treatment of Binocular Anomalies" in the book VISION OF CHILDREN by Hirsch and Wich (1963).
Membership: American and California Optometric Associations, A.O.A., American Academy of Optometry, Optical Society of America, American Association for the Advancement of Science, sigma Xi and American Association of University Professors.
Private practice of Optometry in Richmond, California.
Principal Investigator of two U.S. Public Health Service supported Research Grants:
1) On the Nature of Anomalous Retinal Correspondence, 1960 to 1962.
2) Fixation Tremor and Contour Interaction in Amblyopia, 1962–1967.

NEW YORK, N.Y., *March 19, 1965.*

MYOPIA RESEARCH FOUNDATION,
New York, N.Y.
(Attention: Sylvia Rachlin, Executive Director.)

DEAR MISS RACHLIN: I understand that you are to speak before a Congressional Committee on the subject of the Myopia Research Foundation. As a practising ophthalmologist of 30 years standing, I am very much aware of this problem and of the difficulties associated with its management, especially the need to preserve sight and prevent complications.

Strangely enough these individuals are very often bright persons who apply themselves to close work very diligently. But because of this need for constant reading, they have a tendency to develop degenerative changes in the retina and choroid which can drastically reduce their sight; also the high myope is a person very prone to get retinal detachment because of the stretching of the tissues associated with the progression of myopia.

I think this problem is very wide spread throughout the country and one that deserves considerable investigation and research. I want to wish you success in your efforts to help this severely disabled individual and prevent, if possible, its complications.

Sincerely yours,

A. L. KORNZWEIG, M.D., F.A.C.S.

MYOPIA RESEARCH FOUNDATION, INC.—DEDICATED TO RESEARCH AND STUDY INTO THE CAUSES, TREATMENT, AND PREVENTION OF NEARSIGHTEDNESS

PROGRAM

Working in close cooperation with the United States Public Health Service, National Institutes of Health, universities, institutions, and the many disciplines involved in myopia research, the Myopia Research Foundation plans nation-wide comprehensive interdisciplinary research into the causes, treatment, and prevention of myopia.

Nearsighted children and adults throughout the United States will be able to participate under the supervision of their personal doctors, in a coordinated approach.

Cumulative records will be filed under each eye specialist's name with a code symbol to protect the anonymity of the patient. These records will be forwarded to a National Myopia Center for continued analysis by research experts.

An information department will be established for the central reporting of active research projects for the use of other research doctors and scientists.

Many health, educational and public service groups have expressed great interest in our plans and willingness to participate.

At the First International Conference on Myopia in 1964, sponsored by the Myopia Research Foundation, eminent researchers in myopia from the United States, Europe, Asia, Australia and South America came together to review the problems of myopia and chart future research into the causes, treatment and prevention of nearsightedness. This was the first time that doctors and scientists of a variety of disciplines had ever met to exchange their findings.

International cooperation of doctors is rapidly growing in the development of a strong international structure for sharing and participation.

The Myopia Research Foundation urges the establishment of a National Myopia Center under the United States Public Health Service. Congress has been petitioned in 1965 and 1966 the plea has been made before House of Representatives and Senate Subcommittees.

The Petition for a National Myopia Center is as follows:

"The wearing of eyeglasses is so commonplace as to be taken for granted. However, we are shocked when we see tots of tender age already dependent upon these visual aids. These children often see so poorly that the term 'nearsighter' is an understatement.

"More than a million American school children with progressive nearsightedness are destined for blindness or near-blindness unless the riddle of the causation and treatment of this condition is solved. Countless adults have suffered loss of employment and become financial burdens to their families and the community because of pathological or degenerative changes in myopia. There is no presently known cure for this blindness.

"For centuries, myopia has been considered a hopeless affliction. We know that this need not be true. However, in order to effect a breakthrough and halt the alarming increase in myopia, a crash program is needed.

"To accomplish this, The Myopia Research Foundation recommends the establishment of a *National Myopia Center* under the egis of the United States Public Health Service to make possible nationwide, organized and comprehensive interdisciplinary research into the causes, treatment, and prevention of nearsightedness. Doctors, institutions, colleges, and universities with particular interest in, and facilities for, research and treatment of myopia and its related problems would participate in a coordinated approach.

"Among the areas in which research is urgently needed are—

> "General health (including specific eye research; circulo-vascular and other studies in the realm of internal medicine; neurology; biochemistry; and the many other disciplines which should be involved in myopia research), heredity, environmental factors, nutrition, psychology, lenses (including contact lenses), vocational surveys, living habits of nearsighted children and adults and many other facets involved in comprehensive research.

"The National Myopia Center would encompass:

"1. A Myopia Service Program under the Neurological and Sensory Disease Service Program of the United States Public Health Service, Washington, D.C.

"(a) Collaborative study permitting the creation and development of service programs for myopes throughout the United States, and a standardization of records and reporting forms.

"(b) Grants enabling Myopia Service Programs.

"2. Myopia Research Projects in the National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda, Maryland.

"(a) Establishment of statistical and analytical procedures by the Biometrics Branch of the National Institute of Neurological Diseases and Blindness.

"(b) Grants to the National Institute of Neurological Diseases and Blindness, enabling Myopia Research Projects and establishment of statistical and analytical procedures.

"3. The National Registries of Myopia Pathology, a myopia eye study bank, should be developed under the United States Public Health Service. All Universities, Hospitals, other Laboratories involved in eye research, and Eye Banks throughout the United States could participate in coordinated clinical research. Participating Laboratories would receive eyes of myopes and their families, which have been willed for the purpose of research into the pathology of myopia from its incipience through its advanced stages. Findings would be correlated with other research.

"The plan for The National Registries of Myopia Pathology, originated by the Myopia Research Foundation, has received the enthusiastic support of many individuals and organizations across the nation.

"A National Myopia Center structured upon this three-phase program would stimulate nationwide interest and participation by myopes, their families, and friends in research under public and private health facilities.

"The Myopia Research Foundation pleads for your favorable consideration of this program so necessary if our young are to enjoy the maximum blessings of our Great Society."

The Myopia Research Foundation is idealistic in its plan of operation. No money, whatsoever, is spent on any administrative salaries or professional fund raisers.

Membership in the Myopia Research Foundation is open to all professional people and individuals interested in the problem. Dues are $5.00 per year. All contributions are income tax deductible.

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THURSDAY, APRIL 27, 1967.

RETARDED CHILDREN

WITNESS

MRS. FITZHUGH W. BOGGS, CHAIRMAN, COMMITTEE ON GOVERNMENTAL AFFAIRS, NATIONAL ASSOCIATION FOR RETARDED CHILDREN

Mr. FLOOD. Now we will hear Mrs. Fitzhugh W. Boggs, chairman of the Committee on Governmental Affairs, National Association for Retarded Children.

Mrs. BOGGS. Mr. Chairman, I am very grateful for the opportunity to appear. We have copies of our statement which we will make available.

Mr. FLOOD. You want your statement in the record, of course?

Mrs. BOGGS. Yes.

Mr. FLOOD. That will be done.

(The document follows:)

STATEMENT OF ELIZABETH M. BOGGS, CHAIRMAN, GOVERNMENTAL AFFAIRS COMMITTEE, THE NATIONAL ASSOCIATION FOR RETARDED CHILDREN, APRIL 27, 1967

I. INTRODUCTION

The National Association for Retarded Children is a voluntary organization devoted to promoting the welfare of the mentally retarded of *all ages* and *degrees of disability* by fostering the advancement of research, services, and facilities and by developing broader public understanding of the problem of mental retardation. The Association is composed of more than 1,100 state and local member units with a total membership of over 110,000 individuals.

As a result of our general mission, we maintain an interest in a broad cross-section of the programs of the Department of Labor and the Department of Health, Education, and Welfare. The breadth of these interests is a direct outgrowth of two factors. First, mental retardation is a long term, chronic disability which affects every aspect of an afflicted individual's life. Therefore, a mentally retarded individual—depending on the severity of his handicap—may require specialized diagnosis, medical care, education and training, vocational rehabilitation, employment or income maintenance and protective services during various periods of his life. Second, there are broad variations in the capabilities of our retarded population; as a result, the types of services needed by retarded persons will vary from intensive 24-hour bed care for some of the profoundly retarded to special education and vocational training programs for more capable retarded individuals. The chart, Appendix A, provides an overview of the activities supported by the various agencies in HEW and Labor. It clearly indicates the diverse sources of support for mental retardation programs in the two departments. For example, all seven major operating agencies of HEW and four agencies in Labor conduct some activities related to mental retardation; five HEW agencies and two Labor units carry on significant mental retardation programs.

A well managed federal attack on the problem of mental retardation must involve a variety of agencies within HEW, Labor, and certain other departments. Education, Rehabilitation, Health, and Welfare must all play their appropriate parts. We seek to develop, over the shortest feasible period of years, adequate authority in each of these federal operating agencies to cover formula and project grants in support of services, grants for continued planning, for research and demonstration projects, for professional training, and for construction.

II. SPECIFIC ITEMS IN THE HEW-LABOR BUDGET OF CONCERN TO NARC

A. Adequate appropriation for programs under title VI of the Elementary and Secondary Education Act

NARC was delighted with the initiative shown by Congress last year in adding a new Title VI to the Elementary and Secondary Education Act to authorize a much needed program of support for the education of handicapped children. Under Title VI formula grants are authorized to initiate, expand or improve programs to meet the special educational and related needs of handicapped children.

The need for this federal assistance program is indisputable. Only about one-third of all handicapped children are now enrolled in the special education programs which they require and to which they are rightfully entitled. The House Committee on Education and Labor recognized this need in their recent report on the Elementary and Secondary Education Amendments of 1967 when they stated, "The committee is distressed that this critically important program to eliminate educational disadvantage has . . . not been carried out" (p. 9, H. Rept. No. 188, 90th Congress, 1st session).

While $50 million is authorized in FY 1967 and $150 million in FY 1968 under PL 89–750, thus far no funds have been appropriated for Title VI programs. The Administration has requested $2.5 million in a supplemental FY 1967 request and $15 million for FY 1968. A survey of state directors of special education, conducted by the Council for Exceptional Children, provides ample evidence that state and local educational agencies are prepared to put to wise use a much larger amount of federal funds.

We urge this Subcommittee to significantly increase the Administration request for Title VI funds in FY 1968. Otherwise, much of the vast potential this program offers for improving the quantity and quality of special education programs for mentally retarded and other handicapped youngsters will not be realized.

B. Funds for training teachers of handicapped children

In his recent message to Congress on Health and Education, President Johnson noted that "there are now only 70,000 specially trained teachers of the handicapped—a small fraction of the number the nation requires. In the next decade, five times that number must be trained and put to work" (H. Rept. No. 68, 90th Congress, 1st Session). Yet, in the FY 1968 Budget the Administration has requested $24.5 million for grants to train teachers of handicapped children—the same amount as was requested and appropriated by Congress in FY 1967. This request is $9.5 million less than the $34 million authorized under Section 7 of PL 85–926, as amended.

Not only is the need great but the demand for grants under this program has far exceeded the available funds. During "fiscal year 1967 the requests for funds under this program exceeded the Congressional appropriation by $31,000,000, or a ration of more than 2 to 1" (*Mental Retardation Activities of the Department of Health, Education, and Welfare*, January 1967).

In view of these facts NARC urges the Subcommittee to appropriate the full authorized amount of $34 million for training of teachers of the handicapped.

C. Construction of community facilities for the mentally retarded

The President's Budget includes only half of the $30 million authorized in FY 1968 for the construction of community facilities for the mentally retarded under Part C, Title I, PL 88–164. Based on samples of need as indicated in four state mental retardation facilities construction plans, our Association recently calculated that the cost of constructing community facilities to provide services for all of the mentally retarded not presently receiving services or attending programs conducted in inadequate quarters would be roughly $2.4 billion.

In view of the clear evidence of an overwhelming need for community facilities, we strongly recommend that the full authorized amount of $30 million be appropriated by Congress.

D. Programs in State mental retardation institutions

The Hospital Improvement Program has proven to be a highly effective means of stimulating the development of programs of care and habilitation in state institutions for the retarded. It was originally intended to be escalated at a rate of $6 million annually until all state institutions had an opportunity to qualify. However, if the amount requested for the HIP program in the FY 1968 Budget is approved by Congress, appropriations for this program will have remained almost static for three fiscal years.

This program can not be expanded to the 50 or so state mental retardation institutions which are not presently participating in the program unless FY 1968 appropriations are increased. Ironically, those institutions which need the HIP program most (i.e., the backward, custodially-oriented facilities) are not yet receiving federal grants.

E. Staff and direct operating funds for the Mental Retardation Division, Public Health Service

The total personnel complement proposed for the Mental Retardation Division in 1968 is 72,[1] of which 56 were carried over from the former Branch and 16 carried over with two construction programs formerly with the Division of Hospital and Medical Facilities. This is the same size as the staff assigned to these functions during FY 1966. However, an additional nine million dollar grant-in-aid program was transferred on January 1, 1967 from NIMH to DMR without

[1] The Budget shows a total of 89 positions but 17 of these are assigned to the President's Committee on Mental Retardation, which has no operational relationship to the Division.

any increase in the Division's personnel complement or direct operating funds. This is the so-called Hospital Improvement (HIP) and In-Service Training Program (HIST), one of the most effective stimulus programs. Why has the Division not been allocated positions to administer these additional responsibilities?

F. Management of noncategorical health project grant funds

Last year Congress enacted PL 89-749, which consolidated the nine categorical project grant programs (including mental retardation project grants) of the Public Health Service. With the abolition of the so-called categorical grant system, funds for such projects have been merged and the administrative authority centralized in the Surgeon General's Office. As yet, the Surgeon General's Office has not indicated how these project funds will be allocated among the competing public health interests. Our questions are: (1) What assurances do we have that project grants related to mental retardation will be evaluated by people knowledgeable in mental retardation, and at what level will this occur? (2) Assuming such a grant proposal is acceptable to experts in its field, what assurance is there that it can compete on its own merits with applications whose content and method is more traditional and better understood by the health professional who might form the majority of a "non-categorical" review committee.

What assurance do we have that valuable programs which have been recently initiated under a categorical heading can be continued under the new system? A case in point is the very successful Student Work, Experience and Training program. The funds previously used by the Mental Retardation Division (formerly Branch) to develop Student Work, Experience and Training, have not been assigned to the Surgeon General's Office.

Another case in point relates to funds for planning new university programs for training personnel to work with children who are mentally retarded or otherwise handicapped. The United States Public Health Service and the Children's Bureau have funds for constructing and staffing university affiliated service facilities for such training. During the last few years, the Mental Retardation Branch, USPHS, has made available some of its project grant funds to permit the interested universities to do advance program planning, based on preliminary in-depth studies, thus assuring more effective use of the larger blocks of federal money to be invested in construction. Such planning grants should continue to be available. Will they? And, if so, where in HEW may our interested applicants go for help?

G. Vocational rehabilitation and sheltered workships

The Vocational Rehabilitation Administration continues to report heartening increases in the numbers of retarded persons who are rehabilitated annually, but we know that we are still far short of reaching our national potential in this respect. In 1965 NARC hailed the passage of PL 89-333 as a major vehicle to accelerate rehab services to the more seriously retarded and also to foster the growth of sheltered workship facilities. We are therefore particularly distressed to note that the President has asked for only $3.85 million for workshop construction in 1968. This is less than half the authorized amount and represents a cut as compared to 1967.

The promise of this and so much recent substantive legislation is being thwarted and belied by a budget which we can only regard as gravely inadequate as it affects the mentally retarded.

We recognize that this Subcommittee faces an immense challenge in attempting to allocate fairly the restricted amount of funds available for domestic programs in FY 1968 due to the gigantic expenditures on the Vietnam conflict. Nonetheless, a country with the resources of the United States can and must, in our view, maintain a concern about its less fortunate citizens. It would be indeed tragic if we jeopardized the progress which has been made on behalf of the mentally retarded over the past few years by failing to build upon the solid foundation which has been laid.

Thank you for offering us this opportunity to express our views on FY 1968 appropriations for the Departments of Labor and Health, Education, and Welfare.

Appendix A

Mental retardation activities of the Departments of Labor and Health, Education, and Welfare

Agency	Department	Age and degrees of retardation served	Types of activities							
			Preventive	Other service	Training	Research	Construction	Planning	Income maintenance	Miscellaneous
Office of Education	HEW	3 to 21; mild and moderate		X	X	X				
Vocational Rehabilitation Administration.	HEW	14 and over; mild and moderate		X	X	X	X	X		
Public Health Service, National Institute of Mental Health.	HEW				X	X				X
Public Health Service, National Institute of Child Health and Human Development.	HEW				X	X	X			
Public Health Service, National Institute of Neurological Diseases and Blindness.	HEW				X	X				
Public Health Service, Mental Retardation Division.	HEW	All ages; moderate, severe, and profound.	X	X	X	X	X	X		X
Welfare Administration, Child Bureau	HEW	Up to 21; all levels	X	X	X	X				
Welfare Administration, Bureau of Family Services.	HEW	Over 18; moderate, severe, and profound.		X					X	
Social Security Administration	HEW	All ages; moderate, severe, and profound.							X	
Administration on Aging	HEW	Up to 16 and institutionalized; moderate, severe, and profound aged.		X						X
Food and Drug Administration	HEW									X
Bureau of Apprentice and Training	Labor	Youth and adults; mild and moderate.		X						
Bureau of Manpower and Development	do	do		X						
Wage and Hour Division	do									X
Bureau of Employment and Security	do	Youth and adults; mild and moderate.		X						

Mrs. Boggs. We have a very broad interest in the appropriations bills for both the Department of Health, Education, and Welfare, and Labor, since the disability of mental retardation is a long-term chronic disability and affects so many aspects of the life activity of a person including his employment status. The mentally retarded individual, depending on the severity of his handicap, may require specialized diagnosis, medical care, education, training, vocational rehabilitation, special employment services, income maintenance, or protective services, depending also on the extent of his disability and the life stage at which he is.

At the back of our statement there is a brief table which indicates the distribution of activities by major agencies of HEW and Labor; it will indicate to you how widespread is the involvement of these agencies with mental retardation and our concern for their having adequate support.

I would just like to touch on two or three of the serious concerns we have this year.

Practically all of the recently enacted programs are faced with serious cutbacks in relation to the authorizations for appropriation and this is going to have very serious consequences. We are, of course, aware of the reasons why the present President's budget does not reach the expectations which the Congress had had when they enacted the substantive legislation, but we must say to you that failure to achieve some approximation to the congressional intent in these matters is having a very serious slowdown effect on programs which were new and promising in this decade.

For example, only last fall the Congress passed special new legislation relative to the education of handicapped children, of whom the mentally retarded constitute at least half. The authorization for this year was $50 million and the authorization for next year is $150 million and the request is for about 10 percent of that.

Similarly, the 1968 year was to be the year in which the construction of community facilities for mentally retarded would first hit its stride. It has been going through 2 years of induction. We had hoped that $30 million would be appropriated as authorized. The President's budget asks for only $15 million. When I tell you that, of any appropriation under Public Law 88–164, part C, the first $5 million under the allotment formula is distributed equally among all the States, you will recognize that as long as the appropriation stays low, large States like yours and mine are penalized in respect to the amounts allotted to them.

Similarly, a very promising program was inaugurated in 1963 (originally under the auspices of the National Institute of Mental Health; now transferred to the Division on Mental Retardation), the hospital improvement program as it affects State residential facilities for the retarded, has had a tremendously heartening effect in those institutions which have received project grants for improvement of their services and for demonstrations of the ways in which care can be improved even within the relatively large and, in many cases, outmoded institutions.

But the funding level if the budget is adopted as proposed, will have remained almost static for 3 years, notwithstanding the fact that not all eligible institutions have been funded. Now, what this means is that those who were slowest to move—which are often the ones who

most needed the stimulus and assistance—are the ones which are not being allowed to participate in this program.

Another problem of great concern to us is the staffing of the Division of Mental Retardation which was created January 1, within the new Bureau of Health Services, of the Public Health Service. They now have the responsibility for administering the hospital improvement program. In spite of the fact that its funds are not increasing, there continues to be administrative responsibility connected with this program because the existing grants must be reapproved, yet no staff, no personnel was transferred from NIMH along with this responsibility.

The number of people authorized for the division, if you exclude the people that are technically assigned to the division but are detailed to the President's Committee on Mental Retardation, if you exclude them, the division has the same operating staff it had last year with the exception of the people who are transferred from the Division of Hospital and Medical Facilities to administer the construction program. So that there is no increase, despite the increased responsibilities that this division is asked to assume, and the increased expectations as a result of its elevation from bureau to division status.

The failure to meet expectations with respect to the construction of community facilities for the mentally retarded is duplicated with respect to the construction authorization and appropriation for workshops, which is administered by the Rehabilitation Administration. We had looked forward to having something like $9 million this coming year and only $3.85 million has been requested.

We are, of course, very much aware that the administration and the Congress are under great pressure. I think that the domestic program inevitably must be cut below what we would have hoped and expected, but I think that it is important that we all recognize that in some instances we are losing ground and that our efficiency in meeting human needs in this country is being undermined not only temporarily but also for some time into the future by this forced economy.

We appreciate the opportunity of appearing.

Mr. Flood. Thank you very much, Mrs. Boggs. You are very understanding.

Health Services

Thursday, April 27, 1967.

WITNESSES

DR. AMOS N. JOHNSON, AMERICAN ACADEMY OF GENERAL PRACTICE

DR. MURDOCK HEAD, MEMBER, AMERICAN ACADEMY OF GENERAL PRACTICE

Mr. Flood. We will now hear Dr. Amos N. Johnson from the American Academy of General Practice.

STATEMENT OF DR. AMOS N. JOHNSON

Dr. Johnson. I have with me today Dr. Murdock Head, a member of the American Academy of General Practice, who is a very knowledgeable person in the general area of the provision of health care for people in this country. I asked him to come along with me.

Mr. FLOOD. You are a doctor of medicine?

Dr. JOHNSON. Yes, sir.

Mr. FLOOD. And are you a doctor of medicine?

Dr. HEAD. Yes, sir.

Dr. JOHNSON. Thank you, Mr. Chairman, I am most appreciative of having the opportunity to discuss with this committee some of the health management problems existing in this country today which deserve our attention if we properly address ourselves to the desirable health goal of providing comprehensive quality health care to all citizens at a price which they can afford.

As stated, I am Dr. Amos Johnson, I provide health care services for a community in rural North Carolina. I am immediate past president of the American Academy of General Practice and currently chairman of this Academy's family health care services committee.

Mr. FLOOD. I understand there is a movement afoot to make general practitioners respected again.

Dr. JOHNSON. Not only respected, but the most respected in the whole area, I believe.

I have here with me today Dr. Murdock Head, a member of this academy. Dr. Head is an outstanding physician, who is interested and knowledgeable in the area of health care. As the immediate past president of the American Academy of General Practice, member of its board of directors, and chairman of the family health care services committee, I have traveled much and talked to many of my fellow physicians. Often these physicians express grave concern about the increasing difficulties which the medical profession experiences in meeting its professional obligation to American families.

Mr. FLOOD. You may have the statement you have presented put in the record, if you desire.

Dr. JOHNSON. Yes, sir.

Mr. FLOOD. That will be done.

(The remainder of statement follows:)

What difficulties obstruct the fulfilment of these obligations? This is a complex problem, but, at the risk of over simplification, I will attempt to outline the major problem areas. Two of the major factors contributing to the complexity of this problem are the steadily rising costs of health care and fragmentation in the manner of delivery of health care services to people.

Rising health care costs have increasingly created difficulties for the purchaser as well as the purveyor of services, alike. Total consumer expenditures for medical care have risen from $5.2 billion in 1945 to $26.2 billion in 1965, this in a mere two decades. In terms of gross national product, this represents expenditures of approximately 2½% of the GNP in 1945 as compared to approximately 6% in 1965.

During the period 1950–1960, the national cost of medical care services rose 44.7% as compared to an overall increase of 23.5% for all consumer purchases. During this same period of time, family expenditures for medical care services rose 80.2% as compared to an overall increase in expenditures for all consumer goods and services of 41.5%.

Part of these increased costs has been due to the increase in resource costs being met by the physician, including increased costs of supplies, equipment, facilities, interest on borrowed capital and, importantly, the increased costs and needs for paramedical health assistants. These latter personnel costs have risen sharply and have been further aggravated by the overall shortage of health personnel, both within professional and nonprofessional categories.

The rapidly growing trend toward increasingly narrower medical manpower specialization in recent years has magnified considerably the second contributing factor to the problem. This trend is shown in the following data:

	1931		1960		1964	
	Number	Percent [1]	Number	Percent [1]	Number	Percent [1]
Specialists	22,158	14.5	97,291	38.4	107,329	40.8
General practitioners	112,116	73.6	74,553	31.4	68,326	25.9

[1] Percent of total physicians in private practice.

Looking just at the period from 1960 to 1964, while there has been a total increase of about 10.7% in the number of physicians in private practice; there has been a remarkable increase of about 17.77% of physicians in specialty practice and a concomitant decrease of about 8.4% in general practitioners.

The abilty of our Nation's health care systems to cope with the growing demand for increased health care services is diminished to a considerable degree by such specialization.

But perhaps even more seriously, the trend to specialization has contributed to the growing problem of episodic and of uncoordinated delivery of health services to our people. There is an increasing need and demand for the treatment of the "whole" patient in terms of his total health care needs, considering not only specific conditions that occur, but treating him also in terms of evaluation and control of risk potentials of other illnesses. In order to meet the need of the "whole" patient, the physician must treat not only his physical ailments but must be prepared to consider and evaluate the effects of his total socio-economic environment to determine the causes and factors which adversely affect or potentially affect his health and well-being and that of his family. This then points up the need for the development of a physician who can MANAGE comprehensive services to the total patient and his family, himself. PROVIDE much of the needed remedial care, COORDINATE the actions of the total team of health specialists through needs oriented health programs, and EVALUATE the positive effects of these services within the conceptual framework of comprehensive personal health care services. Such a physician truly serves as the manager of personal and community health services which must be programmed to offset the health problems affecting the individual and the family.

Health care in its totality today has become a leading industry in the nation, with total expenditures ranging over 40 billions of dollars annually. Yet, there is evidence that our nation lags behind other highly developed countries in our world in terms of general health status.

The question which must be asked at this point is—what do we need in health care systems today to assure positive and progressive health status improvement? Can we be content with the simple serial expansion of medical care resources on an "as is" basis, or must more concentration and effort be directed toward the development of a truly comprehensive system that directs itself to specific health care problem solution? I think that the inevitable choice is the latter one.

The next logical question, of course, is—what constitutes a truly comprehensive personal health services program? I agree with Dr. C. J. Wagner of the PHS, Bureau of Health Services, who lists three basic elements of activity, namely: Normal Development, Repair, and Containment.

Normal development consists of those efforts expended to preclude and forestall the occurrence of a disease or a deleterious health experience, as well as the service given, not necessarily to prevent or to cure, but, to insure that the individual may have the opportunity to develop normally. At one end of this spectrum is childbirth and, at the other, is improving the abilities of the aged to live productively.

REPAIR involves the efforts expended in the cure or remedy of illness and in rehabilitative efforts designed to return of the individual to a normal state and function.

Containment is that care directed to people who can't be cured completely of chronic disease, mental illness, diabetes, arthritis, or conditions of old age which health care services will "contain" their illness or disability at the most minimal level.

For the physician-manager to assume his responsibilities for the provision of comprehensive personal health services for families, he must be knowledgeable

about both the health problems affecting the family and the health resources available to meet those problems. He must devise methods and procedures which will ensure the maximum health services to the maximum number of people, at the lowest possible cost. He must maximize the potentials of his supporting health personnel both within and without his span of immediate control, and assure maximum use of their services. The use of allied medical personnel such as nurses, pharmacists, and environmental hygienists, etc., becomes of major concern as he matches all health care resources against the health problems, family after family. He pragmatically demonstrates the results of his efforts by obtaining a high level of immunization, a safe water supply, an adequate and nutritious diet, better housing and better health practices, and a higher level of total national health, by a measurable reduction in the illnesses and infirmities which beset mankind.

I see the role of the family physician of the future in private practice in a similar fashion. He will assume a responsibility for a positive health program for the families that make up his practice. He will collect the data necessary to evaluate their health status, anticipate their health risks and needs and provide them with a positive program which will not only meet their acute needs but ensure the application of modern prospective preventive measures at a time in life when long-range accomplishments may be achieved by implementing this program, the family physician then manages the community resources that are available—medical specialty services, local health and welfare department services, homemakers services, etc. In so doing, he assures the most efficient and prudent use of these resources and thereby assures the greatest possible continuity of benefit to the family at the most reasonable cost.

In order to fulfill the role just described, the family physician in his period of training and orientation will need a varied or broad set of experiences and training including the following:

1. He must be well grounded in the health maintenance and health care problems encountered by *all* age groups and, at the same time, be sufficiently knowledgeable of the potential of the specialties to recognize the need and obtain for his patients services in these areas.
2. He must develop and retain knowledge and experience as to the interrelationships between the individual members of the family itself, and the total relationships between each family and the community.
3. He must have knowledge of the total health resources available in the community to serve the family and its interrelationships.
4. He must then develop knowledge of what constitutes the best blend of health services which will provide, within the availability of the family and community, the highest possible level of positive health.
5. This family physician then must have the training and capability to serve as both a manager and a provider of health services.

For family physicians currently in practice to acquire the needed proficiency in these areas of comprehensive personal health services management, a program of retraining is required. The nation cannot afford the luxury of continuing the present inefficient trends whereby physicans increasingly see a very limited number of patients each day. Fewer physicians must provide more health services for the health needs of more people. To achieve the immediate health objectives of this nation in pursuit of its goal of adequate excellent health care for all, I recommend for this committee's consideration that—

1. Federal assistance be provided to support the conduct of demonstration studies utilizing fully the private sector of medicine to determine the most practical ways in which family comprehensive health care services may be medically managed to meet the health needs of families living in rural as well as urban areas. Information gained through these demonstration projects will be useful not only in application to the nation's health care systems but also, most importantly, for redesign of medical curriculum to develop the family physician of the future.

Specifically, the American Academy of General Practice is interested in sponsoring 10 or 15 pilot projects in a variety of locations throughout the country to determine those responsibilities in which family physicians can be most productive in serving as managers of health services. The studies would give insight into such important matters as financing the three important components of health care as set out previously: namely, normal development, repair and containment. Also, these studies would develop factual information as to the maximum efficient patient load for physicians providing comprehensive quality health services through this mechanism.

2. Federal leadership and support be provided for the development of innovative departments of family and community medicine in our medical schools to assure a full supply of this needed specialist in social, community and family medicine.

3. The Public Health Service continues to place stress in its research programs in the area of health services research designed to rapidly bring the knowledge of improved ways of delivery of personal health services directly to the American people.

4. In order to provide family physicians with additional skills as providers and managers of comprehensive personal health services that seminars and training programs in the field of personal health services, planning should be fostered as a cooperative effort between the Public Health Service and the private segment of medicine.

Mr. Chairman, on behalf of the 30,000 members of the American Academy of General Practice, America's Association of Family Physicians, and an additional 50 or 60 thousand non member General Practitioners, I thank you for the courtesies extended me by your Committee.

I hope that your Committee, and ultimately the Congress and citizens of the United States will recognize that a progressive segment of Americ a's physicians has presented, here today, a positive approach directed to the solving of our recognized health care problems.

Dr. JOHNSON. I would like to express to you in general the thoughts involved in the statement.

Mr. FLOOD. Are we going to get back to general practitioners?

Dr. JOHNSON. Yes, sir; we are going to get a new breed, a breed of well-educated, skillful purveyors of health care to the people in this country whose main job will be to function as the overall coordinator for the provision of health care to the people in this country.

Mr. FLOOD. Of course, the general practitioner is more than merely a doctor of medicine. He is the father confessor, he is the doctor of medicine, he is the confident, he is quite a fellow, you know. He used to be.

Dr. JOHNSON. Well, sir, he still is. I have been doing this for 33 years and to me the playback that I get from my patients for a job well done in guiding them through the maze——

Mr. FLOOD. All sorts of things?

Dr. JOHNSON. All of the complications involving health care——

Mr. FLOOD. What school should my son go to—when you are taking his pulse?

Dr. JOHNSON. I would recommend that your son enter medical school with the dean of the school in Pennsylvania, Dr. Harrell.

Mr. FLOOD. When you are taking the pulse of this fellow in bed, he is liable to ask you what you think about the fellow his daughter is engaged to, and you are supposed to have an opinion.

Dr. JOHNSON. Generally I do because in my community I know everybody there and if your daughter has been courting with some of the fellows in the community, I can express a real good opinion about them because I delivered most of them, you know.

Mr. FLOOD. Go ahead.

Dr. JOHNSON. We believe that what the American people are asking today, Mr. Flood, is for more available high-quality medical and health services.

Mr. FLOOD. How about this regional business?

Dr. JOHNSON. I like it very much and I think it has very great potential to improve the quality and availability of care throughout—I started to say "several"—throughout the many regions that will be identified in this country.

But what we think is that people are not necessarily asking for more doctors. Medicine is trying to produce more doctors. Dr. Harrell, whose school will open this fall, will produce more, but in the foreseeable future, in my lifetime, we can never produce enough doctors to provide the services that the people in this country are demanding, the sophisticated public is demanding now, and what we have to do is better utilize the services of those who are trained to provide medical care than we are utilizing at the present time.

There are all too many doctors who are going into subspecialities and very narrow splintered areas of specialty service where they are able to serve only two or three or six or eight or a half dozen sick people a day.

Mr. FLOOD. They are beginning to specialize in one kidney, aren't they?

Dr. JOHNSON. Well, sir, if it happens to be the only kidney the person has, and a horseshoe kidney, yes, sir.

But we contend—and there are many, many who will agree with us—that a person can be trained to learn his community of patients and thereby be better able to supply more medical services to the people in the area than if they were fragmented and sent, scattered around among medical specialists.

You know, you, as a person, can allocate your heart to a cardiologist and you can allocate your kidney to a urologist but man is more than a physical being; man is mental, man is spiritual, man is emotional, man is social, and you can't proportion your emotions and your spiritual body out with your limbs and lungs and organs and disease processes to specialists. Somebody has to look after the whole person within the context of what we consider as good health care—not medical care. You know, I am glad to see that we are getting some more of our educators into the room. Medical education has come a long, long way. Medical scientific research has come a long, long way, and we have an immense body of scientific knowledge which is good for our patients but at the same time that we have progressed scientifically in research in the basic sciences and scientific medicine——

Mr. FLOOD. This is an appropriations subcommittee. Why are you here?

Dr. JOHNSON. I am here, sir, to ask you for money to implement what I was just fixing to say, that we need money to do research in the very fundamental area of the provision of medical services.

We know now what to do but we don't know how to provide it for the people, and we don't know how to get the people into the cycle of receiving medical care.

We know that 25 percent of all of the people in this country will not accept medical care if it is free, unless they are hurting or unless they are crippled. If they are hurting and crippled and come to a doctor, the minute they get so they can walk again or are free of pain, you don't see them.

Mr. FLOOD. Whose cause are you pleading here now?

Dr. JOHNSON. The American people.

Mr. FLOOD. I know, but you are asking for money.

Dr. JOHNSON. Yes, sir.

Mr. FLOOD. You are suggesting we give somebody money. Who?

Dr. JOHNSON. I am suggesting that money be allocated to the

Bureau of Medical Services of the U.S. Public Health Service to work with in the area of research in the provision of medical care, and to have moneys available to finance the creation of departments of family practice in medical schools to train these people.

Mr. LAIRD. Not only are you interested in the curriculum, but you are also interested in seeing that the research developments get to the American people.

Dr. JOHNSON. That is what I am basically saying; yes, sir.

Mr. LAIRD. We can spend all the money we want to on research, but if we don't get it to people through individuals such as yourself——

Dr. JOHNSON. It isn't worth the risk.

Mr. LAIRD. It isn't worth a thing.

Dr. JOHNSON. Not at all.

Mr. FLOOD. Mr. Laird and I are on the Defense Appropriations Subcommittee as well. You can't imagine that, perhaps, but we really are.

Our problem during the war was to stop these flyboys from coming up, every day we had a meeting, with a plan for a new bomber. We finally had to say we need planes in England in the morning. We need designs for next year and the year after and the next generation, but we need aircraft in London tomorrow. I think that is what Mr. Laird means and so do you.

Dr. JOHNSON. I believe that is the concept I have in my statement which I chose not to read to you because you will have time to read it and you can read it for yourself.

Mr. FLOOD. You have been here as long as we have, nearly.

Dr. JOHNSON. I would like to say another thing, because I think the next group will be representing the Association of American Medical Colleges. I would love for our organization, our 30,000 members and an additional 50,000 who practice as general practitioners whom I represent here today, to be on record as supporting moneys to be made available directly for teaching. Presently the bulk of the money that these gentlemen get in their teaching efforts in medical schools comes through the guise of research, and we need teachers, and we need people who are astute at teaching, equally as astute at teaching as they are at research, and I would love to put in a word for that and I hope maybe they will speak to it as they come along.

Mr. FLOOD. Of course, they are a specially motivated breed.

Dr. JOHNSON. Yes, sir.

Seriously and sincerely, read my statement, please, and give thought to what I am telling you, that we have doctors now who, if they were trained to provide medical services—and by that I mean preventive medicine, prospective preventive medicine, rehabilitating people, indeed, before they become debilitated—that we do believe we could supply ample medical care to our people if we had enough for the basic physicians, the family physicians trained to do this.

Mr. FLOOD. You are amicus curiae; you are a friend of the court.

Dr. JOHNSON. Yes, sir.

Mr. FLOOD. Thank you, Doctor.

STATEMENT OF DR. MURDOCK HEAD

Dr. HEAD. Since last year when we testified before the committee regarding information to the public, that we have now successfully

produced several programs and have distributed them in cooperation with the Academy, in terms of interpreting the research——

Mr. FLOOD. Who is "we"?

Dr. HEAD. My department in George Washington University—the department of medical public affairs.

Mr. FLOOD. So you are a propagandist?

Mr. LAIRD. Not only that, but he is a doctor, a dentist, and a lawyer.

Dr. HEAD. Mr. Murrow said, "I am proud to be a propagandist. CBS used to pay me $250,000 a year and you pay me 21."

The Academy has been very helpful to us in not only the smaller communities, but in the larger communities, in placing our programs in medicine in prime time on television. We have had so many very happy relationships working with Dr. Johnson in the Academy in achieving prime time for medical programs.

Mr. FLOOD. What do you sell? What is your product?

Dr. HEAD. Well, our product is a documentary. The last one was air pollution, "Beware of the Winds," which we just did. We have done one on cancer, with Dr. Farber. We have done one on rehabilitation with Dr. Rusk.

Our role, as we see it, is to interpret some of these complex areas which come up as a result of research and get it to the public, to the consumer. We have been pleased to find that members of the Academy in important cities like Detroit have been able to work with us and place our programs in prime time on open circuit television where we would not have gotten exposure except for an association with the Academy.

We feel that they are doing a real job, not only in their own area of post graduate education to their members, but any important area of what Mr. Laird suggested a minute ago of disseminating the information to the public. After all, if the consumer doesn't know what to expect out of a doctor, or out of health care, then he doesn't know what to demand.

Mr. FLOOD. Mr. Laird is unhappy about an information gap at this point.

Dr. HEAD. This is my specialty. I don't fill it. I have just taken one step. We need a couple hundred others to fill it, but we have been fortunate to move the programing from ghetto time, which is before mass on Sunday morning, to prime time in New York, Chicago, Detroit, Los Angeles.

Mr. FLOOD. Good. We have been happy to hear from you.

THURSDAY, APRIL 27, 1967.

MEDICAL SCHOOLS AND ASSOCIATED ACADEMIC MEDICAL CENTERS

WITNESSES

DR. WILLIAM N. HUBBARD, JR., PRESIDENT, ASSOCIATION OF AMERICAN MEDICAL COLLEGES
DR. JOHN PARKS, PRESIDENT-ELECT, ASSOCIATION OF AMERICAN MEDICAL COLLEGES
DR. ROBERT C. BERSON, EXECUTIVE DIRECTOR, ASSOCIATION OF AMERICAN MEDICAL COLLEGES
DR. ROBERT M. BUCHER, DEAN OF THE SCHOOL OF MEDICINE, TEMPLE UNIVERSITY
DR. GEORGE T. HARRELL, DEAN, MILTON S. HERSHEY MEDICAL CENTER OF PENNSYLVANIA STATE UNIVERSITY
DR. MANSON MEADS, DEAN, BOWMAN GRAY SCHOOL OF MEDICINE, WAKE FOREST COLLEGE

Mr. FLOOD. We will now hear Dr. Robert C. Berson. Dr. Berson is the executive director of the Association of American Medical Colleges. Do you have some people with you, Dr. Berson?

Dr. BERSON. Dr. William Hubbard, the president of the association, will actually be our principal spokesman, and Dr. Bucher is also with us; Mr. Meads of Wake Forest University; Dr. George Harrell.

STATEMENT OF DR. WILLIAM N. HUBBARD, JR.

Dr. HUBBARD. Mr. Chairman, we appreciate the opportunity to appear before you.

We appeared before you informally some time ago and at the time I introduced myself as president of the Association of American Medical Colleges from the University of Michigan.

The association, as you will recall, does represent all of the medical schools, both established and developing, in the United States—some 100.

My testimony is derived from direct conversation and questionnaire material from all of the 88 schools, so it represents our best estimate of their interpretation of their needs. Each of my colleagues will be pleased to respond with me to questions, or engage in commentary with the committee, as you may see fit.

We appear before you in a mood of very grave concern that the medical schools and their associated academic medical centers must be provided with the resources they need to satisfy the expectations for increased numbers of physicians and for the knowledge and skill these physicians need—this is our obligation to society. We are in fact not producing physicians at a rate fast enough to keep up with the growing population. We maintain our physician-population ratio but each year there are 6,000 physicians from other countries who enter the United States, most of them, to be sure, temporarily, but 1,500 physicians a year from foreign——

Mr. FLOOD. Are these people well trained according to our standards?

Dr. HUBBARD. We believe they are not. According to our standard, we believe they are not and recently within the association we have had a

study made of the judgments of directors of hospital training programs, asking them to compare the foreign graduate to the American graduate and our impressions have been confirmed that they do not compare favorably.

The point I am making is, although we have a social obligation to produce the physicians that society needs, we are in fact 100-odd—in the sole source of the production of physicians—we are painfully aware we are not meeting that obligation and we will not meet it unless we have more adequate support.

Although at present the numerical physician-population ratio is being maintained, it is being done through the entrance into practice of 1,500 foreign graduates a year, which is the equivalent of over 15 American schools.

Now, we need to at least double the number of schools in development. We have 14 now. We need at least twice that number and we need to expand existing schools; we need to sustain and improve the quality in our schools. All of this in order to meet the extraordinary increase in demands for health services that you all are so familiar with.

Now, we are also aware of the very serious problems in budget that the Congress faces this year, and when we state these needs, it is not without the realization that we are among many who are calling upon funds that are seriously limited.

However, it must be understood that the real needs of the academic medical centers, if they are to meet their public responsibilities, actually far exceed the recommendation in the administration's health budget. Every university medical center in the United States, whether State or private, is in trouble financially and some are truly in desperate straits. If they are going to meet their expanded obligations, then they will have to have the space; they have to have stable program support for their educational efforts; they will have to have the clinical resources that are necessary for their teaching and for their research in order that they can contribute in each of the three realms where they have essential roles. In teaching and in research and in patient care.

The academic medical centers are small in number. I repeat, there are only 100 in various stages of development in the United States, and it is from these institutions alone that our physician manpower is going to come through the middle 1970's. That is our national resource. It is principally from the same 100 that our major research output will come. Our teachers in the basic sciences that will be necessary for this array of related health personnel—physicians' assistants—will get their primary education in the academic medical centers.

The nursing educators will get their training in the academic medical centers. Most of the hospital administrators, and so on.

The point I would make is that we talk not merely to the importance of the primary education position alone, but to the total educational responsibility of the academic medical center.

The State and private agencies cannot provide all of the funds that are needed, nor have they in the past, and for the simple reason that these programs have national, as well as local purpose. Unless adequate funds from Federal sources continue and are supplemented, then the obligations people have every right to expect from us will not be met.

Therefore, even in the face of the knowledge that this year's budget may not allow the committee to do all that it might wish, we nevertheless urge most strongly that every effort be made to assure that the funds that are appropriated to help related education research and service are as nearly adequate as they can be to meet the needs and the expectations of our people.

If we were to lay one requirement before you in particular, it would be the requirement for construction. The greatest single limiting factor on expansion——

Mr. LAIRD. This budget shows the biggest cut in construction. This is one of the problems before this committee because the budget this year shows a tremendous reduction in what people had anticipated for this year.

Dr. HUBBARD. We have noted that. As you point out, this is a very, very troublesome matter. Not only has the recommendation for health educational facilities been reduced, but veterinary schools have been given eligibility, which means that the overall availability funds have been diluted more than one would estimate when first looking at the construction allocation.

I think from all of our schools the one element that places the sharpest description on the expansion of their programs is the availability of space. Space in their classrooms, teaching laboratories, space in hospitals and ambulatory clinics, space in research laboratories, space in the present reporting research laboratories and particularly animal care facilities, adequate library space. All of these are essential to the interrelated programs of the medical centers.

Mr. Chairman, we have probably not said anything that you haven't heard many times before. We are pointing out that the academic medical centers are not in fact producing either manpower or knowledge, or skills as rapidly as the public needs, and that unless the resources so necessary for this are provided, there is no alternative resource available. It is the 100 academic medical centers that constitute the national resource for the production of these essential elements.

We then turn to construction as the principal limiting factor that our lending institutions have advised us stands in the way of their expansion of programs, and construction that serves a total range of medical center activities; classrooms, clinics, research laboratories, libraries, animal care facilities; all of these in an integrated, planned development, are necessary.

The budget for 1968 for health educational facilities, as you know, calls for $175 million. According to our information from our schools, there is already $100 million that has been approved and unfunded, and another $5.7 million that has been tentatively approved and, as we calculate it, there are 120 letters of intent on file with over $475 million of proposals for educational facilities construction.

Mr. LAIRD. You know I went into some of those, Doctor, and they are not very firm. The problem is those figures in the letters of intent aren't very good figures to use.

Dr. HUBBARD. I would agree that I would not want to stand by that figure except that it expresses——

Mr. LAIRD. It could possibly be higher, but it probably isn't quite that high.

Dr. HUBBARD. The only conclusion that we could come to of which we were certain was within the amount of $100 million already ap-

proved and the amount of $185 million didn't seem to be excessive and we hope the full amount authorized by the Congress would in fact be appropriated rather than the reduced amount recommended in the budget.

If we look at health research facilities, only $50 million is called for in the administration's budget.

As you all are very well aware, from 1967 through 1969 the Congress authorized $280 million. Only $35 million of the $50 million appropriated was actually released for expenditure, and if we add that to the $50 million that is proposed, we get only $85 million for the first 2 of 3 authorized years, leaving a phenomenal balance of $195 million for assignment in 1 year.

Now, there is already a backlog of approved requests here totaling $60 million, and with full agreement with Congressman Laird, that the letters of intent are simply that there is, nevertheless, another $82 million that is cited there.

It is our impression that the medical schools could very well and effectively utilize an appropriation of $100 million in fiscal year 1968 as matching funds for health research facilities construction. We request that the committee consider appropriations in this amount.

Animal care facilities represent a very special problem for us. No specific provision is made in the budget to meet the need for improved animal care facilities. Presumably this need is to be met out of the already limited health research facilities appropriation that we have mentioned, and we would strongly urge that the committee add a separate line item of $20 million for the specific purpose of construction of facilities for animal care in the health research facilities budget.

Last year Congress overwhelmingly enacted legislation setting proper standards of care for animals. Our medical schools welcomed the passage of that act and look forward to providing this high quality of animal care, not only for civilized reasons, as citizens of the community, but only healthy and well cared for animals are appropriate to the work that we do in teaching and research. The most conservative estimates that we can find from our institutions—and these, we believe, are reliable—indicate that for the next 5 years an appropriation of approximately $20 million a year is necessary to bring the animal resources up to the level that the intent of the Congress clearly projects in the legislation that was passed last year.

As we turn to libraries, a survey was conducted by the association in 1963 that disclosed construction needs and renovation in excess of $100 million. In recognition of this need, the Congress authorized $10 million a year for 3 successive years. Last year $7.5 million was appropriated, but none was released for actual expenditure for construction and it is not at all clear that these funds will in fact be available for obligation this year.

The budget figure for 1968 calls for only $5 million instead of $10 million.

Five projects have already been recommended for support to the Surgeon General in the amount of $7 million and it is probable that by June another $3.5 million to a total of $10.5 million will be recommended to the Surgeon General.

From the number of library construction grant applications known to be forthcoming, and in negotiation with staff, it is estimated that

approximately $24 million will be required to support these new applications. Under these circumstances, we urge the full $10 million authorized under the law be appropriated. This will leave an unmet immediate need, as well as a deficiency of the future and we would anticipate that additional legislative action will have to be considered in the library field.

Mr. Chairman, I would say all this is fundamental to the total program of education, research, and patient service. All of these construction funds will have to be matched out of our own inadequate resources, so that you might rest assured that the medical schools are very careful not to inflate the size of their construction needs; not only Federal fnuds, but private and State funds are more than equally involved in all of these construction proposals. This construction is absolutely essential if we are to have the space and the facilities within which to do our job.

Now, beyond this we would like to call—beyond construction, we would like to call particular attention to just four items out of the many that we might speak to. These are the needs for the general research support grant, the research training grants, the clinical research centers and the educational improvement grants.

There are probably 20 items, as we have looked through the legislation, that could well deserve comment, and many would represent very wise investments for the future. But out of respect to the overall budgetary limitations, and in an effort to identify those points that are, in our opinion, of major importance, we focus on these four.

If these four areas don't receive the support they need, then there will be an interruption in the growth of programs which by their very nature have to have stable support over many years in order to achieve their goals. This will limit the capacity of the university medical centers to meet the expanded health expectations of the people.

We recommend that the general research support grants should be increased to the full 15 percent of research appropriations that is authorized under the law. The budget calls for an increase of $10.7 million, but almost all of this will go to institutions that heretofore have not been eligible.

The net result is that there will not be an increase in the awards to the medical schools and wherever a program has this leveling of budget in these days of inflation, it amounts to a decrease in the effectiveness of the program.

These general research support grants are of the highest importance to the institutions. They make possible central research support that is otherwise not readily available. Improved animal care management; central facilities available to a number of investigators and teachers who otherwise might have to duplicate them from individual grants; provision of stability of investigators as their programs of research evolve and change. All of these find support from the general research support grant.

Major new programs of research which now, many of them, enjoy independent support, were initiated with the support of this fund. In my own institution at the University of Michigan, just as an example, over 90 percent of the pilot efforts supported by the general research support grant have developed into programs that now have their own independent support.

Through these grants every institution is able to respond very quickly and adequately in the initial phases to the support of research needs, as well as being able to give balance and strength to the research resources of the entire institution.

One of our deans has said—probably accurately—that it is impossible to overestimate the multifaceted value of these grants. I would emphasize that they are awarded as a result of demonstrated research capacity within the institution. They are carefully reviewed to assure that in their expenditure they further improve the basic research capacity of the institution.

In the research training grants only a 3.8 percent increase is recommended. We anticipate there will be a 3.6 percent growth in cost of living. This then, as we see it, is a level of support. The net effect is then that established programs will not experience a normal growth and the needs of the developing and expanding schools will be frustrated.

There are over 800 unfilled fully budgeted faculty positions in medical schools today. To staff the 25 new schools that are needed by 1975 will require hundreds of highly qualified teacher-scientists, whose production depends upon the availability of adequate research training grants.

Once more, using my own university, which I know best, as an example, in the last 3 years over 20 professors have left our medical school to fill chairs or to take over administrative posts in other medical institutions.

Every single one of these important teachers have been supported at one time or another in his career by funds from the National Institutes of Health programs. So we feel it is accurate to say that the training programs from NIH sources are truly essential to the production of the faculty members necessary for the education of the increased number of physicians in other categories of health-related manpower.

Our most conservative estimate shows a need for a minimum of $153.6 million for research training grants instead of the $139.6 million requested in the budget.

Now we turn to the third item, which is the clinical research centers.

A 7-percent increase is proposed for this program and this is inadequate to meet the rising costs inherent in hospital activities. The clinical research centers basically represent a set of hospital beds available for research. It is in this setting that the fruits of laboratory investigation find their prompt application to patient needs.

The problems of renal transplantation, cardiac pacemakers, problems of hemophiliacs undergoing surgery, children receiving transfusions while they are still in the uterus, patients whose intestines don't absorb food normally being restored to good nutrition, all of these efforts are being pursued successfully within these clinical research centers.

Inflation has decreased the purchasing power of hospitals by 10 percent and hospital bed costs alone have risen, as you well know, from 20 to 30 percent in the past year.

The administration budget calls for $30.5 million for these clinical research centers and we urgently request this item be raised to a minimum of $40.5 million. Even that will still not meet the needs

for the development of out-patient versions of clinical research activity which the Congress asked to have developed last year.

The last area of grants that we would call attention to is educational improvement grants. Basic improvement grants are for the purpose of improving the quality of medical education for an existing student body and to increase the size of that student body modestly. Special improvement grants are designed to meet special opportunities and needs that are nonrecurrent.

The recommended appropriation is $2.5 million less than the authorized amount—the $57.5 million instead of $60 million.

Medical schools have reflected in their responses a capacity to utilize with great effectiveness very considerably more than the authorized amount. Because the recommended figure will in fact probably meet the most pressing needs, and out of respect for the overall budgetary limitations we are not requesting at this time an appropriation up to the fully authorized amount. We do, however, plead that the figure as it is recommended in the budget is actually appropriated. The medical schools have accepted a contract with the Government to increase their student bodies and to embark upon programs that have to be long range and stable to improve the quality and efficiency of their medical education as well.

Very heavy commitments have been made to expand student bodies, faculties, teaching resources, and it is important to the continuing confidence of the partnership between the medical schools and the Federal Government that the commitments be met on both sides and the funds authorized to support this major program commitment actually be appropriated in full.

We turn now to the question of the hospitals and patient care facilities.

We would express our very deep concern that the present programs that provide Federal grants for the construction of hospitals, ambulatory clinics, and other facilities for the care of patients are not adequate or even appropriate for the urgent and growing needs of a number of our member institutions, especially for the renovation or replacement of teaching hospitals and especially in urban settings.

The amount recommended in the President's budget should by all means be appropriated, but even if it is there will remain a large unmet need which very seriously impairs the ability of the medical schools and teaching hospitals to expand and improve their education and training of health personnel and develop more effective and more efficient ways of delivering personal health services to patients.

We would call your attention to the needs for student loans and scholarships. Although some provision and important provision has been made for the support of medical students, we think it is important to emphasize that this program should be markedly expanded in the early future. Although education in the health professional schools is very expensive for the individual, these students receive far less in the way of scholarship and fellowship support than any other students at comparable levels in higher education. Yet it is necessary for over half of our young physicians as they graduate from the professional schools to contribute 2 years of active service in the Armed Forces in recognition of this special need. We think that both as a

matter of equity and recognition of their importance to the Armed Forces, the Federal Government should provide for scholarship support.

THE REGIONAL MEDICAL PROGRAMS

The President has recommended just over $80 million for these programs in 1968 and we very strongly support this recommendation. As this program has gotten underway throughout the country, every medical school is involved in intensive planning and cooperation with many other institutions and groups for programs that are appropriate to a region which really gives great promise for making more readily available to all patients, diagnostic and therapeutic procedures through providing cooperation between medical centers and the community in this area. It is important that these plans be put into operation as soon as they are completed, and the determination to see that these important regional medical programs are not frustrated for lack of funds, we suggest and urge that the recommended support in the budget be reflected in appropriations.

Mr. Chairman, the hard fact that we have to face is that there is simply not enough health manpower to meet the needs of the people. There are not enough doctors and there are not enough supporting people. The shortage of physicians, in our opinion, is without doubt the most critical single shortage in the manpower for health service. Although medical schools have increased their capacities and new schools have been created, the increase is not keeping up with the demand. Growing demands for physicians' services, we feel, can only be met by more physicians.

Despite the hopeful offsetting factors of increasing productivity, these new assistants are as yet undefined in category and untried in practice. It is clear to us that more physicians of high quality must be trained as quickly as possible and the resulting increase in the number of physicians will be healthy not only for people but for the profession itself between now and the middle seventies.

We have these hundred medical schools in the United States that can produce the physicians we need. The adequate support of the faculties responsible for this medical education is a prime need for the future health of the Nation. These 100 institutions must not have their potential limited by an artificial shortage of funds, artificial because the investment necessary for them to optimize their output is minuscule in comparison to our country's wealth and in comparison to the enormous benefits that such an expediture would bring to the health of the people.

The university itself is the typical institutional setting of the interdependent programs of education, patient service, and research that form the academic medical centers. There are 10 established centers that are in effective operation to an analogous setting except that the medical school is independent of the university.

The heart of all of this apparatus, the core of the academic medical center, is the faculty and the facilities that are necessary for the education of the M.D. candidate. Then they serve other essential roles simultaneously. Basic medical scientists are also responsible for the graduate degree programs and the research training that are the source of tomorrow's teachers and investigators in the basic health sciences.

The research efforts of the basic health faculty create a scholarly environment needed for the kind of education that prepares the stu-

dent to understand and utilize the scientific advances that will occur during his professional lifetime. These same research efforts produce the knowledge necessary to improve the definition and solution of all the problems that are vital to human health.

With your permission, sir, I will leave off the reading of the testimony that we have and ask your permission to have it appear in the written record and now pause and if there are any questions that might be directed either to my colleagues or myself, we will be pleased to respond.

I do thank you for your very patient and attentive reception.

Mr. FLOOD. We are very glad to have you. The statement will be placed in the record.

STATEMENT FOR THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES CONCERNING APPROPRIATIONS FOR THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE SUBCOMMITTEE ON LABOR-HEW OF THE HOUSE COMMITTEE ON APPROPRIATIONS, APRIL 27, 1967

GENERAL STATEMENT

Mr. Chairman and Members of the Committee. First, let me express my appreciation for this opportunity to testify before your committee. I would like to make a general verbal statement and submit additional testimony which we hope may be included in the records of these hearings but which in the interest of the committee's time will not be read.

My name is Dr. William N. Hubbard, Jr., and I am President of the Association of American Medical Colleges and the Dean of the Medical School of the University of Michigan. The Association of American Medical Colleges represents the 88 established and 14 developing medical schools in the United States. As their spokesman, the testimony I will present is derived from direct conversations as well as written questionnaire responses of the entire institutional membership of the Association of American Medical Colleges.

Accompanying me are Dr. John Parks, President-Elect of the Association and Dean of the School of Medicine of George Washington University; Dr. Robert M. Bucher, Dean of the School of Medicine of Temple University; Dr. George T. Harrell, Dean, Milton S. Hershey Medical Center of Pennsylvania State University; Dr. Manson Meads, Dean of Bowman Gray School of Medicine of Wake Forest College; and Dr. Robert C. Berson, Executive Director of the Association of American Medical Colleges.

Mr. Chairman, I appear before you in a mood of very grave concern that the medical schools and their associated academic medical centers in the United States must be provided with the resources they need to satisfy the expectations for increased numbers of physicians and improved knowledge—that is their obligation to the people of the United States. We are not producing physicians in this country rapidly enough to keep pace with the growing population. We are approximately maintaining our physician-to-population ratio, but an important factor in this is the immigration of substantial numbers of physicians from foreign countries. In each of the last several years, over 6,000 graduates of foreign medical schools have entered this country, and while many of them remain only for a year or two of training, almost 1,500 of them obtain licenses to practice medicine each year and presumambly remain permanently.

Although there are 14 developing medical schools, we need to double that number of new schools and to expand the student bodies in existing schools. The existing schools must strengthen their training programs so that they can provide the needed faculty for expansion and for the staffing of the new medical schools.

The research programs of the National Institutes of Health are of vital importance to the strength of medical education in this country. Most importantly, however, our present level of knowledge cannot solve our health problems, and expanded research is urgently needed if the health of the people is to be improved.

Finally through the Regional Medical Programs and through the new Bureau of Research on Health Services, the university medical centers seek to extend their efforts in the development of models of improved patient care for general community use.

The real need of the academic medical centers of the United States actually far exceeds the recommendation in the Administration's health budget. Every university medical center in the United States, both state and private, is in trouble financially and some are in desperate straits. In order to meet their expanded obligations, all must have the space and the stable program support that is essential for their contributions in education, research, and patient service. The medical centers of the United States are a vital resource for the health care of the people of the nation and are an important part of the total assets of the nation. The academic medical center is the principal source of health manpower, health related research, and the development of new diagnostic and therapeutic procedures. The academic medical center is the only place where physicians are produced. State and private agencies cannot provide the funds required by all of the programs of the academic medical centers since they have national as well as local purposes. Unless adequate funds from Federal sources continue, we cannot fulfill the obligations to the health care of the people that they have every right to expect from us. We, therefore, urge the committee most strongly that every effort be made to assure that the funds appropriated to health related education, research and service are adequate to meet the needs and expectations of our people.

CONSTRUCTION

The greatest limiting factor on the expansion of our output of health related manpower is a shortage of space. Classrooms and teaching laboratories, hospitals and ambulatory clinics, research laboratories and supporting research resources, animal care facilities and libraries are all essential to the interrelated programs of the medical center, None can be postponed without sacrificing the effectiveness of the others, and all should be developed at a maximum speed so that the benefits of an expanded output from the medical center programs will reach the public rapidly.

Health Educational Facilities

The budget for educational facilities calls for $175 million in fiscal 1968. There is already a backlog of 24 approved and unfunded projects totaling $100.6 million and one provisionally approved that raises this figure $5.7 million. There are 120 letters of intent on file projecting an additional $477 million of construction for educational facilities.

In addition, Schools of Veterinary Medicine are now eligible for grants for the construction of educational facilities. If they are to obtain such grants without reducing the amounts available for health professional schools previously available, the amount appropriated must be increased.

We ask that the full amount authorized by the Congress be appropriated—an increase of $10 million for a total of $185 million.

Health Research Facilities

Only $50 million for fiscal 1968 is called for in the Administration's budget. You will recall that after a very careful study Congress authorized $280 million for health research facilities for fiscal 1967, 1968 and 1969. This present year, because of inflationary pressures, only 35 million of the 50 million appropriated was actually released. Adding this year's expenditure of 35 million to next year's budgetary request, we get 85 million for the first two years—representing one-third of the total amount authorized—and leaving two-thirds or 195 million for authorization in the third year.

There is already a backlog of approved requests that have not been funded totaling $60 million and 118 letters of intent totaling an additional $192 million. Obviously, the medical schools could well utilize over $100 million in fiscal 1968.

We ask, therefore, that the committee increase this budget item for health research facilities construction to at least $100 million for fiscal 1968.

Animal Care Facilities

No specific provision is made in the budget to meet the need for improved animal care facilities. Presumably this need is to be met from within the Health Research Facilities appropriation which we have discussed. We strongly urge that the committee add a separate line item of $20 million for the specific purpose of construction of facilities for animal care to the Health Research Facilities budget.

Last year Congress overwhelmingly enacted legislation setting standards for proper care of animals. Our medical schools welcomed the passage of that act and look forward to providing animal care of the very highest quality. Only

healthy and well-cared for animals are appropriate to our essential work of research and teaching.

Our best and most conservative estimates indicate a need for the next five years of an appropriation of $20 million a year to improve the resources for the care of animals so that the intent of the Congress will be fulfilled.

Library Facilities

A survey conducted by the Association of American Medical Colleges in 1963 disclosed a need for construction of and extensive renovation of libraries totaling an excess of $100 million. In recognization of this great need, Cogress wisely authorized in the Medical Library Assistance Act funds amounting to $10 million a year for three successive years.

Last year, $7.5 million dollars was appropriated but none of this was released for actual construction. It is not at all that these funds will be, in fact, available for obligation this year.

The budget figure for fiscal 1968 calls for only $5 million instead of the $10 million authorized. Five projects have already been recommended for support to the Surgeon General in the amount of $7 million and it is probable that by June another $3.5 million to a total of $10.5 will have been recommended to the Surgeon General. From the number of library construction grant applications known to be forthcoming, it is estimated that approximately $24 million will be required to support these new applications.

Under these circumstances we urge that the full $10 million authorized under the law be appropriated. This will leave an unmet immediate need as well as a deficiency in future need for which, we believe, additional legislative action will be required.

Mr. Chairman, I would emphasize that this construction is fundamental to the program of education, research and patient service which the medical centers provide. All of these construction funds will have to be matched out of our own inadequate resources so that you may rest assured that the medical schools are careful not to inflate the size of their construction needs. Not only Federal funds but private and state funds are more than equally at stake. This construction is absolutely essential if we are to do the job expected of us.

NEEDS FOR PROGRAMS OF EDUCATION, RESEARCH AND PATIENT SERVICE

In this portion of this testimony we would like to call to the particular atention of the committee the needs for the general research support grants, the research training grants, the clinical research centers and the educational improvement grants. There are over a score of items in the budget which would well deserve improved support through appropriations. Many such increases would represent very wise investments and needs for the future. We have, however, limited our comments to four areas out of respect for the overall budgetary limitations of the nation and in an effort to identify those areas most important to the production of health manpower. In our opinion, a failure to appropriate the sums requested in these areas would mean a long term waste for a short term saving. It would interrupt the growth of programs which must have stable support over many years and would seriously limit the capacity of the university medical centers to meet the expanded health expectations of the people

The General Research Support Grants

It is recommended that the general research support grants should be increased to the full 15-percent of research appropriations authorized under the law. The budget calls for $56 million—an apparent increase of $10.7 million. The fact is that almost all of this increase will go to newly eligible institutions, making no provisions for the growing need for established institutions. The net result of this, as in any program that is fixed in budgetary support, is to decrease its effectiveness. This general research support grant has made possible improved animal care management, has provided central facilities available to a large number of investigators and teachers who might otherwise have to duplicate equipment, and has provided stability of support of investigators as their research efforts evolve.

Major new programs of research which now enjoy independent support were initiated by the availability of the general research support grant. In our own institution at the University of Michigan over 90-percent of the pilot efforts supported by the general research support grant have developed into programs that now have their own independent support. Through these grants the institution is able to respond quickly and adequately to the support of your research

needs, as well as giving balance and strength to the research resources of the entire institution. One of our deans has said, "It is impossible to overestimate the multifaceted value of these grants."

I would emphasize that they are awarded as a result of demonstrated research capacity within the institution and are carefully reviewed to assure that they further strengthen the research capacity of the recipient instituion.

Research Training Grants

Only a 3.8-percent increase is recommended for the research training grants of all the Institutes of Health—$139,606,000 for fiscal 1968 compared with $134,492,000 for fiscal 1967. 3.6-percent of growth can be conservatively accounted for in the increased cost of living. The net effect is that established training programs will not have normal growth, and the needs of developing and expanding schools' training programs will be frustrated.

Over 800 unfilled positions are budgeted in the medical schools of the United States today. To staff the 25 new schools that are needed by 1975 will require hundreds of highly qualified teacher-scientists whose production depends upon the availability of research training grants. Using the University of Michigan, which I know best, as an example—in the last three years over 20 professors have left the medical school to fill chairs or to take over administrative positions in other institutions. Everyone of these important teachers had been supported at one time or another in his career by funds from NIH sources. It is fair to say then that the training programs for NIH sources are essential to the production of the faculty numbers necessary for the education of increased numbers of physicians and other categories of manpower.

Our most conservative estimate shows a need for a minimum of $153.6 million for research training grants instead of the $139.6 million requested in the budget.

Clinical Research Centers

A 7-percent increase is proposed for this program and this is inadequate to meet the rising costs which are inherent in hospital activities. Clinical research centers represent a group of hospital beds specifically available for research. It is in this setting that the fruits of laboratory and investigation find their prompt application to patient's needs.

The problems of renal transplantation are being solved in these units.

The reasons for breakdown of implanted cardiac pace makers are studied here.

Methods are being developed which allow normal clot formation in patients with hemophilia during surgery.

Infant deaths due to erythroblastosis are decreased by transfusions given to the infant while he is still in the uterus.

Nutrition is restored to a number of patients badly nourished because of defects in absorption from the intestinal tract. These and many other efforts which are a mixture of research and patient care are made possible only with the resources of the clinical research centers.

Inflation has decreased the purchasing power for hospitalization by over 10-percent. Hospital bed costs have risen from 20-percent to 30-percent in the past year.

The administration budget calls for $30.5 million. We urgently request that this item should be raised to a minimum of $40.5 million. Even this amount will still not meet the needs for the development of outpatient versions of clinical centers.

Educational Improvement Grants

Basic improvement grants are for the purpose of improving the quality of medical education for an existing student body and to increase the size of that student body. The special improvement grants are designed to meet special opportunities and needs that are nonrecurrent.

The recommended appropriation is $2.5 million less than the authorized amount—$57.5 million instead of $60 million. Medical schools have reflected in their responses a capacity to utilize with great effectiveness and benefit to the nation considerably more than the figure recommended in the budget. Because the recommended figure will meet the most pressing needs and out of respect of the overall budgetary limitations, we are not requesting that the appropriation be increased to the fully authorized amount. We do, however, plead with you to see to it that this figure as it is recommended in the budget is actually appropriated.

The medical schools have accepted a contract with the government to increase their student bodies and to embark on programs that must be long-range and stable to improve the quality and efficiency of medical education. Heavy commitments have been made to expand student bodies, faculties and teaching resources. It is important to the continuing confidence of the partnership between the medical schools and the Federal government that the commitments be met on both sides and the funds authorized to support this major program commitment actually be appropriated.

Hospitals and Other Facilities for the Care of Patients

We are deeply concerned about the fact that the present programs providing Federal grants for the construction of hospitals, ambulatory clinics, and other facilities for the care of patients are not adequate or appropriate for the urgent and growing needs of a number of institutions, especially for the renovation or replacement of teaching hospitals, particularly those in urban settings. The amount recommended in the President's budget should, by all means, be appropriated, but if it is, there will remain a large unmet need which seriously impairs the ability of many medical schools and teaching hospitals to expand and improve their education and training of health personnel and develop more effective and more efficient ways to deliver personal health services to patients.

Student Scholarships and Loans

The President has recommended that the amount authorized be appropriated, and we strongly support that recommendation. We think it is important to emphasize, however, that this program should be markedly expanded in the early future. Although education in the health professional schools is highly expensive for the individual, these students still receive far less scholarship support than any other students at comparable levels in higher education. It is necessary that about half as many young physicians as graduate from medical school go on active duty with the armed forces each year to keep these indispensable programs going, so we think the Federal government should provide much more scholarship support.

Regional Medical Programs

The President has recommended that just over $80 million be appropriated for these programs in 1968, and we strongly support that recommendation. As this program has gotten underway throughout the country, every medical school is involved in intensive planning, in cooperation with many other institutions and groups, for programs appropriate to that region which give great promise for making more readily available to all the patients certain diagnostic and therapeutic procedures, improving the cooperation between institutions, the effectiveness of health personnel and their continuing education. It is important that plans be put into operation as they are completed so their substantial benefits will soon be available to physicians and their patients.

Mr. Chairman, the academic medican centers of the United States through the Association of American Medical Colleges accepts the responsibility they have to serve the health needs of the people. Proposals that have been made for the support of medical education, research, and patient service by the Federal government represent its essential contribution to the capacity of the medical centers to fulfill their responsibilities to the people.

I would respectfully request that additional written testimony be accepted for the record. The opportunity to testify before your committee is deeply appreciated and my associates and I will now be pleased to respond to comments or inquiries from the committee.

APPENDIX

Manpower Requirements of the Nation

The first hard fact to be faced is that there is not enough health manpower to meet the needs of the American people. There are not enough doctors and not enough supporting people. The shortage of physicians is beyond a question the most critical single element in manpower for health service. Although medical schools have increased their capacity to educate physicians and new schools have been created, the increase in the supply is not keeping up with the need. In light of the growing demands for physician's services despite the hopeful offsetting factors of increasing his productivity by training as yet undefined categories of assistants, it is clear that more physicians of high must be trained as quickly as possible and that the resulting increase in number of physicians will be

healthy not only for the nation but for the profession itself. Between now and the middle seventies, we will have approximately 100 medical schools in the United States which can produce the physicians we need. The adequate support of the faculties that are responsible for this medical education is a prime need for the future health of the nation. These 100 institutions must not have their potential limited by an artificial shortage of funds. Artificial because the investment necessary for them to optimize their output is miniscule in comparison to our country's wealth and in comparison to the enormous benefit such an expenditure would bring to the health of people.

The university is today the typical institutional setting of the interdependent programs of education, patient service and research that form academic medical centers, and ten established academic medical centers are in effective operation with have an analogous setting except that the medical school is independent of a parent university.

The core of the academic medical center is the faculty and facilities necessary for the education of the M.D. candidate. But other essential roles are simultaneously served. Basic medical scientists are also responsible for the graduate degree programs and the research training which are the source of tomorrow's teachers and investigators in these basic health sciences. The research efforts of the basic health faculty create the scholarly environment needed for the kind of education that prepares the student to understand and utilize the scientific advances that will occur during his professional lifetime. These same research efforts produce the knowledge necessary to improve definition and solution of problems vital to human health.

The clinical faculty adds the responsibility for patient care to its obligations for teaching and research. Both the medical school and the hospital phases of the physician's education are shared by the clinical faculty while they are increasingly sought after for the postgraduate education of the practicing physician. Research and research training programs both basic and applied are necessary for these teacher-physician-scientists to translate laboratory findings into improved patient care and more effective teaching. Commonly, this same medical faculty shares responsibility for teaching students of dentistry, nursing, pharmacy and supporting health workers.

The academic medical centers vary widely in their organization for patient service, but all have the obligation to provide examplary patient care under faculty responsibility. This high level of patient service is not only necessary to medical education and medical research but is also an important community resource.

Every academic medical center in the United States is in trouble financially and some are in desperate straits. Improved support is needed to support quality of their existing program; to permit them to enlarge their output of essential medical manpower and to provide for new programs and to enhance delivery of health services. The institutional integrity of the academic medical center is essential to the attainment of the separate and collective missions of teaching, research and patient service; so it is necessary that the total effect of these separate programs preserve the inseparable dependence of teaching, research and patient care within the academic medical center. Programs of federal agencies conducted in cooperation with academic medical centers should produce the specific results required by the mission of the granting agencies but should also add to the increasing institutional strength of the academic medical centers within which these missions are fulfilled.

The expectations of the people will only be fulfilled through an increased output of physicians well grounded in modern science along with other professional and supporting health workers; through continued pursuit of both basic and applied research; and through new methods which will enhance delivery of health service in the community. For each one of these functions, the medical schools and their teaching hospitals constitute an essential national resource.

Research Grants and Research Training

A sustained and generous commitment to independent basic and to applied research should be maintained. Directed research and applied research should be supported as a supplement to and not as a substitute for independent research and research training. A dynamic relationship must be maintained permanently between research and instruction. Progress in medical science can be made most effectively when we understand that research and instruction are inextricably intertwined. To a major degree, instruction and research are not separate items at all. Research is an instrument not only for obtaining new knowledge but for

creating an environment for teaching and learning. Medical students are properly being integrated into research activities as a regular part of their laboratory and classroom assignments to an increasing extent.

Regrettably large amounts of public and private funds which have been provided in recent years have been exclusively for research and this has fostered the view that medical research and medical education are functions apart. An unwillingness to accept and act upon the concept that research and education are functions in common has in fact tended to separate the benefits of research on the educational process. Critics of research and of the education of physicians have stated that too many physicians are being diverted from patient care into research. The charges of this nature are misleading and incorrect. Research programs have helped establish the highest standard of medical care in history and patients are receiving continuously more effective care by virtue of the increasing proportion of investigators. The practicing physician must himself understand and engage in a continuing study of research in order to evaluate the vast array of complex information that becomes available throughout his professional life. The recommended increase for research grants in the budget is $35.7 million over the expenditures for 1967. Anticipated inflation of 3.5 percent will absorb $15.7 million of this increase. At the present time there is probably a backlog of approximately $35 million of approved but unfunded grants.

At a time when new medical schools are developing and there is a national interest in creating more widely dispersed centers of excellence and research, it is our opinion that the recommended amount will not maintain the momentum of medical research that is desirable.

A wider distribution of our present level of ignorance will not resolve the health problems of the people. It is necessary that we have improved knowledge rapidly and consistently as we can produce it is we are to make major improvements in the effectiveness of health services that are available.

Health Service Facilities

We do not recognize within the recommended budget provision for funds with which to modernize or construct facilities for patient care which will allow our existing medical schools to demonstrate optimum patient service and allow them to respond adequately to new and increased demands for patient service. The teaching hospital of the United States within academic medical centers must be maintained as models of excellence for the entire community.

Basic Education Improvement Grants, Special Educational Improvement Grants and General Research Support Grants

These three grants are of singular importance to the academic medical centers of the United States in providing the institutional strength and stability that is necessary.

These 100 institutions will play a central role in the development of the regional medical programs for heart disease, cancer and stroke and related diseases.

These institutions will be largely responsible for providing the basic scientists who must be teachers in all of the educational institutions in the United States concerned with the training and education of health related manpower at community college and university level.

These 100 academic medical centers must assume the obligation of research and medical services in order to create models that can be adopted by the entire community.

The academic medical centers have the potential of working as models for group practice—a form of medical care which is generally conceded to be of the greatest importance for the future but which has grown at a disappointingly slow rate in the past.

The academic medical centers are the only source for experimentation on the total span, on the total education of the physician—looking forward to improving its quality and hopefully shortening the total span of education.

From the same 100 academic medical centers will come most of the nursing educators, many of the hospital administrators, all of the new physicians that the country needs. The present level of appropriations for the basic educational improvement grants, the special educational improvement grants and the general research support grants is most seriously inadequate to meet the needs of the 70's. We are aware of the sharp budgetary limitations that confront the United States today. We would, however, be remiss in our responsibility if we did not inform the Congress through this testimony that the needs for these awards that provide basic institutional strength are several fold at the present

level, if the expectations of the program already underway are to be fulfilled. We recognize that it is not reasonable to expect a significant increase in these awards for the fiscal year 1968. At an appropriate time, however, we look forward to giving testimony on the nature and size of the actual need if the commitments of the academic medical centers to people are to be fulfilled.

The Teaching Hospitals

Current recommendations for the construction of health facilities—hospitals, health centers, long-term care facilities, diagnostic treatment centers, rehabilitation facilities and modernization of hospitals—are for a lesser amount in 1968 than in 1967. These health facilities are the locale of over half of the total educational programs of the academic medical centers. They render an essential service to the community in which they exist, and the quality of these facilities determines the extent to which the staff can demonstrate exemplary patient care.

With the passage of Titles 18 and 19, a wonderful and long desired change has taken place inasmuch as the patient is now able to choose hospitals to which he will go, regardless of his economic status. While welcoming and applauding this change, the academic medical centers are deeply concerned about outdated and inadequate facilities provided in many of the public institutions and teaching hospitals. The hospitals of our great metropolitan areas are frequently within the deteriorating inner cities, and adequate testimony is available on their state of physical decay which is so advanced that many must be replaced and almost all require rehabilitation. At the University of Michigan, for example, the university hospital is 40 years old, and its plans were completed over 50 years ago. Its architecture no longer allows patients privacy, nor the staff the facilities that modern humane medicine requires. The result is that students are not seeing the kind of medical care that properly serves as a model for their own future work. A major program for the modernization and replacement of teaching hospitals is essential to the future. That in the present year there is little likelihood of adding the funds necessary to make a major start on this important program is of grave concern, and we feel obligated, as a matter of record, to indicate to the committee this urgent need if the quality of medical education in the United States is to be sustained.

Conclusion

We are told that, after agriculture and manufacturing, health is the largest industry in the nation. Quality of this great system of health care can be no better than the knowledge and skill that serves it. A physician remains at the apex of the team of health related workers that translate this knowledge and skill into service. It is from the medical schools of the United States and their related medical center programs that the knowledge, skill and physician manpower essential to this health care system will come. By providing these 100 academic medical centers with the resources they need to meet their obligations, the quality and effectiveness of the entire system of health care will be enhanced. Although the total number of dollars involved appears large when isolated, it is very small indeed in comparison with the magnitude of the expenditures for health throughout the nation. It is from a very deep and urgent sense of obligation to meet the health manpower needs and the needs for improved knowledge and skill that we appear before the committee to describe the resources that are necessary to meet these public purposes.

Mr. FLOOD. You are helping us, you know. That is why we are glad to have you and your colleagues here.

We know the story and I have no questions.

Thank you very much.

Dr. HUBBARD. Thank you, Mr. Chairman.

May I ask your indulgence on one more matter. I would, if I may, like to pass to you for the written record testimony regarding the dental research institutes.

Mr. FLOOD. Yes. By all means. That will be placed in the record following your statement.

Dr. HUBBARD. Thank you.

(The information follows:)

APRIL 27, 1967.

Congressman DANIEL J. FLOOD,
Chairman, Labor-HEW Subcommittee, Committee on Appropriations, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN FLOOD: I respectfully request the privilege of having included in the public testimony before your committee the contents of this letter for the written record.

I am William N. Hubbard, Jr., M.D.—a member of the Advisory Committee to the Surgeon General on General Research Institutes. I am Dean of the Medical School at The University of Michigan and President of the Association of American Medical Colleges.

Your Committee has heard testimony from Dr. Kreshover, the Director of the National Institute for Dental Research, on the importance of support for the new program of dental research institutes. Although I am not a member of the dental profession, I have for the last few years been working with others in the National Institute of Dental Research to improve the resources and quality of basic research as it relates to the problems of oral health.

Only a small number of institutions have the resources and the organizational capacity to develop a dental research institute. These institutes will, therefore, be national resources serving the interests of the entire country. These institutes are designed so that the total resources of the academic institution receiving the grant can be focused on the program of the Institute. They will provide an opportunity for scientists from all of the academic disciplines that can make a significant contribution to the problems of oral health to work together. These institutes will be readily accessible to dental students and to dental faculty, so that improved opportunities will exist for the development of the scientist-clinician who has made such great contributions to medicine and of whom we have so very few in dentistry.

Over the years, the basic science departments within our academic medical centers have developed effective interrelationships with those who are interested in the health problems that are the responsibility of the physician. A similar opportunity has not been so readily available for the interaction between the basic medical sciences and the dentists. Since the members of dental research institutes will also be members of the basic science departments, it is anticipated that young men working for their Ph.D degrees, who will become future teachers in the basic sciences, will have an exceptional opportunity to do their research under the supervision of established scientists whose research is in a field relevant to dentistry and oral health.

At the present time when dental students receive their instruction in the basic medical sciences, they uncommonly are taught by people whose research is specifically related to problems of oral health. Since the basic medical sciences are general and do not have restricted application to either medical or dental problems, this does not create a very serious difficulty. On the other hand, a positive opportunity is created when a few of the teachers in the basic sciences do demonstrate to the dental student through their research interest that there is a direct and important relevance of basic sciences to the problems of dental practice. It is also through this contact that the gifted, interested dental student will have an opportunity to undertake research and thereby begin to explore his long-term capacity for a career in academic dentistry.

At the present time these new institute programs will be limited to space that is currently available. There is no special provision for construction funds. Although during the present budgetary hearings there is little opportunity to increase the allocations authorized for construction of research facilities, I urge that the committee give special consideration to the opportunity created by these new programs of institutes for dental research.

Our present knowledge of how to diagnose and treat dental disease and diseases of the oral cavity is such that it is a practical impossibility to expect that through extending therapy we can meet the dental health needs of the nation. It is clear that a major program of preventive dentistry must be developed and particularly preventive dentistry as it applies to the younger age group. The devastating diseases of the supporting tissues of the teeth that occur in middle and older life and result in so many dental cripples, require insights and new knowledge that are not presently available. Improved dental materials and prosthetic devices are essential to effective restorative dentistry. The expansion of dental manpower and of the very important dental assistant group presume the availability of highly skilled clinician-scientists who are now, for all practical

purposes, unavailable. These dental research institutes will be an important component in meeting the demands for the knowledge and in creating the academic manpower that is necessary to train the practitioners who must deliver both preventative and restorative services in dentistry.

I urge the committee to consider that in the national interests special provision should be made to meet the full costs of the construction of facilities to house these new dental research institutions. Like the primate centers and the special facilities of the Atomic Energy Commission, they are truly national resources and they should not be delayed or diminished in size by the limitations of the capacity of an institution in which they exist to raise matching funds. In my opinion, the facilities for such an institute would, at today's construction prices, cost between $6 and $8 million. I hasten to add that this is at best an informed opinion, but I believe it to be reliable. Since the total number of such institutes in the United States will be small, the dollars required will likewise be small relative to the impact they will have.

Dentistry has not yet benefited as fully as medicine from the sweeping advances of knowledge in the basic biological sciences and the basic health sciences. It is to remedy this situation that the dental research institutes should be created as national resources for the enhancement of dental research and the development of dental educators. Because of their national importance, I urge the committee to consider that their full cost of construction and operation should be met by federal appropriations.

Sincerely,

W. N. HUBBARD, Jr., M.D.,
Dean, The University of Michigan Medical School.

THURSDAY, APRIL 27, 1967.

NARCOTIC ADDICT REHABILITATION

WITNESSES

LARRY ALAN BEAR, LEGAL COUNSEL AND EXECUTIVE OFFICER, OFFICER OF THE COORDINATOR OF ADDICTION PROGRAMS, OFFICE OF THE MAYOR, CITY OF NEW YORK
PETER F. TUFO, ASSISTANT TO THE MAYOR, THE CITY OF NEW YORK

Mr. FLOOD. We will now hear Mr. Lawrence Bear, counsel of the Office of Narcotics Board, New York City.

I see you are accompanied. Who is your friend?

Mr. BEAR. This is Peter Tufo. Mr. Tufo is the Assistant to Mayor Lindsay and operates the New York City office in Washington.

STATEMENT OF LARRY ALAN BEAR

Mr. BEAR. I want to thank you for giving me the opportunity to testify before you today as a representative of both John V. Lindsay, mayor of the city of New York, and Efren Ramirez, M.D., the coordinator of addiction programs for the city.

New York City now has, by all estimates, about 50 percent of the national narcotics problem. Moreover, the number of narcotic addicts in New York City is growing, as it is in all large metropolitan areas throughout the country. The loss incurred through this rapidly spreading problem is incalculable, not only in terms of money but also in terms of human resources. We were therefore pleased to note that Congress acknowledged the countrywide nature of the problem of narcotics addiction and passed the Narcotics Addict Rehabilitation

Act of 1966 (Public Law 89–793). Section 402a of that act calls for an appropriation of $15 million to be allocated to States and municipalities for rehabilitation programs. This appropriation will allow Federal money to join State and local money already at work to turn the tide of addiction throughout the country.

It is our understanding however that the Bureau of the Budget has recommended an appropriation of only $4 million for section 402a of the Narctoics Addict Rehabilitation Act of 1966. This amount, distributed on a countrywide basis, represents only a token interest on the part of the Federal Government in the narcotics problem and will not even support a mere holding operation. This is to say, newly addicted groups will grow at a more rapid rate than groups for whom treatment can be provided. If we are to end this desperate cycle we must launch an all-out campaign which will require a meaningful investment of money at all levels of government.

It is true that treatment programs for addicts have not generally produced good results. However, the city of New York has embarked upon a dramatic, broadly based new approach to the problem of prevention of addiction and treatment and rehabilitation of addicts which we feel deserves the special attention of this committee, and warrants serious reconsideration of any decision to cut the total moneys called for by the congressional legislation by 73 percent. We feel that the full $15 million should be appropriated for the purposes called for by the Narcotics Addict Rehabilitation Act of 1966, then, because we are convinced that addicts can be rehabilitated, intense preparation for meaningful programing is underway in New York City and that sufficient Federal funds must be made available if the program is to be successful.

Mr. FLOOD. How long have you been at it?

Mr. BEAR. Since April of 1966. This program has been in effect that long. We think that we are able to show that it would be a mistake to cut the total moneys.

Mr. FLOOD. Are you a lawyer?

Mr. BEAR. I am. I am a lawyer. I have been in the area of legal medicine for about 14 years.

Mr. FLOOD. What is legal medicine?

Mr. BEAR. Well, that relates, Mr. Chairman, to any area of the law in which to get proper solutions to a problem the law must involve itself with other disciplines, particularly the medical discipline. It might be scientific disciplines. For example, it seems to me that you can not talk about problems of law and psychiatry, insanity problems either as legislators, practicing lawyers or judges, without involving yourself in some way with medical attitudes and medical concepts.

The narcotics problem is medical-legal in the sense it is not a problem that can be solved in any way by lawyers alone or doctors alone or scientists of any kind alone. That is really what I mean.

I would take a few moments to acquaint this committee with the basic New York City plan for rehabilitation. It is divided into three parts: Induction, Treatment, and Reentry.

Although the addict may have a sick way of life, he is not therefore automatically amenable to treatment. Before he is exposed to the actual treatment process, he must learn to become a patient. Therefore the specific goals of induction are:

1. To challenge the addict until he wishes to do something about his addiction problem.
2. To encounter him about his general attitudes in peer groups so that his attitude toward treatment begins to change.
3. To expose him to the group process so that it can become a useful tool of therapy for him.
4. To expose him to professionals so that he learns to accept their role as therapists.

The final goal is to reorient the addict to the point where he accepts treatment and may move on to phase II (treatment).

It is expected that the induction phase of the program for each individual addict will vary with his personal growth, but the average length of time spent in induction will be from 3 to 6 months.

Induction may take place in a prison, or in a Community Orientation Center in a heavy addiction area, staffed by rehabilitated trained ex-addicts and community people. In either case, the inductees attend therapy groups with other addicts in induction.

The primary aim of the therapy group in induction is to deal with the overt symptoms of the addict's "sick" way of life. Thus, the addict-patient in peer groups will be challenged by the ex-addict to do something about changing his behavior. He will have the role model of the successful ex-addict available to him in each group, so that he is no longer able to find excuses for his antisocial behavior, but rather must begin to take responsibility for it.

When induction takes place outside of prison, therapy groups will deal with the use of drugs as a way of escape. Inside prison, although actual drug use itself is generally not the problem, the addict must still be mentally detoxified and challenged to examine any escapist behavior which is equivalent in nature to acting out through use of drugs.

When induction is completed, the addict-patient will have been successfully detoxified, both physically and mentally, and challenged into seeking solutions to his most basic problems. At this point, he is ready to proceed to phase II, treatment.

The cost of an induction program in an in-patient setting such as a prison is about $9 per patient per day.

In a Community Orientation Center, the cost of induction, including day-care and detoxification services, is about $10 per patient per day.

After he has completed induction, the addict is ready to proceed to a treatment program. Treatment is best done in a therapeutic community staffed by professional psychiatric and medical personnel, assisted by exaddicts.

The primary goal of treatment is to change the attitudes and behavior of the addict patient from an antisocial orientation to one which is consistent with the goals of the general society. More specifically, treatment must:

1. Promote an increasing acceptance of responsibility on the part of the patient for his own behavior.
2. Teach him how to adjust to the norms of society by adjusting to the norms of the therapeutic community so that he is no longer acting in a self-destructive or antisocial fashion.
3. Provide a setting in which the patient can explore his emotions while he is changing his behavior.

4. Promote self-growth on the part of the patient.

When the addict-patient has completed the treatment process, which can be expected to take some 10 months, his behavior will be consistent with the norms expected of him in the greater society, and he will begin to have some insight into his emotional makeup. This is by no means the end of the rehabilitation process for him, but he is now equipped to complete his rehabilitation through a reentry process into the society. (Phase III.)

The primary treatment value of a therapeutic community is that it provides a continuous 24-hour-a-day environment of growth to the patient-addict. Not only the therapy groups themselves, but all the activities of the community are geared toward his personal growth. The addict is able to learn to adjust to the goals and mores of the therapeutic community in the same way that he will later have to adjust to the goals and mores of society in general. Since the therapeutic community is a closed setting, the staff is able to assist the addict-patient at all levels of his growth and, through confrontation, demonstrate to him the consequence of his behavior.

In addition to participation in frequent group encounters, the addict-patient will perform many of the necessary day-to-day tasks of the community, such as some maintenance and upkeep of his facilities, and like activities. In this way, addicts will learn to be responsible for things belonging to them, will begin to take pride in their surroundings and, consequently, in themselves. Educational opportunities, both academic and vocational, will also be made available to them.

The heart of the therapeutic community will be the therapy groups. These groups, which may be conducted by psychiatrists, trained ex-addicts or group leaders, will help the addict-patient examine his behavior and emotions in relation to day-to-day situations that arise in the therapeutic community, and thus provide him with a concrete means of changing both the way he feels and the way he behaves. At this level, the groups will not deal very much with drug use, but will deal instead with the attitudes, behavior, and needs that may have led to drug use in the first instance. In this way, the therapeutic community will not be dealing merely with symptoms, but with the real source of the addict's problems.

The cost of maintaining an addict in a therapeutic community is approximately $400 per month in a nonhospital setting and some three times that in a hospital setting.

Reentry is the third phase of the rehabilitation process. In general it serves to achieve three (3) major goals of the total program:

1. It prepares the patient for his return to an open society and provides the opportunity for the ex-addict to confirm the strength of his own rehabilitation through a gradual, structured process of confrontation with progressively more demanding emotional, vocational and social tasks.

2. It provides manpower for the two previous phases of rehabilitation (induction and treatment) to complement and extend professional resources in those stages.

3. It provides a follow-up structure to evaluate the effectiveness of the previous two phases of rehabilitation of each patient through systematic observation of the behavior of reentry candidates as they assume more and more responsibility.

Reentry can take place in the community, or in a specific reentry house. Certain aspects of the reentry process are particularly important and deserve special mention. In the first place, reentry candidates work closely with professionals in each of the phases of the program. This serves to counteract the strong tendency for exaddicts to be unable or unwilling to relate to non-ex-addicts. Constant exposure to, and work with, professionals prepare the exaddict for future relationships with employers, relatives, and other non-ex-addicts. His lack of trust, hostility, and defensive attitudes toward the "outside world" are resolved in this phase.

A second major aspect of reentry is its emphasis on personal responsibility, The reentry house itself is an open facility. High degrees of self-control and responsibility are, therefore, demanded from the candidate. He must demonstrate that he is using his time productively in the house as well as in his job.

Finally, the reentry phase provides the opportunity for vocational counseling and training in a variety of skills. The cost of a candidate in reentry in a reentry house is approximately $13 per day.

Rehabilitation, though, is only one part of the problem. The New York City plan also includes as was mentioned above, a broad community development program made up of many component parts, designed to provide prevention and education services for the city.

Neighborhood based on groups of parents and other interested citizens are being developed in areas of greatest drug abuse so that the community is alerted to the problem as it exists, what they can do about it, and what responsibility the community itself plays in the prevention and rehabilitation of addicts.

In conjunction with this, an extensive teacher training program is being set up in public and parochial schools to spot pre-addict behavior in youngsters. In addition, juvenile evaluation and prevention clinics are being established to do further diagnosis and treatment for those young people who although not yet using drugs, are displaying the kind of behavior which is known to be associated with early drug use. The cost per unit is $100,000 per year.

The value of this kind of total approach is that it offers to the addict and to the community a logical progression of services which will meet the needs of both as they develop and change. It is a radical departure from the usual stop-gap services being offered to the addict—services which to this point allow him to repeat the cycle of addiction, jail, hospital, readdiction.

Under the kind of rehabilitation program outlined above, an addict can be successfully rehabilitated for approximately $12 per day. This figure is about equal to the cost of keeping him in jail without treatment, from which he immediately returns to drug use. It is about one-third the cost of keeping him in traditional treatment hospitals.

Even when we add to that figure the cost of the community development programs, the cost per day is far below that which the addict costs society if he is not rehabilitated. The addict steals almost $100 per day to support his habit. The taxpayer must bear not only that cost, but the cost of added police protection. In New York City it is estimated that well over 50 percent of the petty crimes committed are committed by addicts seeking money to buy drugs. Millions of dollars more are being poured down the drain for stop-gap programs that do nothing to reduce the addict syndrone.

In addition, the fully rehabilitated trained exaddict is an essential part of the rehabilitation of other addicts. He is in this way, able to repay the debt that he owes to those who have invested in his rehabilitation.

No city can bear the cost of such a program alone. Even assistance from the State government is not enough. It is only when city, State and Federal moneys work together that this program and others throughout the country can be fully realized.

Congress realistically appraised the measure of Federal cooperation necessary to implement meaningful programs throughout the country when it called for an annual appropriation of $15 million in Federal moneys to support them. We in New York City implore this committee to use its best efforts to see to it that the entire $15 million called for by this bill is, in fact, appropriated.

This induction process is oriented toward the community. Our feeling is that the addict——

Mr. FLOOD. Where do you get them?

Mr. BEAR. We get the addict both on a purely voluntary basis, by establishing community orientation clinics in the community where the addict is first encountered. We also are developing a community program in which we organize groups such as relatives of addicts. A group we call RARE—rehabilitation of addicts by relatives and employers. These groups are given what we call the attitudinal training so that they come to accept this problem as a problem openly in the community. They learn how to deal with the addict in his own family, which is often a very terrible experience, and to deal with him. I don't mean for the family to cure the addict but for the family to be able to do their part logically, meaningfully and properly to get the addict into treatment rather than antagonizing each other and ruining each others lives.

They are also taught how to cope with the problems of youngsters in the family not addicts but who are in imminent danger of becoming addicts by the nature of their circumstances; that is, they may have brothers or friends addicted. That again invloves a prevention which we think is perhaps more important than the treatment process itself.

These groups, such as the relative groups, also serve as empolyees or workers in community orientation clinics which are no more than store fronts, Mr. Chairman, in an individual community, endemic area in New York which would be Bedford-Stuyvesant or eastern New York. There are other areas such as Newark or Philadelphia; that is, in areas where the additional problem is endemic.

The clinic itself is manned by an ex-addict, professionally trained to make an initial confrontation, and a relative of the addict. The induction process or initial confrontation is made in this commuinty orientation clinic either as a result of the addct coming into knowledge or being oriented toward going in by the community groups developed, as I say, either through parent groups or through block development groups and others that we have working in the city of New York.

The problem with the addict, Mr. Chairman, is that he is not a patient merely because he is ill. If I have a problem with my head or stomach and I go to a doctor we assume, if I am in my right mind, I go to get advice. Given that advice, I take it. That is because I am a patient. The addict is not willing to take advice and though he may

come for treatment for any number of reasons, either that he has no more money or he is tired of going through a second story window or he needs to get way from the police, or whatever the real reasons might be, he is not there because he is truly saying, "Help me, I don't want any more of this life." He is really saying, "I cannot take any more of this life because there are too many problems involved, though I would love it if people would leave me alone."

He is hostile, aggressive, destructive. I think that, if I may say so, is one of the problems in Lexington and a great many other treatment areas because the initial confrontation is made by a professional who really feels that he has a patient there when he does not. We then make the initial confrontation with the trained or professional ex-addict who does no more than orient this addict. I won't say orient, but make him understand what his real problems are and make a patient of him. To put the addict in a position where he is physically and mentally detoxified and wants help.

It is from there we put him in the second phase of what we call treatment; that is, a professional treatment process which, if I might take just a minute, is specifically set up to promote an increasing acceptance of responsibility on the part of the patient for his own behavior, to teach him how to adjust to the norms of society, by adjusting to the norms of a therapeutic community so he is no longer acting in a self-destructive or antisocial fashion, to provide a setting in which the patient can explore his emotions while he is changing his behavior and promote self-growth on the part of the patient.

This is a process which can be expected to take some 10 months, and subsequent to this process of actual treatment in a closed setting the addict must then go through a third phase which we call the reentry or resocialization phase. Assuming that you put an addict into induction or make him a patient, and then put him into actual treatment, that takes some 15 or 16 months to do this. What you have done really is make a new man out of this addict, but only in a very supportive way; that is, everybody with him is in the same boat he is. He is not really prepared to face the problem of leaving that community, his own community.

Treated addicts go back into the community from whence they came. The community from whence he came is not going to be able to be a good one. It is one in which there are more addicts and he has to face reality, face people who are still manifesting very sick behavior. It would be very nice if we could take people from a therapeutic community outside of central Harlem or east Harlem, or wherever the problem might be, and say, "You don't have to go back there. Instead we will send you to Scarsdale." It does not work that way. The man from east Harlem goes back to east Harlem. The man goes back where his community is. He has to be taught to face the reality problems that are there. That is the reentry process.

This involves halfway houses, or more accurately stated reentry houses and the use of these addicts in the third phase as workers in the first and second phases, all of which we have in here. Generally speaking, Mr. Chairman, the cost of rehabilitating addicts in each of these phases, if we were to average out the program, under this kind of rehabilitation program an addict could be successfully rehabilitated for approximately $12 per day. This figure is about equal to the

cost of keeping him in jail without any treatment from which he immediately returns to drug use. This is one-third of the cost of treatment in traditional hospital settings. Even if we add to that figure the cost of a community development program, such groups as relative groups, the cost is far below that which the addict costs society if he is not rehabilitated.

In addition to the funds that are expended in correctional institutions for addicts, the addict steals almost $100 a day to support his habit, which costs the taxpayers must bear as well as the added cost of police protection.

In New York City alone it is estimated well over 50 percent of all petty crimes against property are committed by addicts seeking money to buy drugs. Millions of dollars more are being poured down the drain for stopgap programs that do not do anything to reduce the addict syndrome. New York City cannot alone, Mr. Chairman, bear the cost of this program. Even assistance from the State government is not enough. It is only when city and State and Federal moneys work together that this program and other programs throughout the United States—because we have serious problems in areas other than New York City—it is only through a combination of these moneys that we can recognize any degree of success.

The Office of Economic Opportunity has been working with us on a proposal for what is essentially our community development program; that is to say, our prevention program that I described briefly to you which is contained in this statement. We have some assurance from OEO that that community development program, or the first phase of the program I described to you, will be funded by OEO. Of course, the administration has not yet seen fit, as far as we know, to release any funds to OEO although they have been appropriated. But even if those funds are appropriated, that is given to us and we have informal assurances they will be and we are able to begin or at least to enlarge our community program and to involve people, to go back to your first and most important question, Mr. Chairman, how do you get them, how do you involve them, if we are to get these funds and involve large numbers of addicts in the city of New York as a result of our program and prepare them and get them ready, where will funds come from so that they can successfully be treated as patients?

If we cannot, Mr. Chairman, utilize the funds that Congress saw fit to authorize in this NARA proposal, we are going to be in the position of not where we cannot run a program—although to be honest we can run a program for 100 addicts or a thousand rather than 10,000—but we will be in a position where we are going to have funneling in to us in the city addicts who are prepared for treatment, communities which are involved with the program finally, and not treating the way one treats mental illness and hides it but actually seeking to engage themselves in the program and no funds with which to provide the treatment into which these people should go. It seems to me, Mr. Chairman, having heard the President of the United States in his recent speech on crime in the United States say that he realizes that narcotics addiction is one of the more serious problems in relation to crime—and he was pleased to announce that the Federal Government was entering into a partnership, those were his words, with States and municipalities—to clean up this narcotics problem.

This gave us great heart, gave us great hope, and we in New York City were certainly happy. This feeling is shared by many other narcotics administrators throughout the country because we have been in touch with them. It gave us hope that we would finally have sufficient Federal funding to put together with State and city funding, because we realize our own responsibilities, to have a meaningful program such as this one to be successful. I can only say to you, Mr. Chairman, and I say it in all humility, that if instead of the $15 million which Congress has authorized for this purpose we get only $4 million for the country, which is 27 percent of the total, then, Mr. Chairman, we are not talking about a partnership. We are talking about an illusion.

I would implore this committee to use its best efforts to see that the entire $15 million called for by the bill is in fact appropriated. We are now at the point, I think, where we have something really meaningful to offer, and I think that the amount of money that is necessary to do this job is very small compared to the effect a successful program could have in this area.

If there are any questions, I would be very happy to answer them.

Mr. FLOOD. Thank you very much.

THURSDAY, APRIL 27, 1967.

VOCATIONAL EDUCATION

WITNESSES

LOWELL A. BURKETT, EXECUTIVE DIRECTOR, AMERICAN VOCATIONAL ASSOCIATION

WAYNE W. MILLER, DIRECTOR, OKLAHOMA STATE TECH, OKMULGEE, OKLA.

FLOYD D. JOHNSON, PRESIDENT-ELECT, AMERICAN VOCATIONAL ASSOCIATION, YORK, S.C.

Mr. FLOOD. We will now hear Mr. Lowell Burkett, executive director of the American Vocational Association.

You have somebody with you?

Mr. BURKETT. Yes, I do. I have the president-elect of the American Vocational Association, Mr. Floyd Johnson, and then Mr. Wayne Miller of Okmulgee, Okla.

I have a prepared statement which is before you.

Mr. FLOOD. Proceed.

STATEMENT OF LOWELL A. BURKETT

Mr. BURKETT. Mr. Chairman, I am Lowell Burkett, the executive director of the American Vocational Assocation.

Mr. FLOOD. What is the American Vocational Association?

Mr. BURKETT. It is a private and nonprofit educational association of some 40,000 members. It is made up of teachers, supervisors, teacher trainers at all levels of vocational education, in the high schools, junior community colleges, area schools, teacher trainers in colleges and universities, State departments of education people. In fact, all the leaders in the field of vocational education throughout the Nation.

Mr. FLOOD. It looks as though you fellows are about to come into your own.

Mr. BURKETT. We sincerely hope so. This is the 50th anniversary of the Smith-Hughes Act by Woodrow Wilson in 1917. It has been a gradual growth of the program and a very sound growth over many years. We feel at the moment we are at the point where we can make great progress and are making great progress in the development of vocational education in this country. I would like to say at noonday, at 12 o'clock, the President of the United States dedicated a new vocational school at Crossland High School in Maryland. It was my privilege and the privilege of the president-elect to attend that dedication ceremony.

We are delighted to have him there. I believe this is the first time that the President of the United States has ever dedicated a vocational school according to the history we have.

Our primary concern is providing high quality programs of education for employment. At the same time we recognize the need for good education, good sound proficient educational programs that would be of help to all people at all levels as they develop to make full development of themselves. We as a professional organization try to make studies of the anticipated needs of our program.

Mr. FLOOD. Do you embrace so-called private schools?

Mr. BURKETT. Yes; we have quite a number. In fact, all of the business schools, accredited business schools of this Nation are members of the association. Being a professional organization, we are concerned with the professional development of all types of vocational schools.

Mr. FLOOD. What about the parochial schools?

Mr. BURKETT. Parochial schools, a number of members, yes. In fact, we have membership not only from education but membership from industry, business, people that are interested in training. We encompass a rather large group of people.

The house of delegates of the association at our last meeting in Denver, Colo., in December of last year looked at this whole matter of need. They passed a strong resolution found on page 2 of the testimony in which we are asking or soliciting the 90th Congress to appropriate the full amount authorized under the Vocational Education Act of 1963 and other acts.

I would like to take your time to point out to you a summary of a study that was made by our association, working through the State directors of vocational education in each of the separate States, and each of those directors had a research coordination unit trying to determine the State and local needs in vocational education.

In fiscal year 1968 or 1967, they estimated that as far as Federal money was concerned that they could have used $414,988,890 in Federal money. As we know, the appropriations fell far short of that. In fiscal year 1968 the States and local communities figure they could use $560,835,000. Then it shows on this testimony that the amounts of money they anticipate that they can use for 1969 and 1970, which we will not get into here because we are talking about the appropriations for fiscal year 1968, but according to the budget figures, the budget indicates that at about $285 million. This is almost about half of what the States could actually use to fully develop the program. This is assuming that the State and local communities would match as re-

quired by law. They are far outmatching the Federal money. In fact, it is running at the present time about $3 of State and local money to every dollar of Federal money. They anticipate for fiscal year 1968 that the State and local communities could raise about $875 million.

I would also like to point out there is a great need for training of teachers. We have a shortage of teachers. Ancillary funds allocated under the Vocational Act of 1963 will help in that respect. At the present time we are about 10,000 teachers short of what is needed to fully man our program. We anticipate that we will need at least 37,000 new teachers trained between now and 1970.

The entire study is shown in our testimony. I will not go over all of it but I would like to point out some things about work study. Work study, as you recall, is a part of the Vocational Education Act of 1963. For fiscal year 1968, or 1967, the budget said that we were reducing the appropriations with the idea that the funds would be turned over to the Neighborhood Youth Corps. It was reduced from $25 million to $10 million. The budget this year indicates that this would be phased out and that the program would be conducted by the Neighborhood Youth Corps. We feel that this has a lot of disadvantages for the student, particularly enrolled in vocational education. We find that the work-study program is very helpful to the kinds of students that we have in many of our programs. They are counseled by the counselors in the schools. They many times come to the school for enrollment but one of the major problems is that they lack funds to remain in school. We are able at that time to direct them and utilize some of the work-study money in order to get these students enrolled and keep them in school.

We have been able in most instances to find some kind of a job in the school in the work-study program related to the instructional program. Instead of just having a job they also have an opportunity to take some training in relation to the jobs themselves. We sincerely hope, Mr. Chairman, that the committee will reexamine that proposal, the Bureau of the Budget, and would at least appropriate the same amount that is appropriated for fiscal year 1967. We could use far more because, as the study has shown that we have made for fiscal year 1968, we could enroll 353,858 students. This is the estimated number by the States. These people will be denied the opportunity to take vocational training to remain in school and get in the mainstream of employment.

We wholeheartedly endorse the idea of the work-study program. We feel that it is a kind of a program where most of the money goes to the individual student. The Office of Education has made a study showing that about 3.3 percent of the funds that have been allocated were used for administration purposes. We already have the people in schools who are doing counseling. They are already there. All they need to do is direct them to this program. It is a very inexpensive type of thing. I have a number of examples of things that are happening in various places throughout the country in regards to the work-study program. In the city of Cleveland during the summer of 1966, there were 200 students enrolled and employed at the veterans hospital there. Many of the youngsters came from depressed areas of the city of Cleveland. They did not miss any workdays and were anxious to continue employment as long as possible. Many of the work-study coordinators reported these students always arrived earlier than the reg-

ular employees. They also reported that the youngsters became changed persons in terms of their attitude toward work and their interest and pride in being self-supporting and self-respecting young people.

The hospital officials were so favorably impressed with the work-study program and the employees involved in it that they conducted a special commendation ceremony at the hospital honoring these 200 youngsters involved in the program. This commendation which was publicly presented to the youngsters before all of the employees states in part that—

> Throughout the time you have been with us as a part-time student vocational education work-study employee, you have maintained exceptionally high standards of performance. You have displayed a willingness to learn and a natural desire to achieve excellence that rates special commendation. Work performed in your area of assignment has continuously been rated by your supervisor as highly satisfactory or outstanding—to recognize your efforts and assure you that your work has not passed unnoticed, I am commending you in writing by this letter.

You see that the students are really performing a great service. We also elicited from the students, or they elicited from the students their reaction to the program. One of the students said:

> I think the work-study program is a very worthwhile and informative program. It has helped me and many other students to gain a great deal of priceless knowledge which can never be obtained in a classroom. Your teacher can tell you about a situation, what you're expected to do when it arises, but you don't really grasp the whole idea until you are faced with it. While on this job, I have many times run up against a problem which I did not know how to handle. However, since this is a training program I have someone to turn to and ask for help whenever I need it. These things are happening to me. I don't have to read about what someone else does or be told what is hard or easy; I find out for myself—I feel now that I would like to broaden my vocational field and learn more than just things of the business world. To know whether or not you will be content at the type of work you are involved in you have to get some experience in handling the things you will do when you are on your own—I am very happy; I have had the chance to work here, and I feel privileged that I have had some fine teachers and have learned so much more than the students who learn only from books.

This is just a statement from a student in the work-study program. I earnestly hope, Mr. Chairman, that the committee will restore the funds for the work-study program. By doing so you will keep faith with many American youngsters who need and want this program and with the vocational educators and other school personnel that will work diligently to create local support for the work-study program.

That is all the testimony that I have.

I would be delighted to answer any questions.

(The full prepared statement follows:)

STATEMENT OF LOWELL A. BURKETT, EXECUTIVE DIRECTOR, AMERICAN VOCATIONAL ASSOCIATION

(Appropriations Committee, U.S. House of Representatives, Subcommittee on Appropriations for Department of Health, Education, and Welfare, Room H–164, the Capitol, April 27, 1967)

Mr. Chairman, thank you for this opportunity to appear before you on behalf of the members of the American Vocational Association. I am here to present the position of the Association on Federal funds of vocational education for fiscal 1968 as authorized by the Congress.

The American Vocational Association is a private, non-profit professional association of 40,000 members who are concerned with the promotion and devel-

opment of vocational, technical, and practical arts education. AVA members are engaged in teaching, administrative, or supervisory positions in comprehensive high schools, vocational high schools, area vocational high schools, junior and community colleges, technical institutes, colleges and universities, state departments of education, and in manpower development and training activities. Still others are engaged in research, curriculum development, guidance and counseling, or similar activities closely related to programs of vocational training. Some AVA members come from business, industry, labor, and other fields outside professional education.

Vocational educators are grateful to the Congress for its support of vocational education. Since enactment of the Smith-Hughes Act fifty years ago, Congress has continually evaluated our programs, and has enacted supplementary legislation to provide expansion and improvement. I might say, also, that the Committee on Appropriations has many times given added support to vocational education in the face of recommendations of the Budget Bureau that vocational funds be cut. We are grateful for this support, and we believe that our vocational programs will continue to justify the wisdom of your action.

Our primary concern is that of providing high quality programs of education for employment. At the same time, we recognize the need for all youngsters to become proficient in the basic skills of communication, and to acquire knowledge and insight that helps them to become mature and responsible citizens. In addition to learning job skills, vocational students take part in other activities that enhance their employability. Many of you know of the programs conducted by vocational youth clubs—the Future Farmers of America, the Future Homemakers of America, the Distributive Education Clubs of America, the Vocational Industrial Clubs of America, and other similar clubs. Through club activities, youngsters have an opportunity to develop leadership abilities to plan their careers, to provide service to their school and community.

NEED FOR FEDERAL FUNDS

The policy-making body of our Association, the AVA House of Delegates, meets each December in conjunction with our annual convention. At that time, a program of work is adopted, which usually includes resolutions relating to Federal legislation for vocational education. I call to your attention to the following resolution adopted by our House of Delegates in Denver, Colorado, December 9, 1966:

Whereas, the economy of the Nation is contingent upon the productiveness of its people, and

Whereas, many persons move from community to community in pursuit of employment opportunities, and

Whereas, technology has developed to the point that education, training, and retraining are essential to employment, and

Whereas, social conditions in an advancing technological era are dependent in large measure upon the employability of the people, and

Whereas, the tax base is inadequate in many states and local communities to support vocational education, and

Whereas, the defense of the Nation is dependent upon an adequate supply of well-trained manpower: Therefore, be it

Resolved, That the AVA urge the first session of the 90th Congress to appropriate for fiscal year 1968 the full amount of funds authorized by P. L. 88-210, and by other Acts which authorize funds for vocational education.

Following adoption of this resolution last December, our staff surveyed the fifty states to assess the extent of financial support needed by the states so that they could move toward the goal of meeting vocational education needs "of all persons of all ages in all communities,"—the charge given us by P.L. 88-210.

Our study was based on the assumption that the Federal-State-local matching ratios will continue at the same level now provided for in the Federal Acts.

Following is a summary of the information provided to us by the states:

SUMMARY OF A.V.A. STUDY NO. 1—1967 [1]

FEBRUARY 6, 1967

Estimated federal funds necessary to adequately meet the needs of vocational-technical education:

Fiscal year 1967	$414,988,890
Fiscal year 1968	560,835,000
Fiscal year 1969	656,316,499
Fiscal year 1970	1,213,616,689

Estimated local and state support for vocational-technical education:

Fiscal year 1967	$726,718,895
Fiscal year 1968	875,188,871
Fiscal year 1969	955,888,961
Fiscal year 1970	1,045,666,676

Total financial estimates (federal, state, and local) to adequately meet the needs for vocational-technical education:

Fiscal year 1967	$1,141,707,785
Fiscal year 1968	1,436,023,871
Fiscal year 1969	1,612,205,460
Fiscal year 1970	2,259,283,365

Estimated enrollments in vocational-technical education programs:

Fiscal year 1967	7,097,600
Fiscal year 1968	7,781,205
Fiscal year 1969	8,829,562
Fiscal year 1970	9,059,695

Estimated federal support needed for constructing, equipping, and remodeling facilities to adequately meet the needs for vocational-technical education:

Fiscal year 1967	$236,034,979
Fiscal year 1968	323,669,883
Fiscal year 1969	353,043,809
Fiscal year 1970	354,231,724

Estimated average cost for constructing and equipping one residential school is $3,996,051.

Estimated federal support necessary to operate one residential school for a one-year period:

Educational cost per student	$925
Residential cost per student	1,018

Estimate of the number of residential schools needed: [2]

Fiscal year 1967	57
Fiscal year 1968	68
Fiscal year 1969	84
Fiscal year 1970	96

Vocational-technical education teachers now employed in the states:

Full time	66,719
Part time	57,483

Total estimated teachers needed for vocational-technical education:

	Full-time	Part-time	Total
Fiscal year:			
1967	69,252	64,968	134,220
1968	81,741	73,730	155,471
1969	86,591	79,116	165,707
1970	93,954	85,934	179,888

[1] The figures reflected in this study include estimates received from all states and territories except Montana, North Dakota, Wyoming, District of Columbia, and Virgin Islands.
[2] Seven states did not identify the number of residential schools needed.

Investment in vocational teacher training in F.Y. 1966:

Local	$2,761,176
State	7,181,290
Federal	5,617,396
Total	15,559,862

Total number of teacher trainers—1,956 of which 1,018 are full time and 938 are part time.

Estimated federal support needed for pre-service, in-service, internships, and fellowships for vocational teachers:

Fiscal year 1967	$20,191,991
Fiscal year 1968	24,090,195
Fiscal year 1969	27,280,495
Fiscal year 1970	29,442,010

Estimated federal support necessary to provide work-study programs for students who need assistance in F.Y. 1967—$25,828,314.

Estimated number of students who should be served by work-study program:

Fiscal year 1967	323,403
Fiscal year 1968	353,858
Fiscal year 1969	379,307
Fiscal year 1970	396,599

41 states reported that the differential in matching among various work-study programs has created problems.

Estimated federal support states need for vocational technical education research:

Fiscal year 1967	$15,029,328
Fiscal year 1968	19,549,370
Fiscal year 1969	22,429,534
Fiscal year 1970	25,764,629

We believe, Mr. Chairman, that these estimates reflect the necessity for appropriating the $225 million authorized by P.L. 88–210. As you know, not all of these funds go for grants to the states since P.L. 88–210 provides in Section 4(c) that 10 per cent of the total authorization be reserved for use by the Commissioner to make grants for research. We believe that research funds are needed and fully support the provision of P.L. 88–210 that sets aside monies for this purpose. We believe, however, that the research should be tied more closely to program operation.

I am sure this Subcommittee is aware of the recommendation of the Budget Bureau that the work-study program (Section 13, P.L. 88–210) be phased out and replaced with a program established by the Economic Opportunity Act; namely, the Neighborhood Youth Corps. You will recall that this recommendation was made last year by the Budget Bureau and has now been repeated in connection with the budget recommendations for fiscal year 1968.

We believe, Mr. Chairman, that the vocational education work-study program effectively reaches vocational students who will not be served by other aid programs; and we are confident that these programs cannot be made available as efficiently and as effectively as through the vocational work-study program.

The vocational work-study program is administered through existing state and local educational administrative channels. It operates in rural areas and small communities as well as in the larger urban areas. Existing administrative channels can operate the vocational work-study program for one student as well as for many. It helps students, ages fifteen to twenty-one, helping the students before they drop out at age sixteen, the age at which most dropouts leave school. The vocational work-study program is administered by educators who are interested in vocational students and their future.

The vocational work-study program oftentimes has provided an opportunity to place students in jobs that are related to the vocational program. Thus, the program becomes a valuable tool in motivating students and enhancing their employability.

In the first year of operation, fiscal year 1966, it was estimated that 50 per cent of the students who participated in the vocational work-study program worked on jobs related to their vocational program.

The vocational work-study program has been well received by local school administrators as well as by State and local vocational leaders. They represent the administrative level closest to the students, and they have been free to make decisions at the level where the most information about students is available. Costs for program operation has been exceedingly low at both the State and local level. Approximately 97 per cent of each dollar appropriated has been spent to pay salaries of needy students.

Let me point out, Mr. Chairman, that the State and local communities make a contribution to the vocational work-study program which exceeds the contribution made by local agencies who sponsor the Neighborhood Youth Corps. I make this point simply to say that educators have promoted the vocational work-study program to the extent that local and state agencies are willing to pay 25 per cent of the total cost of the work-study program. I know of no other Federally supported work-study program, at any level, that has generated local support equal to that generated by the vocational work-study program.

As an example of how successful the vocational work-study program has been, let me cite just one example which happens to come from the State of Ohio.

In the city of Cleveland during the summer of 1966, two hundred students were enrolled and employed at the Veterans Hospital.

Many of the youngsters came from the depressed areas of the city of Cleveland. They did not miss any work days and were anxious to continue employment as long as possible. Many of the work-study coordinators reported that these youngsters always arrived earlier than the regular employees. They also reported that the youngsters became changed persons in terms of their attitudes toward work and their interest and pride in being self-supporting and self-respecting young people.

The hospital officials were so favorably impressed with the work-study program and the employees involved in it that they conducted a special commendation ceremony at the hospital honoring these 200 youngsters involved in the program. This commendation which was publicly presented to the youngsters before all of the employees state in part that, "Throughout the time you have been with us as a part-time student vocational education work-study employee, you have maintained exceptionally high standards of performance. You have displayed a willingness to learn and a natural desire to achieve excellence that rates special commendation. Work performed in your area of assignment has continuously been rated by your supervisor as highly satisfactory or outstanding—to recognize your efforts and assure you that your work has not passed unnoticed, I am commending you in writing by this letter."

It was generally felt by agency officials employing vocational work-study students that these youngsters were highly motivated and doing an excellent job not only earning and carrying their own weight as far as a job is concerned but learning new skills as well. *In several instances these participating agencies have volunteered to provide the necessary matching percentage in order to participate in the program again this year.*

Parents of work-study students were interviewed concerning their reactions on the program. Typical of the many parent comments are as follows: "I cannot find words to express myself. The vocational education work-study program is doing a wonderful job for youth. I and my neighbors are very proud of this program and wish it will go further." Other parents indicated that these jobs enabled their youngsters to buy their own clothes and shoes thus making it possible for them to continue in school another term.

Students reactions to this program were elicited. Typical of these reactions is a letter which is quoted in part as follows: "I think the work-study program is a very worthwhile and informative program. It has helped me and many other students to gain a great deal of priceless knowledge which can never be obtained in a classroom. Your teacher can tell you about a situation, what you're expected to do when it arises but you don't really grasp the whole idea until you are faced with it. While on this job, I have many times run up against a problem which I did not know how to handle. However, since this is a training program I have someone to turn to and ask for help whenever I need it. These things are happening to me. I don't have to read about what someone else does or be told what is hard or easy; I find out for myself—I feel now that I would like to broaden my vocational field and learn more than just things of the business world. To know whether or not you will be content at the type of work you are involved in you have to get some experience in handling the things you will do when you are on your own—I am very happy; I have had the chance to work here, and I feel privileged that I have had some fine teachers and have learned so much more than the students who learn only from books."

One of the things apparently that has made the vocational education work-study so outstandingly successful in terms of helping students earn and learn on the job related to the fact that these youngsters are adequately supervised and directed as a part of the public school vocational education program. Employers often indicated that the vocational education work-study program was superior to other youth work program primarily because of its close relationship and supervision by public school educators who were interested in and able to assist the employers with problems concerning the student.

I earnestly hope that this Subcommittee will restore funds for the vocational work-study program. By doing so, you will keep faith with many American youngsters who need and want this program, and with the vocational educators and other school personnel who have worked so diligently to create local support for the vocational work-study program.

Thank you very much.

Mr. FLOOD. Thank you very much.

Mr. BURKETT. Thank you, sir.

MONDAY, MAY 1, 1967.

DENTAL PROGRAMS OF THE PUBLIC HEALTH SERVICE

WITNESSES

HAMILTON B. G. ROBINSON, DEAN, SCHOOL OF DENTISTRY OF THE UNIVERSITY OF MISSOURI, KANSAS CITY

HAL M. CHRISTENSEN, DIRECTOR, WASHINGTON OFFICE, AMERICAN DENTAL ASSOCIATION

Mr. HULL. The first witnesses this morning represent the American Dental Association and the American Association of Dental Schools.

Dr. Hamilton B. G. Robinson is Dean of the School of Dentistry of the University of Missouri at Kansas City.

I am delighted to have you here.

Mr. ROBINSON. Thank you, sir.

Mr. HULL. Doctor, you are right next door to me.

Mr. ROBINSON. We received the Centennial Award together at the Missouri meeting.

Mr. HULL. Yes.

Will you proceed, please?

Mr. ROBINSON. Mr. Chairman and members of the committee, my name is Dr. Hamilton B. G. Robinson. I am dean of the School of Dentistry of the University of Missouri at Kansas City. I have this year, in addition, the privilege of serving as president of the American Association of Dental Schools. With me is Mr. Hal M. Christensen, director of the Washington office of the American Dental Association. We are here to present the view of these two organizations on the President's fiscal 1968 appropriations for the National Institute of Dental Research and the Division of Dental Health. A full statement is, with your permission, being submitted for the record.

(The statements follow:)

STATEMENT OF THE AMERICAN DENTAL ASSOCIATION AND THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS

Mr. Chairman and Members of the Committee, my name is Dr. Hamilton B. G. Robinson. I am Dean of the School of Dentistry of the University of Missouri at Kansas City. I have this year, in addition, the privilege of serving as President of the American Association of Dental Schools. With me is Mr. Bernard

J. Conway, chief legal officer of the American Dental Association. We are here to present the view of these two organizations on the President's fiscal 1968 appropriations for the National Institute of Dental Research and the Division of Dental Health.

We are grateful for this opportunity to do so as this Committee has long been a wise and generous friend to denistry. The dental profession has benefited greatly from the counsel and support of this Committee. And, of course, much of that help came from John E. Fogarty, whose death was a signal loss to all.

The fiscal 1968 budget includes $30.3 million for the National Institute of Dental Research and $9.8 million for the Division of Dental Realth. There are additional small sums in other budgets that relate to the work of the Division and upon which we will comment in the course of this testimony.

The funds allocated will permit both agencies to continue their activities on the same, somewhat restricted scale as has obtained in previous years. The increases allowed over the present year's allocation are not such as to permit expansion of their work in any meaningful sense.

For some years, the American Dental Association and the American Association of Dental Schools have been urging the viewpoint that both agencies are consistently supported at a level just short of that needed to fulfill totally their mission. This belief stems in part, no doubt, from our own involvement in dental matters. It has, however, an objective basis as well.

As we all recognize, dental disease is perhaps the most pervasive ailment in society; almost no one is immune from its effects. This basic fact has a twofold consequence. First of all, the widespread nature of dental disease dilutes its dramatic impact on the public consciousness and the result is that dentistry has unique difficulties in attracting private support for its research and public health activities. However, this same fact also means that any breakthrough in understanding the causes of dental disease or in perfecting techniques for preventing or controlling its manifestations brings benefits not to a segment of the population but to virtually everyone. Since the private sector spending for dental care activities now exceeds $3 billion annually, the savings that could result from research breakthroughs in prevention of dental disease or expanded public health activities in controlling it would not be insignificant.

The extent to which dental disease is a national problem was, for many years, underestimated by everyone except dentists themselves. This has begun to change rapidly and emphatically and greater attention is now being paid by both the private and the public sectors of society.

In the private sector, there has been an immense growth in dental prepayment plans initiated by the profession itself and by the commercial insurance industry. Such plans, by encouraging early and regular dental care, will enable families to prevent much dental disease that now occurs and exists untended until it becomes so serious that it can't be ignored.

The public sector's new level of attention can be seen in the programs being enacted by Congress. The Office of Economic Opportunity's Project Head Start has a significant dental component. Most of the Title XIX programs now being enacted by the states include dental benefits and, by 1975, this will be mandatory. The President has submitted to this Congress a proposal to establish a series of dental care pilot projects for needy children based on the American Dental Association's National Dental Health Program for Children.

Such activities, both in the private and public sector, are supported by the dental profession. It must be recognized, however, that the scope and cost of these care programs will be determined in large measure by the activities being carried on in dental research laboratories, schools and public health agencies.

A program of dental care for needy children, for example, will have a very different form if we know how to prevent tooth decay than if we do not. But such a discovery will come only from those research activities supported by the budget of the National Institute of Dental Research.

A program of dental care, as a further example, will have a different form if the dentists involved have been trained, during their dental school years to work effectively with dental auxiliaries. By thus restricting his attention to those procedures requiring his level of proficiency, the dentist is able to care for more patients. But the training now given dental students in working with auxiliaries is supported by the Division of Dental Health. To the degree that such support is inadequate, young dentists leave school with a less than optimum understanding of the value of the auxiliaries and the ways in which to use them.

The more sympathetic attention that is paid, then, to the budgets of the

National Institute of Dental Research and the Division of Dental Health, where are carried out the fundamental investigations that support and shape all other efforts, the greater hope we have of evolving care programs that are as efficient and economical as we could desire. Saving pennies on the budgets under scrutiny here today, it may be argued, can well result in wasting more than pennies elsewhere.

With this as prologue, then, we would like to discuss the two budegts in selective detail, addressing ourselves first to the activities of the National Institute of Dental Research.

NATIONAL INSTITUTE OF DENTAL RESEARCH

Research grants.—Of the funds available to the National Institute of Dental Research, nearly half are allocated to extramural research grants. The value of this program is manifest. We have today a vastly increased number of dental research institutions capable of doing work of the highest quality on problems of basic importance to our search for the causes of tooth decay, gum disease, oral cancer and other oral ailments. Considerable momentum has developed in recent years in dental research and it is important that this momentum not be interrupted because of the unavailability of funds. If it is, we will suffer the loss both of projects of promise and of the qualified personnel who could staff these projects.

The budget proposes that $12.9 million be allocated to this activity in fiscal 1968 as opposed to $12.1 in the present fiscal year. This is an increase of 7 per cent and will, it is estimated by the Administration, permit the funding of 311 projects next year as opposed to 303 this year.

Set against this is our understanding, based on informal surveys we have undertaken, that more than $1 million in grant applications have been approved but will be unfunded this year due to budget limitations. This more than absorbs the increase contemplated in the 1968 budget submitted to you.

The net result is that the activity supported by extramural research grants will, at best, mark time during fiscal 1968. This, we believe, is shortsighted, particularly in view of the consideration, already mentioned, that must be given to the value of this work in making patient care more efficient and economical.

We would hope this Committee would permit the Institute to continue this aspect of its work at the present level and, in addition, have an opportunity for at least some measure of expansion to take advantage of new ideas and new areas of exploration. To do this minimally would require a budget of $15 million which breaks down into three components: $12 million representing present rate of progress, $1.5 million to fund the existing backlog of approved grants and $1.5 million for a small-scale expansion.

Dental research institutes.—We have spoken already of the debt dentistry owes this Committee for its wise and generous foresight. Dental research institutes are the most recent example of this. Last year this Committee initiated a $3 million budget item for the Institute to permit establishment of a number of large-scale, multidisciplinary centers. Through their location in university environments, these institutes can bring to bear a variety of skills and approaches on those oral health problems not yet wholly understood. Two institutes have been approved and funded already.

This center concept has long been favored not only by the dental profession but by the scientific community at large. Now that it has at length been established, under this Committee's leadership, all those involved are hopeful that orderly growth will be possible.

The fiscal 1968 budget allows for no increase in the amount allocated this year. That amount might, conceivably, be sufficient to sustain and develop those centers already established or to establish one or two new ones. An additional $1 million would, in our opinion, make it possible to register some progress both in the growth of the established centers and in the development of one or two additional ones. We would suggest such an increase in the budget you are considering.

Manpower.—The impact of the nation's increased attention to dental disease can be seen in all aspects of the Institute's activities. Nowhere is it clearer, however, than in those segments dealing with increasing the manpower pool.

If we are going to meet the growing demand for dental care, greater numbers of dentists will be needed. The dental education system is already expanding to meet this need. Existing schools are being enlarged and new schools are being founded.

Obviously, it is necessary that each dentist who is graduated leave school with the finest possible education. If we are to retain, much less improve, the present quality of dental education, however, greater numbers of dental researchers and dental educators must be trained to educate this greater number of dental students.

The Fellowship and Training portions of the Institute's budget for this year is $7.1 million. The proposed 1968 budget contemplates an increase of $350,000 or 5 per cent. Presently, about 600 persons are being trained under the Institute Fellowship and Training grants budget, with about 200 emerging annually into independent work. The proposed increase would allow an additional 33 persons to be trained and boost the annual number emerging to about 209. Measured against the demand being generated by our population, and supported by governmental action on all levels, this is a rather small increase. Our associations suggest that an additional $600,000 would permit an expansion more in line with the impending realities.

Collaborative studies.—Within its direct operations budget, the Institute has funds for what are called collaborative studies. Investigations initiated in the Institute's own laboratories cannot always be carried to completion there because special facilities and/or personnel are required to pursue them. In such instances, outside facilities are used under contract arrangement to advance projects as an extension of the Institute's efforts. Generally, such collaborative work needs to be undertaken with a minimum of delay in order to preserve the beginning work already undertaken by the Institute itself.

One of the programs now supported under this arrangement relates to the development of better dental filling material, notably one that would adhere inseparably to the surface of he tooth. The potential consequences for patient care are considerable since development of such a material would make it virtually unnecessary ever to have fillings replaced, thus saving expense on the part of patients and conserving much of the dentist's time, freeing him to care for more patients. Work of this type is being pursued under contractual arrangement between the Institute and the National Bureau of Standards. The American Dental Association believes strongly that this productive program should be continued on an expanded basis.

Other programs being pursued through this collaborative studies mechanism include work on cleft lip and palate, microbiological control of tooth decay and improvement in oral-facial prostheses worn by people disfigured by injuries or disease, especially oral cancer. In this latter category, for example, it is estimated that some 21,000 persons undergo primary surgery of the head or neck each year and are, afterwards, in need of oral-facial prostheses of some type.

We believe that $500,000 beyond the total suggested in the fiscal 1968 budget could be readily used in this area and hope it would be possible for the Committee to consider favorably such an increase.

Oral Cancer.—The virulence and high death rate of oral cancer are such as to justify some special mention of it in this testimony. Cancer of the mouth accounts for approximately 4 per cent of all cancers occurring annually in the United States. More than 25,000 new cases occur annually and some 5,000 persons die each year from its ravages.

Despite this, relatively few cancer investigators are working in this area. There is a largely unfulfilled need for studies on the biochemistry and structure of malignant and premalignant tissue in the oral cavity. Such effort has potential not only for improving early diagnosis of oral cancer but also contributing important information in the search for common causal factors in all forms of cancer. An increase of $100,000 would permit an expanded extramural research effort on oral cancer.

The Intramural Facilities of the Institute.—Before turning to the Division of Dental Health, we should like to make a brief comment on the intramural facilities of the Institute. Dedicated in 1960, the building was filled to capacity almost at once. At present, the Institute is forced to rent space in other buildings in order to maintain its current program and is now beginning to examine the prospect of using space in PHS hospitals in other parts of the country. Such physical separation militates against the total fulfillment of its mission. The appropriate officials should, in our opinion, begin now to plan an orderly, unified expansion of the Institute's physical facilities.

THE DIVISION OF DENTAL HEALTH

This Division administers a number of broadly based programs directed toward alleviating current dental problems. The Division helps to provide health

education facilities. It studies and suggests solutions to the problems attendant upon dental health care of the indigent, the handicapped and those who live in remote areas. It conducts and supervises investigations leading to the increased efficiency of our current manpower pool. It supports investigations designed to make it easier for practitioners to stay abreast of developments in dentistry and incorporate them without unnecessary delay into their practice.

The Division is the sole Public Health Agency devoted to non-research efforts in dental affairs. With an operating budget of less than $10 million, its efforts are obviously spread paper-thin.

Health Professions Educational Assistance Act.—The Health Professions Educational Assistance Act and its subsequent amendments have enabled the nation to begin to redress the impending manpower shortage, to strengthen dental schools and to broaden the opportunity for talented young people, who could not otherwise afford it, to undertake the study of dentistry. Administration of the Act is shared by the Division of Dental Health.

As of January, 1967, funds already allocated have or will result in the creation of two new dental schools. Twenty schools will have been renovated or rehabilitated and 541 first-year places will have been added in the nation's dental schools. We understand that more than 50 applications from all health schools will be approved and ready for funding by the end of the current fiscal year.

Under these circumstances, we would support fully the $175 million that is requested in the budget before you.

This amount, of course, is the total available for all eligible schools, including medicine, dentistry, osteopathy, optometry, podiatry and veterinary medicine.

In previous years, Congress has provided that a fixed percentage of the available construction money be allocated to dental educational institutions. The procedure seems to have worked well and, so far as we know, it is unanimously agreed to be equitable. We assume that this procedure will be followed during fiscal 1968 and, consequently, that dental schools will receive approximately $37 million during fiscal 1968 for new construction, renovation and rehabilitation.

A particularly vital aspect of the Health Professions Educational Assistance Act is that section providing improvement grants for the eligible schools. The foresight of Congress in providing such funds has been widely and justly acknowledged.

These improvement grants fall into two categories. The basic improvement grants are proportionately distributed to all eligible schools that apply. The special improvement grants represent additional sums distributed to those schools who, it is determined, require special measures to assist them in bringing their program up to a desirable level.

The fiscal 1968 budget provides $57.5 million for this twofold purpose. While this is a substantial increase over the $30 million appropriated last year, we would agree that it is justified in that it more nearly approximates the demonstrated need of the schools as shown in the testimony that led to the enabling legislation.

Of this $57.5 million total, it is our understanding that approximately $32.5 million will be allocated to basic improvement grants, equaling about $190,000 for each of the approximately 172 eligible schools. Of this amount, dentistry's proportionate share would be about $9 million.

Special improvement grants will require, it is estimated, the remaining $25 million. These grants will go only to those institutions whose applications have been approved by the National Advisory Council on Medical, Dental, Optometric, and Podiatric Education. The Administration says it expects that the major share of this $25 million will go to medical schools. We assume this is said in recognition of the fact that there are 100 medical schools estimated to be eligible and only 52 dental schools, 10 schools of optometry, 5 schools of osteopathy and 5 schools of podiatry. We further assume, however, that the administrators of this section of the law will give to all other health schools the same sympathetic attention they extend to medical schools.

The final section of the Health Professions Educational Assistance Act provides scholarships and loans to students attending health schools.

The scholarship grants section provides approximately $8 million for fiscal 1968, which amount, it is estimated, will provide support for some 4,000 young people of demonstrable talent who could not, even under the loan program, otherwise pursue a career in the health professions. We do not believe this relatively small amount of money could possibly be better invested than in this way. The need of excellence in the provision of health care, the competitive

position of the health professions with regard to other scientific pursuits and the nation's moral commitment to our talented youngsters all compel unstinting support for this program.

Much the same can be said for the loan program. The educational preparation necessary for a doctorate in dentistry or medicine is long, arduous and highly expensive. Without the loan provisions of this law, many young people, splendidly equipped by intellect and aspiration, would have to forgo their hopes of becoming a physician or dentist. The funds available in fiscal 1968 will assist, it is estimated, some 21,000 health school students. We would urge this Committee to allocate the full amount requested.

The Allied Health Professions Personnel Training Act.—Enacted in 1966, this law provides two types of assistance to those schools preparing students for such careers in the health field as medical technology and dental hygiene. It provides, first, some $3 million in fiscal 1968 for construction or rehabilitation of physical facilities. Given the fact that there are nearly 650 institutions engaged in giving the kind of training encompassed by the bill, this is an extremely limited sum of money and will not, of course, move us forward in any substantial way. It is something of a beginning, however, and our organizations hope that the full amount requested will be allotted.

The educational improvement grants section of this law is likewise a severely limited response to the acknowledged need. The fiscal 1968 budget suggests an allocation of $9.75 million. Distributed among the eligible institutions, it is estimated that each will receive about $15,000. It should also be noted that the small amount of money, and the great number of institutions involved, will clearly make it impossible to award any special improvement grants, even though Congress has authorized them.

Dental Auxiliary Utilization.—As has been already noted, this nation is beginning to focus its attention more sharply than ever before on the problems of dental disease. The dental profession welcomes this development and, indeed, has been working toward it for many years.

Though all segments of society seem to be manifesting increased concern, there is no question but that the preseent Administration has been in the forefront. The public statements of President Johnson, HEW Secretary John W. Gardner, HEW Under Secretary Wilbur J. Cohen and HEW Assistant Secretary Philip Lee are filled with remarks concerning what needs to be done in dental care and what mechanisms should be adopted to do it.

The American Dental Association and the American Association of Dental Schools are gratified that the President, and so many of his advisors, now share our desire to extend the finest possible dental care to all our fellow citizens. Further, we agree that many of the mechanisms they suggest are clearly valid.

In particular, we agree that the nation's dentists must take every possible step to increase their productivity. One of the swiftest and most certain ways of doing this, it has long been known, is to make greater use of the dental auxiliaries, especially the dental assistant, who works at the dentist's side as he cares for patients. The best way to teach a dentist how to work with dental assistants most effectively is, obviously, in the dental school, the place where he prepares himself for all other phases of his future practice.

Administration officials have frequently and publicly spoken of their belief in this procedure. Indeed, on more than one occasion, Administration officials have singled out the dental profession's utilization of auxiliaries as an example for the other health professions to follow.

It is extremely difficult, then, for our organizations to understand why this aspect of the Division's budget—the only source within the federal government that funds dental auxiliary utilization programs in the dental schools—is so consistently and repeatedly underfunded.

In fiscal 1967, this budget item was allocated $2.6 million. Under these circumstances, all of the senior students in the dental schools received some experience in working with auxiliaries and about half of the junior students were included. There is total agreement among educators that the senior students do not receive enough experience under the current program and, further, that all of the junior students, rather than half, should be included.

The suggested allocation for fiscal 1968 is $3 million, an increase of $400,000. This would be inadequate even were dental school enrollment to become static. In fact, of course, dental school enrollment is increasing and will increase even more sharply in the near future as the full impact of the Health Professions Educational Assistance Act is felt.

If we are to have any hope of keeping the promises we make to our fellow citizens, then the source programs that underlay all our efforts must be realistically funded. In this instance, an appropriation of $5 million would permit the school to educate fully all the appropriate students in the value and use of dental auxiliaries. Accordingly, we urge this Committee to allocate $5 million to this budget item.

Dental Health Center in San Francisco.—For some time now, planning has been underway for construction of an addition to the present Dental Health Center in San Francisco. This Committee, in its report last year, urged that this go forward as quickly as possible. Our organizations are happy to note that the necessary construction funds are requested for fiscal 1968. The money is not part of the Division's budget but is contained in a separate Public Health Service fund for buildings and facilities. We are grateful to the Committee for its assistance in bringing this project to fruition.

Comprehensive Health Planning and Services.—Fiscal 1965 marked the first year that federal funds were ever specifically granted to assist state and local governments to combat their immense dental public health problems. This specific earmarking was accomplished by the action of this Subcommittee and its Senate counterpart. By fiscal 1967, this dental category was funded at the level of $1 million, which if apportioned equally would be a modest $20,000 per state.

In the closing days of the 89th Congress, as you will recall, the categorical grant-in-aid program was replaced by a Comprehensive Health Planning and Services Act. The American Dental Association, in its testimony at that time, recognized that considerable justification exists for enacting a new framework within which states and the federal government could work cooperatively to solve their manifold public health problems. We voiced our concern, however, that the extremely small amount of money that had finally been earmarked for dental health might be lost yet again.

Our concern is somewhat intensified by the fact that in the fiscal 1968 budget this item has not only disappeared from the Division's programs but is no longer identifiably listed anywhere in the federal budget.

In testimony before this Committee in April, Dr. Leonard D. Fenninger, director of the bureau of health manpower, took note of the omission and explained: "Funds for this purpose in 1968 are included in the appropriation 'Comprehensive health planning and services' in the Office of the Surgeon General. We will continue, of course, to provide to the States necessary professional and technical guidance in connection with this program."

Dr. Fenninger's assurance is most welcome. We must say candidly, however, that his statement would have been even more welcome had he stipulated precisely how much money is going to be available in fiscal 1968. We would certainly hope it will not be less than $1 million and would suggest that it could fruitfully be more.

Further, we do not fully understand the rationale for including money allotted to such a specific item in a rather omnibus administrative fund. In future years, we believe, the Public Health Service might usefully provide more detailed comment regarding an item that, both nationally and on the state level, the dental profession considers to be of great importance.

Additional Programs: The Division carries out a greatly varied set of activities in addition to those specifically discussed in the course of this testimony. They are, for example, carrying out epidemiological studies concerning the incidence of cleft lip and palate. They have a fellowship and training program oriented toward prevention and control aspects of dental disease and community dentistry. They are deeply involved in studies concerning the nature and scope of the duties that dental auxiliaries can be asked to perform. They provide considerable support to the profession's efforts to intensify continuing education for the practitioner. They bear the chief governmental responsibility for educating the nation about the unquestionable benefits of fluoridation. They have a research and development program directed toward the clinical evaluation of new filling materials, the importance of which was explained in our discussion with respect to the National Institute of Dental Research.

All of these programs, as has been noted, are carried out under the most stringent budgetary limitations. The Division deserves, we believe, considerable commendation for its efficient use of the money made available to it. Since the increases suggested in the fiscal 1968 budget for these programs are modest indeed, our organizations would urge the Committee, at a minimum, to appropriate fully the amounts requested.

Mr. ROBINSON. We are grateful for this opportunity to do so as this committee has long been a wise and generous friend to dentistry. The dental profession has benefited greatly from the counsel and support of this committee. And, of course, much of that help came from John E. Fogarty, whose death was a signal loss to all.

The fiscal 1968 budget includes $30.3 million for the National Institute of Dental Research and $9.8 million for the Division of Dental Health. This will permit both agencies to continue their activities on the same, somewhat restricted scale as has obtained in previous years.

For some years, the American Dental Association and the American Association of Dental Schools have been urging the viewpoint that both agencies are consistently supported at a level just short of that needed to fulfill totally their mission. This belief stems in part, no doubt, from our own involvement in dental matters. It has, however, an objective basis as well.

As we all recognize, dental disease is perhaps the most pervasive ailment in society; almost no one is immune from its effects. This basic fact has a twofold consequence. First of all, the widespread nature of dental disease dilutes its dramatic impact on the public consciousness and the result is that dentistry has unique difficulties in attracting private support for its research and public health activities. However, this same fact also means that any breakthrough in understanding the causes of dental disease or in perfecting techniques for preventing or controlling its manifestation brings benefits not to a segment of the population but to virtually everyone. Since the private sector spending for dental care now exceeds $3 billion annually, the savings that could result from research breakthroughs or expanded public health activities would not be insignificant.

The extent to which dental disease is a national problem was, for many years, underestimated by everyone except dentists themselves. This has begun to change rapidly and emphatically. Greater attention is now being paid by both the private and the public sectors of society.

In the private sector, there has been an immense growth in dental prepayment plans initiated by the profession itself and by the commercial insurance industry.

The public sector's new level of attention can be seen in the programs being enacted by Congress. The Office of Economic Opportunity's Project Headstart has a significant dental component. Most of the title XIX programs now being enacted by the States include dental benefits and, by 1975, this will be mandatory. The President has submitted to this Congress a proposal to establish a series of dental care pilot projects for needy children based on the American Dental Association's national dental health program for children.

Such activities, both in the private and public sector, are supported by the dental profession. It must be recognized, however, that the scope and cost of these care programs will be determined in large measure by the activities being carried on in dental research laboratories, schools, and public health agencies.

A program of dental care for all needy children, for example, will have a very different form if we know how to prevent tooth decay than if we do not. But such a discovery will come only from those research activities supported by the budget of the National Institute of Dental Research.

A program of dental care, as a further example, will have a different form if the dentists involved have been trained, during their dental school years, to work effectively with dental auxiliaries. The training now given dental students in working with auxiliaries is supported by the Division of Dental Health. To the degree that such support is inadequate, young dentists leave school with a less than optimum understanding of the value of the auxiliaries and the ways in which to use them.

The more sympathetic attention that is paid, then, to the budgets of the National Institutes of Dental Research and the Division of Dental Health, where are carried out the fundamental investigations that support and shape all other efforts, the greater hope we have of evolving care programs that are as efficient and economical as we could desire. Saving pennies on the budgets under scrutiny here today, it may be argued, can well result in wasting more than pennies elsewhere.

With this as prologue, then, we woud like to discuss the two budgets in selective detail, addressing ourselves first to the activities of the National Institute of Dental Research.

Research grants: Of the funds available to the National Institute of Dental Research, nearly half are allocated to extramural research grants. The budget proposes that $12.9 million be allocated to this activity in fiscal 1968 as opposed to $12.1 million in the present fiscal year. This is an increase of 7 percent and will, the administration estimates, permit the funding of 311 projects next year as opposed to 303 this year.

Set against this is our understanding, based on informal surveys, that more than $1 million in grant applications have been approved but will be unfunded this year due to budget limitations. This more them absorbs the increase contemplated in the 1968 budget.

The net result is that the activity supported by extramural research grants will, at best mark time during fiscal 1968.

We hope this committee will permit the Institute to continue this aspect of its work at the present level and, in addition, have an opportunity for at least some measure of expansion to take advantage of new ideas and new areas of exploration. To do this minimally would require a budget of $15 million which breaks down into three components: $12 million representing present rate of progress, $1.5 million to fund the existing backlog of approved grants and $1.5 million for a small-scale expansion.

Dental research institutes: We have spoken already of the debt dentistry owes this committee for its wise and generous foresight. Dental research institutes are the most recent example of this. Last year this committee initiated a $3 million budget item for the Institute to permit establishment of a number of large-scale multidisciplinary centers.

Two institutes have been approved and funded already. Now that the center concept has at length been established, under this committee's leadersip, all those involved are hopeful that orderly growth will be possible.

The fiscal 1968 budget allows for no increase in the amount allocated this year. An additional $1 million would, in our opinion, make it possible to register some progress both in the growth of the established centers and in the development of one or two additional ones.

Manpower: The impact of the Nation's increased attention to dental disease is nowhere clearer than in those segments dealing with increasing the manpower pool.

If we are going to meet the growing demand for dental care, greater numbers of dentists will be needed. The dental education system is already expanding to meet this need.

Obviously, it is necessary that each dentist who is graduated leave school with the finest possible education. If we are to retain, much less improve, the present quality of dental education, however, greater numbers of dental researchers and dental educators must be trained to educate this greater number of dental students.

The fellowship and training portions of the Institute's budget for this year is $7.1 million. The proposed 1968 budget contemplates an increase of $350,000 or 5 percent. Measured against the demand being generated by our population, and supported by governmental action on all levels, this is a rather small increase. Our associations suggest that an additional $600,000 would permit an expansion more in line with the impending realities.

Collaborative studies: Within its direct operations budget, the Institute has funds for what are called collaborative studies. One of the programs now supported under this arrangement relates to the development of better dental filling material, notably one that would adhere inseparably to the surface of the tooth. The potential consequences for patient care are considerable since development of such a material would make it virtually unnecessary ever to have fillings replaced, thus saving expense on the part of patients and conserving much of the dentist's time.

Other programs being pursued through this mechanism include work on cleft lip and palate, microbiological control of tooth decay and improvement in oral-facial prostheses worn by people disfigured by injuries or disease, especially cancer and war injuries.

We believe that $500,000 beyond the total suggested in the fiscal 1968 budget could be readily used in this area.

The Division of Dental Health administers a number of broadly based programs directed toward alleviating current dental problems. The Division is the sole Public Health Service agency devoted to application of dental research results for the direct benefit of the public. With an operating budget of less than $10 million, its efforts are obviously spread paper thin.

Health Professions Educational Assistance Act: The Health Professions Educational Assistance Act and its subsequent amendments have enabled the Nation to begin to redress the impending manpower shortage, to strengthen dental schools and to broaden the opportunity for talented young people, who could not otherwise afford it, to undertake the study of dentistry. Administration of the act is shared by the Division of Dental Health.

As of January 1967, funds already allocated have or will result in the creation of two new dental schools. Twenty schools will have been renovated or rehabilitated and 541 first-year places will have been added in the Nation's dental schools. We understand that more than 50 applications from all health schools will be approved and ready for funding by the end of the current fiscal year.

Under these circumstances, we would support fully the $175 million that is requested in the budget before you.

This amount, of course, is the total available for all eligible schools. In previous years, a fixed percentage of the available construction money has been allocated by Congress for dental education institutions. This procedure seems to have worked well and, so far as we know, it is unanimously agreed to be equitable. We urge that this procedure be followed during fiscal 1968.

A particularly vital aspect of the Health Professions Educational Assistance Act is that section providing basic and special improvement grants for the eligible schools. The foresight of Congress in providing such funds has been widely and justly acknowledged. The fiscal 1968 budget provides $57.5 million for this twofold purpose.

Of this total, approximately $32.5 million will be allocated to basic improvement grants. Special improvement grants will require the remaining $25 million. These special grants will go only to those institutions whose applications have been approved by the appropriate national advisory council. The administration says it expects that the major share of this $25 million will go to medical schools.

We assume this is in recognition of the fact that there are 100 medical schools estimated to be eligible and only 72 other health profession schools. We further assume, however, that the administrators of this section of the law will give to all other health profession schools the same sympathetic attention they extend to medical schools.

The scholarship grants section provides approximately $8 million for fiscal 1968, which amount, it is estimated, will provide support for some 4,000 young people of demonstrable talent who could not, even under the loan program, otherwise pursue a career in the health professions. We do not believe this relatively small amount of money could possibly be better invested than in this way. Much the same can be said for the loan program and here too we would urge this committee to allocate the full amount requested, which will assist some 21,000 health school students. Further, we would urge that the full amounts requested for the Allied Health Professions Personnel Training Act be allocated.

Dental auxiliary utilization: As has been noted, this Nation is beginning to focus its attention more sharply than ever before on the problems of dental disease. The dental profession welcomes this development and, indeed, has been working toward it for many years.

Recent public statements of President Johnson, HEW Secretary John W. Gardner, HEW Under Secretary Wilbur Cohen and HEW Assistant Secretary Philip Lee have directed attention to what needs to be done in dental care and what mechanisms should be adopted to do it.

The American Dental Association and the American Association of Dental Schools are gratified that the President and so many of his advisers appear to share our desire to extend the finest possible dental care to all our fellow citizens.

To accomplish this objective, we agree that the Nation's dentists should take every possible step to increase their productivity. One of

the swiftest and most certain ways of doing this is to make greater use of the dental auxiliaries, especially the dental assistant, who works at the dentist's side as he cares for patients. The best way to teach a dentist how to work with dental assistants most effectively is, obviously, in the dental school, the place where he prepares himself for all other phases of his future practice.

Administration officials have frequently and publicly spoken of their belief in this procedure. Indeed, on more than one occasion, they have singled out the dental profession's utilization of auxiliaries as an example for the other health professions to follow.

It is extremely difficult, then, for our organizations to understand why this aspect of the Division's budget—the only source within the Federal Government supporting dental auxiliary utilization programs in the dental schools—is so consistently and repeatedly underfunded.

In fiscal 1967, this budget item was allocated $2.6 million. Under these circumstances, there is total agreement among educators that the dental students do not receive enough experience in working with auxiliaries.

The suggested allocation for fiscal 1968 is $3 million, an increase of $400,000. This would b inadequate even were dental school enrollment to become static. In fact, of course, dental school enrollment is increasing and will increase even more sharply in the near future as the full impact of the Health Professions Educational Assistance Act is felt.

If we are to have any hope of keeping the promises we make all our efforts must be realistically funded. In this instance, an appropriation of $5 million would permit the school to educate fully all the appropriate students in the value and use of dental auxiliaries. Accordingly, we urge this committee to allocate $5 million to this budget item.

Dental health center in San Francisco: For some time now, planning has been underway for construction of an addition to the present dental health center in San Francisco. This committee, in its report last year, urged that this go forward as quickly as possible. Our organizations are happy to note that the necessary construction funds are requested for fiscal 1968 and thank the committee for its help.

Comprehensive health planning services: Fiscal 1965 marked the first year that Federal funds were ever specifically granted to assist State and local governments to combat their immense dental public health problems. This specific earmarking was accomplished by the action of this subcommittee and its Senate counterpart. By fiscal 1967, this dental category was funded at the level of $1 million, which if apportioned equally would mean a modest $20,000 per state.

In the closing days of the 89th Congress, as you will recall, the categorical grant-in-aid program was replaced by a Comprehensive Health Planning and Services Act. The American Dental Association, in its testimony at that time, recognized that considerable justification exists for enacting a new framework within which States and the Federal Government could work cooperatively to solve their manifold public health problems. We voiced our concern, however, that the extremely

small amount of money that had finally been earmarked for dental health might be lost yet again.

Our concern is somewhat intensified by the fact that in the fiscal 1968 budget this item has not only disappeared from the Division's programs but is no longer identifiably listed anywhere in the Federal budget.

In testimony before this committee in April, Dr. Leonard D. Fenninger, Director of the Bureau of Health Manpower, took note of the omission and explained:

> Funds for this purpose in 1968 are included in the appropriation "Comprehensive health planning and services" in the Office of the Surgeon General. We will continue, of course, to provide to the States necessary professional and technical guidance in connection with this program.

Dr. Fenninger's assurance is most welcome. We must say candidly, however, that his statement would have been even more welcome had he stipulated precisely how much money is going to be available in fiscal 1968. We would certainly hope it will not be less than $1 million and would suggest that it could fruitfully be more. Mr. Chairman, this concludes our oral statement. May we again thank the committee for this opportunity to present our views. Mr. Christensen and I would be glad to answer any questions.

Mr. HULL. Dr. Robinson, we certainly appreciate your statement. Thank you very much, sir.

Mr. ROBINSON. Thank you.

MONDAY, MAY 1, 1967.

TUBERCULOSIS

WITNESSES

DR. H. WILLIAM HARRIS, MEMBER, BOARD OF DIRECTORS, NATIONAL TUBERCULOSIS ASSOCIATION

DR. ROBERT J. ANDERSON, MEDICAL DIRECTOR, NATIONAL TUBERCULOSIS ASSOCIATION

Mr. HULL. Our next witness will be Dr. Harris, member, board of directors, National Tuberculosis Association and Dr. Robert Anderson, medical director, National Tuberculosis Association.

We will be delighted to have your statement, Dr. Harris.

Dr. HARRIS. Thank you very much, Mr. Hull.

Let me say first that my job is professor and chairman of the Department of Medicine of the Woman's Medical College of Pennsylvania in Philadelphia, but as you noted, I am here as spokesman for the board of directors of the National Tuberculosis Association.

Dr. Anderson is medical director of the American Thoracic Society which is the medical arm of the National Tuberculosis Association.

First, I would like to express our appreciation and that of the board of directors of the NTA for this opportunity to appear before your committee and to review certain of our country's health problems which I am sure are of mutual interest to you and to our association.

As you know, we have a formal statement which has been given to your committee.

Mr. HULL. It will be inserted in the record.

(The statement follows:)

STATEMENT OF THE NATIONAL TUBERCULOSIS ASSOCIATION IN SUPPORT OF THE TUBERCULOSIS AND CHRONIC RESPIRATORY DISEASE PROGRAMS, PHS, FOR FISCAL 1968 BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON LABOR—HEW

Presented by H. William Harris, M.D.

STATEMENT ON TUBERCULOSIS

The Tuberculosis Problem

The National Tuberculosis Association was founded in 1904, when tuberculosis was the leading cause of death. Every community in the country is covered by one of our affiliated tuberculosis associations and we have as an integral part of our national association a medical society of some 5,000 physicians called the American Thoracic Society.

Great advances in chemotherapy in the past 20 years have dramatically reduced tuberculosis to the rank of twentieth cause of death in the U.S. However, tuberculosis continues to be the most important specific infectious disease in this country. Hundreds of thousands of persons in the U.S. are afflicted by this disease even today.

In recent years, an average of 50,000 new active cases have been reported annually. Each new case has an average of five contacts who must be examined for possible existence of infection and disease. At any one time, about 100,000 persons are in hospitals or are receiving active treatment at home. Another 200,000 are still being supervised by health departments to assure that they will not relapse; approximately 10,000 patients are known to reactivate annually.

These figures give some approximation of the current burden of tuberculosis control on health departments.

The Task Force on Tuberculosis

In the 1950's, following the development of very effective anti-tuberculosis drugs, it became increasingly evident that these drugs were not being employed widely enough to bring about the diminution in the disease possible through their proper and adequate use.

A Task Force was appointed in 1963 by the Surgeon General of the U.S. Public Health Service at the request of your committee to develop a program to take full advantage of the currently available scientific advances. This group of highly qualified individuals representing various specialized disciplines reported that substantially increased Federal support for specific control measures was necessary to accomplish the much needed acceleration in control. They urged expanded use of project grants so that activities could be pinpointed where they were most needed.

Congress has accepted the recommendations and has met the needs of the Task Force plan to date by specific appropriations action. Practically all States have been able to intensify their tuberculosis control efforts. As might be expected, experience during the past few years with augmented project grant funds has shown which approaches are relatively ineffective and which are abundantly fruitful, serving as models for application elsewhere.

The Record

Currently there are 88 projects funded in all but one State. In our opinion, the Tuberculosis Program of the United States Public Health Service has done an outstanding job in administering the expanded project grant program. To launch such an operation required planning and organizational abilities and a clear understanding of what had to be done; the Tuberculosis Program has performed well in all respects.

An evaluative approach to tuberculosis control has now been introduced in project areas. Priorities have been established and accomplished in performance has been recorded. The type of improvement which can be expected as a result of intensification of activities is illustrated in one project group as an example. Almost 90 per cent of a total of 17,000 persons suspected of having tuberculosis were examined and their condition evaluated within six months of the time they were identified. This is far better than the usual record in the past.

What remains to be done

Nevertheless, tuberculosis control measures remain inadequate in many areas of the country. In one group of project areas, only half of the active cases who should have had an examination of their sputum for tubercle bacilli within the previous six months had done so. Such poor performance in one of the most critical aspectsof tuberculosis control shows the extent of improvement needed—improvement possible only if the additional resources recommended by the Surgeon General's Task Force are actually made available. In order to ensure tuberculosis-free generations in the future, the Tuberculosis Program of the Public Health Service has been working on plans to encourage tuberculin testing of children entering school. As part of its program to keep children from becoming infected, or to detect such infection at the earliest possible moment if it does occur despite the protective measures, adequate control measures are applied immediately to prevent further spread. It is important that this objective not be impeded. The President in his statement on America's Children and Youth of February 8 stated as one of his priorities the stopping of "tuberculosis in its first stages, before it causes serious harm."

Financing of tuberculosis control

Project grant funds (in the amount of $14,950,000 in fiscal year 1967) have been the main form of Federal support for tuberculosis control during the past few years. Formula grants in the amount of $3,000,000 were available this year for ongoing control activities within State and local health departments. As Federal funds were increased in response to recommendations of the Task Force, we were concerned that State and local expenditures might decline. However, evidence shows that this is not the case, the amount spent on tuberculosis control by State and local governments this year totalling at least $37,000,000, an increase over the estimated expenditures of $32,500,000 at the time of the Task Force report.

The Future

The National Tuberculosis Association Board of Directors supported the principles of the formula grants proposed in P.L. 89–749 when the legislation was first proposed because the NTA has always supported strong basic health services. Project grants authorized under P.L. 89–749 are intended to "provide services to meet health needs of special regional or national significance," according to the House Committee report accompanying H.R. 18231. The report specifies that project grants are for purposes of program support, development and demonstration for such targets as tuberculosis control.

The Task Force recommended that Federal appropriations for the third year of accelerated tuberculosis control total $25,000,000 for project grants and $4,500,000 for formula grants. This third year is fiscal 1968. Yet the 1968 Federal budget proposes, under the ceiling imposed by P.L. 89–749, only $17,500,000 for project grants for tuberculosis control. This amount is $7,500,000 short of the requirements for the Task Force plan. It will indeed be disappointing if the careful plans of the Task Force on Tuberculosis Control have to be scaled back in the critical next year when increased activities have just begun to have an impact on control performance. We believe that this earmarking of project grants for tuberculosis is well deserved recognition of the special results that are possible in reducing and even eradicating tuberculosis if the money to mount the program is appropriated.

To delude ourselves that tuberculosis is no longer a formidable enemy is to permit more years of unnecessary suffering and expense from this disease. The health workers of this country will see that this attitude does not prevail and that the campaign continues if the Congress will help make this possible. We urge you to appropriate at least $17,500,000, the amount requested in the budget for project grants for tuberculosis control.

STATEMENT ON EMPHYSEMA, BRONCHITIS, AND OTHER CHRONIC RESPIRATORY DISEASES

The problem

The rate of increase in deaths from emphysema, chronic bronchitis and other chronic respiratory diseases has been so sharp in recent years as to attract widespread attention. In 1963, Moriyama of the National Center for Health Statistics, PHS, pointed to the frequent association of these diseases with other causes of death, noting that the published figures on chronic respiratory diseases as primary causes of death were only the visible portion of the iceberg. He termed the upward trend in the death rate an emerging serious public health problem, which called for careful and intensive study.

In 1964, emphysema, chronic bronchitis, bronchiectasis, asthma and chronic interstitial pneumonia caused over 30,000 deaths and were estimated to have contributed to 50,000 other deaths. Thus, 80,000 deaths in one year alone were caused directly or indirectly by these chronic chest diseases. In addition, many deaths due to such conditions are thought to be incorrectly attributed to "heart failure" and a host of other ill-defined conditions.

In emphysema and chronic bronchitis, the most prevalent of the chronic respiratory diseases, both permanent and transient changes take place in the lungs which make it impossible for a person to obtain all the oxygen he needs and to eliminate the waste gases of breathing. As these conditions progress, the patient becomes increasingly short of breath, more and more unable to walk and do his work. He becomes a respiratory cripple fighting for every breath. The disease attacks primarily males in their most productive years of life.

The group of bronchopulmonic diseases, of which emphysema is the major component, is now the tenth cause of death in the United States and seventh among males. In recent years, the mortality rate from this group of diseases has risen more sharply than that of any of the ten leading causes of death. Emphysema alone caused close to 16,000 deaths in 1964; provisional figures indicate that there was an increase of over 2,500 deaths due to this cause in 1965. This increase in one year is almost as great as the total number of persons recorded as dying from the disease ten years ago.

It is estimated that at least 10 per cent of all men above the age of 40 have enough pulmonary obstruction to impair their capacity to breathe. Emphysema is now the second most frequent diagnosis for which benefits are granted by the Social Security Administration to workers who must retire for disability prior to age 65. Annual costs of these benefits are today in excess of $90,000,000. Dr. Rene Dubos, the Rockefeller University bacteriologist, has stated that chronic pulmonary disease is the greatest single medical problem in Northern Europe and is increasing at an alarming rate in North America.

During the week of October 17, 1966, the Public Health Service and the National Tuberculosis Association sponsored a Conference to consider what could be done to arrest the alarming rise in chronic respiratory diseases, notably emphysema and chronic bronchitis, and to offer patients afflicted with these conditions more resources than are currently available. The Task Force called together for this purpose consisted of leading medical specialists and other authorities in the fields of research, public health and medical and nursing education. The findings are summarized in the following.

The cause of emphysema and the course of both emphysema and chronic bronchitis are not fully understood and a better understanding of the diseases is necessary before diagnosis and treatment can be improved.

Cigarette smoking has been strongly implicated in their development but other factors are certainly involved because some non-smokers develop emphysema. The effects of environmental pollution on development of chronic respiratory diseases are not fully known. However, extended air pollution crises have resulted in excessive mortality among persons already afflicted with these diseases. The reason for the excessive ratio of men as compared with women who die of the respiratory diseases, particularly emphysema, is unknown.

To find answers to such questions as these, the Task Force pointed to the need for expansion and acceleration of basic, epidemiologic and clinical research in chronic bronchitis and pulmonary emphysema.

Financing for research

It is obvious that if the problems of emphysema and chronic bronchitis and the other diseases which cause pulmonary crippling are going to receive the kind of national attention called for by this Task Force more funds must be forthcoming from the Federal government to finance research activity than are now available.

At the present time, the budget for the National Institute of Allergy and Infectious Diseases contains approximately $1,000,000 annually for specific research in emphysema, and this appropriation has been available only during the past two years. These funds support investigations exploring the role of infectious agents in the development of chronic respiratory disease. Because the competencies of the Institute's staff are in the field of infectious diseases, use of the funds in this way seems logical and efficient. The National Heart Institute also supports emphysema research because of the close connection of diseases of the respiratory system with those of the circulatory system. The amount of support in the latter Institute for work concerned with pulmonary physiology is estimated at several million dollars.

In our opinion these sums are not of the proportions necessary to finance the amount of research needed to cope with diseases which have such an impact on our population nor to support all areas of research which must be looked into and more fully explored, or is there any increase proposed in the budgets for these particular National Institutes of Health for research grants in the field of chronic respiratory disease. The National Tuberculosis Association urges Congress to take action this year to see that greater impetus be given to research in chronic respiratory diseases through appropriation of increased Federal funds to these Institutes.

Medical and other patient care services

Therapeutic help is available for patients with chronic respiratory disease which temporarily relieves their condition and enables them to function within the limits imposed by the severity of their condition.

Nebulized aerosols, breathing exercises and other physical reconditioning can be of benefit. Extremely effective inhalation therapy machines are available which assist patients in the act of breathing, but the employment of these devices under other than skilled medical management can be detrimental and even dangerous to the patient. By the time a person with emphysema is ill enough to benefit from an inhalation therapy machine, he is usually dependent on the device for the rest of his life.

At all times, the patient must be protected from contracting respiratory infections which will exacerbate his condition. Immunization and antibotic prophylaxis play an important role in such protection.

Although we need to know more about the causes of emphysema and chronic bronchitis, we have learned much in the past ten years which has been dramatically effective in preventing death in patients who go into respiratory failure. However, help of this nature is usually confined to those in life threatening crises in whom respiratory difficulty may be the end result of other conditions.

As with any disease, the physician must have exact knowledge and understanding of the patient's physical condition to make a proper choice of a medical regimen. In the majority of communities, skilled medical supervision for patients chronically ill with pulmonary insufficiency is just not available. This situation

is due largely to the fact that the medical knoweldge which does exist has not been made generally available because of lack of personnel to teach the skills and knowledge necessary to diagnose and treat the disease. As might be expected, it is necessary to break such a bottleneck by starting where people are trained.

The solution to improved medical care

The Task Force discussed at length the need for physicians and other personnel well trained in the diagnosis and treatment of patients with emphysema and chronic bronchitis. They stressed the present lack of capability for pulmonary disease teaching in medical schools. They stated that the need could only be met by organized programs in medical schools under faculty competent in these specialties.

Much of the knowledge and techniques in the respiratory disease field which we do possess have developed only in the past decade. Therefore, medical schools have had little time to develop educational programs to equip students with the kinds of skills needed. The NTA has made a survey which shows that only one-fourth of the existing medical schools have a program in pulmonary disease teaching which could be described as more than minimally adequate.

Specifically, the survey revealed that twenty per cent of the 82 medical schools responding to our inquiry had no undergraduate chest disease teaching program. Over a third did not assign students to chest clinic patients. Over a third had no clinical or research fellows working in this important field of medicine. Ten schools had no full time faculty member assigned to pulmonary disease teaching; 18 had only one.

The NTA believes that the urgent need for professional education in this field can be met only by the establishment in every medical school of a specialized cadre of full-time personnel working with patients who are afflicted with these conditions. The primary purpose of such cadres would be to develop understanding in medical students, interns, residents and fellows in university medical centers of the physiologic, diagnostic, treatment and rehabilitation principles underlying the care of respiratory disease patients.

Cadres would consist of physicians, pulmonary physiologists, nurse specialists in respiratory disease care, pulmonary function technicians, inhalation therapists and physiotherapists, and blood-gas chemists. Through such programs, direct impetus would be provided for increasing the numbers of specialists and other personnel with highly specialized skills. By providing the opportunity for research training, intensive residencies and fellowships in the field could be offered and participation of post-graduate students would be possible.

Medical students who become general practitioners would go into their communities with greatly expanded knowledge of how to care for respiratory disease patients. Most important, continuing educational programs would almost immediately extend knowledge to practicing physicians and other health professionals, and to institutions in their areas. Inevitably, new developments in techniques would be conceived in such programs which would be disseminated to medical practitioners in the community, the end result being availability of good medical services outside hospitals, an objective we must all work for in these times of accelerating hospital costs and a particularly important objective in the care of persons whose disability is long term.

This particular approach we consider the most effective way to meet an increasingly critical situation. However, it demands the various skills of several disciplines working together to show students and practitioners how to best manage patients with these diseases. A full scale program of the type we are proposing would cost approximately $7,500,000 a year if all of the approximately 100 medical schools in operation or planned for operation in the next five years participated immediately.

The estimate of $7,500,000 includes maximum support in a third of all medical schools where the program must be initiated. In approximately a fourth of the schools, costs would be mainly for the provision of highly specialized equipment which would enable those schools to realize the potential of such programs through use of professional and technical resources already available. In the remaining medical schools, augmentation of skills and equipment of varying degrees would be required depending on their respective staffs and facilities.

The NTA recommends that Congress provide the impetus to this program by appropriating funds for its support. We would urge Congress to start the program this year. Although $7,500,000 is needed for maximum support, we recommend that appropriations for 1968 be at the level of $2,000,000; this amount will allow demonstrations of what can be accomplished.

Increased resources in the community for the management of the pulmonary diseases are imperative. A specialist in the field recently commented that, "Most physicians who graduated from medical schools prior to five years ago have only the most meager knowledge of modern methods of treatment so that outside of medical centers, with a few exceptions, a large mass of the population does not receive the benefit of up-to-date methods."

A program such as we have described will go far to remedy deficiencies in medical care and to reduce the tremendous costs of these diseases as more knowledge of early diagnosis, effective treatment and rehabilitation is developed and utilized by doctors in their medical practice in the community.

Chronic Respiratory Disease Program, PHS

The Congress played a role in the establishment of the Program of the Public Health Service which has the responsibility for promoting control of chronic respiratory disease and has appropriated $1,000,000 annually for that Chronic Respiratory Disease Program during the few years since its inception. This Program is the only Federal agency whose sole purpose is to promote better diagnosis, treatment and rehabilitation of chronic respiratory disease patients.

Its programs include developmental and evaluative research on the effectiveness of various diagnostic and therapeutic approaches. The Program has initiated pilot clinical studies and is evaluating screening examining techniques for their case finding value. It is supporting three respiratory intensive care units of the sort which should be available in every community of any size because of their demonstrated lifesaving potential. It is promoting the development of high quality rehabilitation clinics which have had significant success in restoring patients to a high degree of comfort, self-suffiiency and independence.

Meager appropriations have limited the number and scope of these valuable projects. The need for more and better services for patients with emphysema and other chronic respiratory conditions is great in every area of the country. Communities must develop more adequate medical care services for respiratory disease patients. For the Federal program to reach its potential in assisting communities in attaining these objectives, it must have additional funds. It is time that more projects are undertaken by the Chronic Respiratory Disease Program aimed at developing new approaches and demonstrating workable methods of providing services. More educational programs for the medical profession and for the public must be provided in order to promote wider application of the knowledge that is available.

We urge that the Federal government expand the activities of the Chronic Respiratory Disease Program. To accomplish this, we request that Congress increase the appropriation of the National Center for Chronic Disease Control by $1,000,000 for the types of specific activities in chronic respiratory disease which are so desperately needed.

SUMMARY

In our opinion, attention to the control of chronic respiratory diseases, including tuberculosis, is markedly inadequate in the President's budget.

In the past, the National Tuberculosis Association has often turned to Congress for help in seeing that needs were met. On many occasions, Congress has recognized the urgency of a situation and through its action provided the impetus for establishing programs to meet demonstrated needs. This year, the National Tuberculosis Association calls on Congress to show the same foresight by taking action to alleviate the serious situation in respiratory disease control. It requests that:

Congress appropriate at least the requested amount of $17,500,000 for tuberculosis control project grants in order that the campaign to eradicate this major communicable disease can be maintained.

Congress make it possible to launch a campaign against the other serious chronic respiratory diseases, such as emphysema and bronchitis, whose rapidly increasing toll threatens to negate all that has been achieved in control of respiratory tuberculosis. In order to do this, the National Tuberculosis Association requests:

Increased funds for the National Institute of Allergy and Infectious Diseases and the National Heart Institute for research grants in the field of chronic respiratory disease.

An additional $1,000,000 to the National Center for Chronic Disease Control for the Program in Chronic Respiratory Disease.

Support for initiating a demonstration program of professional education in medical schools and affiliated teaching hospitals, at an initial amount of $2,000,000.

Dr. HARRIS. I would like to summarize the main items in that statement.

Since its founding in 1904, the National Tuberculosis Association in partnership with Federal, State, and other agencies has played a leading role in programs of tuberculosis control in this country. Fortunately, advances in our ability to treat this disease today have dramatically decreased the death rate from tuberculosis, but nonetheless tuberculosis continues to be the most important specific infectious disease in this country today.

In recent years, an average of 50,000 new cases have been reported annually. At any one time, about 100,000 persons are under active treatment in hospitals or at home and an additional 200,000 are under medical supervision to assure that their disease does not relapse.

In 1963 at the request of your committee, a task force on tuberculosis control was appointed by the Surgeon General of the U.S. Public Health Service and this group urged the expanded use of project grants so that activities could be focused where they were most needed in a vigorous drive to eradicate tuberculosis from this country.

Congress has accepted these recommendations and has met the needs of the task force plan to date. In our opinion, the tuberculosis program of the U.S. Public Health Service has done an outstanding job of promoting and organizing projects for tuberculosis control, and these are now operating in almost all States. The use of project grant funds has demonstrated that faster control over the spread of infection can be achieved through increased activities. However, the program is still in its beginning. This year the tuberculosis program of the Public Health Service is planning to launch a widespread campaign of tuberculin testing of children entering school in order to insure tuberculosis-free generations in the future.

The 1968 budget for the PHS includes $17½ million for project grants for tuberculosis control. It is gratifying that the value of the intensified efforts in tuberculosis control in the past few years has been recognized and that continuation of these efforts is insured by the inclusion of this specific amount. However, the proposed appropriation is still $7½ million less than the amount recommended in the task force plan for project grants for the third year; that is, in 1968.

In view of the potential which exists today for even more effective programs of prevention and control, the National Tuberculosis Association requests Congress to appropriate in the 1968 budget at least the amount of $17½ million for project grants for tuberculosis in order to maintain an accelerated campaign to control this disease.

The second major health problem I wish to mention is that posed by a group of chronic respiratory diseases, chief among which are chronic bronchitis and pulmonary emphysema. These are of major significance today and they are increasing at an alarming rate as a cause of human suffering, disability and death. Chronic bronchitis and emphysema begin insidiously. In their early stages, they may cause no symptoms or only a small cough. They often progress, however, to advanced stages when the person feels short of breath on the slightest exertion or even at rest. Death may occur from an inadequate exchange of oxygen from the lungs to the body, and the inability of the lungs to get rid of carbon dioxide.

I would like next to mention just a few statistics demonstrating the true magnitude of this problem in this country today. In 1964, chronic bronchitis and emphysema and to much lesser extent, asthma, bronchietasis and chronic interstitial pneumonia were the cause of more than 30,000 deaths. They were a major contributing factor leading to the death of an additional 50,000 persons. These diseases ranked seventh as a cause of death among males.

Secondly, enormous numbers of persons are physically impaired and disabled by these diseases. Emphysema is the second most common diagnosis for which benefits are granted by the Social Security Administration to workers who must retire for disability prior to the age of 65. Cost of these benefits today approximate $90 million annually. It is estimated that 10 percent of all men over the age of 40 in the United States have some degree of chronic respiratory disease sufficient to produce a measurable impairment in their capacity to breathe.

Third and most important is the marked increase in the toll these diseases take among our citizens. The number of deaths they cause has doubled every 5 years since 1950 and is increasing at a faster rate than any other leading cause of death. At the present rate of increase, this group of diseases will cause over 50,000 deaths in 1972, or about the same number as the number of people killed in automobile accidents at the present time.

The urgency of the situation is such that the U.S. Public Health Service and the National Tuberculosis Association convened a task force last October to discuss what could be done to focus more attention on the problem. I was pleased to serve as chairman of that task force, and we were delighted that the late Mr. Fogarty gave the keynote address. Copies of the task force report and the recommendations have been supplied to the committee.

Briefly, the recommendations of the task force on chronic bronchitis and emphysema included increased support for research into the causes of these diseases which are so poorly understood. In the past

2 years, the National Institute of Allergy & Infectious Diseases has received $1 million annually for specific research in the role of infectious agents in the development of chronic respiratory disease. The National Heart Institute annually spends several million dollars on related research. These are not large enough sums to finance the amount and scope of research needed.

As far as we know, the 1968 budget of the National Institutes of Health does not include any increase for research grants in chronic respiratory disease. We urge Congress to see that increased Federal funds are appropriated to finance the full-scale research needed in chronic respiratory disease.

Services to patients for chronic respiratory conditions are nonexistent in many areas of the country. Because these diseases have only recently emerged as important causes of disability, medical school training programs have not given sufficient attention to their prevention, diagnosis, and treatment. Certain types of therapy which are available need to be administered or supervised by skilled paramedical personnel who are also limited in number.

For these reasons, the National Tuberculosis Association believes that it is essential to establish in each medical school a cadre of personnel consisting particularly of medical and nursing specialists, but also assisted by technicians and other persons with specialized skills essential for the maximum treatment of respiratory disease. We estimate that this program ultimately will require $7,500,000 annually.

For the first year an appropriation of $2 million will make it possible to initiate demonstrations of the program.

The advantages of the program would be many. Dissemination of knowledge to practicing physicians through educational programs would be an immediate result. Medical students, interns, and residents would be equipped with the basic knowledge of how respiratory disease patients could best be handled. By offering specialized training, the program would lead to an increase in the number of medical specialists in diseases of the lung, and other professional personnel who are critically needed to teach others. We request that Congress appropriate $2 million for the initiation of this specialized training program in medical schools during fiscal 1968.

Because demonstration and evaluation of services for respiratory disease patients are so urgently needed, we recommend that the types of valuable activities begun by the chronic respiratory disease program of the PHS in certain areas of the country be expanded and extended to other communities by means of a $1 million increase in the appropriation to the National Center for Chronic Disease Control.

This ends my summary statement, Mr. Hull. We very much appreciate the opportunity to appear.

Mr. HULL. Thank you for being here, Dr. Harris. Just how much progress are we making in this field?

Dr. HARRIS. In chronic respiratory disease?

Mr. HULL. Yes. Do you see any ray of hope in the future?

Dr. HARRIS. Yes. This was one of the major topics discussed by the group of experts at Princeton at the task force meeting last October. The answer has to be, in a sense, ambivalent. First, with the development of new techniques and new knowledge in basic methods of research, and in ways of approaching biologic problems of this sort,

there is great promise of the possibility of ultimately knowing definitively the cause for chronic bronchitis and emphysema and how to prevent the diseases.

We have great needs, however, before these possibilities or potentials can be realized, as are outlined in this report.

Mr. HULL. Thank you for your statement.

Dr. Anderson, do you have a statement to make?

Dr. ANDERSON. On the latter point, I think the developments in this field, the understanding of these diseases, and the techniques that are used in treating them are largely developments of the past 10 years, wouldn't you say, Dr. Harris?

Dr. HARRIS. Yes.

Dr. ANDERSON. It is now possible, through these techniques, to at least identify who is sick and to manage patients much more adequately than was possible years before. If the patient gets the right kind of service we can improve the condition of about 80 percent of them.

Mr. HULL. I have lost some friends with emphysema in the last year.

Dr. ANDERSON. Understanding of these conditions by the average practitioner is not very great. This is a natural consequence of the fact that the conditions have only been recognized in the past 10 years.

Mr. HULL. Thank you very much.

Dr. ANDERSON. Thank you, sir.

MONDAY, MAY 1, 1967.

TITLE II–C OF THE HIGHER EDUCATION ACT OF 1965

WITNESSES

DR. JAMES E. SKIPPER, ASSOCIATE LIBRARIAN, PRINCETON UNIVERSITY, REPRESENTING THE ASSOCIATION OF RESEARCH LIBRARIES

DONALD F. CAMERON, EXECUTIVE DIRECTOR, ASSOCIATION OF RESEARCH LIBRARIES

Mr. HULL. We have with us this morning Dr. James E. Skipper, associate librarian, Princeton University, representing the Association of Research Libraries.

Do you have a statement?

Dr. SKIPPER. Yes, sir.

(The statement follows:)

STATEMENT BY JAMES E. SKIPPER, ASSOCIATE LIBRARIAN, PRINCETON UNIVERSITY, REPRESENTING THE ASSOCIATION OF RESEARCH LIBRARIES

Mr. Chairman and members of the Subcommittee, I am James E. Skipper, Associate Librarian of Princeton University and, until recently, Executive Director of the Association of Research Libraries, the organization which I represent today. The Association is composed of eighty institutional members, representing the larger academic and other libraries which collect comprehensively in support of teaching and research.

My particular purpose in appearing before the Subcommittee concerns Title II–C of the Higher Education Act of 1965. This Title authorizes the Library of Congress to perform a variety of related services for the benefit of every library in the country.

For the purpose of illustration, I am sure that you are all familiar with the index to the New York Times, or Shepherd's Citator to legal literature. In these examples an indexing job is done once by highly competent personnel and the publication is issued and efficiently distributed to users. It would be intolerable to think of every library or law office in the country compiling its own indexes. Yet, this is precisely the problem in cataloging books that we are trying to relieve with a fully-funded program under Title II–C.

In 1901 the Library of Congress began the distribution of cataloging information as a by-product of adding books to its own collections. Because of limited budget at the Library, this information has been available for only about one-half of the books added to our research libraries each year. As it costs from three to five times as much to catalog a book without Library of Congress information, and requires linguistically skilled professional personnel rather than sub-professional or clerical labor, the resulting costs have become intolerable. In addition, this inefficiency has resulted in local processing delays which, last year, accounted for a cataloging arrearage of over 2.5 million books within the Association of Research Libraries alone.

The effect of Title II–C is to authorize the Library of Congress to expand its existing cataloging services, not only for the benefit of its constituents in government, but for the support of scholarship and research on the national level.

Fortunately, we are not seeking funding for an untried proposal. Title II–C, which has been funded for approximately nine months, has exceeded our collective expectations. Under the imaginative and vigorous implementation of the Library of Congress, Title II–C has produced dramatic results, even though the initial appropriations were approximately one-half the amount authorized by law. It may interest the Subcommittee to read some of the reports which we have received from a number of libraries across the country:

University of North Carolina

"If the savings realized on only Title II–C country titles is projected over a one-year period, the savings will amount to $19,848.00. If the Title II–C program were expanded to the point where worldwide coverage was provided and copy made available for all foreign books purchased by this library, this figure would increase to approximately $59,500.00, a considerable savings to this library. . ."

Dartmouth College

"Although conversion to LC classification is partially responsible, we have been able to reduce our general monographic catalogers from seven to two and to use the five professional positions for more efficient catalog department organization or to accomplish cataloging that was formerly going into arrearage. . ."

University of Chicago

"The benefits of this program rest not just in greatly improved utilization of this country's limited specialized manpower, but absolute benefits that can frequently not be secured in any other way, for example, in the cataloging of material in very difficult foreign languages where local capability simply does not exist. . ."

University of California

"We have admired the speed and precision with which the Library of Congress has instituted this new program, to a point where already we see a fifty-percent increase in the availability to us of Library of Congress printed cards. . ."

University of Washington

"The Head of our Catalog Division estimates that, while before Title II–C, catalog information was available for thirty to thirty-five percent of such acquisitions, now LC cards are available for approximately fifty percent and it is expected that this percentage will rise even more. . ."

In my visits I have seen dramatic evidence of the impact of this program. Libraries which formerly had to provide original cataloging for more than half their current receipts are now able to process a greater number of books with less staff and avoid the backlogs which used to keep needed materials from use by students for many months. I have seen significant savings in linguistically skilled manpower through the increased availability of cataloging copy from the Library of Congress.

Title II–C enjoys most of the elements for which we look in an ideal legislative program. It is germane in being related to the national interest in higher educa-

tion. It authorizes services by a Federal agency which could not realistically be performed by any library in the private sector. In addition, the financial investment afforded by the Federal Government is returned many times by savings on the local level, as well as resulting in the most intelligent use of scarce manpower.

Mr. Chairman, and members of the Subcommittee, it is for these reasons that the Association requests your support in providing full funding for this program which has already produced such significant results. We have made a splendid start, but are only half-way toward the achievement of our objective. The pressures for library service being generated by a doubling of college student enrollment in this decade, the acceleration of research, and the exponential increase in the growth of knowledge and the rate of publishing require a fully operational program under Title II–C, if libraries are to meet their responsibilities to society.

The original Act authorizes $7,770,000 for Fiscal Year 1968. We earnestly hope that you will find this sum to be a wise investment in the libraries upon which higher education and the nation at large depend so heavily.

Dr. SKIPPER. I have submitted my statement and with your permission I would like to make a few remarks.

Mr. HULL. You may proceed.

I am James E. Skipper, now associate librarian at Princeton University and formerly executive director of the Association of Research Libraries, the organization which I represent today.

This organization is composed of the 80 larger institutions in this country which collect published material in support of research. Our university members last year produced about 85 percent of the doctoral degrees granted in this country, so our interest in the Higher Education Act in general and in title II–C in particular is rather apparent.

You will recall, sir, that title II–C authorizes the Library of Congress to provide certain services which we have found to be absolutely essential for the development of library service in this country, and my purpose in being before you this morning is to request the full funding which was authorized in the original legislation.

The problem that we are addressing with title II–C really concerns the organization of knowledge and the free flow of information. Libraries receive books, journals, maps, newspapers, government reports and related materials from all over the world and these receipts, of course, have been accelaterd by the expansion of student enrollment, the increase in research funds, as well as our present national interest in having to know about countries which several decades ago were simply geographic expressions.

This has placed a tremendous load upon libraries in having to deal with materials in Turkish, Arabic, Persian, the southeast Asian languages, Japanese, Russian, and so forth.

It is recognized that libraries are the social institutions which have been created to deal with the problem of acquiring these materials, organizing them in a meaningful manner, and making them readily accessible to people who need them. These users range from scholars and students to officials of government and corporation executives having to determine policy.

It is needless to say that the organization of knowledge is a pretty complex business. Libraries are dealing with a variety of publications; they are dealing with hundreds of languages and thousands of dialects; they are dealing with a rather sophisticated clientele, and to perform their function, materials must be organized effectively.

The term applied to this organizational technique is called "cataloging." We have found that if cataloging can be done by one central

agency and done well, it does not have to be repeated by all of the libraries serving higher education, or the public libraries and the special libraries throughout this country.

In 1901, the Library of Congress began to distribute catalog cards as a byproduct of adding books to their collection. Up until last year the research libraries of this country were able to catalog about half of the titles added to their collections using Library of Congress copy. This left the other half for which copy was not available.

The seriousness of the question is composed of a variety of factors. First of all, sir, it costs from three to six times as much to add a book to our collections without Library of Congress copy as it does to add with it.

Secondly, to catalog from scratch, so to speak, requires fully competent professional personnel with all of the linquistic abilities which I have mentioned. If we get copy from the Library of Congress, then universities in this country having an African program or a Chinese program, do not have to have a person in their cataloging department able to read dialects of Africa or of the Far East. This is the major saving that we see in this program.

There is the question of a quick and ready access to information. Without this service from the Library of Congress, we have a local manpower shortage and books pile up. Two years ago we had over 2.5 million volumes on the shelves of ARL members because of cataloging arrearage, which were not accessible to scholars and students.

Before I prepared my statement, I asked for a number of libraries to respond indicating the effect of this program to date. Some of the responses are in my statement.

I can summarize these responses by saying that the effect of the program, under what has really been a vigorous and imaginative implementation by the Library of Congress, has exceeded our expectations, even though we were optimistic to start with.

We find that with the medium-size libraries the availability of cataloging copy from the Library of Congress has increased by 50 percent, even though the program is only 9 months old, and was only half funded in the last Congress. The larger libraries, of course, where the serious problem lies, find their increased availability of copy amounting to approximately 15 percent.

In summary, we are halfway toward achieving our goal of acquiring a high percentage of catalog copy from the Library of Congress. Last year the Library sold cards to 17,000 accounts through its card division. This will indicate some degree of reliance on the part of our libraries on this very essential service.

What we are asking for is the full extension of a program which was started in 1901, has been effective in meeting half of our cataloging needs, and has been tremendously successful during the first 9 months of the operation under the present title II–C.

If I may, in summary, point out just a few of the benefits from this program, some of which are perfectly obvious:

First of all, there is a dollar saving. In the statement you will find institutions claiming they are saving $40,000 or $50,000 a year on cataloging costs alone. Some are saving $15,000. This Federal investment has a multiplied effect because every dollar spent on the program at LC saves many times that amount in the field.

Secondly, there is a substantial saving of scarce manpower.

The program has been highly successful to date. There has been an increased effectiveness in access and the availability to information, and, as a last point, I believe one very desirable product coming out of this effort is a standardization of access to information by bibliographic description. This is a fancy way of pointing out the difficulties we have had in the world because of lack of common currency standard, or the difference between the metric system and what we use. Or the difference in screw thread dimensions between England and America.

As we move toward our ultimate goal, which is computer-based mechanization of the bibliographic record, standardization will become absolutely essential. We are building toward that now.

In addition, speaking of mechanization, we need two additional factors. One is an adequate source of raw materials—again, this is implied by the program. The other is the intellectual manpower required to describe the contents of these publications. Combining these elements with an adequate technology will give us the possibility of automating bibliographic information.

Mr. Chairman, this is a very general statement of the problem. I can assure you that because of the demands of society the factors I have mentioned, in addition to the increase in student enrollment, increase in R. & D., Federal involvement in foreign countries, and the exponential growth in knowledge itself, have all produced tremendous pressures on our libraries. I can tell you without any hesitation that title II–C is the most significant research library legislation ever passed by Congress. It is for this reason that we respectfully request full authorization in the amount of $7,770,000 for fiscal year 1968.

I appreciate being able to present my case.

Mr. HULL. Thank you very much for your statement.

We will also place in the record, Mr. Cameron's letter to Mr. Flood, chairman of the subcommittee.

(The letter follows:)

ASSOCIATION OF RESEARCH LIBRARIES,
April 11, 1967.

Hon. DANIEL J. FLOOD,
Chairman, House Appropriations Subcommittee on Labor, Health, Education, and Welfare, Washington, D.C.

DEAR CONGRESSMAN FLOOD: Funding is requested for Title II–C of the Higher Education Act in the authorized amount of $7,770,000. This program has been the most significant legislative enactment in the past fifty years so far as libraries are concerned.

Although the program has been in operation for approximately one year at half-funding, the Library of Congress has achieved remarkable progress in implementing this Act.

Significant local savings have been obtained through:

An increase in the availability of Library of Congress catalog copy, ranging from 10% in large libraries to 50% in medium sized institutions;

Significant savings in manpower involving scarce linguistic competence. Sub-professional staff can catalog books with Library of Congress copy at a rate four to six times as fast as original cataloging, which requires the efforts of experienced professional staff;

Books are quickly made available for use rather than being restricted to over-loaded cataloging departments. Our present arrearage of approximately 2.5 million volumes is being reduced.

COMMENTS FROM LIBRARIES

University of Pennsylvania

"Title II–C provides the support for one of the most promising cooperative endeavors in the history of research library development in this country . . . After just the few months that this massive and complex program has been operational, we are beginning to feel its effects here at Pennsylvania . . ."

University of North Carolina

"If the savings realized on only Title II–C country titles is projected over a one-year period the savings will amount to $19,848.00. If the Title II–C program were expanded to the point where world-wide coverage was provided and copy made available for all foreign books purchased by this library, this figure would increase to approximately $59,500.00, a considerable savings to this library. . ."

Cornell University Libraries

"If all aspects of salaries, space, benefits and the administration of this personnel were included, the total savings to this library in dollars would undoubtedly be in the range of $15,000–$18,000. . ."

Duke University Library

"The facts are, however, that because of what the Library of Congress has been able to do in this first year of the program, we shall catalog with the same number of catalogers 5,000 more volumes than last year, and a substantially larger percentage of the total items cataloged have been handled by non-professional help. These non-professional people, incidentally, given Library of Congress cards, can catalog three to four times as many books a year as a professional cataloger without the Library of Congress cards. The 5,000 additional volumes we are adding this year, if the books had come to us without Library of Congress cards, would have required four professional catalogers, who would have cost us at least $28,000. When one begins to multiply this kind of savings by the number of libraries that will be affected, the significance of Title II–C to American research libraries can be appreciated. . ."

University of Michigan

'Although Title II–C has been in operation only a short time, there has already been an increase of over 20,000 titles cataloged by LC from May 1966 through February 1967 over the same period for the previous year, as demonstrated by the catalog cards received by our library. . . Moreover, because of the high level of competence at which original cataloging must be performed, with corresponding higher salary levels, the use of an LC card reduces the cost by considerably more than 50 percent. . ."

The University of Chicago Library

"The benefits of this program rest not just in greatly improved utilization of this country's limited specialized manpower, but absolute benefits that can frequently not be secured in any other way, for example, in the cataloging of material in very difficult foreign languages where local capability simply does not exist. . ."

Purdue University Libraries

"We have gone on record that Title II–C can save us one foreign language cataloger at $10,000 a year. In truth the savings are greater—we would find such a cataloger only after a long recruitment period with probably a year's backlog to catalog. There is also the cost of the often inferior and misleading cataloging which we are ashamed to acknowledge now must be done locally, for lack of prompt current foreign language cataloging at the Library of Congress. It is imperative that this Title II–C be continuing, for we cannot rely on it for one or two years and then have it withdrawn. This causes poor and costly library mismanagement. . ."

Tulane University Library

"We have some startling percentages to report in cataloging. Before August 1966, approximately 50% of titles to be cataloged had LC copy in some form. After only a few months' operation of the Title II–C program, this percentage has risen to 80%. Since the only new bibliographic tool of significance is the LC depository catalog, the dramatic change is attributed to the availability of these Title-II cards. Cataloging has accelerated and costs are decreasing. . ."

Dartmouth College Libraries

"Although conversion to LC classification is partially responsible, we have been able to reduce our general monographic catalogers from seven to two and to use the five professional positions for more efficient catalog department organization or to accomplish cataloging that was formerly going into arrearage. . ."

University of California, Los Angeles

"We have admired the speed and precision with which the Library of Congress has instituted this new program, to a point where already we see a 50% increase in the availability to us of Library of Congress printed cards. . ."

Syracuse University

"As participants in the program, we have access to a depository set of Library of Congress cards. This, in addition to the greater percentage of materials that aren ow being cataloged by the Library of Congress because of the II–C Program, helps us place our books on the shelf more swiftly and efficiently . . ."

University of Washington library

"The Head of our Catalog Division estimates that, while before Title II–C catalog information was available for thirty to thirty-five percent of such acquisitions, now LC cards are available for approximately fifty percent and it is expected that this percentage will rise even more . . ."

Very truly yours,

DONALD F. CAMERON,
Executive Director.

MONDAY, MAY 1, 1967.

FEDERAL PROGRAMS BENEFITING CHILD HEALTH, WELFARE, AND EDUCATION

WITNESSES

GEORGE J. HECHT, CHAIRMAN, THE AMERICAN PARENTS COMMITTEE
MRS. BARBARA McGARRY, EXECUTIVE DIRECTOR, THE AMERICAN PARENTS COMMITTEE

Mr. HULL. Our next witness is Mr. George J. Hecht, the chairman of the American Parents Committee.

Mr. HECHT. May I introduce Mrs. McGarry, who is the executive director of the American Parents Committee.

Mr. Chairman and members of the committee, I am George J. Hecht, chairman of the American Parents Committee, and publisher of Parents' magazine. For the American Parents Committee, I would like to present our views with regard to items in the fiscal 1968 HEW budget that will vitally affect our Nation's children.

For the last two decades, our committee has been concerned exclusively with congressional legislation and other Federal action of special benefit to child health, welfare, and education. Our position in each instance is determined through our annual board of directors meeting, together with consultation with members of our national council. We are proud of our distinguished roster representing all parts of the country, with each member a recognized specialist in a particular area of concern for children.

As a result of our last annual meeting in November 1966, I am authorized to express our support for the following items in the fiscal 1968 budget for HEW: 150 years ago, the legendary lawyer-statesman Daniel Webster, in a celebrated speech, described Dartmouth College

with simple effectiveness: "It is small * * * yet there are those who love it."

This description would indeed seem to be appropriate in characterizing the half century of relationship between the U.S. Children's Bureau and the American people.

Year after year, this small Bureau's publications are the "best-sellers," at the top of the list of all Government printed material offered the public. As an institution secure in the public's affection and respect, the Children's Bureau has maintained an enviable prestige among child health and welfare specialists throughout the world. How enviable in this country such prestige is, can best be measured by the repeated, almost annual, attempts by other Federal agencies to reestablish various Children's Bureau programs within their own administrations.

As we have frequently stated on such occasions, the continuing success of all the Bureau's progams is due, we believe, to their single-mindedness of purpose—the well-being of American children. In the spirit of reasoned compassion, the Children's Bureau has developed a variety of services designed to work together for this purpose.

Maternal and child health services; crippled children's services; and child welfare services are all administered by the Children's Bureau through grants to State agencies. To take full advantage of the grants for either the maternal and child health or crippled children's services, the States must match, on a dollar-for-dollar basis, one-half of the Federal funds appropriated. In the case of child welfare funds, each State must match the Federal funds on a variable basis in direct proportion to the State per capita income. While the States must meet the requirements of the Social Security Act spelling out these grant-in-aid programs, there is still wide latitude granted in developing State plans for them. In this way, State and local initiative are both respected and encouraged.

Since the above services are required by law to become available to all parts of the States by 1975, we find it difficult to reconcile this requirement, with the Bureau of the Budget's failure to request the authorized amounts for each of these programs for fiscal 1968. In adhering to the previous year's level, the budget request subtracts $5 million from 1968 authorizations for maternal and child welfare services; $5 million from crippled children's services; and $9 million from the authorized 1968 total for child welfare services.

In other words, they authorize $50 million in each case and the Bureau of the Budget requested $5 million less for that maternal and child health and $5 million less for crippled children, and $9 million less than authorized for child welfare service.

While the international situation requires retrenchment in some areas of our domestic economy, we do not feel it should be in an area as vital as our greatest national resource—our Nation's children.

The American Parents Committee also supports the requested amounts for research, training and demonstration projects in child welfare; special project grants for maternal and infant care (for high-risk, low-income maternity patients); title XIX's grants for the health of preschool and school children; training of professional personnel for crippled children; research projects on maternal and child health; and Children's Bureau salaries and expenses.

For the last item, we strongly recommend the inclusion of nine regional consultants in juvenile court services. The American Parents

Committee, having filed an amicus curiae brief with the U.S. Supreme Court in the *Gault* case, recognizes that local juvenile court jurisdictions, in conforming with a hoped-for favorable *Gault* ruling possibly due in a few weeks, will in many instances require the consulting services of such specialists. The distinguished chairman of your committee, together with those other Members of Congress also accepted to practice before the Supreme Court, is in a special position to appreciate the impact of the forthcoming *Gault* decision on many of the juvenile courts throughout the country.

The American Parents Committee, having previously gone on record in support of the Elementary and Secondary Education Act, at this time reemphasizes our support of the amount originally authorized by Public Law 89–750 under title VI, "Education of handicapped children."

For this new title, although $50 million was authorized for fiscal 1967, no appropriations were granted. For fiscal 1968, while $150 million is authorized, a total of $53.4 million is requested in the budget for this title.

"One child in 10 in our country is afflicted with a handicap which, if left untreated, severely cripples his chances to become a productive adult," stated the President's message on education last February, concerning handicapped children; and, the message adds:

> We must also give attention to their special educational needs . . . There are now only 70,000 specially trained teachers of the handicapped—a small fraction of the number the Nation requires. In the next decade, five times that number must be trained and put to work.

In the coming year alone, according to his February 8 message on the welfare of children, the President confirmed that more than 4 million American children will suffer physical handicaps and another 2 million will fall victim to preventable accidents or disease. On the basis of these facts, we respectfully urge this title be funded to the extent of need.

The American Parents Committee has noted the earmarking of almost half of FDA's requested budget increase for 1968, for the purpose of further implementing the Drug Abuse Control Act. We strongly urge congressional approval of this amount. A year ago, testifying before this committee, we emphasized that over 1 million teenage Americans were involved with psychotoxic drugs—both stimulant and depressant—which could be effectively controlled through adequate implementation of the Drug Abuse Control Act. Continuing control of such drugs is even more urgently needed now, with the likelihood that new drugs under investigation may be added to the list of those now considered dangerous enough to come under the purview of this act.

For continuing administration of the amended Pure Foods and Drugs Act, the Food and Drug Administration deserves the support of all citizens concerned with the quality of food we provide our families, as well as cosmetics and drugs. At a time when the word "additive" is widely accepted yet little understood, the consumer can be especially grateful for this agency's continuing concern and research.

The American Parents Committee records our continued support for the following USPHS programs: Communicable disease control; community mental health centers; the National Institute of Child

Health; Indian and migrant health services; and the new health manpower education and utilization program.

Gallaudet College, in the District of Columbia, the only institute of higher learning in the world today for the deaf, is authorized by Public Law 89–694 to establish a model secondary school for the deaf, on its campus. It is our hope that this new school will provide stimulation for the construction of other such specialized schools, in those areas where there is presently no opportunity for the deaf youngster to gain a secondary education. We respectfully urge your committee to grant the full authorized amount for this purpose, for our youth who live in the silent world.

Finally, to the members of this committee, I should like to express the American Parents Committee's appreciation for the continued privilege of appearing before you, in our common desire to secure the highest possible quality of care and education for all American children.

Mr. HULL. Thank you for your statement, Dr. Hecht.

MONDAY, MAY 1, 1967.

HEALTH, EDUCATION, AND WELFARE PROGRAMS AND THE WOMEN'S BUREAU

WITNESSES

VICTORIA SCHUCK, PROFESSOR OF POLITICAL SCIENCE, MOUNT HOLYOKE COLLEGE; CHAIRMAN OF NATIONAL LEGISLATIVE COMMITTEE, AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

MRS. ALISON G. BELL, STAFF ASSOCIATE, LEGISLATION, AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

Mr. HULL. Our next witness will be Dr. Schuck, professor of political science, Mount Holyoke College; chairman of National Legislative Committee, American Association of University Women.

She has with her Mrs. Alison G. Bell, staff associate, legislation, American Association of University Women.

We are delighted to have you here this morning.

Dr. SCHUCK. Mr. Chairman and members of the committee, I am Dr. Victoria Schuck, professor of political science, Mount Holyoke College, South Hadley, Mass. I am the legislative chairman of the American Association of University Women—an organization with a membership of 173,911, organized into 1,607 branches in the 50 States, Guam, and the District of Columbia.

I wish to make a statement in support of appropriations for the Department of Health, Education, and Welfare, and for the Women's Bureau of the Department of Labor.

The A.A. & W. feels itself especially qualified to do this.

Among those statements of principles, adopted at the last biennial convention of the association in Portland, Oreg., in 1965, which direct the work of the association are two that are related to our appearance before you today. We quote parts of each:

> We believe that educational opportunity designed to achieve the best use of human resources is basic to the preservation of our

society and its fundamental freedoms. We believe that support of universal democratic education is a prime responsibility of the association. Therefore we will promote those methods, programs, and media which contribute to the improvement of educational opportunities for all. We will support measures designed to meet problems created by higher costs and mounting enrollments. We would continue to work for the strengthening of library facilities.

We will promote the recruitment of qualified faculty members, administrators, and boards or commissions of education at all levels. Therefore, we will encourage active efforts to identify community needs and to select and work toward the solution of those community problems. We will attempt to interpret the significance of institutions which are essential in protecting the individual and in strengthening family and community life. We will work to develop understanding and utilization of these resources.

In implementing these association principles our members work as volunteers at the community and State level with community councils and on Governor's councils, on such community problems as care for the aging, welfare, and mental health. Among other projects, members have exercised leadership in establishing community day-care centers, Headstart programs, centers for the aged, halfway houses for individuals returning to society from mental or penal institutions. We teach as volunteers in basic education and rehabilitation programs. In many cases we have assumed overall responsibility for specific programs.

Many of our members work as professionals in the field of welfare and public assistance. Many of them are teachers at one educational level or another; others serve on local school boards, act on State boards of regents or as trustees of individual institutions. We work actives with State legislatures to insure advantage is taken of the opportunities for social improvement that are offered in the many State-Federal programs administered at the Federal level by the Department of Health, Education, and Welfare and the Department of Labor.

Because we in AAUW have this kind of commitment and very basic knowledge of community needs we feel an obligation to appear before you today.

We do have a very great interest and stake in the protection of the consumer offered by the Food and Drug Administration. We have a considerable interest and knowledge from our work at the local level where better than 95 percent of the Welfare Administration funds are spent for programs covering mothers and children, the juvenile delinquent, and those physically or mentally handicapped or in need of services because of age. Therefore we wish to express our confidence in these programs and urge appropriation of the sums requested for the Food and Drug Administration, the Vocational Rehabilitation Administration, the Public Health Service, including: mental health research and services and water and air pollution control, the Welfare Administration, and the Administration for the Aging. We are particularly interested in full appropriation of the funds requested for arts and humanities education activities.

The primary concern of our membership always has been education. For this reason and because of the breadth and complexity of the appropriation bill before this committee, in the main, we shall focus our special comments on individual programs in this field.

We are fully aware of the strain placed upon the Federal budget today by the Vietnam war, but we are convinced that one of the most vital areas, in which curtailment should not be permitted, is in the appropriations for the educational needs of this Nation.

We have seen the figure $9.2 billion, or 6.7 percent of all regular Federal budget expenditures, quoted as the total of net expenditures in the Federal budget for education, training, and related activities. Of this sum we understand the appropriations requested for the Office of Education are $4.05 billion. In reviewing the allocation of these funds for programs at different educational levels we see that some increases in requests have been made for individual programs over last year's appropriations. But we note that appropriations for construction and equipment have been cut back from last year's amounts, particularly for colleges and libraries.

We question the advisability of either curtailing or postponing construction of these educational facilities in the face of projected enrollments. The American Council on Education has pointed out that an expenditure of at least $3 billion annually must be provided for construction at the college level just to keep up with increased enrollments—allowing no leeway for replacement of obsolete and deteriorating facilities.

In my opinion and based on my experience, the committee could well consider the problem of funds for obsolescence in institutions where enrollments are not rapidly increasing, for needs in this area may mean great deterioration unless aid is provided. The American Council on Education has also pointed out that the budget request before you of $640 million for the Higher Education Facilities Act would provide approximately one-fifth of the needed $3 billion per year for facility construction. Can this really be called Federal sharing of responsibility?

Of as much concern to us as the fact that cuts below the appropriations for the past year for ongoing programs are being proposed and that relatively little new money for new and expanded programs is being asked, if the fact that the Office of Education's budget requests for programs in elementary and secondary education, for higher education, for student assistance programs, and on down the list, remain so far below the sums authorized by the Congress for these programs. We question whether it is in the best interest of the Nation to appropriate sums so far below these approved authorizations. In illustration and as examples of alarming inconsistency, we call to your attention the contrast between the budget estimate of $165,950,000 for libraries and community services and an authorization of $281,770,000 and the contrast between the Office of Education's budget estimate of $1,173,194,000 and the authorization of $1,766,950,000 for higher educational activities. It is our contention that the witnesses appearing before the authorization committee, and the committees themselves, acted in good faith in making their recommendations to the Congress that approved these educational programs.

We conclude by urging you to give special attention to individual programs whose contribution to our social and political welfare could be substantial if they are adequately funded. We regard the immediate implementation of the International Education Act of last year to be of the greatest importance in regard to the development of educa-

tional TV as essential. We urge full funding of the Teachers Corps.

Last year according to the Department of Labor, 140,000 individuals left teaching. It seems to us that an appropriation for the appointment of the 5,000 Teacher Corps trainees requested by the Office of Education, and which we recommend, would make only a small dent on the problem of replacing 140,000 teachers. Therefore we urge and hope for increases in this committee's recommendations on funds for work-study, student loan, and scholarships programs. To us, it seems imperative in the face of the growing demands from business and industry for trained workers and in the face of our growing shortages of professionally trained people in such fields as teaching and the medical professions, that financial barriers to post-high-school training be removed.

Again, we wish to say as we have to other committees and in earlier years that we wish a time lapse could be legislated which would permit the implementation of education programs in the year following the one in which authorizations and appropriations are made. Under the present plan school systems at all levels are compelled to do their hiring and operational planning months in advance of the time when they have actual knowledge of the funds available to them.

We do not wish to overlook another question. The association firmly supports the full appropriation of the funds requested for the civil rights educational activities of the Department of Health, Education, and Welfare.

We should like to add a word in support of the Women's Bureau whose request for funds is in the Department of Labor budget.

Since our founding, we in the association have worked for improvement in working conditions, and for improved status for women. Forty-seven years ago we were among these who urged the creation of the Women's Bureau. Because we firmly believe the Bureau can now play a very important role in altering the present underutilization of talented womanpower we urge appropriation of the $912,000 requested for its operation.

We thank you for the privilege of appearing before you.

Mr. HULL. Dr. Shuck, we are delighted to have you here this morning. We are well acquainted with the wonderful organization which you are representing, the American Association of University Women.

Thank you very much for your statement.

MONDAY, MAY, 1967.

TITLE VI, ESEA, 1966—HANDICAPPED CHILDREN

WITNESSES

MRS. FRANCES Z. WASHAM, TEACHER, NORCLAY ELEMENTARY SCHOOL, NORTH KANSAS CITY, MO.

Mr. HULL. Our witness is Mrs. Frances Z. Washam, teacher, Norclay Elementary School, North Kansas City, Mo. She is a constituent of mine and not only a wonderful person, but a wonderful teacher. We are delighted to have you with us this morning, Mrs. Washam.

You may proceed with your statement.

Mrs. WASHAM. Thank you, Congressman Hull.

I am Frances Washam, teacher of a class of educable retarded children in the North Kansas City Public Schools. I am here today in the interest of title VI appropriations for handicapped children authorized in the Elementary and Secondary Education Amendments of 1966.

These appropriations were authorized for fiscal year 1967 at $50 million and $2,500,000 was budgeted. For fiscal year 1968, $150 million was authorized and $15 million budgeted.

I am representing North Kansas City Public Schools. All of the field of special education is watching with great interest to determine how soon the very forward looking program made possible by the Congress of the United States will be implemented. Timing is of critical importance because the children who are to be served are constantly growing older. They need the services which would be possible under this act now. I speak from experience gained in teaching classes for mentally retarded children for 15 years. It has been a rewarding experience to work with these boys and girls who can become useful, contributing citizens if we meet the challenge of serving their educational needs. I shall not intrude greatly upon your time but I would like to give you some ideas about how our local school systems can make use of the funds which would become available were the full authorized amount appropriated for these programs.

First, we need better diagnosis, identification, and continuing evaluation of children. Often not all of the examinations which are needed are available to determine the real status of the child. We need not only the psychological examinations but also medical examinations, tests for hearing acuity, visual ability, and other measures, some of which have not yet been developed, in order to really plan programs effectively for these children. Programs that will aid in maximum development of sensory, motor, cognitive, and judgment skills, to encourage the fullest realization of their potentialities for personal and social maturity and independent living. The employment of personnel for this purpose and the development of new tests and instruments will require additional funds.

The education of these children needs to begin at as early an age as possible. We were pleased with the language of the bill which makes it possible to start as early as age 3. The influence to which children are exposed during the formative years will condition practically all of their future life. They need early training with emphasis on sequential developmental steps, development of language skills, relationships, and other elements of orientation. This should begin as early as possible so that when they are of school age they will be more able to learn effectively. This is true for all children. It is even more true for handicapped children who start with a deficit against them.

A third great need is for programs currently in operation for the retarded, speech defective, and perhaps other children, to be continued through the summer months so that they will maintain skills and knowledge and continue their development without a period of loss. Few school systems are able to extend this kind of service except in a limited way for children taking "makeup" or enriched work. For the

handicapped who need this reinforcement it is very important in shortening their school life and preparing them more adequately for making their best contribution.

For handicapped children early acquisition of skills which will assist them in finding employment is important. Prevocational skills are emphasized in our programs for the mentally retarded as well as some other handicapped children. We now have some effective junior and senior high school programs in vocational and industrial training, including on-the-job training. We can point with pride to many successful placements through this program. For example, one boy who had had welding training was employed by the Ford Motor Co. in their Claycomo plant as an apprenticed welder. His final test score was the second highest on record for that particular plant. He has now been employed for 2 years at this plant. Another young man was placed in the shipping department of National Bellas Hess, a mail-order firm. After he had been employed other boys from the program were requested by this company. The boys were trained and supervised by this young man. They were quite pleased to find one of their former colleagues supervising them. He was transmitting his skills in employment to other of his fellow mentally retarded students. We could cite many other examples of this kind; however, we believe that the best recommendation for the programs that prepare these children is that companies continually request additional placements from among our graduates. Our main concern at this time is that we do not have enough facilities to provide the training for all children who could benefit from it. We have a waiting list of children who need these programs. We believe this is not only a loss to the children but also a loss to society. In this connection I might add that from an economic point of view it is indeed wise to educate and train this segment of our society to be wage-earning, taxpaying citizens.

One of the great needs of teaching exceptional children is finding suitable educational materials and making proper application of them. For years we have been adapting regular materials or, in the few spare moments we have had, developing our own. It takes many different materials for needed repetition to keep interest and attention on the task until it is learned. We need many hand-manipulative learning devices, so structured that they meet the need to learn by doing, to use the sensory approach to learning. Research recently reported to a conference of doctors stresses the need to improve ear and eye learning. It is good to see a greater awareness of this need for all of society. The need is greater for the handicapped. This research shows that the ear for words and the eye for pictures together inform the brain with "keeping knowledge" better than either alone. A test for recall 3 days later was only 10 percent for telling alone. It was 35 percent for showing alone. But when telling and showing were combined as the teaching tools the recall 3 days later was 65 percent. Now we are grateful to observe curriculum development projects which will incorporate research are underway at several universities in the form of curriculum and materials centers. One great problem is to bring the services of these centers directly to school systems through State and local curriculum programs. It would also be very helpful to have curriculum personnel at each school system to assist in the inservice training of teachers in the use of the material and to determine the

best local application that can be made of these materials. Equipment for the presentation of curriculum materials is of great importance and would greatly conserve the time of teachers. Programed instruction, overhead projectors, and other methods of presentation would make the thing they wish to learn more vividly clear to these students. Much of the necessary meaningful repetition for learning can be supplied through programed instruction and the student can often work by himself for periods of time and periodic helping from the teacher. While most local school systems make available the minimum of such local materials and equipment the demands and needs are so great that their budget cannot include all that is needed. A further complicating factor of costs is that the amount of materials needed by these children is small compared to the usual amount needed by other children. Consequently, most companies are not in a position to place the risk capital into the development of these materials that is required. When they are developed they usually cost more than the usual materials because of these added factors.

One great need in better home-child-school relationships is more personnel to counsel with parents regarding the problems of their children and effective relationships between home and school. The child is greatly affected by various manifestations which parents of handicapped children may have. Many parents are unable to accept that their children cannot progress as rapidly as other children. These children come to school already patterned by built-in defeat. The great task then is to raise the child's concept of himself through success that can be encountered in the school-home setting. This requires increased work between the school and home to properly interpret the child's progress. While the teacher must currently work most of this into her busy day, it would be very helpful if additional specialists could be made available to assist in this worthwhile work. Other personnel are needed to provide the range of services needed by these children. Counselors for mentally retarded children to take care of problems which arise during the day and as a result of faulty home-school relationships would be useful. Some children with special health problems need the servics of a school nurse or physician more frequently than other children do. In some other cases where the children are extremely physically handicapped, aid and attendants should be considered essential but often they are not available. To provide for these personnel and services to the extent they are needed is not currently possible in most school systems.

You can see that what we are asking for are the essentials to take care of the many elements of a difficult task. It is a task which, although difficult, is very rewarding and most of us who are in this profession would choose no other.

We feel sure that you are as interested as we are that all handicapped children have an even opportunity to live as completely and as successfully as they can. We know that many demands are currently being made for Federal funds and that you must decide which needs must be met first. We appreciate the opportunity for presenting some of the needs of some of the handicapped children in our school system. I am sure that your decision will be based on what is equitable and best.

This completes my testimony, Mr. Chairman. I appreciate the oppor-

tunity to have testified on this vital issue and invite any questions you and other members of the committee may wish to ask.

Mr. HULL. Mrs. Washam, we are delighted to have you here today. I know of not only your concern, but also of the wonderful work you have done in this field for many, many years. I would hope everyone might be as dedicated as you are.

Mrs. WASHAM. Thank you.

Mr. HULL. We appreciate the wonderful work you are doing down in our area.

Mrs. WASHAM. It is a pleasure, truly.

May I just have you look at this, Congressman Hull, to see how fine these young boys and girls are. I sometimes think the members don't have an idea of the fine youth involved in this program and the great potential they have.

There is an epileptic child; there is a child who is on medication for heart damage; there are two who are cerebral palsy children, one child who has a hearing deficit, two children with visual difficulties. All are under the classification of mental retardation, plus other involving conditions.

Mr. HULL. I think you are doing a wonderful piece of work in the field of rehabilitation; we certainly need many more counselors and teachers such as you who are interested in this field.

Mrs. WASHAM. This is a thrill when you really see that you can do something and every day you are teaching for what they are going to be when they strike the outside world when they don't have the protection around them which they feel in school and at home.

Mr. HULL. That is true.

Thank you very much for your appearance here this morning, Mrs. Washam.

We will reconvene at 10 o'clock tomorrow morning.

ENVIRONMENTAL HEALTH

WITNESSES

HON. ROBERT TAFT, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO
WALTON H. BACHRACH, MAYOR OF CINCINNATI, OHIO
HOKE S. GREENE, VICE PRESIDENT FOR ACADEMIC AFFAIRS, UNIVERSITY OF CINCINNATI
DR. EDWARD P. RADFORD, JR., DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL HEALTH, UNIVERSITY OF CINCINNATI
EDWARD C. PANDORF, CHAIRMAN, MAYOR'S COMMITTEE ON ENVIRONMENTAL HEALTH, CINCINNATI

Mr. FLOOD. We are pleased to have with us this morning our distinguished colleague and our friend, the Honorable Robert Taft, a Member of the House of Representatives from the State of Ohio.

Mr. Taft, I see that you have with you some associates in this matter. Would you like to introduce them?

Mr. TAFT. Mr. Chairman, I do. I would very much like to introduce the mayor of the city of Cincinnati, Mr. Bachrach; the dean of the University of Cincinnati, Mr. Hoke Greene.

I am correct in saying of the graduate school?

Mr. GREENE. Vice president for academic affairs.

Mr. TAFT. You have moved on.

Dr. Radford of the University of Cincinnati, Mr. Edward Pandorf, chairman of the mayor's committee on environmental health.

I appreciate, as do the officials and representatives of the city here present, the——

Mr. FLOOD. What is your subject?

Mr. TAFT. The subject is the environmental health facilities of the Public Health Service.

Mr. FLOOD. Please proceed.

STATEMENT OF HON. ROBERT TAFT, JR.

Mr. TAFT. The mayor's committee is a committee that has been in existence for a good many years now to encourage and try to cooperate with the efforts being made by the Public Health Service, the university, and many other groups in the environmental health field in Cincinnati.

We have a long and proud tradition in the field of public health still growing we hope, going back even before the sanitary engineering center which bears my father's name which is located out in the Cincinnati area.

That Center, I might say, while it still has some Public Health Service facilities, has been transferred to Interior, and it is apparently largely planned for the Interior Department water pollution and control resource activity.

The Public Health Service is planning to move out of that facility and has been moving out of it. It has other facilities in the area. There is present in the budget a proposal for further planning, construction, and I believe land acquisition funds for the new Public Health Service facility adjacent to the University of Cincinnati.

Mr. FLOOD. Coming from the hard-coal fields, I am not unacquainted with air and water pollution.

Mr. TAFT. I am sure of that. Unfortunately, I might say Cincinnati's location is such that we sometimes get some of the water pollution coming down from those areas. We have had air pollution problems, too, and have been working on them for a long time ourselves.

The city of Cincinnati is ready to go. It has committed $4 million to the building site selected by the Public Health Service. Any delay in this important facility for research in urban and industrial health and other areas of environmental health, will result from delay in Washington, not Cincinnati.

Certainly no problem is more urgent or critical for our cities. It calls for immediate financing, hopefully in excess of the budgeted planning fund. Such financing could expedite new solutions for problems of environmental health, sanitation, occupational health, solid waste disposal, water supply, injury control, and other urban health problems. There may be areas in which special defense requirements necessitate cutting back on expenditures, but projects such as this one should not be among them. Cincinnati's longtime interest, involvement, and commitment in the public health area assures early and effective results.

Against that background, Mr. Chairman, I would like to present the mayor of Cincinnati, the Honorable Walton H. Bachrach.

STATEMENT OF WALTON BACHRACH, MAYOR OF CINCINNATI

Mayor BACHRACH. Thank you.

I am Walton H. Bachrach, mayor of Cincinnati.

Mr. FLOOD. How long have you been mayor?

Mayor BACHRACH. Seven years.

Mr. FLOOD. You are not an amateur.

Mayor BACHRACH. Not an amateur; I have been on the city council for 14 years. It has been quite an experience.

We also have with us Dr. Radford, professor and director of the Department of Environmental Health of the University of Cincinnati, and Mr. Ed Pandorf, chairman of the mayor's committee on environmental health.

We are appearing today to review briefly the background and current status of Public Health Service programs in the Greater Cincinnati area and to call to your attention the urgent need for congressional action to improve the facilities of the Public Health Service in Cincinnati and thus insure sound development for essential research programs of national importance.

For over 50 years the Public Health Service has been carrying on investigative work in Cincinnati, beginning with a small and modest laboratory which was later superseded by the Robert A. Taft Sanitary Engineering Center. The Taft Center was outgrown several years ago, and now the new National Center for Urban and Industrial Health is operating under difficult circumstances in sites widely scattered throughout the Cincinnati area.

We are naturally delighted that the importance of Cincinnati as a focal point of research for the benefit of the entire Nation has been recognized by the location of the new national center in our community. Our tristate area provides a natural laboratory for environmental research, with a metropolitan complex of almost 1½ million people, a balanced combination of heavy and light industry, the Ohio River and major tributaries flowing through the heart of the city, and highly respected educational institutions providing a skilled pool of faculty and students for training and research.

But the Cincinnati programs of the Public Health Service will increasingly be handicapped by crowded, scattered, and outmoded facilities. As my associates will explain, Cincinnati has an affirmative plan to solve these problems, and we stand ready to make a major contribution to their early and permanent solution.

I would like to offer a certified copy of a resolution passed last Wednesday by the City Council of the City of Cincinnati, reaffirming and extending Cincinnati's pledge to make available 20 acres of land near the University of Cincinnati for the U.S. Public Health Service and urging prompt congressional appropriation of funds for the construction of research facilities on this land.

The council on September 16, 1964, passed a resolution offering to cooperate with the U.S. Public Health Service making approximately 20 acres of land available without cost in the vicinity of the city for the Public Health Service, whereas under the resolution the authority of the city to cooperate was to remain in effect for 2 years, which

has now expired. The Public Health Service has selected a 20-acre tract bounded by St. Clair Street, and so on.

On April 12, 1967, the council, on recommendation of the city manager—we have a city manager form of government—and the capital improvements committee provided $150,000 in 1967 for advance acquisition of distressed parcels at the Environmental Health Center site and reserved councilmanic bond issuing authority—these can be issued by the city council—sufficient to assure the Federal Government that funds are available to carry out the city's commitment of $4 million to this project.

The construction funds have not been included in the budget of the President of the United States now being considered by the Congress. Uncertainty about the timing creates serious problems. In other words, for the residents in the site that we have selected for this project.

The council desires to move ahead on this project. It reaffirms and extends its pledge to make the 20 acres selected by the Public Health Service available as soon as possible after Congress has appropriated construction funds for the proposed new Public Health Service facilities, and the council urges prompt congressional approval of said appropriations so that construction may be undertaken at the earliest possible time.

Copies have been sent to the Surgeon General, Public Health Service, and the Congress.

We are offering this today, gentlemen, because we have reaffirmed this policy and we are ready to move.

Mr. FLOOD. Without objection, that will be made a part of the record.

Mayor BACHRACH. Thank you, sir.

(The resolution follows:)

A RESOLUTION Reaffirming and extending Cincinnati's pledge to make available 20 acres of land near the University of Cincinnati for the United States Public Health Service, and urging prompt Congressional action appropriating funds for the construction of research facilities on this land

Whereas, Council on September 16, 1964, passed a resolution offering to cooperate with the United States Public Health Service by making approximately 20 acres of land available, without cost, in the vicinity of the University of Cincinnati for additional facilities for the Public Health Service; and

Whereas, under the said resolution the authority of the City Manager to cooperate with the Public Health Service by making said land available was to remain in effect for a period of two (2) years, which authority has now expired; and

Whereas, the Public Health Service has selected a 20-acre tract bounded by St. Clair Street on the south, Nixon Street on the north, Vine Street on the east, and a line 100 feet east and parallel to Bishop Street on the west; and

Whereas, on April 12, 1967, the Council, on recommendation of the City Manager and the Capital Improvements Committee provided $150,000.00 in 1967 for advance acquisition of distressed parcels at the Environmental Health Center Site and reserved Councilmanic bond issuing authority sufficient to assure the Federal Government that funds are available to carry out the City's commitment of $4,000,000.00 to this project; and

Whereas, construction funds for this project have not been included in the Budget of the President of the United States, now being considered by the Congress; and

Whereas, continued uncertainty about the timing of this project creates serious problems for the residents of the site; and

Whereas, the Council desires to move ahead on this project as soon as Federal construction funds are appropriated; now, therefore,

Be it resolved by the Council of the City of Cincinnati, State of Ohio:

SEC. 1. That the Council reaffirms and extends its pledge to make the 20 acres selected by the Public Health Service available as soon as possible after Congress has appropriated construction funds for the proposed new Public Health Service facilities in Cincinnati.

SEC. 2. That the Council urges prompt Congressional approval of said appropriations so that construction may be undertaken at the earliest possible time.

SEC. 3. That copies of this resolution be transmitted to the Surgeon General, United States Public Health Service, and to the Congressmen from the First and Second Districts of Ohio.

Passed April 26, A.D., 1967.

EUGENE P. RUEHLMANN,
Vice Mayor.

Attest: Dale Schmidt, *Clerk.*

COUNCIL OF THE CITY OF CINCINNATI, STATE OF OHIO, OFFICE OF THE CLERK OF COUNCIL

I hereby certify that the foregoing transcript is correctly copied from the books, papers and journals of the City of Cincinnati, State of Ohio, kept under authority and by the direction of the Council thereof.

Resolution passed by Council of the City of Cincinnati, State of Ohio, on April 26, 1967, reaffirming and extending Cincinnati's pledge to make available 20 acres of land near the University of Cincinnati for the United States Public Health Service, and urging prompt congressional action appropriating funds for the construction of research facilities on this land.

In testimony whereof I have hereunto set my name and affixed the seal of the Clerk of Council's Office this 27th day of April in the year Nineteen Hundred and sixty-seven.

R. A. MACDONALD,
Chief Deputy Clerk of Council.

Mr. TAFT. Mr. Chairman, the next person we would like to ask to speak is Dr. Hoke S. Greene, vice president for academic affairs of the University of Cincinnati.

STATEMENT OF DR. HOKE S. GREENE

Dr. GREENE. Mr. Chairman, members of the committee, the University of Cincinnati has a long and distinguished history of research and training in areas which parallel closely the environmental investigations of the Public Health Service. These efforts began with the founding of the Kettering Laboratory in 1929 under the direction of Dr. Robert A. Kehoe and the expansion of the college of engineering. The Kettering Laboratory is now undergoing significant developments in environmental health under the direction of Dr. Radford. The college of medicine, one of the Nation's leading medical schools, is now completing a new 600-bed general hospital, a new 30-bed unit for research and treatment of thermal burns, a new research building for the Children's Hospital Research Foundation—where Dr. Albert Sabin has carried out such significant work—and a new building for nursing education.

In planning these major improvements we have recognized that both the Public Health Service and the university would benefit from closer working relations, and major steps have been taken to bridge the gap. Many Public Health Service staff now function as faculty members with full rights, privileges, and responsibilities and conduct their investigations jointly in both facilities. For example, this type of cooperative effort has been quite successful in the radioisotope laboratory of the college of medicine where combined research is carried out in nuclear medicine and radiobiology with sharing of personnel and

facilities. A similar program in radiological health is in existence at the college of engineering, and the Public Health Service is constructing a solid waste disposal research facility on a university site to be completed in 1967 for joint research by Public Health Service and university investigators.

These successful joint efforts merely scratch the surface of what will be possible when university and Public Health Service facilities are adjacent to each other as part of an overall, planned research center. That is the exciting opportunity which you can help us realize.

Mr. FLOOD. Thank you

Mr. TAFT. Next we have Dr. Edward Radford, professor of medicine and head of the Department of Environmental Health, University of Cincinnati.

Dr. Radford.

STATEMENT OF DR. EDWARD RADFORD

Dr. RADFORD. Mr. Chairman and members, I would like to depart from the text to perhaps fill in some of the gaps and emphasize some of the points that Dean Greene has made by some specific examples.

I would like to say in prefacing my remarks that the University of Cincinnati has the largest department devoted entirely to environmental health of any university in the country. We have developed within the interuniversity framework a university environmental health center called the center for the study of human environment. I am director of this center as well as head of the department of environmental health. The emphasis of the center is to bring together departments not traditionally concerned with health problems.

I would like to illustrate some of the complexities of the problems and some of the reasons why we feel that the presence of the Public Health Service facilities adjacent to our department and to the university as a whole will be of great benefit in both directions. Consider the problem of metals in our environment. Metals are not biodegradable in the sense that we think of them. You cannot break them down into carbon dioxides and water, which is a convenient way to get rid of a lot of things. Metals stay around. We are mining metals out of the earth at a great rate and distributing them widely into the environment. They get in the water, air, and so on. We have research programs presently underway at the university in our department which are looking at the respiratory syndrome of the newborn infant. This is one of the commonest causes of death in the newborn period. We have evidence now which suggests it is related to a metal deficiency in the mother. At least this is a hypothesis. This metal definciency may be accentuated by the presence of excess metals in the environment. This is a reciprocal relationship here. This is the basic research aspect of the program.

What are your biological effects of these? This takes a large department concerned with biological research that is the same that might be found in any other institutions. To go beyond this we need to know much more about what are the interrelations between metals of this kind. Zinc and copper are the ones that I am talking about. There could be others, such as lead or radioactive isotopes which is one of the areas I have been personally doing research in.

The point here is that it does not stop simply with the laboratory. The finding that this deficiency or excess may be important in the

health of babies and mothers is obviously a first step. Then we need information of what is going on in the environment. Here we need to have the engineering competence. We need to have the development of good, sound monitoring programs to determine where in the water or the air these disturbances may be. Are they serious? Can we define a safe level or an unsafe level? This is the problem of standard setting which is one that will be vexing to Congress for some time to come.

The next step is to try to design an environment in which we can avoid problems of this kind. Here we are in the area of community planning. Again we are well represented at the University of Cincinnati with an active community planning program and it is one in which we are vigorously bringing health to the attention of the students.

It is rather a paradox that probably all the urban renewal and planning that has been carried out so far has been done with very little input and mainly concerned with economics, esthetics, architecture, and so on. The health and psychological implication and all the vast constellation of implications that can modify man's attitude toward his environment has been lacking.

I would like to mention one other problem which bears on the kind of research we are doing now and the kind that we would be cooperating with in the Public Health Service on. We have some evidence that one of the common pesticide formulations containing pyrethrins but in addition others, we have some evidence this is more toxic than previously thought. I won't go into the scientific details about this but it appears it may be the combination of two or three agents together which are leading to the toxicity which singly would be much less toxic. This is a kind of interaction which we have suspected may well exist in the environment but there has been very little evidence because the research is difficult. It means combining a whole lot of things together to see if there is a greater effect in a given individual. Again here the problem is, can we define an environment which has maybe several pesticides that are used for various purposes coming together and perhaps having a greater effect in an individual? We have the same problem not solely in the laboratory definition of what is safe but also the definition in the environment itself. All of these are drawn together in community planning, urban planning and in the sciences at the other end of the scale which may be concerned with chemicals such as thalidomide which produces damage in infants.

We have a big program at the Children's Hospital concerned with this subject under Dr. Organi. Dean Greene mentioned the work that the group under Dr. Sabin had done. I would like to close by emphasizing that we have industrial hygiene and industrial health strongly represented in our department. It is safe to say that the University of Cincinnati and the Kettering Laboratory have graduated more occupational physicians and engineers than all the other universities in the United States combined. Dr. Kolee was active in developing this program and has been one of the leaders in this field. We plan to continue our interest in occupational health. You mention the coal mining problem. This is still a problem. Here is an occupation which condemns or may condemn the individuals to ill health in their later years. Is there a way we can avoid this? What are the steps that have to be taken? We still have a lot to learn about many of these occupational problems.

At the same time in learning about them we learn a great deal about what these agents will do to man. This is a way in which human beings do become exposed to greater amounts of these environmental problems.

I would like to close by saying that as pointed out in the prepared statement the Public Health Service has been seriously handicapped in its relationships with the universities and we feel by bringing them together and providing for closer working relations so that our students can do work on these problems in the Public Health Service facilities, and conversely their faculties can participate actively with ours, we can make very great advances quickly.

(Mr. Radford's prepared statement follows:)

STATEMENT BY DR. EDWARD P. RADFORD, JR., DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL HEALTH, UNIVERSITY OF CINCINNATI

Mr. Chairman, members of the committee, the activities of the Public Health Service in the Cincinnati area are far from ideal. Their own laboratories are so widely dispersed physically that scientific communication within the Taft Center has been unsatisfactory for interdisciplinary work. In addition, the scientists of the Public Health Service and the University have been so remote from each other as to make contact difficult on a day-to-day working basis. Thus Public Health Service personnel have lacked ready access to the students, faculty, and facilities of the University, and the services and laboratories of the excellent Public Health Service programs have been lost as a practical matter to the students and faculty of the University.

It became apparent that the best solution to all these problems would be the bringing together of all of the physically scattered activities of the Public Health Service immediately adjacent to the University campus. Advised by the Public Health Service that 20 acres would be needed for a proper development, the City of Cincinnati delineated alternate sites, one of which was later selected by the Public Health Service. Planning funds have already been provided by the Congress, the City has set aside the $4 million needed to provide the site; only construction money is needed to realize the benefits to research and training which will flow from this project.

I am here to counsel against delay. Scientific personnel in the fields of urban and industrial health are in short supply, but fortunately at the moment one of the largest pools of trained manpower in these disciplines is in Cincinnati. These skilled staffs are desperately in need of adequate facilities. Bringing the Public Health Service activities together in an academic setting is most appealing to such scientists. Extended delay in constructing such badly needed facilities not only hampers the effectiveness of research but may, over time, break up the highly skilled teams which have been assembled in Cincinnati over many years and are carrying out highly important projects.

The appropriation of the needed construction funds merits your highest priority if we are to stay ahead of the growing health problems of an increasingly urban and industrial society.

Mr. FLOOD. Mr. Taft and Mayor, I presume that in your area since you do have some flow down the river from the coal fields, you have both a sewage and acid mine water problem in your river?

Mr. TAFT. That is correct, Mr. Chairman.

Mr. FLOOD. In some of the other areas that is quite a problem as well. They are proceeding to attack the sewage disposal problem under the traditional procedures of sewage disposal plants with the help of the Federal Government in all sorts of programs. No one anyplace in the world seems to know the answer to the acid mine water problem. Some people say that you should not build a separate sewage disposal plant and spend X numbers of millions because if you do you simply have disposed of maybe one-third of the problem and you still have not touched the acid mine water which in its own right is a desperate

pollutant. Some people say that you can use them both together. Acid mine water in itself is an agent to work against the sewage disposal process.

All sorts of experiments are going on. Have you fellows been doing anything with that specifically?

Dr. RADFORD. I can not say specifically. The Department of Engineers has been very actively concerned with a variety of treatment programs for waste dipsosal. For example, in the tanning industry I happen to know about it specifically. It is rather interesting that one of the wastes from the tanning industry represented in West Virginia, and I believe Pennsylvania as well, alkaline wastes. Maybe there is some way economically that these wastes can be put together. It is a lime residue and this is a very serious problem in this particular industry. I do not think that there is a technical barrier. The barrier is essentially an economic one.

There is no question but that if you could use so-called tertiary treatment on mine wastes, you could eliminate the acid wastes and in fact it does take care of itself to some extent in the Ohio because the water is used so frequently and goes through pretreatment and post-treatment cycles several times. The acid in the Ohio River does fall off quite rapidly as you get out of the mining area. It is taken care of to some extent.

Mr. FLOOD. What about the mining area?

Dr. RADFORD. This is still a problem, you are right.

As I say, it is essentially an economic one. How much are we willing to pay to maintain stream quality and what are the levels at which we feel it should be? The same thing applies in air pollution control. How can we best solve the problem with the least amount of expenditure?

Mr. FLOOD. Mayor, your great city is certainly to be complimented for their leadership. It is an extraordinary local awareness of the entire problem and your tradition and history. I presume that is because of your close association and cooperation with your State people, as well as the Federal people in this whole broad area.

I know last year there was an appropriation of $1,385,000 for planning; $23 million is about the total cost of the project. You are contributing not only to your own municipality and the Greater Cincinnati area but all sections of the entire country will benefit from the work that will be done at this facility.

Mayor BACHRACH. That is quite right.

Mr. TAFT. Thank you. We have one other witness, Mr. Pandorf, chairman of the mayor's committee. He might have a word.

STATEMENT OF EDWARD C. PANDORF

Mr. PANDORF. I think most everything has been said that need be said.

Mr. Chairman, members of the committee, in 1963 Mayor Bachrach appointed the "Mayor's Committee on Environmental Health" with instruction to review the relationship of Public Health Service research activities in Cincinnati with the city, educational institutions, and industry, and to make recommendations for the improvement of those relationships. As you have just heard, much progress has been made along these lines in recent years, but action has been delayed

on one of our central recommendations: consolidation of the scattered Public Health Service facilities at one location contiguous to the campus of the University of Cincinnati.

As current evidence of the commitment of the city I am presenting to you at this time a certified copy of a resolution of Cincinnati City Council dated April 26, 1967:

Reaffirming and extending Cincinnati's pledge to make available 20 acres of land near the University of Cincinnati for the United States Public Health Service, and urging prompt Congressional action appropriating funds for the construction of research facilities on this land.

Mr. Chairman, the site has been selected by the Public Health Service after thorough study; the city has provided funds for the immediate acquisition of distressed parcels in this site, and has reserved $4 million to complete the purchase of the property, its clearance and improvement of access streets.

We believe this program should stay on schedule and that construction should be funded now.

Mr. TAFT. Mr. Chairman, I might just add one or two things. I do not think these have been mentioned. One is that the Public Health Service has already made a determination and a decision and has taken action to move the new Department of Urban and Industrial Health to the Cincinnati area. Dr. Svore, the Director of that Department, is moving to Cincinnati shortly and will be taking many people with him. This points out as well to the fairly advanced plans for land acquisition, the necessity of early action in this area to try to make most effective the efforts that are going to be undertaken by this Division of Urban and Industrial Health in the area as well as some other divisions of the PHS effort that are going on.

I would like to say in the budget document there is a line item on page 463, a request for the 1968 estimate figure of $770,000. Presumably this would cover additonal planning and also possibly some funds that are required of the Federal Government. Most of them are not from the point of view of the resolution for the land acquisition involved. If there is any way to facilitate and expedite the program, I think it would be in the public interest to do so.

I thank the committee very much for its attention. If you have any questions, we would be glad to try to answer them.

Mr. FLOOD. Mr. Smith.

Mr. SMITH. Are you generally testifying in support of the amount in the budget or do you have a specific recommendation?

Mr. TAFT. We are testifying in support of the amounts in the budget, Mr. Smith, and also urging that if the Department feels it can use any additional funds in going ahead and starting construction, work on the site, that this be done. At least the commitment be made on the site which at the present time has not been done.

Mr. FLOOD. This $700,000 is a carryover from the appropriation.

Mr. SMITH. I see.

Mr. FLOOD. Mr. Shriver?

Mr. SHRIVER. I have no questions.

Mr. FLOOD. Thank you.

Mr. TAFT. Thank you, Mr. Chairman and gentlemen.

STATEMENT OF HON. DONALD D. CLANCY

Mr. FLOOD. We are sorry our friend Congressman Clancy could not be here today. He called yesterday to say that he had a very important meeting of his Committee on Armed Services that he felt he must attend this morning.

We know of his interest and are happy to have his statement that will be placed in the record at this point.

(The letter follows:)

STATEMENT OF HON. DONALD D. CLANCY, OF OHIO

Mr. Chairman, I would like to join the Cincinnati representatives from whom you have already heard in urging that construction funds be appropriated for the proposed new Public Health Service facilities in Cincinnati.

The City of Cincinnati has long been recognized for its excellent work in basic and applied research in environmental health. Its pioneer efforts and its record of achievement serve as a logical nucleus for projected expansion of programs in the environmental health field, as I believe the members of this Subcommittee recognize.

Cincinnati's engineering, biological, and medical experience is waiting to be tapped in furtherance of the Administration's goals in the fields of environmental health. As the Subcommittee has heard, the City stands ready to cooperate in every possible way, including the donation of the 20-acre tract near the University of Cincinnati.

An excellent and close working relationship exists between the Public Health Service and the City of Cincinnati—especially its scientific community. The Subcommittee has for years shown a deep understanding of the benefits of having the Public Health Service work closely with the major medical and engineering schools such as we have in Cincinnati, and it is our earnest desire to maintain this fine spirit in the future.

The resources of Cincinnati in laboratories and scientists in the specialized area of environmental health are rich and tested. In addition, Cincinnati offers the Ohio River and a heavily industrialized area as a natural urban "laboratory" for Taft Center scientists. With the increasing emphasis being placed on urban problems and industrial effects on health, Cincinnati's new Center for Urban and Industrial Health offers the promise of continued significant contributions in fitting man's environment for a increasingly more urban age.

The City of Cincinnati has pledged its deep and continued interest in activating a meaningful program to assist in the improvement and expansion of the facilities of the Taft Center, and it is our hope that the Subcommittee will agree that it is urgent to move forward on this project.

Mr. FLOOD. Three other Members of Congress have sent us statements on other subjects. This would be a good point at which to have them appear.

SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

STATEMENT BY HON. JOE SKUBITZ

The first is from our colleague Joe Skubitz on the subject of Federal assistance to schools in federally affected areas.

(The statement follows:)

STATEMENT BY CONGRESSMAN JOE SKUBITZ, OF KANSAS

JUSTIFICATION FOR FULL APPROPRIATION NEEDED UNDER PUBLIC LAW 815

As you gentlemen know, Public Law 815 authorizes Federal assistance to school districts to construct school facilities for substantially increased school enrollments brought into a district by Federal projects or activities. The allocation of these funds to school districts is controlled by a formula in the Act. They are not granted automatically to all impacted areas. They are authorized, as I have said before, only when a school district has had a substantial increase in

enrollment made up of children who live on Federal property or who live with a parent employed on Federal property. No funds are granted to any school district under this Act unless the school district is without sufficient school facilities for this increased number of children. Thus, all projects that are approved are to build school facilities to "house" children for whom no facilities exist and whose parents are needed to prosecute military or domestic projects. Even then the law requires that the amount of funds allocated to any district be restricted to the cost of constructing "minimum" school facilities.

When the appropriation request for fiscal year 1967 was made for this program last year, the temporary provisions were in effect only to June 30, 1966. Accordingly, the request was for $22.9 million, which was just enough for the permanent provisions of the Act. The permanent provisions authorize payments for children who live on Federal property. The temporary provisions authorize payments primarily for children who live in a community with a parent employed on Federal property. The payments are made because the Federal Government owns the property with which these children are connected and it cannot be taxed for school purposes. The annual cost for this program for the last several years has been approximately $50 million when all the provisions were in effect. The administration also recommended to the Congress last year some minor technical amendments which would improve inequities in the administration of the Act. It was estimated that these minor technical amendments would increase the cost of the program to about $58 million.

Congress appropriated the $22.9 million as requested, passed the minor technical amendments, and extended the temporary provisions of the Act until June 30, 1967. The Office of Education informs me that they have received by the first cutoff date for filing applications this year, a total of 349 applications requesting more than $100 million. They have made a tentative review of all those applications and they think that the firm requirements will be $61 million. They have $22.9 million to meet this urgent need.

The law provides that when the funds appropriated in any year are not sufficient to meet the requirements of all eligible applications, the funds must be allocated to those school districts that have the greatest relative urgency of need. Under the present circumstances, the Office will be able to approve only about 50 of the highest priority projects. The other 300 plus eligible applicants will have to wait to see if additional funds are appropriated in order to approve their projects.

The administration also recommended the appropriation of $22.9 million for this program for the 1968 fiscal year, the same amount as for the current fiscal year. The bill reported out by the House Committee on Education and Labor recommends extension of the temporary provisions to June 30, 1967, and several bills have been introduced by other Congressmen to extend these provisions for one or two years. Thus, it appears that there also will be a need for next fiscal year for about $60 million to meet the eligible applications that will be submitted. It is apparent then that the backlog of this year's eligible applications that cannot be funded with this year's appropriation, cannot be funded with the appropriation requested for next year.

Gentlemen, this situation is urgent. I have received a number of letters from the school officials in my district describing to me the very urgent need to get an allocation of funds to approve the eligible projects on file in order that they can build school facilities for those children whose parents are assigned to projects in my district, many of them in direct support of the war in Viet Nam. I am informed by a number of other Congressmen that they have received similar letters describing the urgent situations that exist. For example, in my district there is an urgent situation in the Derby Unified School District in Sedgwick County, Kansas. This school district has a pupil enrollment of 5,700 and 60 percent of this number are federally connected. A majority of these federally connected pupils reside with parents who are employed at Air Force Plant No. 13, also known as Boeing Plant No. 2.

This plant is expanding rapidly to meet the needs of the Viet Nam situation and increased numbers of employees are being hired now. Families are moving into the district every day to meet the employment needs at the Plant.

The Derby Unified School District has large numbers of unhoused children as a result of increased Federal activity and it must have financial assistance soon if it is to provide suitable school facilities for its children. I am informed that the priority index for its Public Law 815 construction project is not high enough to be reached with the current appropriation; therefore, the only way this district can be helped with its school housing problem is through a supplemental appropriation.

I am also informed that the funds appropriated for Public Law 874, the companion law for Public Law 815 which provides current operating expenses for schools in impacted areas, is sufficient for the current year to pay entitlements to all districts eligible to receive payments. There are approximately 50 large school districts that are eligible for assistance this year because of amendments made by this Congress last year liberalizing the eligibility requirements but who cannot receive payments from the present appropriation because of a rider on the appropriation bill. The amount appropriated for this program for this current year is $416.2 million. An additional $15 million is needed for these newly eligible districts.

The appropriation request for this program for 1968 now pending before this Committee is also $416.2 million. The estimated requirements in fiscal year 1968 are $461 million. Thus, the appropriation being considered for next fiscal year is sufficient to pay the eligible school districts only 90 percent of the entitlements which the formula in the Act say they should receive.

Most of you people on this subcommittee have had some experience with this impacted areas program. It was authorized in 1950 and has been in operation since that time. It has been very well administered and is well liked by the Congress. These programs have proved their worth in making it possible for hard-pressed school districts to provide classrooms and operate programs for those military personnel and those civilian workers who have been required to leave their normal place of residence and move to areas where their services were required by the Federal Government. Most of the requirements under these programs result from our military activities. I think it would be a great disservice to these local communities and to the fathers of our fighting men in Viet Nam if this Congress does not fully fund the provisions of these two Acts as the Congress has authorized. I urge you to recommend an additional appropriation for the current fiscal year of $40 million for Public Law 815 and also an additional $15 million for Public Law 874. I also urge that you recommend in the appropriation for fiscal year 1968 the full amount needed for Public Law 815, perhaps $60 million and the full amount needed under Public Law 874—$461.5 million.

At the time when this Congress is considering ways and means of improving the education program for educationally disadvantaged children, for children in the inner areas of our great cities, and in other areas of the world, we cannot neglect the children of those military personnel and other workers needed here at home to prosecute the military and civilian projects authorized by this Congress.

Title III of the National Defense Education Act

STATEMENT OF HON. LEE H. HAMILTON

Mr. Flood. The next statement is on a subject we have heard a great deal about this year, the level of funding for title III of the NDEA. The statement is from Congressman Hamilton of Indiana. We are happy to place it in our hearing record.

(The statement follows:)

STATEMENT OF THE HON. LEE H. HAMILTON, OF INDIANA

Mr. Chairman, and members of the Subcommittee, I appreciate the opportunity to appear before you and to enter my remarks regarding the appropriation for Title III of the National Defense Education Act in the record of these hearings.

I would like to go on record in opposition to the present recommended cut from $82,700,000 to $50,000,000 for Fiscal year '68. I am in favor of maintaining the present level of appropriations for this Title.

These funds have been very important to many schools in the Ninth District of Indiana. This program has served as a cutting edge for development of many new, innovative and important programs; and it has the enthusiastic support of school administrators and school boards in the District.

I would sincerely appreciate your giving every possible consideration to maintaining the appropriation for this program at the present level.

Appropriations for Education Programs

STATEMENT OF HON. AL ULLMAN

Mr. Flood. Our friend Al Ullman has sent us a rather comprehensive statement with regard to the fund needs of several education programs. We are happy he took the time to prepare this statement for us and will place it in the record at this point.

(The statement follows:)

STATEMENT OF HON. AL ULLMAN

Mr. Chairman, I appreciate the opportunity to present this statement today and to bring to the attention of your Committee the widespread interest among Oregon educators in appropriations for fiscal year 1968.

In this year of extraordinary pressures on the budget, I do not envy your Committee the hard decisions which you are called upon to make. I am confident that under the able leadership of your new Chairman, the Gentleman from Pennsylvania, you will carry on the tradition of concern for American education which characterized the career of our dear friend and colleague, the late John Fogarty.

Mr. Chairman, I have received the comments of a large number of Oregon school administrators, teachers, and parents expressing their appreciation for many of the landmark programs enacted by the 88th and 89th Congresses in the field of education. In my testimony today, I would like to share with the Committee a sampling of this mail, in order to underscore the achievements of these programs and the importance of their continuation.

As Members of Congress we must persevere in our efforts to eliminate duplication and unwarranted spending in education, just as we must strive to consolidate Federal programs in other areas. But we must recognize also the notable successes and important innovations which have earned the support of our professional educators and others who deal with these programs on a day to day basis.

As we all know, our Federal participation reflects the variety and complexity of our modern educational enterprise. Therefore, my comments, and those of Oregon's educators, will cover a broad range of educational appropriations which are before the Committee.

First of all, I would like to direct the Committee's attention to the President's budget request of $1.2 billion for Title I of the Elementary and Secondary Education Act of 1965.

This Title has stimulated the educational community to aggressively attempt to serve the needs of disadvantaged children. In my state, 11%—57,629—of Oregon's children in both public and non-public schools participated in Title I activities last year.

In a letter to my office, Wallace E. Turnidge, Director of Federal Projects for the Salem, Oregon, Public Schools, described one example of a Title I project: "You may recall that the Salem program, 'Summer 66,' was designed to give an exemplary educational experience to disadvantaged children, as well as to provide a training program for experienced teachers to enable them more adequately to teach the disadvantaged. This program ran parallel with a Head Start program so that special service personnel could be more efficiently utilized."

An elementary school principal, Earl Mattison of Lebanon, Oregon, wrote: "Under this program, we have purchased a large amount of gymnastic equipment and this year have hired a qualified person to instruct the children in its use. If appropriations are cut, this could mean losing this wonderful program we have, and the average classroom teacher does not know how to use the equipment so it would become obsolete."

Not only would equipment purchases under the program be wasted, but the real tragedy of reducing appropriations under Title I is expressed by Raymond A. Mullen, Superintendent of the Sutherlin Public Schools in Douglas County, Oregon: "The impact of federal funds on local education programs has been a real blessing for many children. An administrator is a gambler at heart and most of us have gambled with you because of the educational programs being made possible for deprived children that would not be in operation without such daring. Is it fair to these children to gradually withdraw the educational succor?"

Mr. Chairman, I would urge this Committee to give every consideration to maintaining the $1.2 billion figure set in the President's budget for the Title I program of the Elementary and Secondary Education Act.

As the Members of this Committee will recall, concern over the large shortages in manpower trained in mathematics, science, and modern foreign languages following the first Sputnik in 1957 led to the enactment of the National Defense Education Act in 1958 which authorized a variety of support programs for elementary, secondary, and college level education. One of the most important contributions of this legislation was the modernization and acquisition of equipment in schools throughout the country, as authorized under Title III.

The President's budget request cuts N.D.E.A. Title III funds by 41%, from $82.7 million in fiscal year 1967 to $50 million in fiscal year 1968.

I have received a large volume of mail from concerned educators questioning this dramatic reduction. The Superintendent of the Multnomah County, Oregon, Intermediate Education District wrote: "The overwhelming need is manifested in Oregon by the fact that for the past four years, project applications (under N.D.E.A. Title III) have requested approximately four times the amount of federal funds available for matching. The addition of the new areas of English and social studies opened up vast reservoirs of need which cannot otherwise be satisfied."

Darrell Muller, Director of Research and Development for the Pendleton, Oregon, Public Schools, and Leroy G. Childers of the Wallowa County Public Schools described two types of assistance which Title III funds are providing. Mr. Muller said: "Our Pendleton School District 16R has used this fund to help implement the following program changes in our schools: 1. Modern Mathematics Curriculum; 2. New Laboratory Approach for Science, especially Biology; 3. Development of Foreign Language course offerings; 4. Development of individualized instruction, especially in English and reading." Mr. Childers reported: "In Oregon, the Small School Project has provided us with resource people from other states and universities, with in-service programs designed to develop individualized instruction, with information that assists our teachers in developing a program in each specific subject area that utilizes the best instructional materials and equipment, and best of all, with motivation of the teachers and administrators to improve education radically."

Perry B. Johnson, Superintendent of the Klamath County Oregon School District, expressed the dilemma faced by school administrators—particularly those in rural areas—if the 41% cutback is permitted: "In our own school district we have applied for matching funds in the amount of $29,000 worth of equipment in the last couple of years. This equipment is direly needed to develop our educational programs to compete with larger districts throughout the nation. These are funds that we would find very difficult to raise locally."

Superintendent Thomas J. Walker of Coos County, Oregon, Intermediate Education District told of the importance of the matching feature of the N.D.E.A. Title III appropriations: "These funds have inspired local investments nearly three times over to provide school children with improved educational opportunities."

Mr. Chairman, as a result of the important contribution that N.D.E.A. Title III is making to American education, I urge this Committee not only to restore the funds cut by the President's budget, but to expand this program to the full amount of $110 million for equipment and $10 million for supervison and administration which was authorized by the Congress.

Another area which has been brought to my attention is the Work-Study program of the Vocational Education Act of 1963. There is critical and pressing need in America today for skilled craftsmen, and the Congress has been resolute in encouraging our youth to pursue vocational education. In our modern industrial society, adequate vocational education requires work beyond the high school level, yet many of our young people preparing for a trade come from families unable to afford the costs of higher education.

The nation spent $25 million on this worthwhile program in 1966, cut back to $10 million in 1967, and now the Work-Study program has been dropped entirely from the budget. The Executive Secretary of the Oregon Vocational Association, Elmer H. Halstead, wrote: "We feel that the Work-Study program, operating with only a 3% overhead cost, is the most effective and frugal method of expending taxpayers' dollars to assist the needy vocational education student."

As I mentioned above, I am as anxious as any Member of Congress to eliminate

overlapping of Federal programs. However, Carl G. Devin, Dean of the Vocational-Technical Division of the Treasure Valley Community College in Ontario, Oregon, told me of the importance of this program in relation to War on Poverty efforts: "I firmly believe that these funds should be kept at the maximum attainable for this program, in that it remains very difficult for many vocational students to qualify at the instructional level for the neighborhood youth corps and O.E.O. work-study programs."

Mr. Chairman, I suggest that the Committee give careful consideration to restoring the $10 million Work-Study appropriation under the Vocational Education Act of 1963.

In the area of higher education, I would like to share with the Committee the experience of Oregon educators with the programs of the Higher Education Act of 1965 and the Higher Education Facilities Act of 1963.

Federal assistance has been particularly effective in stimulating equipment purchases designed under Title VI of the 1965 legislation to improve undergraduate education and instructional techniques. The Oregon Educational Coordinating Council reports that prior to this program, the 22 participating higher educational institutions in Oregon spent approximately $2,142,000 annually on instructional equipment and materials. Spurred by the Federal grants, this total institutional contribution rose to $3,533,633—an increase of 65% in a single year

It is important that the Committee consider the amounts recommended for this area of financial assistance as a minimum and seek ways to expand the budget recommendations for undergraduate instructional equipment.

Th budget recommends a 13% reduction in funds for graduate and undergraduate facilities construction at our nation's colleges and universities. The recommended amounts are a full 45% below the sums authorized by the Congress for these purposes.

Th Oregon Educational Coordinating Council has detailed the pressing need for adequate capital construction monies in the years ahead. In Oregon, enrollments in colleges and universities will climb from the 1966–67 level of 62,694 full-time students to an expected 90,666 students in 1970–71—an increase of 45%. As we all realize, now is the time when we must plan for the facilities in which to house and educate these students. The table below, prepared by the Oregon Educational Coordinating Council, compares the actual contribution to construction costs in 1962–66 with the projected needs for 1967–71.

Source	1962–66 actual	1967–71 estimated	Percent increase
Private	14.5	37.5	159
State and local	90.4	253.9	181
Federal	29.4	83.4	183
Total	134.3	374.8	179

It is obvious that in this vital area, a reduction in appropriations at this time will contribute to the backlog of construction needs and place in jeopardy the quality of higher education throughout America.

Mr. Chairman, I have welcomed the opportunity to discuss with the Committee these important problems. I have been gratified by the interest and concern expressed by the Oregon educational community in the success of these programs and the necessity for adequate funds to continue their efforts. The Oregon experience is not unique—all of our nation's citizens will appreciate your careful appraisal of the dollar needs of our educational system.

Thank you for your consideration of this statement.

TUESDAY, MAY 2, 1967.

INSTITUTIONAL MANPOWER DEVELOPMENT TRAINING PROGRAM

WITNESS

L. T. ALLISON, PRESIDENT, MIDWAY TECHNICAL INSTITUTE, CHICAGO, ILL.

Mr. FLOOD. Our next witness, Mr. L. T. Allison, is president of the Midway Technical Institute of Chicago, Ill.

Mr. Allison.

Mr. ALLISON. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, it is with great pleasure and a sense of real social responsibility that I make this statement in behalf of the extension and expansion of so-called institutional manpower development training programs so that this committee will give due consideration to the need when determining appropriations.

The vocational tarining program administered by the U.S. Department of Labor under the Manpower Development and Training Act has the practical effect of meeting the needs of industry as well as lifting the deprived individual from the poverty level to a position of pride as a wage earner, a taxpayer, and a contributing member of the community.

As president of Midway Technical Institute, located on the South Side of Chicago, I speak from considerable experience in the establishment, staffing, and operation of such programs in a broad range of vocational fields. Midway Technical Institute, a private school, was established 25 years ago to provide practical job training for Negro exservicemen under the GI bill of rights. I need not remind this committee that there were fewer educational opportunities for Negro youth—even exservicemen—in the 1940's than is true today. I shall enter into the record of the proceedings of this committee a recent report by Midway entitled "Federally Financed Job Training Program Basic to War Against Poverty." It spells out the nature of our programs and makes a general assessment of their value to the Woodlawn community in Chicago. At the same time, I shall enter into the committee record a selection of comments from various authorities regarding the achievements of this training, together with a list of organizations currently employing graduates of Midway. So that we can can agree on terms, let us accept a definition of institutional vocational training, as training that takes place in a school situation rather than in a training camp or on the job, or in a public school environment.

This means, then that institutional training, as carried on at Midway and at many other vocational schools contracting with the Federal Government to provide such training, offers unique opportunities to make sure that learning is effective, retained and applied with optimum results. The prevocational phase of the training offers unique opportunities to develop the whole person to improve psychological and sociological attitudes, to facilitate adjustment to a training and job situation, and to prepare the individual for total integration into the working and social life of the community in which he lives.

Another aspect of this training that is unique is its location in the midst of the neighborhood where the trainee lives. It thus avoids the shock of removing the individual from his home environment and placing him in the middle of a strange and perhaps hostile environment. Furthermore, the prevocational experience eases adjustment to the realities of the job situation by teaching good grooming, respect for fellow workers and supervisors, the necessity for consistent and prompt attendance on the job, and so on.

But of prime importance in this kind of training is the work that is done to help the individual establish his own identity as a person, as a member of a group, and as a participant in contemporary society. So far, I have drawn your attention to what might be dismissed as intangible byproducts of vocational training. Our experience has shown that, far from being secondary, these aspects of training are the absolutely essential foundation stones upon which specific vocational training must be built.

What good is to train a man or woman in the manipulative skills required to perform a job, while at the same time ignoring the motivation required to perform that job? In the long run, how lasting will be the effects of job training if in the course of that training, no effort has been made to enhance self respect, engender personal pride, and foster the desire to succeed?

We at Midway can point with pride to the achievements of our graduates. I refer you to the comments of those who have seen for themselves the basic changes brought about in individuals by the Midway method. May I say that all institutional contractors have brought to their task the professional expertise and technical proficiency needed to develop and maintain effective programs. Furthermore, during these months this training has been carried on under Federal sponsorship, valuable experience has been gained in refining methods of training so that now a new frontier in vocational training has been reached.

We live in a time of what my be termed an employment gap. In community after community across the country skilled and semiskilled jobs are going begging for want of people able to fill the, while at the same time, we have great pockets of unemployment, particularly, in our larger cities. Furthermore, we have a great hidden manpower reservoir of people who are underemployed who, with supportive training, could be much more productive for society and themselves. Given this situation, it seems a tragic waste to consider curtailment of institutional vocational training in favor of greater emphasis on so-called on-the-job training. Such training surely can communicate a skill to an individual; but it has built-in potentials for failure because it overlooks psychological and social adjustment, personal motivation, and the inculcation of confidence to sustain acceptable work standards.

What is needed, instead of curtailment, is expansion and broadening of institutional vocational training, plus the coupling of programs with on-the-job training efforts to bridge the gap between classroom and the job environment.

A recent White study of the Nation's unemployment rolls, referred to by Joseph Califano, Presidental Special Assistant, indicates that of 7.3 million currently unemployed, only some 50,000 welfare recip-

ients are capable of leaving the relief rolls and going to work. With all due respect to the White House researchers, I believe these figures are subject to misinterpretation. Mr. Califano does indicate that there are some 900,000 mothers of 3.5 million relief children, but he does not point out their potential for gainful employment. Think for a moment what a coupled program of vocational institutional training and day care for children might produce in moving relief recipients to income-producing status. Federally sponsored institutional vocational training programs have developed to a point of efficiency where it would be a tragic loss to the country were they to be cut back.

It is no coincidence that the Urban League of Chicago, in a newly released report on job status of Negroes in Chicago, set as No. 1 priority, and I quote, "An expansion of on-the-job and institutional training so that it will include all who need it to be meaningfully employed." Gentlemen, the vocational institutions have built upon experience in this new and specialized field of training; today they have the facilities and staff to meet the challenge of badly needed expansion, and can do so right now. All they need is the funds to do the job. Without these funds, they will soon wither and die, and our urban communities across the Nation will be poorer.

We have made a magnificent start in approaching the solutions to the key problem of the disadvantaged in the United States today. That key problem is employment. If we can lead increasing numbers of the unemployed and underemployed out of despair, frustration, and bitterness that characterize the welfare psychology of the defeated, we can look to a happier nation.

Without the help of you gentlemen, as members of this committee, we cannot hope to sustain and strengthen the type of vocational training that has thus far proved most effective in bringing the productive life to those who need it most—the thousands upon thousands who want a better life, who want to play a valid part in American life, but don't presently have the means to do so.

The people of the slums themselves now recognize the need for expansion of schools like Midway. From January 1, 1967, to April 21, 1967, we have graduated to employment 354 adult men and women. In the absence of new enrollment our student population has now been reduced to 214.

I would like to inject here that after May 21, the enrollment will be as of the following Monday, 132.

Although recruitment is not our function we made a limited survey of need in the ghetto neighborhood in which the school is located, and as a result found that since January 1, 1967, 230 adults, many on public assistance, were desirous of enrollment for job training. They are aware of the opportunity and the success that their friends and neighbors have achieved.

We have the space and the equipment, but our potential students, unskilled and discontented, crowd the ghettoes ready and anxious for an opportunity to escape from insecurity and dependence. We hope that Federal funds will again become available.

We are receiving requests from Chicagoans in other parts of the city to come to their neighborhoods and offer the kind and the quality of training now available at Midway. Business organizations and associations are just now beginning to realize that on-the-job training in and

of itself will not suffice to fill employment needs. Consequently, they are turning to us to develop coupled programs, blending institutional training with vocational and ultimately on-the-job training so that the full potential of individuals can be reached with maximum results at minimum long-term cost.

You gentlemen can provide the means where new programs of this kind can be developed and refined.

May I point out that there will come a day, we all hope and pray not far off, when our men overseas will be returning to their homes to reenter the world of business and industry. In spite of their excellent military training and specialized work in fields closely allied to business and industry, they are going to require some kind of readjustment training, as under the GI bill. The kinds of training offered by institutions such as Midway will offer the best of such training to those who need it the most, provided the schools have been permitted to continue to grow and develop in skill and service to the community.

Summing up, my personal plea to you is to give heed to the place of institutional training in the total vocational education mix, as fostered by our Government. Granted, the war in Vietnam has put strictures on funds available for the war on poverty. I cannot pretend to know the ways and means at hand to protect manpower training from incalculable damage through enforced cutbacks, but I am sure your committee does. Therefore, I appeal to you to give manpower training of the institutional variety the support it now so gravely requires. Don't settle for the cheapest, the token, the lick-and-a-promise kind of program. Help us to continue to build for a better future so that ultimately, every citizen with the need for a job can acquire the skills to do it, the motivation to do it well, and the pride of participation in the life of our country.

Thank you.

Mr. FLOOD. Midway and schools of these sorts; are these private institutions or private corporations for profit?

Mr. ALLISON. Midway is a private corporation.

Mr. FLOOD. We have public vocational schools of all sorts that exist and are being developed as well, doing the same kind of thing in the public sector?

Mr. ALLISON. That is right. In Chicago we have a participation of the two types.

Mr. FLOOD. Your concern is with proper emphasis of the job training as distinguished from this other type of training to which you speak?

Mr. ALLISON. Yes, it is.

Mr. FLOOD. Mr. Shriver.

Mr. SHRIVER. How long are they in this training? Various times?

Mr. ALLISON. Depending on the skills and it depends on the individual and what grade level they come into the training at.

Mr. SHRIVER. What is the average cost per student, considering the whole of your program?

Mr. ALLISON. The basic education, prevocational program, which is the one I referred to here where we will accept a student from 0 to a grade level of 2, in 20 weeks we will elevate the student to a fifth point or better. That is a 20-week program and that costs $600 per student.

Mr. SHRIVER. That would be the average?
Mr. ALLISON. Yes, sir.
Mr. SHRIVER. Thank you.
Mr. FLOOD. Mr. Smith.
Mr. SMITH. You will have 132 students as of next week?
Mr. ALLISON. As of Monday following the 21st of May.
Mr. SMITH. How many of these will be veterans?
Mr. ALLISON. We have no veterans at this point. These are all students we have contracted through the manpower training program.
Mr. FLOOD. Do you have any branch schools in other cities?
Mr. ALLISON. At this point, no, sir. I was out last week in Oakland and Watts and I was asked to come out and look over the possibility of developing other schools patterned after the one we have in Chicago.
Mr. SMITH. Why did you emphasize the veterans in your testimony?
Mr. ALLISON. The emphasis was there placed on how the school came into being. You remember in the early forties after the return of the GI—I was one of them—the Negro found very few schools that would accept him for training for several reasons. The level of education requirement in so many instances eliminated his enrollment. Other reasons are obvious so that upon those reasons Midway Technical ——
Mr. SMITH. What does that have to do with the veterans of Vietnam, your present situation?
Mr. ALLISON. Vietnam was only mentioned, I think, in the light that the war in Vietnam, as we are all aware, is one of the reasons there have been cutbacks.
Mr. FLOOD. Are you certified by the Veterans' Administration to accept students?
Mr. ALLISON. Yes, sir; we are.
Mr. SMITH. Why haven't you enrolled Vietnam veterans? They are mustered out every day.
Mr. ALLISON. At this point, not only my school but in our private school association in Chicago I think the problem is that the allowance awarded a veteran at this point——
Mr. SMITH. They are going back to other schools on that allowance.
Mr. ALLISON. There are some of the schools they are going to, upper educational levels. These people in the training that we offer in the main are in the lower economic bracket and their income monthly is much lower than it is in some of the other brackets.
Mr. FLOOD. You train women as well as men?
Mr. ALLISON. Yes, sir.
Mr. SMITH. That is all I have.
Mr. FLOOD. Mr. Casey?
Mr. CASEY. I have no questions.
Mr. FLOOD. Thank you.
Mr. ALLISON. Thank you, sir.

TUESDAY, MAY 2, 1967.

CHILDREN'S RESPIRATORY DISEASE CENTERS

WITNESS

DR. FREDERIC GERARD BURKE, PROFESSOR OF PEDIATICS, GEORGETOWN UNIVERSITY

Mr. FLOOD. We have Dr. Burke with us now.

Dr. Frederic Gerard Burke is the medical director of the Children's Convalescent Hospital.

Where is that located?

Dr. BURKE. In Washington, D.C.

Mr. FLOOD. Do you have a statement, Doctor?

Dr. BURKE. Yes, I am submitting a statement, Mr. Chairman.

I know that you are pressed for time. I may extrapolate and speak freely relative to the statement.

Mr. FLOOD. As you wish. Your statement will be inserted in the record.

(The statement follows:)

Mr. Chairman and members of the subcommittee, my name is Dr. Frederic Gerard Burke. I am a professor of pediatrics at Georgetown University, Medical Director of the Children's Convalescent Hospital in Washington, a recent member of the National Advisory Council to the Institute of Child Health and Human Development, and a consultant to the Surgeon General, and as a pediatrician, have spent the past 25 years observing and treating the diseases upon which I am about to testify.

I am pleased to have this opportunity to submit testimony to the Committee and the Congress in support of developing a number of Children's Respiratory Disease Centers to be established by the Public Health Service Bureau of Disease Prevention and Environmental Control.

The increasing incidence of chronic respiratory disease in childhood is apparent to all who work in pediatrics due in part, I believe, to advances in other areas of research, such as nutrition and microbiology. A number of children survive today from formerly fatal insults only to be afflicted with chronic lung decompensation. This is not the only factor, and severe respiratory disorders appear to be increasing.

I postulate a *time-biologic continuum* in these pulmonary diseases which occur at different ages. Beginning with the Acute Respiratory Distress Syndromes of the newborn and presenting clinically as Bronchiolitis, Croup, Bronchitis, Acute Asthma, the Chronic Asthma-Emphysema complex, Cystic Fibrosis, and others. While the etiologic factors and cellular responses of these medical entities may vary—they all have several effects in common, especially air-hunger, that need elucidation and clinical research. The best methods of treatment of these frequently crippling conditions need to be taught to our medical students, nurses, technicians and parents. This could be best done through a coordinated, multidisciplined approach at a Children's Respiratory Disease Center.

I must point out that the effects of severe lung disease in childhood leave scars and rob the individual of his pulmonary reserve. Chronic pulmonary disorders in young and middle adult life frequently have their onset in childhood. Chronic asthma, for instance, is a potentially preventable disease; the magnitude of the crippling effects in adult life from childhood asthma can only be estimated since morbidity statistics are frequently hard to obtain.

In the 1963 National Health Survey of children in the United States, the data showed more than one-third of all chronic illness reported for children under 17 years was caused by hay fever, asthma, severe eczema, or sinusitis. Nearly one-fourth of all the days reported lost from school because of chronic illnesses are due to severe asthma. These figures are considered conservative and are probably higher. The crippling psychologic, pulmonary and economic effects of childhood initiated asthma in adult life can only be guessed at, but they are high.

The saddened plight of the air-hungry child stimulates panic in the patient, his family and, indeed, sometimes to his physician. Many family units have been uprooted and broken by the frightening visitation of acute and chronic respiratory distress in a child.

While the role of genetic endowment and biologic and psychologic factors are undoubtedly important components in the causation of asthma, another, and quite important, is the physical environment of the child—the urgency of investigating the role of air pollution and environmental contamination in the production and aggravation of these diseases cannot be overstated. Medical annals are filled with volumes dealing with the effects of climate on human disease, but there is a signal lack of controlled scientific observation on the human effects of polluted air.

We are accustomed to thinking that a diseased condition is brought on by a single cause, a classic view that is no longer tenable for many disease states. While there is frequently a simple association of an infectious agent producing an acute disease state, this concept simply does not answer many chronic diseases, which are on the rise today.

Chronic Bronchitis in Great Britain, once thought to be a specific disease entity, similar to chronic asthma, develops over a long period of time and can become crippling through a combination of factors. These include air pollution, smoke, a variety of respiratory allergens, repeated and recurrent bouts of respiratory infections, occupational exposures, and psychological trauma—all conditioned, perhaps, by genetic factors.

It seems apparent that there is probably no simple cause of chronic asthma, but air pollution is certainly part of the etiological complex and one that has *not* been extensively evaluated.

Indeed, with due consideration of the full magnitude of the problem of chronic pulmonary disease, there needs to be a greater, concerted effort made, if human and national needs in this area are to be met.

The development of these Centers would provide a great stimulation to more clinical research, provide an ideal setting for technical and professional training and initiate models of exemplary service and care for affected children and their families. Only by means of such Centers can longitudinal and multi-factorial approaches be made to chronic pulmonary disease. In such a setting, many medical and behavioral scientists can focus their talents and tools to provide a significant thrust against lung disease. The disciplines of pediatrics will be supplemented by those of psychiatry, psychology, immunology, virology, genetics, sanitary engineering, environmental health sciences and many others and will be brought on this target and dispel a smog of ignorance that pervades this great area of human health needs. Since this multi-disciplined approach is in the nature of a Center, an affective faculty of teachers and treators will thus be assembled to effectively disseminate this knowledge and care to a large number of patients and physicians surrounding the geographic region. Since these medical students and trainees establish their practices all over the country, the medical benefit to patients will be nationwide.

I would hope and strongly recommend that $750,000 be added to the appropriation for the National Center for Chronic Disease in fiscal year 1968 to provide first year grants of approximately $150,000 for five Pediatric Pulmonary Centers. This would enable the Public Health Service to discharge this vital health responsibility.

At all levels of research action, with all available resources at our disposal, a concerted and determined effort by the Congress and physicians must be structured to bring relief and open the windows of ignorance to let in the air of enlightenment for our breathless children.

Mr. FLOOD. Proceed.

Dr. BURKE. I am appearing here before the subcommittee to lend whatever support I can to the proposition and in support of the development of some pulmonary disease centers for children in connection with the current appropriation requests of the Public Health Service.

Mr. FLOOD. Do you have in mind special pulmonary centers or separate sections of general hospitals or children's hospitals?

Dr. BURKE. My concept of the development of the five model centers would be centered in departments of pediatrics of universities or associated affiliated teaching institutions. I think by this mechanism

we would be in a position to assemble the necessary multidisciplinary and multifactorial disciplines that are necessary to bring to bear if we are going to make a significant thrust against chronic pulmonary diseases in childhood which I see as a major unmet need in the public health job of the physician and Public Health Service. I would like to point out that when a man at the age of 31 or 32 suddenly develops emphysema and is then out of his job and his family is bereft and therefore is doomed to a lifelong disease situation, this suddenly just didn't appear at the age of 31, 32, but it had its origin early in childhood.

The incidence of chronic pulmonary disease in our pediatric population today is quite alarming and——

Mr. FLOOD. You are speaking of the entire spectrum of pulmonary disease from birth to old age.

Dr. BURKE. As a matter of fact, Mr. Chairman, I regard chronic pulmonary cases as a time biological continuum, if you will. I regard respiratory disease of the newborn, which is the first few days of life and which carries with it such a high mortality rate at the present time, and going on to the first 6 months of life where we see a clinical syndrome which we call bronchiolitis, this has been defined as having the air hunger mechanism located in the small bronchials and in the alveolae, functioning portion of the lung and peculiarly hits children between the ages of 2 and 7 months.

From 7 months to 2 years we see children with acute spasmodic croup. Then we see children with chronic or acute bronchitis or asthma.

Mr. FLOOD. Is this physiological or virus or a combination?

Dr. BURKE. That is right. The specific etiological basis, the specific causes for each of these clinical entities as we see them may be different but they all have in common one thing, air hunger. They are all desperately ill children by virtue of not getting enough air and going in and developing what I call the asthma-emphysema complex, which I think is the most neglected entity of these groups.

Mr. FLOOD. Do you include cystic fibrosis as well?

Dr. BURKE. I definitely include this because this as its major manifestation is the symptom of not being able to breathe. I think there is a continuum here going on from emphysema in the adult and other chronic bronchiectasis and other decompensation manifestations. That really calls for investigation at the cellular level. Recent advances in cystic fibrosis would indicate there is an enzymatic defect at the cell level associated with the genetic endowment of the child.

Recent investigation evidence in bronchiolitis has been clearly shown that about 90 percent of these are initiated by a specific virus, respiratory. In acute respiratory cases we know some of the acute signs of this syndrome and you notice it in looking for it in babies born prematurely and in certain other circumstances.

What I am saying is, Mr. Chairman, we know some of the things about each of these clinical entities. If we regard these as one continuum, as one of the total disease entities which requires specific definition, all of the things in common which need to be defined in terms of treatment and basic clinical research efforts to find out how they work and what one must do to prevent and adequately treat these entities——

Mr. FLOOD. What is the population?

Dr. BURKE. The Children's Convalescent Hospital has currently 50 beds. As of the next 30 days, the association with the grant from the Hill-Burton mechanism, we are about to construct a new 82-bed unit which will be dedicated to extend our chronic care for children. It is the only multidisciplined or at least multityped entity for chronic extended care for children in the Washington metropolitan area.

Mr. FLOOD. Your program is entirely inpatent?

Dr. BURKE. At the present time it is mostly, not entirely so, but 4 years ago we developed a program for chronic asthmatic children and we currently have an eight-bed unit in a 52-bed hospital dedicated and this aroused our interest in dealing with this great problem of chronic, intractable asthma.

Under the building started within 30 days, we will have a 20-bed chronic respiratory disease unit and the total number of beds will be expanded to 82.

The inpatient department will be accompanied by an expansion of our relatively small outpatient department which we have at the present time.

Mr. FLOOD. Almost of necessity the age of your patient and the type of patient and the condition calls for inpatient treatment, I suppose?

Dr. BURKE. That is correct. We draw patients from the acute short-stay hospitals, Children's Hospital, Georgetown University, District of Columbia General, Army and Navy hospitals, and NIH and from some other agencies which largely we have been taking and do take chronically ill children who just do not fit into the programs of acute short-stay programing which goes on in other hospitals.

In looking at these woebegotten youngsters some years ago we clearly understood that one of the most neglected areas was the chronic respiratory illness in this age group.

Mr. FLOOD. You do not draw economic lines?

Dr. BURKE. No; we do not. As a matter of fact, very few patients that we take pay for their care. We draw support from a very interested group of Washington ladies, a group of 50 managers they call themselves. They by their moneyraising efforts and through the efforts of the UGF and some contributions from the community, other than that, we try to remain in balance with our budget.

Mr. FLOOD. Mr. Shriver?

Mr. SHRIVER. I have no questions.

Mr. FLOOD. Mr. Smith?

Mr. SMITH. Did I understand you to say that emphysema does not just develop in later years but that they have it from the time they are born?

Dr. BURKE. My concept, Mr. Smith, is that pulmonary decompensation, which appears in middle or young adult life, has its beginnings in the robbing of pulmonary reserve in childhood. For instance, there are no less than 300 chronic intractable asthmatic children in the United States. I might say that 20 percent, one out of five children in the United States, are involved with a severe form of what is now called allergy—a big broad umbrella. Clinically again manifested by names we give things: hay fever, emphysema, or asthma.

They are all one disease and at any one time one of the other entities can flip into chronic pulmonary disorder. This is a large number of children—20 percent.

The incidence in the Washington metropolitan area alone, for instance, would number some 200 to 300 chronically intractable patients. These are youngsters who have thick charts at Children's Hospital. They come in two, four, five times a year in acute respiratory distress.

Mr. SMITH. Did all people who suffer from emphysema have an allergy earlier in life?

Dr. BURKE. I don't think anyone has yet defined what are the factors that steal the pulmonary reserve that make that individual come down. We know many of the chronic, intractable asthmatic children, if they survive, who have had emphysema.

We are interested in the Children's Convalescent Hospital in identifying the role of air pollution in the robbing of this pulmonary reserve. We feel among other uninvestigated causes of chronic asthma, and indirectly even if they don't get asthma as such in the infancy-childhood period, we are interested in the effects of air contamination in producing bronchial spasm.

Mr. SMITH. It is not necessarily hereditary, is it?

Dr. BURKE. I assure you that this is not the most important feature. I have eight children. One is a chronic asthmatic. He is going to college in Denver.

Mr. SMITH. I misunderstood your earlier statement. I thought you said it was hereditary.

Dr. BURKE. No. The very fact it seems to be on such an increase—that is, the chronic incidence of asthma during childhood—that it has led us to look for other causes, specifically air pollution as the conditioning factor——

Mr. FLOOD. There is a hereditary transmission.

Dr. BURKE. There is a genetic component but perhaps no greater than 50 percent of children with chronic asthma give a history that is known in their parents or grandparents.

Mr. CASEY. We have had other testimony on this same subject of child repiratory centers. The emphasis of one witness had to do with the cystic fibrosis. That was more in the research end. Yours is more in the establishment of these centers throughout the country. Is that correct? You want proper treatment administered as new developments come about.

Dr. BURKE. I think the three go together. The primary basis or emphasis will not be on research except this—that when you have a number of these children located in one center and peripherally treating another group on the outside in their homes and relating to the center in terms of an outpatient function, then you have a precious opportunity to get on with research.

The centers that I conceive of would be basically for training. They would be basically university affiliated but they would provide a setting not where there is one little kid who is suffering. You do not get a comprehensive picture to provide adequate training for the medical students in such an instance. But if you have a respiratory disease center then you can bring together the immunologists, psychiatrists, geneticists, public health nurses, and all of the disciplines that are concerned with this multifaceted problem.

Actually then you are building a tremendous faculty for training in the postgraduate levels. Pediatricians, nurses, and public health people would be involved.

I serve on the American Board of Pediatrics. We examine our candidates in a variety of subjects before we certify them.

One of the areas of weakness we have found has been a weakness in how to manage, how to treat research concepts. This is a problem that is so important in terms of the national interests in health.

I assure you that if one has not seen any of these children, kids gasping for air—we are still applying methodologies which were extant 15 and 20 years ago.

It is difficult to talk to a group of five or six people and not have had one individual either in his own immediate family or by close acquaintance involved in this problem.

Mr. FLOOD. Mr. Casey has 10 children.

Dr. BURKE. You have outdone me by two, sir.

Mr. CASEY. I don't think the two programs are in conflict at all because the previous witnesses spoke of the fact that although they were primarily cystic fibrosis centers——

Dr. BURKE. No; we are talking about the very same thing. In our own unit we have children with cystic fibrosis. As a matter of fact, I am chairman of the Professional Committee on Cystic Fibrosis here in Washington. This is one problem. They have as their focal point pulmonary diseases, air hunger. I am not terribly interested in names we put on things, whether it is an apple, an orange, or banana. They are fruit.

These children have as a common symptom air hunger.

The major symptom is pulmonary decomposition. That is why these two things work together.

Mr. CASEY. That is all, Mr. Chairman.

Mr. FLOOD. Thank you very much.

UNITED CEREBRAL PALSEY ASSOCIATION

WITNESS

HARRY LYONS, LEGAL AND LEGISLATIVE DEPARTMENT, UNITED CEREBRAL PALSY ASSOCIATION

Mr. FLOOD. Mr. Harry Lyons is our next witness.

Unless there is some desire on the part of other members that this be on the record, I think we will have it off the record.

(Discussion held off the record.)

Mr. FLOOD. Thank you, Mr. Lyons.

Mr. LYONS. Thank you, Mr. Chairman.

ENFORCEMENT OF THE CIVIL RIGHTS ACT

WITNESS

CLARENCE MITCHELL, DIRECTOR, WASHINGTON BUREAU, NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE

Mr. FLOOD. Now we have Mr. Clarence Mitchell.

Mr. Mitchell is the director of the Washington Bureau of the National Association for the Advancement of Colored People.

Do you have a statement, Mr. Mitchell?

Mr. MITCHELL. Yes, I have, Mr. Chairman.

With your permission, since you are so informal here, I would appreciate the opportunity of filing the statement. It will take 3 to 5 minutes to say orally what I have on my mind.

Mr. FLOOD. Proceed in whatever way you wish.

Without objection the statement will be filed.

(Statement follows:)

Mr. Chairman and gentlemen of the subcommittee, I am Clarence Mitchell, director of the Washington Bureau of the National Association for the Advancement of Colored People. I appear to express support for the civil rights appropriations of the Department of Health, Education, and Welfare.

In numerous decisions the U.S. Supreme Court has affirmed a national commitment to equal justice under law. Congress has also supported this great principle by passing legislation, especially the historic 1964 Civil Rights Act.

In spite of the progress by court decisions and legislation, there are still forces at work seeking to nullify victory and turn back the clock. One of their favorite techniques is to urge that appropriations for implementing civil rights commitments be cut down or eliminated altogether. The denial of funds for civil rights program has always been unjust. To deny such funds now would also be a national tragedy.

Though there are numerous voices raised against relying upon constitutional methods for winning equal rights, the NAACP has always stood for achieving its objectives within the framework of the U.S. Constitution. That is where we stand today. We know that the task of winning broad public support for this point of view is made more difficult when it appears that Congress is not giving its full support to programs designed to implement court decisions and legislation in the area of civil rights.

The Congress has given to HEW an important assignment. The agency now administers over 100 programs touching almost every facet of the life and social customs and usage in the country. As that agency has attempted to do its job, there are some like ourselves who insist that it is not moving fast enough and others who do not only oppose the modest efforts of HEW, but who also do not want any kind of positive action. We feel that the HEW programs should be broadened and accelerated. However, at this time we appear to give the agency unequivocal support and to express the hope that Congress will give it the moneys requested.

For more than a century the Congress has been authorizing the funding of Federal assistance programs such as those administered by HEW. Unfortunately, in the past, most of this funding was on a racially discriminatory and segregated basis. This put the Government of the United States in the shameful position of subsidizing racial separation and exclusion. When Congress passed the 1964 Civil Rights Act, it directed the executive agencies to reverse the racially discriminatory system. Through the principles contained in title VI of the act, Congress attempted to place the Nation in the high position of spending tax money collected from all the people for the benefit of all the people without regard to race, religion, or national origin.

A major part of the implementation of title VI has been entrusted to HEW and the U.S. Department of Justice. The Department of HEW has made a determined effort to achieve goals of fair treatment for school children. It has attempted to attack the serious problem of discrimination in hospitals and on the whole, under the leadership of Secretary John Gardner, it has shown great sincerity and dedication.

HEW's task was made infinitely more difficult by overt and massive resistance to compliance with the law, mounted and exercised by public officials—Governors, Senators, Congressmen, State officials, school superintendents—in the press, in public gatherings, in private visits.

The intensity and frequency of pressures on HEW have been extraordinary. The administratively difficult task given to HEW is an epic struggle, a battle in which the American respect for law and the rights of American citizens are at stake. These rights, though recognized and protected by the constitution and by law, have been and are in continuous jeopardy.

It is our opinion that the activity of HEW deserves congressional support in the most tangible way that support can be given, namely adequate funding. We respectfully but strongly urge that the requested funds be approved.

Mr. MITCHELL. I am happy to have been here at the previous discussion because I think the public does not understand to what extent committees like this make an effort to get at the facts and do a fair and objective job in the matter of appropriations.

The matter on which I appear is a very sensitive area. It is our hope that we can get a continuation of the appropriations for civil rights activity in the Department of Health, Education, and Welfare without cuts in the appropriation which they have requested.

As you gentlemen know, they administer the part of the 1964 Civil Rights Act, title VI, and do the policing job to see whether the schools, hospitals, and other beneficiaries of Federal grants administer and spend those moneys in a nondiscriminatory manner.

We as an organization are not always satisfied with what is done in this area. I would be dishonest if I fail to tell you that we think they are often too slow. I am sure by the same token——

Mr. FLOOD. Who do you mean by "they"—the Government officials charged with this responsibility?

Mr. MITCHELL. That is correct, Mr. Chairman. I would say specifically we would think that the people charged with the responsibility of implementing the civil rights aspects of title VI are often overly cautious and often not as productive as we would like to see them be.

However, at the same time I know there are other forces in the country who think they are moving much too fast and would like to do everything possible to slow down or eliminate——

Mr. FLOOD. That is an understatement.

Mr. MITCHELL. I know that you know the situation and I didn't want to overstate it.

I think it is very important to understand that in this country there are people who have no respect for law and order, and there are other people who are determined to see that law and order prevail in this country. I am happy to say that our organization is on the side of those who believe in law and order and who want to make use of the regular legal processess to achieve our ends.

With that in mind I think it is very important that the Government not only pass valuable legislation, such as the 1964 act, but that it also see that the legislation is adequately financed.

I have been around Washington for nearly 30 years now. I know that in the old days before we had much substantive civil rights legislation the opponents of civil rights would get at us by cutting the appropriations of agencies that were friendly on civil rights questions so that those agencies became intimidated and would not be forthright in the area of civil rights.

Now that we have substantive legislation, which I think is very valuable, the opponents have switched to a different type of attack. They try in some instances to write substantive legislation into appropriations. That was done last year, as some of your gentlemen know. I want to take this opportunity to thank those of you who took a forthright position against trying to legislate in an appropriation bill.

I had the opportunity to talk to Mr. Shriver who was very positive on that. I am happy to say, with reference to the idea of try-

ing to write legislation into the appropriations, with regard to financed hospital care, those who tried to do that did not succeed.

I am sure now that the other aspect of their attack is going on, and that is not just to write some substantive language into the appropriation but, if possible, to knock out entirely the system of enforcement; and, failing that, to so cripple the enforcement that it would not be possible to do an effective job by any standard.

My plea to you, Mr. Chairman and members of the committee, is that you help those of us in this country who desperately want to be sure that whatever is done to advance the cause of human rights is done within the framework of the Constitution of the United States.

We believe that if we can have adequate law, adequate enforcement of the law, and adequate personnel, not everybody will be superlatively happy but I think at least most people will feel that the Government of the United States is doing what needs to be done to be responsive to the wishes of the people.

That is all I have to say and I thank you for hearing me.

Mr. FLOOD. Mr. Laird?

Mr. LAIRD. I have no questions.

Mr. FLOOD. Mr. Smith?

Mr. SMITH. Do you have a brief comment to make concerning freedom of choice as the system for overcoming segregation?

Mr. MITCHELL. Yes, I would, Mr. Smith.

We have found in our experience that freedom of choice plans do not work unless they are very carefully supervised.

Our experience in the areas where there has been segregation by law is that, first, those who announce freedom of choice plans often are not acting in good faith and they do everything they can to frustrate people who want to make use of such plans.

Then we have found, also, that sometimes the people themselves, without any valid reason, because of historical background in which they have lived, assume that this is a dangerous thing to do, and they do not make use of the freedom of choice plan.

We would hope that the systems of trying to handle these matters on an area-by-area, school-district-by-school-district basis would be used more in some of these things.

We think some broad basic guidelines should be laid down, as HEW has attempted to do.

Then we feel that in many local situations, the most important element is people acting in good faith.

Once you have that you can accomplish almost anything. A freedom-of-choice plan might not be necessary. A redistricting thing might be better.

Mr. SMITH. That is all I have.

Mr. FLOOD. Mr. Shriver?

Mr. SHRIVER. I have no questions.

Mr. FLOOD. Mr. Casey?

Mr. CASEY. I want to say this: Of all the various organizations now it does seem that yours is emerging as the most law abiding. I want to compliment you for that.

Mr. MITCHELL. Thank you.

Mr. CASEY. I admire a strong advocate when he complies with the law. I have told many of my friends that if I were in the other place I might be more prone to use less restraint than some of you do in seeking your aims.

Again, I think the NAACP seems to be emerging as the most lawful. I hope you continue that way.

What has deterred progress has been the irresponsibility of some in trying to seek their aims. I think we have laws which, as you say, if they are properly and judicially followed progress in this country will continue in a proper way.

We will still have great disagreements, I am sure, as to the rapidity with which things should move, as you have stated.

There has been some question by some Members of Congress as to the administration of these laws exceeding the directives of Congress. I am sure it will all be worked out one way or the other.

I assure you all Members of Congress take the position you do, that if it becomes the law that is what it should be. We are here to uphold the laws of this country.

By the same token, many feel the law should not be exceeded in the administration, that if more is needed then it is up to the Congress to pass additional laws.

I think the whole thing can be solved with a matter of education. I don't mean just upgrading the education of those who have been denied it in the past but I mean educating those, many of whom have finished college but are still not educated with regard to the processes of this great country, and with regard to the contribution they can make by observing the law in its full intent.

Mr. Mitchell, I think you have made a fine presentation. I hope that your organization continues to follow the lawful course. Some of the others are contributing drastically to turning back the clock on what progress you have made.

Mr. MITCHELL. I certainly thank you, Mr. Casey. I know I can speak for our entire organization when I say that whatever we have gotten in this country—and I think we have been blessed with many advantages—we have gotten by making use of the Constitution, the courts, and our right to petition, our right to seek legislative enactments, and things of that sort.

I am sure we will continue on that course. I really want to thank all of you gentlemen for receiving me in the spirit you have received me.

Mr. FLOOD. Thank you, Mr. Mitchell.

POWERPLANT AT GEORGETOWN UNIVERSITY

WITNESS

JAMES G. DEANE, WASHINGTON, D.C.

Mr. FLOOD. Mr. James G. Deane is the next witness.

Mr. DEANE. Thank you very much for the privilege of allowing me to appear before you for a few minutes.

Mr. FLOOD. Mr. Deane is from Washington, D.C.

What is the purpose of your appearance?

Mr. DEANE. A few weeks ago I directed a letter to you calling to your attention the problem with respect to grants at Georgetown Univer-

sity's campus, with particular reference to a heating and cooling plant that is proposed as a central campus facility.

Questions have arisen about the manner in which this particular part of the university expansion, which is, as you know, being very heavily supported by the Public Health Service and also by the Office of Education, has been administered by the granting agencies.

I am appearing before you as an individual but I would like to point out that there are some 18 organizations, both national and local, which have become sufficiently concerned about the specific plans for this heating and cooling plant to go on record before the Board of Zoning Adjustment in the District of Columbia in opposition to the site which has been fixed in the plans as they stand at the moment.

These organizations are very concerned about this site partly because it is immediately next to a very valuable public park, part of the national park system, Glover-Archibald Park, and also because the project has serious implications for the zoning system in Washington it appears to us that the project is not in conformity with the requirements of the zoning regulations.

Mr. FLOOD. Mr. Deane, how do we have jurisdiction over this problem?

Mr. DEANE. We feel, Mr. Chairman, that the manner in which the Public Health Service and the Department of Health, Education, and Welfare have handled the project raises questions as to the proper administration of these Federal grants and as to whether the Federal funds that are being expended are being handled in the most careful and wise way.

We feel on the basis of our contacts with the Department and with the Public Health Service that very grave questions are raised about the adequacy of the review procedures.

I would like to——

Mr. FLOOD. The adequacy? You mean if and when the Public Health Service, in the opinion of certain citizens in any locality, has done something with which they are seriously concerned, such as the case you cite, there should be review procedures set up within the Public Health Service?

Just what do you have in mind?

Mr. DEANE. The Public Health Service has review procedures for projects of this kind. There are architects and engineers who go over the plans as they are developed by institutions. They check out these plans for various details as to the design, siting, and so forth.

We have found, much to our surprise, that the review procedures as they stand do not go into some of the most significant features of projects of this sort. I mean specifically in this case such aspects of this proposed heating and cooling plant as the noise that will be created, the air pollution problem, the physical size, and the effect on the terrain where it is proposed to be built, and the general impact of this industrial type.

Mr. FLOOD. I think you make your position clear.

The Congress, if it so wishes, delegates to the agency, as you know, the establishment of certain rules, procedures, and regulations to execute that law. Sometimes Congress goes too far in that delegation of power. That question comes up frequently. There are many agencies

where the Congress should not delegate so much authority. Sometimes they almost write their own laws.

This question has been raised frequently and it is a serious question. However, this is an appropriations subcommittee. There is no way that we could write into law a change in the regulations. That would have to be done by the responsible legislative committees.

Mr. DEANE. As an indication of the line of our thinking—I am sure this has come to your attention already—in the report of the Senate Committee on Appropriations of last September dealing with the HEW appropriations, the committee wrote in on page 79 some recommendations with respect to the design of hospital buildings financed with Federal funds in order to make provision for the handicapped.

This has suggested to me——

Mr. FLOOD. This is done very infrequently in the House. It is an entirely different set of rules here. They have limited authority to write legislation on appropriation bills; in the House that could not be done.

Mr. DEANE. What I am questioning, Mr. Chairman, is whether or not the procedures that are now employed by Public Health Service assure that public funds are being expended wisely and in accordance with the intentions of Congress, and, of course, of this committee.

We feel that some of the aspects of this particular project suggest that this kind of oversight is not being exercised.

For example, while we have found the Public Health Service and the Department very unresponsive to our questions we did persuade the Cincinnati installation, which is concerned with occupational and environmental health, to undertake a noise study at this site. I will be glad to submit this to the committee.

This report from the Public Health Service facility in Cincinnati states that apparently the noise that will be created by the air-conditioning machinery in this plant will exceed the permissible levels for even manufacturing districts in Washington.

As far as I know, the Department has ignored this report, even though the report was prepared within the Department.

Since no building, no structure of this kind, can be erected if it does not meet the District's zoning standards, I find it very difficult to understand why the Department should ignore this kind of information.

Mr. FLOOD. What position, if any, has the Zoning Board or Commission taken? Have they taken any action? I presume this has been brought to their attention. Has it?

Mr. DEANE. I am also puzzled at the manner in which this subject has been dealt with by the Department. Apparently the Department has approved this project without waiting for local approval actions because none of these local actions——

Mr. FLOOD. My question was this: What action, if any, has the local Zoning Commission or Board taken?

Mr. DEANE. This action has not been completed.

While we anticipate that the Board of Zoning Adjustment may approve the project——

Mr. FLOOD. Do you have access to the courts if and when they would do that?

Mr. DEANE. We certainly do. This is a possibility which is being given consideration.

Also, there has been no approval yet by the Commission of Fine Arts, nor has there been approval by the regulatory agency, the District government's engineering and licensing section.

Mr. FLOOD. Despite the action taken by the Department, whether you like it or not, it is unlikely they would go any further than taking the action they have taken under the circumstances of this procedure with which they are faced.

Mr. DEANE. I have been told by officials of the Public Health Service that the proper procedure under normal circumstances would be to wait until these approval actions have been completed locally before the project goes forward. Yet we are informed that not only have bids been received for the equipment for this plant which is to be built to order but it may be that some of the contracts for this equipment already have been awarded.

It may be that it might turn out that the building cannot be erected. Therefore it would seem strange that this much has gone forward.

I think it is the reverse of the kind of procedure I would normally expect.

We are also very seriously concerned about a conflict between the plans that have been submitted to the Federal Government on the one hand and the plans that have been submitted to the local agencies. These plans are inconsistent in very major particulars, and this, too, may interfere with the consummation of the project.

I think it should be pointed out that, since this is a central campus facility that is intended, and since other projects that the Public Health Service and the Office of Education are helping to finance will be tied in with it, any serious difficulty in constructing this plant may very well impede the completion of very important facilities elsewhere on the campus.

Mr. FLOOD. Mr. Deane, if and when that situation arises we should endeavor to see about it then. We have no jurisdiction in this. You are bringing this to our attention out of an abundance of caution. You are alerting us.

Mr. DEANE. We are concerned about the lack of responsiveness to these facts and other facts and the lack of responsiveness to public opinion on the part of the administrative agencies of the Federal Government.

We feel it is very serious that there should be such lack of responsiveness in a public program of this size and significance.

I would like to submit to you, Mr. Chairman, copies of two letters, one to Secretary Gardner and one to Mr. Henry Cram, of the Division of Physician Manpower, from the Committee of One Hundred on the Federal City, which is an organization of which I am a trustee.

Neither of these letters has been answered. In a great many direct contacts with the Department and the Public Health Service we have also run into a series of closing doors.

For example, we have been denied access to certain public documents, documents we would regard as properly public, including the application for the Federal grants and detailed information as to costs.

Mr. FLOOD. Mr. Deane, you have an established procedure by law to obtain access to any documents if it is declared by the responsible authority that they are public documents. Certainly an Appropriations

Subcommittee will not rule on that delicate point as to what is an executive document and what is not.

As you know, committees of this Congress have been frustrated since the time of George Washington, who started that not too commendable practice, and up until last week this constitutional question never has been decided. Perhaps it should be but it will not be through the intercession of an Appropriations Committee.

You have your rights and so have they. It will be a balancing of the equities which will determine who is correct and who is not. However, this is not your forum.

Mr. DEANE. As a former student of political science I would hope that the Congress would wish to exercise the kind of oversight over the expenditures of public funds which would encourage the Department to take a more liberal view of the rights of citizens.

Mr. FLOOD. That is the position of this committee, expressed time and time again.

Mr. DEANE. May I submit the noise study to which I made reference?

I also have some drawings which I would be glad to show you which demonstrated that some of the basic information provided to the Public Health Service about the site has been inaccurate, and that therefore we feel that again the review procedures of the Public Health Service have been demonstrated to be defective in terms of proper——

Mr. FLOOD. Your forum for that kind of presentation, to remove, restrict, or limit the right to regulate, to execute a law, is before the legislative committee.

You have well documented the statement you have made. Without objection we shall include these documents as part of your presentation.

(Documents follow:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
April 7, 1967.

Mr. JAMES G. DEANE,
Washington, D.C.

DEAR MR. DEANE: Enclosed is a copy of the report of the survey made at the proposed site of the power plant at Georgetown University. Copies of this report are also being sent to Mr. Henry Cram, Division of Physicians Manpower, Bureau of Health Manpower, and Mr. William B. Page, Division of Research Facilities and Resources, National Institutes of Health, U.S. Public Health Service.

Sincerely yours,

HERBERT H. JONES,
Assistant Chief, Engineering Section, Occupational Health Program.

REPORT ON NOISE SURVEY—PROPOSED SITE OF POWERPLANT, GEORGETOWN UNIVERSITY, WASHINGTON, D.C.

FOREWORD

The survey was made on March 30, 1967 by Herbert H. Jones, Sanitary Engineer Director, Engineering Section, Occupational Health Program, Cincinnati, Ohio. The study was initiated at the request of Mr. James G. Deane, Chairman, Potomac Valley Conservation and Recreation Council. The purpose of the survey was to determine if there would be a community noise problem resulting from the location of the proposed power plant of Georgetown University adjacent to the Glover Archbold Parkway.

SUMMARY

The specifications for maximum permissible sound pressure levels for the proposed power plant have been compared with the District of Columbia Zoning Regulations and present background sound pressure levels in the Glover Archbold Parkway. The District of Columbia Zoning Regulations are exceeded by 8 to 20 decibels. The background sound pressure level in the center of Glover Archbold Parkway is exceeded by 9 to 27 decibels. It is believed that the potential noise problem should be given some consideration in the approval of the proposed site.

DESCRIPTION OF SITE

The power plant site is approximately fifty feet from the boundary line of the Glover Archbold Parkway, an area which has been set aside as a natural park by the National Park Service, Department of Interior. The Parkway starts at the Potomac River and follows a deep valley northward along the western boundary of the Georgetown University. At the site of the proposed power plant the Parkway is approximately 550 feet wide and extends across a deep valley which has a virgin grove of beech trees. At the western edge of the park is a residential area.

OBSERVATIONS

On March 30, 1967 magnetic tape recordings were taken in the park using a Nagra II portable tape recorder and a Bruel and Kjaer Precision Sound Level Meter, Type 2203, equipped with Type 4131 condensor microphone. This equipment was calibrated with a Bruel and Kjaer, Type 4220, Pistonphone with this signal being recorded and used as a reference signal. The tape was analyzed using the Type 2203 sound level meter and Type 1613 octave filter set.

Measurements were made at the boundary line of the park at about the middle of the proposed power plant location, at the bottom of the valley approximately 275 feet from the boundary and near the boundary on the far side of the park at a distance of approximately 550 feet. These measurements were made between 11:30 AM and 1:30 PM and the results given below represent the average background sound pressure levels excluding aircraft flyover noise.

Average background sound pressure levels, decibel re 0.0002 μbar

Location	Over-all level	Center frequency of octave bands in cycles per second							
		63	125	250	500	1,000	2,000	4,000	8,000
Boundary line	58	56	52	40	39	31	20	12	11
Center-275'	57	54	52	41	35	31	20	13	11
Far boundary line	59	57	53	42	38	32	21	14	10

The background sound pressure levels are what would be expected for a rural or suburban area with little or no traffic during the daytime. At this particular location there are aircraft flying overhead on take-off from National Airport. From the limited amount of time spent at the site it was not possible to determine the number of flyovers per day or week. The maximum sound pressure levels produced from aircraft flyover were measured as follows.

Maximum sound pressure levels from aircraft flyovers, decibel re 0.0002 μbar

	Over-all level	Center frequency of octave bands in cycles per second							
		63	125	250	500	1,000	2,000	4,000	8,000
Jet	81	74	75	73	77	71	62	50	38
Propeller	86	84	80	76	77	74	66	53	41

DISCUSSION OF MEASUREMENTS

The design specifications for the proposed power plant specifies a maximum permissible sound pressure level at 550 feet as shown below.

Design sound pressure level decibel re 0.0002 μbar

	Octave bands, cycles per second							
	20 to 75	75 to 150	150 to 300	300 to 600	600 to 1,200	1,200 to 2,400	2,400 to 4,800	4,800 to 9,600
Night	57	47	39	32	28	25	22	21
Day	63	55	47	41	37	35	33	32

Using the above data for daytime and calculating sound pressure levels at other distances would give sound pressure levels at various distances as shown in the next table.

Design sound pressure levels at various distances, decibel re 0.0002 μbar

	Octave bands, cycles per second							
	20 to 75	75 to 150	150 to 300	300 to 600	600 to 1,200	1,200 to 2,400	2,400 to 4,800	4,800 to 9,600
Distance (feet):								
550	63	55	47	41	37	35	33	32
275	69	61	53	47	43	41	39	38
50	83	75	67	61	57	55	53	52

The District of Columbia Zoning Regulations, Chapter 6, Section 6101, sets the following maximum sound pressure levels for boundaries of Commercial-Light Manufacturing Zones.

[Maximum sound pressure level in decibels 0.0002 μbar]

Octave band in cycles per second (Hz):		Octave band in cycles per second (Hz)—Continued	
0 to 74	72	600 to 1,199	46
75 to 149	67	1,200 to 2,399	40
150 to 299	59	2,400 to 4,800	34
300 to 599	52	Above 4,800	32

The maximum permissible levels in the specifications exceed the limits set by the District of Columbia Zoning Regulations by the following amounts.

Octave bands (Hz):	*Sound pressure levels*	Octave bands (Hz)—Continued	*Sound pressure levels*
20 to 75	11	600 to 1,200	11
75 to 150	8	1,200 to 2,400	9
150 to 300	8	2,400 to 4,800	19
300 to 600	9	4,800 to 9,600	20

The maximum permissible levels as given in the specifications also exceed the background sound pressure levels in Glover Archbold Parkway by the following amounts.

	Distance from site (in feet)		
	550	275	50
20 to 75	6	15	27
75 to 150	2	9	23
150 to 300	5	12	27
300 to 600	3	12	22
600 to 1,200	5	12	26
1,200 to 2,400	14	21	32
2,400 to 4,800	19	26	41
4,800 to 9,600	22	27	41

CONCLUSIONS

The maximum permissible sound pressure levels as given in the specifications for the proposed power plant exceed the limits set by the District of Columbia Zoning Regulations and the present background noise levels in the Archbold Parkway by a considerable amount. It is believed that this should be given serious consideration before approval is given for the power plant to be located at the proposed site.

COMMITTEE OF 100 ON THE FEDERAL CITY,
Washington, D.C., April 3, 1967.

Hon. JOHN W. GARDNER,
Department of Health, Education, and Welfare,
Washington, D.C.

DEAR SECRETARY GARDNER: We wish to urge your personal examination of a Public Health Service supported project which as matters now stand is, in our opinion, doing grave injury to the principle of sound community planning here in Washington.

Georgetown University plans to erect a central heating and air-conditioning plant with the aid of substantial federal funds allocated to expansion of the university's medical-dental facilities. The site chosen is a steep stream-valley hillside which the campus shares with Glover-Archbold Park, one of the most notable of Washington's natural park areas.

The campus has adequate space elsewhere for such a facility. Moreover, there is every reason to exempt one of the capital's few relatively intact and unspoiled wooded stream valleys from detriments of the kind a large heating-cooling plant is bound to inflict upon it. We refer to noise, air pollution, ugliness, truck intrusions and direct physical damage to the terrain and the park.

Unfortunately, as we have discovered to our great surprise, your grant procedures omit provision for environmental review, and PHS evidently leaves to local agencies virtually all responsibility along this line, however indifferently such responsibility may be exercised. We have urged, in contacts with some of the administering PHS officials, that at least in this case appropriate weight be given to the prospective impacts, because of the especially sensitive location. But this does not seem to be happening.

We are convinced that neither the PHS grants program nor the university is likely to gain in public esteem from an intention that appears both thoughtless and unnecessary.

Several aspects of the project will, we think, be of particular interest to you. One is the fact that the chosen site is not in conformity with the university's own master plan, as filed with official agencies in accordance with District of Columbia regulations. That plan shows a different site, although that too is needlessly near the campus edge and the park. Even more significant, however, is the fact that when the PHS grants were approved in 1965 this apparently was done on the basis of still another site, one a substantial distance from the park. It has not been explained adequately, at least to us, how that site came to be abandoned or why the change apparently has been accepted without serious question by PHS.

Another salient fact is that the university itself hitherto has declared the presently intended site uneconomic. I enclose a copy of a letter containing this declaration, written in May, 1965, to an official of the National Capital Planning Commission by the university's present vice president for planning. (We

are informed that in excess of $200,000 has been estimated merely for site preparation for the project as now pending.) The unavoidable inference from the university's change of intent is that with the promise of federal subsidy an uneconomic site no longer need be considered one to be avoided.

This altered plan contradicting park values conflicts with a significant prior public commitment. Glover-Archbold Park was created more than 40 years ago as the result of large gifts of land by two generous Washington citizens (one of whom, Mrs. Anne Archbold, a member of this Committee, is still living). Additions were made under the Capper-Cramton Act, which was devised to preserve just such natural stream valleys in the national capital area. Congress accepted the land donations by special acts, and Secretary Udall, among many, has personally stressed the urgency of protecting the park's beauty and tranquillity as belonging to a distinctive and nationally important Washington possession.

Glover-Archbold Park is, of course, part of the National Park System, and the Park Service ranks it second as a Washington natural asset only to Rock Creek Park. In certain respects, such as being functionally roadless and possessing an extraordinarily dense breeding bird population which is under systematic study, it stands by itself.

The conflict most immediate and striking, however, involves the project's detailed plans themselves, and we invite your special attention to this subject. As evidenced by copies of tracings accompanying this letter, while submitting to PHS one set of drawings showing a facility more than 115 feet high, located 50 feet from the park and with partly exposed smoke stacks and cooling-tower stacks, the university has submited to local agencies drawings showing a structure 88.5 feet high, located 60 instead of 50 feet from the park, having completely screened stacks and lacking a truck-backaround platform a few feet from the park shown on the PHS submittals.

The university stated on March 22 to the District of Columbia Board of Zoning Adjustment, which must grant permission before erection of any campus structure, that the smaller one will be built. It is this smaller structure that the board, we are told, subsequently approved, although no formal order to this effect has yet been issued. The same plan was submitted to the Commission of Fine Arts, whose final action is still pending, and to the National Capital Planning Commission, which on the basis of it recommended approval of the project subject to certain provisos.

We think it noteworthy that the university has made only the latter plan public, and that at the March 22 hearing it both failed to offer any explanation regarding the different submittal to PHS and strongly objected to the introduction of information about that submittal into the hearing record. The information, including tracings from the university's drawings, was introduced by this Committee.

Despite the commitment made to the Board of Zoning Adjustment, we are informed that the university already has opened bids on the plant equipment based on the drawings submitted to PHS, and intends to award the equipment contracts shortly.

We think PHS should have an urgent interest in obtaining an explanation of this situation.

A number of national and local organizations have signified their opposition to the university's present intention and to any site detrimental to the park. Neither set of drawings is acceptable from the standpoint of proper park protection or, in our opinion, in the framework of the District of Columbia's zoning regulations, which require that any campus facility be so located that it is not likely to become objectionable to neighboring property because of noise, traffic, number of students or other objectionable conditions.

We request, under the circumstances, that all PHS approvals concerning the project be immediately suspended, that an investigation be made of the conflicting drawings and the project's environmental implications, and that you consider whether the federal grants allocated to the proposed plant should be cancelled.

We shall be glad to provide more detailed information.

Yours sincerely,

JAMES G. DEANE,
Chairman, Subcommittee on Conservation and Park Protection.

Enclosures.

MAY 13, 1965.

Re: Georgetown University 1985 Development Plan

Mr. WILLIAM MCINTOSH,
National Capital Planning Commission,
Washington, D.C.

DEAR MR. MCINTOSH: On behalf of Georgetown University, I am enclosing documents with information additional to the data and plans contained in the University's Brochure submitted on 31 December 1964. This additional information was requested by the Commission's Committee on Universities during the hearing on 1 March 1965.

In detail the newly submitted documents are:

Exhibit 2F, contains information on growth, giving the foreseeable situation by 1985. This Exhibit was explained during the Full Commission's hearing on 4 March 1965.

One of the questions raised by the Commission was: Has Georgetown University in its 1985 Plan made full use of recent changes for Universities in the Zoning Regulations? This question is related in particular to the recent increase in permissible floor area ratio to 1.8. The University is using the recent changes to the fullest practicable extent in its 1985 and future plans. In this regard, I should like to emphasize certain conditions and factors which have guided the University in its planning to achieve the most efficient land use.

The Zoning Regulations prescribe that maximum land coverage will be 60% in our instance. Our present area is 110 acres approximately. Hence, we will eventually have 33 acres of green or other open space on the entire campus. This will include necessary roads, sidewalks, lawns, athletic, parking and other areas. Much of the area on the plans which were submitted to the Commission is already unusable for various reasons. The University program objectives include physical education and recreation and sports as well as other types of education and recreation. The area available for athletic fields has been reduced to approximately 17 acres as compared to a recognized norm of 35 acres for intercollegiate and intermural athletic programs. During a site visit the members of the Commission were able to observe that the steep hillsides around the Observatory and the athletic fields are not suitable for economic construction. Further, most of the larger playing areas are on filled ground, the fill being over 60 ft. deep. This land does not lend itself well for School constructions.

The whole Georgetown civic community occupies about one (1) square mile and the population was estimated to be 11,600 in 1960. The Georgetown University has a peak population of students, faculty, administrative personnel, visitors and patients of about 10,000. About half of this number are students who are young and require some outdoor recreation. A brief examination of the map of the whole area will reveal the paucity of green space for recreation and athletic games. We have estimated the population density on the University Campus to be 1 person for every 440 sq. ft. as compared to 1 person for every 2400 sq. ft. in the civic community.

The University has had to develop its own internal zoning plan. This is normal and required since efficient operation of the educational facilities and the prevention of mutual interference makes it necessary to assign specific areas to certain functions. This internal zoning was demonstrated on Exhibit 2D which was previously presented to the Commission.

The foregoing also responds to the question raised by the Commission as to the size of the areas assigned to outdoor physical education. In this connection, I should like to mention two signifcant events of current concern. Firstly, the construction of a new 177,000 sq. ft., million volume, library on campus necessitates the relocation of tennis courts to a part of the present outdoor athletic space. This will reduce playing fields by 49,000 square feet (1.2 acres). I am sure that the Commission appreciates that all the present green fields serve multiple purposes for fall, spring and summer sports. Second, the future expansion of the gymnasium will also reduce outdoor athletic space still further.

The Commission also requested further information on parking spaces. Exhibit 2D amended, shows parking space allocations. The Medical Center and General University combined have 1722 parking spaces, not counting curb parking. Under the present code regulations we require only 1660 spaces. By 1985 the Medical Center will have space for 2000 cars and the General University will have space for 1650, all off street, and not counting curb parking. This will be well in excess of code requirements.

I shall be glad to furnish any additional information required and please let me know if I can be of further assistance.

Sincerely,

T. BYRON COLLINS,
S.J., Business Vice President.

COMMITTEE OF 100 ON THE FEDERAL CITY,
Washington, D.C. February 14, 1967.

MR. HENRY CRAM,
Acting Chief, Educational Facilities Branch, Division of Physician Manpower, U.S. Public Health Service, Silver Spring, Md.

DEAR MR. CRAM: We understand that substantial federal funds are to be contributed through your office to the construction of a heating and cooling plant at Georgetown University.

Our Committee is deeply concerned about the adverse impacts which we believe this project, at its presently intended site, would have on Glover-Archbold Park, one of the most significant components of the National Park System in the nation's capital.

Occupying the very narrow Foundry Branch Valley, this exceptional natural park would be damaged seriously by the noise, structural bulk and air pollution associated with this large factory-type utility installation next to its boundary. Cutting the structure, together with its intended parking lot and service road, into the steep wooded hillside would deface irreparably this part of the stream valley. We understand that the project would also entail installing a sewer or sewers within adjoining park land, and it seems inevitable that the construction would cause other direct park damage as well.

Our inspections convince us that feasible substitute sites are readily available within the campus. It appears to us that one or more such sites might actually be more suitable from an engineering standpoint. The planned location seems curiously remote from the university's medical complex which it is intended that the plant will primarily serve.

We also wonder whether consideration has been given to the desirability of a gas or electric system instead of one using fuel oil. We believe this question merits attention because of the area's worsening pollution problem.

We believe it would be in the public interest for your office to examine rigorously the environmental aspects of this project in the light of the growing national urgency of conserving livable surroundings and precious urban recreational space.

Yours sincerely,

JAMES G. DEANE,
Chairman, Subcommittee on Conservation and Park Protection.

Mr. FLOOD. Thank you, Mr. Deane.

Mr. DEANE. All right, sir.

Thank you.

CONCLUDING REMARKS BY SUBCOMMITTEE CHAIRMAN

Mr. FLOOD. This concludes our hearings on the items of appropriations to be considered in connection with the regular, annual Labor and Health, Education, and Welfare appropriation bill. We have a few additional statements that have been submitted for the hearing record and we will keep the record open for at least 1 week and will accept additional statements of reasonable length for the record.

LETTER TO SECRETARY GARDNER REGARDING ENFORCEMENT OF THE CIVIL RIGHTS ACT

As a result of the considerable testimony we have had on enforcement of the Civil Rights Act, I have written to Secretary Gardner for clarification of his approach to this matter. I will place my letter in the record at this point and if his reply is received in time, and I believe

from discussions with the Under Secretary that it will be, it will be placed in the record immediately following mine.

(The letters follow:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C., April 27, 1967.

HON. JOHN W. GARDNER,
Secretary of Health, Education, and Welfare,
Department of Health, Education, and Welfare,
Washington, D.C.

DEAR MR. SECRETARY: In the course of the hearings on the 1968 Labor-H.E.W. Appropriation Bill, the Subcommittee heard testimony dealing with the administration of Title VI of the Civil Rights Act.

Members of the Subcommittee are seriously concerned with certain of the contentions made by outside witnesses about the Department's approach to the enforcement of the Civil Rights Act and are particularly disturbed that the Department was not fully responsive to the Committee report last year calling for complete centralization of the civil rights enforcement staff:

If at all possible I would like to resolve the concerns about civil rights that have been identified.

It would be helpful to the Subcommittee if you could provide us with a clarification of your approach to Civil Rights.

1. The Committee has been informed that your guidelines and enforcement activities are directed exclusively at the Southern States and not at similar practices in the North.

2. The Committee has been informed that you have gone beyond the intent of the law, that rather than requiring nondiscrimination, you are requiring racial balance and that this is expressly prohibited by the very terms of the Civil Rights Act.

3. Last year, the Committee provided staff for Civil Rights enforcement activities with the instruction that this staff be separated from the operating agencies and their programs, and administered on a centralized basis. The Committee clearly had in mind more than centralized funding, it was the view of the Committee that the activity would be best carried out in a centralized organization. I cannot presume to speak for the entire Subcommittee, but I firmly believe that the Subcommittee not only continues to have this view but are strengthened in their conviction based on experience and the testimony of outside witnesses. I cannot understand your failure to take appropriate action.

If you would give me your views and plans on these problems, it will assist the Subcommittee in its consideration of the 1968 budget.

Sincerely,

DANIEL J. FLOOD,
Chairman, Labor-H.E.W. Subcommittee.

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, May 9, 1967.

HON. DANIEL J. FLOOD,
Chairman, Subcommittee on Labor, Health, Education, and Welfare, Committee on Appropriations, House of Representatives, Washington, D.C.

DEAR MR. FLOOD: This is in response to your recent letter concerning this Department's administration of Title VI of the Civil Rights Act of 1964. First let me say that we appreciated the extensive consideration which your committee has devoted to the administration of this program and the opportunities we had to testify on this subject before you.

In your letter you ask for my comments on three specific points which have been raised in testimony. Following are in respect to these points:

1. Title VI of the Civil Rights Act applies to the entire nation, not to any one region of the country. In carrying out the Congressional directive, we are applying the anti-discrimination provisions of this section and the Departmental Regulation to the North as well as South.

All school districts wherever located are equally required under the regulation to assure that they are in compliance with Title VI. The guidelines

apply to all school districts in the nation in the process of eliminating the dual school system.

2. In your letter you asked whether HEW public school desegregation policies require "racial balance." The Department requires only what the law requires: that Federal funds not be paid to school districts where students are denied the equal protection of the laws. This is the limit of the policies and procedures of this Department not only with respect to Title IV but with respect to Title VI as well. We will continue to adhere faithfully to the statutory prohibition against requiring racial balance as that provision is interpreted by the courts.

3. You expressed again the strong conviction of the Subcommittee that a centralized staff would assure a more efficient, economical and effective enforcement program. We have as you know gone through extensive changes in civil rights organization and procedure for enforcement of Title VI of the Civil Rights Act, including centralization of funding and of legal enforcement activities. Our experience and accomplishments have laid a groundwork on which further centralization can now be built. Based on a further review of this matter we are prepared to make the additional changes necessary to accomplish the reorganization recommended by the Committee. While these changes will require extensive personnel reassignments and revisions in the Regulation, we are prepared to initiate immediately the required steps.

In place of our present organization, which locates staff and compliance functions in five agencies, and authorizes the agency heads to order the termination of funds, our reorganization would establish a centralized staff unit with all Title VI responsibilities in the Office of the Secretary and the probable assignment of the review of decisions of hearing examiners to an administrative tribunal. This procedure would be applicable to all grant programs administered by the Department.

I trust I have been responsive to the concerns expressed in your letter and would be pleased to discuss them with you further.

Sincerely,

JOHN W. GARDNER,
Secretary.

VETERANS EMPLOYMENT SERVICE AND RELATED DEPARTMENT OF LABOR ACTIVITIES

STATEMENT OF THE AMERICAN LEGION

STATEMENT OF AUSTIN E. KERBY, DIRECTOR, NATIONAL ECONOMIC COMMISSION, THE AMERICAN LEGION, BEFORE THE SUBCOMMITTEE ON LABOR, HEALTH, EDUCATION, AND WELFARE, HOUSE COMMITTEE ON APPROPRIATIONS, IN SUPPORT OF FUNDS FOR THE VETERANS EMPLOYMENT SERVICE AND RELATED PROGRAMS, APRIL 28, 1967

Mr. Chairman and members of the subcommittee, I appreciate this opportunity to present the views of The American Legion on the FY 1968 budget request of the Department of Labor.

At the outset I want to thank you, Mr. Chairman, and each member of this Subcommittee for your continuing support of employment services for veterans. The passing of your former Chairman, the Honorable John E. Fogarty of Rhode Island, was a deep shock to all of us in The American Legion. He was a true champion of American war veterans and a close personal friend of many Legionnaires. We are consoled, however, Mr. Chairman, by the fact that this Subcommittee is now under your capable leadership because we know of your deep concern for our veterans welfare.

The American Legion has consistently supported the appropriation of adequate funds for the Department of Labor to carry on an effective employment program for veterans as well as other programs designed to improve their economic capabilities.

At its 1966 National Convention in Washington, D.C., The American Legion adopted resolutions supporting the activities of the Department of Labor relating to the economic problems of war veterans. My comments today, however, are directed primarily to the Veterans Employment Service and its programs in the Affiliated State Agencies. This Service and the Affiliated State Agencies,

over the years, have done an outstanding job for veterans with a minimum of funds. I would like the record to show that we appreciate the services they have rendered, both to the veteran and to The American Legion, in connection with our own employment programs. Our resolutions on this subject, numbered 102 and 103, are attached to my statement and I request that they be included in the printed record of these hearings. Also attached to my statement is a brief summary of two other resolutions adopted at our 1966 National Convention, numbered 53 and 486, which support the appropriation of adequate funds for related veterans' programs within the Department of Labor. It will be appreciated if this summary is also included in the record of the hearings.

The Veterans Employment Service budget request for fiscal year 1968 is $1,801,000, an increase of $45,100 over the appropriation for FY 1967. We understand that the additional money is required to meet the salary increases approved by Congress last year. Thus, the budget request anticipates that the Veterans Employment Service will operate at the same level as in FY 1967. We believe this will place a tremendous burden upon that service for several reasons.

Last year Congress enacted the Veterans Readjustment Assistance Act of 1966 which provided, among other things, job counseling and job placement services for all veterans who served honorably on active duty after January 31, 1955. It is estimated that approximately 3.8 million servicemen were separated from the armed services between January 31, 1955 and March 3, 1966, the date the new "G.I. Bill" was enacted. According to projections of the Veterans Administration this figure will increase to 7.1 million by June 30, 1972. The projection is based partly on Department of Defense estimates that 600,000 veterans will be separated from the armed services in 1967, 725,000 in 1968, and 850,000 in 1969. In addition, the Armed Forces will retire annually approximately 60,000 career servicemen. It is obvious from these figures that more and improved employment services will be needed to handle this anticipated work load. As you know a career military retiree's average age is 46. Many of them have little or no experience in civilian employment. In any event, men of this age are considered older workers and need specialized counseling service. Even at the present time the work load of the VES is considerable. As of December 31, 1966, there were more than 430,000 veterans actively seeking employment as compared to 350,000 on the same date in 1965.

In view of the current work load, aside from anticipated increases in the years to come, The American Legion strongly urges this Subcommittee to act favorably upon the budget request for the Veterans Employment Service.

The American Legion also asks you to give serious consideration to the need for authorizing additional veterans employment representative positions so that the Veterans Employment Service can properly fulfill its responsibilities to our war veterans. As you know, in Title IV of the Veterans Readjustment Assistance Act of 1946, Congress provided special job counseling and job placement services for veterans. The American Legion is confident that this is still the desire of Congress.

With the war veteran population increasing, aging, and shifting geographically, the Veterans Employment Service needs additional employment representatives in certain states where large numbers of war veterans have migrated.

While The American Legion relies heavily on the services provided to veterans by the federal government, we also conduct an employment program of our own. Our effort is designed to encourage employers to hire handicapped and older workers. This program is publicized throughout the country by our state organizations. On the basis of nominations received, awards are presented annually to employers, both public and private, whose employment practices in these areas are outstanding. In 1966 a total of 61 employers across the nation were so honored, 34 of them for hiring the handicapped and 27 for hiring older workers. These awards are made in cooperation with the Veterans Employment Service and the President's Committee on Employment of the Handicapped and the state Employment Security Agencies.

In closing, Mr. Chairman, and members of the Subcommittee, may I again urge you to act favorably upon the budget request of the Department of Labor for those programs in that department designed to place the veterans in gainful employment so that they may resume a normal life in society after service to their country.

SUMMARY OF OTHER RESOLUTIONS REFERRED TO IN STATEMENT

Veterans reemployment rights.—1966 Convention Res. No. 53—endorses the Veterans Reemployment Rights Program and requests Congress to provide the Office of Veterans Reemployment Rights with adequate funds and personnel to enable them to give prompt and effective service to all persons having rights and obligations under the reemployment Statutes.

Employment of older workers.—1966 Convention Res. No. 486—urges the Congress to make adequate appropriations for the required extension of specialized service for older workers in all local offices of the several state employment services and throughout other affiliated offices of the United States Employment Service, particularly through the provisions of staff time budget realistically related to the needs of the older worker.

RESOLUTION 102

A resolution to support Federal and State veterans employment services adopted by the 48th annual national convention of the American Legion, Washington, D.C., August 30–September 1, 1966

Whereas, Title 38, U.S. Code (Public Law 85–857) as amended, and the Veterans Readjustment Benefits Act of 1966 (The "Cold War G.I. Bill") provide for maximum counseling and placement services for all veterans, and

Whereas, The U.S. Department of Labor, through the Bureau of Employment Security, the Veterans Employment Service, and the State Employment Services placed veterans in approximately 900,000 jobs in the calendar year 1965, including 100,650 jobs which were filled by disabled veterans, and

Whereas, This work loan is being greatly increased as a result of the Veterans' Readjustment Benefits Act of 1965, which makes more than four million Cold War veterans eligible for speicalized employment services through the State Employment Services of the several states, and

Whereas, The number of those veterans is expected to increase at the rate of several hundred thousands per year in the foreseeable future, and

Whereas, There will be many thousand additional veterans commonly designated as military retirees added to the number of veterans entering the civilian labor force each year during this decade, and

Whereas, Many veterans of World War II who are now in the older worker category encounter resistance in their efforts to obtain suitable employment as a result, and

Whereas, The disabled veteran finds it more and more difficult to obtain gainful employment, due to both age and disability, and

Whereas, The Manpower Development and Training Act of 1962, as amended, which provides for job training and retraining of unemployed persons, including eligible veterans, places additional responsibilities upon the State Employment Services, and

Whereas, All of the above responsibilities demand, and will continue to demand, more time, more manpower and additional funds for the U.S. Department of Labor, the Bureau of Employment Security, the Veterans Employment Service and the State Employment Services of the several states, now, therefore, be it

Resolved, by The American Legion in National Convention assembled in Washington, D.C., August 30–September 1, 1966, that The American Legion go on record as requesting the Congress to provide adequate funds for the U.S. Department of Labor, the Bureau of Employment Security, the Veterans Employment Service and the State Employment Services to adequately staff the veterans' programs and assure that the provisions of Title 38, U.S. Code, as amended, and the Veterans' Readjustment Benefits Act of 1966, are carried out as contemplated by these laws.

RESOLUTION 103

A resolution favoring the creation of adequate local veteran employment representative positions in the various State employment agencies to better serve the employment needs of all veterans, adopted by the 48th annual National Convention of the American Legion, Washington, D.C., August 30–September 1, 1966.

Whereas, It has been the long established policy of The American Legion to promote maximum employment of all veterans, and

Whereas, The Cold War G.I. Bill, the Veterans Readjustment Benefits Act of 1966, signed into law by the President on March 3, 1966, confers veteran status to those who served in the Armed Forces from January 31, 1955 to date, and

Whereas, It extends the job counseling and placement benefits of Title 38, U.S. Code, to be provided by the Public Employment Services to the newly designated veterans who were discharged under conditions other than dishonorable, and

Whereas, There are approximately 3.8 million veterans who have been released from the Armed Forces since January 31, 1955, with an additional estimated 500,000 to 600,000 to be released annually between 1966–1970, and

Whereas, All veterans, including these newly designated veterans are to receive priority in the Public Employment Service Offices as provided for in Title 38, of the U.S. Code of Federal Regulations, and

Whereas, This priority includes selection and referral to job openings with the Public Employment Offices as well as priority and referral to training opportunities under the Manpower Development and Training Act of 1962, and

Whereas, There is a greater need for increased employment services for veterans due to the vast number of veterans who have been and will be released from the Armed Forces through 1970, now, therefore, be it

Resolved, by The American Legion in National Convention assembled in Washington, D.C., August 30–September 1, 1966, that The American Legion go on record as favoring the creation of adequate local veteran employment representative positions in the various state agencies to assist in their desire to better serve the employment needs of all veterans, and be it further

Resolved, that The American Legion petition Congress to make adequate appropriations for the financing of these additional positions which will insure adequate employment services to the veterans of the nation through grants to the various state agencies.

Control of Venereal Disease

STATEMENT OF THE AMERICAN LEGION

Statement of Randel Shake, Director, National Child Welfare Commission, the American Legion

Mr. Chairman and members of the subcommittee, My name is Randel Shake and I am National Child Welfare Director of The American Legion, a position I have held for the past seventeen years. My statement today is being presented in behalf of the National Child Welfare Commission of The American Legion of which Morris Nooner, Jr., of Plymouth, Illinois, is its National Chairman.

In May of 1956, a Los Angeles newspaper ran this headline: "Venereal Disease up 30% Among Teenagers." This information had come from Dr. George M. Uhl, Los Angeles' widely respected health officer, and occasioned The American Legion's interest in venereal disease, particularly as it applied to children and young people. We must frankly admit that prior to 1956, The American Legion like many others, had undoubtedly assumed that the effectiveness of penicillin on venereal disease would soon eliminate this scourge. To learn that venereal disease was actually on the increase, instead of declining to a negligible factor, was indeed a shock. It was even more shocking when our studies revealed that the greatest increases in venereal disease were taking place among our children and youth.

Since that day in 1956 The American Legion, through its Child Welfare Commission, has been vitally interested in society's attempt to control veneral disease. Our great concern with the increase in venereal disease among young people should be obvious to all when it is recalled that of the approximate 70 million children in the United States today who are 18 and under, some 40 million are the children of veterans.

On a number of occasions since 1956 The American Legion has appeared before this subcommittee to request adequate Federal funds to assist the states in their venereal disease control programs. As the record of our previous testimony will attest, we have long believed that venereal disease and especially syphilis could for all practical purposes be wiped from the face of the United States if we but had the will to do so. In this regard it was gratifying to

read the report of the Surgeon General's Task Force forwarded to the Surgeon General in December of 1961. As I know the members of this subcommittee are aware, that report recommended a program for the eradication of syphilis, which program has since been implemented by the Venereal Disease Branch of the Public Health Service under the very able leadership of William J. Brown, M.D. Our study and observations have indicated to us that real progress has been made during the past fiscal year and we would like to here commend the Venereal Disease Branch of the Public Health Service and likewise express our appreciation to the Congress of the United States for making funds available so the program of eradication could continue.

We are quite cognizant, however, that in a society as complex as that in which we live, no effort, regardless of its efficiency and effectiveness, can achieve the desired goal of eradication in a few years time. Nevertheless, we would hope that as a Nation we are irrevocably committed to the goal of the Venereal Disease Branch of the Public Health Service—eradication of syphilis as a public health problem by 1972. We would likewise hope that the Congress, too, is committed to this goal and will accordingly make sufficient funds available for enough years that a program of practical eradication can be continued.

Our study and observations of the progress being made in eradication of syphilis during the past year indeed makes us optimistic that the goal can be reached by 1972. We have noted for example the increase in public awareness that venereal disease is the most serious communicable disease today in the United States. We have noted more than twice as many states as a year ago have included venereal disease education in the school curriculum as approved by the State Departments of Education. We have noted a continuing increase in the number of private physicians reporting infectious syphilis and an increase in the number of reports, concerning members of the armed forces, with sufficient information to permit civilian authorities to initiate tracing of both infectious syphilis and gonorrhea. And best of all, we have noted that 1966 was the first year since 1957 when there was a slight decrease rather than an increase in the number of cases of primary and secondary syphilis reported in the United States. We firmly believe that the combined efforts of the United States Public Health Service and the state and local health departments are beginning to show some real headway in achieving the goal of eradication by 1972.

We are concerned, however, about Federal and State appropriations. In fiscal year 1965 the Congress appropriated $10,105,000 for venereal disease control. In fiscal 1966 it reached $10,392,000 and for fiscal 1967 the amount appropriated was $10,593,000. These amounts are certainly far better than the four or five million dollars appropriated in the late 1950's but they are certainly not adequate in our judgment to achieve eradication any time in the near future. We believe 1968 can be a banner year if enough funds are available to continue pushing downward the reported number of syphilis cases. With the known decline in 1966 we have every reason to believe that it will continue in 1967 but without an increase in funds we are doubtful that it can continue past that point. It is our personal belief that Federal appropriations for fiscal 1968 should be, at a minimum, 50 per cent greater than appropriations for fiscal 1967. As this Subcommittee is certainly well aware, the costs of personnel and material have risen sharply during the past several years, and as you are also well aware, as our population increases so do the number of venereal disease cases increase. We do not see how an increase of less than 50 per cent over the 1967 budget can possibly permit our public health officials to meet the increased costs which they must pay and the increased population which they must serve.

Mr. Chairman, we are certainly cognizant of the fact our military commitments in Vietnam and other parts of the world place a burden on the total Federal budget. As taxpayers ourselves, we are in sympathy with the attempts of this Congress and the Administration to eliminate unnecessary Federal expenses. But we submit to you that, even if it is a domestic program, our fight against venereal disease is likewise a war and one that we have been waging for many years. We do not seek to reduce the budget for our necessary military commitments, but we would hope that the "other war" could be granted sufficient funds so it too could win its battle. The health of our youth is one of our greatest national assets.

The American Legion is basically interested and concerned with the physical and emotional effects that venereal disease has on the lives of our children. In addition, however, we are also concerned with the total economic effect venereal disease has on our society. We know, for example, that roughly 4,000 persons each year are still killed by syphilis and these are only the cases where syphilis

is noted on the death certificate; we know that maintenance of the syphilitic blind in this country amounts to about $5 million annually; we know that there are approximately 24,000 paretics (syphilitic insane) whose annual care requires approximately another $50 million. Of untreated syphilis about one in 200 becomes blind; one in 50 becomes insane; one in 25 becomes crippled; and about one in 15 becomes a syphilitic heart victim. The cost of care of these patients represents our failures in the past to find and properly treat syphilis, but the same figures certainly argue that we must do a better job than in the past in order to lighten the burden of care for future years.

Many times economic statistics are cold and seem to be oblivious to the human suffering which they represent. Many times they seem blind to the care, worry, discouragement, and loss of production of the humans involved. Certainly this is true in the statistics we have just mentioned for they in no way measure the full loss to society of the individuals involved. For example, we annually lose about 19,000 man-years because of institutionalization for syphilitic insanity. We lose about 5,600 man-years annually because of disability from cardiovascular syphilis and another 11,000 man-years because of disability of syphilitic blindness. In addition, we lose some 40,000 man-years annually from life expectancy due to syphilis and a loss of income to age 65 (at the 1963 per capita personal income rate) of nearly $32 million.

As an organization, The American Legion is fully in accord with the present program of eradication of venereal disease by 1972. We know, however, that without proper funds the projected plans will remain plans instead of positive results. The last action taken by The American Legion on this subject was at our National Convention here in Washington, D.C., August 30–31, September 1, 1966, when our Convention unanimously adopted the following resolution.

VENEREAL DISEASE EDUCATION PROGRAM

Whereas, Venereal diseases are one of the greatest public health problems facing the people of the United States today, and have constituted an increasing threat to the health of our young people; and

Whereas, These diseases strike without regard to age, sex, race, wealth, status or geography; and

Whereas, Techniques are available to eradicate syphilis from the United States by 1972, and to control the spread of gonorrhea until effective tools can be developed to eradicate that disease; and

Whereas, There is an acute need for universal education of our population about these diseases; now, therefore, be it

Resolved, By the American Legion in National Convention assembled in Washington, D.C., August 30–31, September 1, 1966, that it go on record as endorsing the introduction of a sound and adequate program of Venereal Disease Education into every school system in the United States, beginning at least by the 8th Grade; and, be it

Further resolved, That the American Legion urge parents, youth leaders, educators and all other responsible citizens to lend their active support, in every way possible, to the eradication of syphilis from the United States by 1972 and to the control and eventual eradication of gonorrhea as well; and, be it

Finally resolved, That the American Legion call upon the President of the United States, and the members of the Congress of the United States, to lend the prestige and power of their high offices to the accomplishment of these goals.

Mr. Chairman, although the American Legion is interested in helping eradicate venereal disease for all age groups, its primary interest is in the young people of this Nation. I am sure that you are as appalled as are we to learn that in fiscal year 1966 at least one out of every 250 teenage boys and girls was infected with gonorrhea. These are reported cases only. If we are permitted the vernacular, the situation really gets pretty "sticky" when experts tell us that the actual incidence of infection is considered to be four times the reported incidence. One wonders how serious we adults are about the welfare of our young people when we find that in 13 states the rate for gonorrhea among the 15 to 19 year age group was over 500 per 100,000 or a ratio of one in 200; and it becomes fantastic and nearly unvelievable that in one area of this country the rate in 1966 was 4,636.5 showing a ratio of better than one in 25!

Infectious syphilis in this same age group was, of course, not as prevalent in number but the rate of infection was still just as heartbreaking. In calendar year 1965 the rate of infection for this same age group for both infectious syphilis and gonorrhea was more than double the rate for all other age groups combined.

One finds no comfort in examining the incidence of infection in the 20 to 24 age group. For instance in 1965 approximately one out of every 100 young men and women contracted gonorrhea. And, to sum up the statistics, young people in the age group 15 to 24 were responsible for 53.9 percent of all infectious venereal disease in the United States in the calendar year 1965.

It is often said that statistics can be used to prove most anything. We submit, however, that any conscientious study of statistics available from the Public Health Service not only proves that venereal disease is the most serious communicable disease in the Nation, but also that as a Nation we are not yet doing all we can to eradicate it. No one today needs to get venereal disease. No one who has it needs to keep it—no one needs to suffer its terrifying end results. Diagnosis is relatively sure; treatment is painless, easily available, inexpensive, swift and reliable. It is time we as a Nation accepted that nothing worthwhile is necessarily easy or cheap. It is time we accept that the figures suggested by the Surgeon General's Task Force in 1961 for the eradication of venereal disease are no longer valid because of the increase in cost of both personnel and materials together with our increase in population. In our judgment it is time we increased our appropriation for this very important health service by at least 50 percent over the level of the 1967 appropriation so that eradication by 1972 has an honest chance to become a reality. We believe it can become a reality and urge this Committee to recommend a budget increase at least equal to the one we have suggested.

Mr. Chairman, and members of this Committee, in the interest of brevity we have purposely avoided any discussion of morality as it is entwined in the problems of venereal disease. We recognize the existence of this factor but have chosen to limit our discussion to the hard facts of medicine and money. We appreciate the opportunity to present our views, Mr. Chairman, and want to extend the sincere gratitude of The American Legion for the courtesy you have shown in permitting us to do so.

Budget Requests for the Office of Education and Public Health Service

STATEMENT BY THE U.S. CHAMBER OF COMMERCE

STATEMENT ON LABOR-HEW APPROPRIATIONS FOR SUBMISSION TO THE SUBCOMMITTEE ON DEPARTMENTS OF LABOR AND HEALTH, EDUCATION AND WELFARE AND RELATED AGENCIES, HOUSE COMMITTEE ON APPROPRIATIONS FOR THE CHAMBER OF COMMERCE OF THE UNITED STATES BY HAROLD H. HAIR,* APRIL 26, 1967

The Chamber of Commerce of the United States recommends that Congress reduce the 1968 budget by at least $5 billion. A budget calling for an all-time high in Federal expenditures, and the prospects of a record peace-time deficit, possibly as high as $20 billion, make it imperative that Congress critically review all spending programs with the aim of eliminating those that are wasteful or ineffective and curtailing or deferring the less essential ones.

This year the Chamber does not have a long list of specific recommendations. Instead, we chose to concentrate our resources on a few highly significant activities. Accordingly, we are not detailing each account, we believe Congress should cut to reach the goal of $5 billion. But, we do suggest two opportunities for prudent cuts within the purview of this Subcommittee which we would like to call to your attention. The recommended reductions are:

Office of Education	$528,800,000
Public Health Service	300,000,000
Total	828,800,000

While citing only these two examples, we urge the Subcommittee to examine all programs funded in this bill and to trim wherever it can without harm to the national interest.

*Harold H. Hair is Director of the Government Operations and Expenditures Program of the Chamber of Commerce of the United States.

OFFICE OF EDUCATION

Budget request	$4,054,670,000
Recommended reduction	528,800,000

The Office of Education administers approximately 30 different programs in the field of elementary and secondary education. They form an overlapping and confusing tangle which baffles both educators and bureaucrats alike. The Chamber of Commerce of the United States asks that this problem be addressed seriously before any significant expansion of elementary and secondary education programs is allowed.

The National Chamber recommends reductions in the following Office of Education purposes:

1. Elementary and Secondary Education Act

Under Title I of the Elementary and Secondary Education Act, millions of dollars in Federal funds have gone into some of America's wealthiest school districts while leaving many of the poorest untouched. The attempt to remedy partially the problem of inadequate financing for poorer districts by changing the distribution formula to use a national rather than a state average is jeopardized by the language of H.R. 7819, which suspends that reform until appropriations equal full entitlements. Not only does Title I often widen the disparity between the rich and the poor schools, but it adds an annual demand for new teachers of about 50,000 to a national demand already more than 50,000 greater than the available supply. In light of these facts, $200 million should be cut from the Title I appropriation request for fiscal 1968.

Title III continues to be completely run by the Office of Education despite the pleas of educational leaders throughout the country who feel that it could be administered more swiftly and effectively at the state and local level than in Washington. Quite possibly an administrative log jam at the Office of Education is responsible for the fact that on March 31 only $57,444,750 of Title III funds had been obligated in this fiscal year. New spending authority for fiscal 1968 should not exceed $180 million.

2. "Impacted Areas" Education Act

To compensate local educational agencies for financial burdens imposed on them by Federal activities enumerated in Public Laws 815 and 874, but to prevent Federal payments from exceeding Federally-created burdens, we recommend a reduction of $232,800,000 in the budget request for fiscal year 1968.

In accordance with Public Law 88–665, and with $200,000 appropriated for that purpose, the Secretary of Health, Education, and Welfare on November 23, 1964, contracted with the Stanford Research Institute for a thorough analysis of aid to Federally-impacted school districts under Public Laws 815 and 874. The two-volume work which resulted indicated serious over-payment to impacted areas and was, along with modifications by the Office of Education and the Bureau of the Budget, the basis of the President's fiscal year 1967 request for changes in eligibility requirements and rates of payment, and a substantially reduced appropriations. We strongly urge the Appropriations Committee to restore the integrity of these programs by voting an appropriation not in excess of $206,337,000.

3. Teacher Corps

The National Chamber supports the sound concept of state and local responsibility for teacher recruitment, placement and supervision. For that reason, we ask that none of the $36,000,000 requested for the National Teacher Corps be approved.

Although the modifications introduced in this year's authorization bill to establish greater state and local control over Teacher Corpsmen are steps in the right direction, we cannot support a program in which public school teachers are not directly responsible to the people of the states and localities.

The need for 250,000 new teachers a year is a critical one in American education—especially in our pockets of poverty—and the one, two, or three thousand a year who are recruited by the National Teacher Corps and who decide to remain in teaching after their two-year enlistment are at least a small contribution to that need. We feel, however, that the gain is more than offset by the manner in which the teachers are provided and by the danger that the American public may assume that a quick and eye-catching Federal panacea has been found for a deep and pervasive American problem.

Both the training institutes under Title XI of the National Defense Education Act and the teacher fellowship authority under Title V, Part C of the Higher Education Act already provide substantial authority and funds for training poverty area teachers. In addition, Title V of H.R. 6232, the Higher Education Amendments of 1967, entitled "Education Professions Development," is designed "to coordinate, broaden and strengthen programs for the training and improvement of the qualifications of teachers and other educational personnel for all levels of the American educational system so as to provide a better foundation for meeting crucial needs of the Nation for personnel in these areas."

PUBLIC HEALTH SERVICE

Budget request	$2,922,687,000
Recommended reduction	$300,000,000

Concern was expressed in a recent study of the National Institutes of Health made by a distinguished committee of American citizens headed by Dean E. Wooldridge. The committee reported to the President that NIH has an important organizational need to strengthen its capacity for long-range planning and for determining the optimum utilization of its funds. Until this reform is accomplished, the appropriations for the NIH should be held in check to help avoid waste of funds.

The total budget estimate for the Public Health Service indicates an increase of $315 million over the current year. The record of appropriations granted to the Public Health Service over recent years shows an average annual increase of $250 million in new spending authority. The record also shows that over the period from fiscal year 1962 through fiscal year 1968 appropriations exceed actual expenditures by an average of almost $500 million per year. In fact, it is estimated that in each of the fiscal years 1966, 1967 and 1968 appropriations will exceed expenditures by well over $600 million. This constitutes a tremendous backlog of spending authority.

The backlog of funds accumulating in the Public Health Service could very well lead to grants and other expenditures for extremely low priority projects. To a great extent it diminishes Congressional control over Federal spending. Under these circumstances, an overall reduction of the Public Health Service budget of at least $300 million should be made.

International Education Program

STATEMENT OF THE NATIONAL CONGRESS OF PARENTS AND TEACHERS

Statement in Support of Appropriations for Fiscal 1968 for the International Education Act

(By Mrs. Edward F. Ryan, chairman, National Congress of Parents and Teachers, Committee on Legislation, May 5, 1967)

A certain few events in the last twenty years have created a world situation which is highly sensitive—the tremendous advances in science and technology among a few western nations; the long delayed assertion of equality by non-white peoples; the first effort in history to do something about poverty; and the growth of independent nations in the once colonial areas of the world. All of these have created vast expectations among human beings—expectations well beyond possibility of early fulfillment; expectations which have risen sharply and sometimes exploded.

In the role of world leadership which the United States has rather unwillingly taken upon itself, we face the task of dealing with the incredible disparities among the nations of the world between wealth and poverty, between have and have not, between normal health and normal disease, between normal opportunity for education and normal illiteracy. These disparities breed hostility, greed and envy which tend to prevent or destroy the best efforts at cooperation among nations.

Therefore, the goal of American foreign policy, we believe, is to bring about the development of all nations to an acceptable equity among peoples, and to prevent in the meantime the explosion those gaps between us now invite. It is a policy which takes not only great skill on the part of the responsible officers,

but widespread citizen support and a reasoned and determined effort to understand the interests of other nations. As Secretary of State Rusk has said on many occasions, "Foreign policy is everybody's business."

Education of the future American public to such an understanding of other nations requires curriculum and qualified teachers we do not now have in our schools. The International Education Act of 1966 authorized programs for developing needed curriculum and preparing teachers in this field. The proposed appropriation of $36,525,000 for fiscal 1968 is very badly needed, and we of National PTA hope very much it receives the approval of your subcommittee.

We appreciate very deeply your consideration of these views.

Higher Education Facilities

STATEMENT OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES

Introduction

On April 20, 1967, John F. Morse of the American Council on Education submitted a statement on the Administration request for federal aid to higher education for the fiscal year 1968. Morse's statement emphasized that the higher educational community believes very strongly that aid to higher education should be made available at a considerably higher level than that recommended by the Administration.

The American Association of Junior Colleges, a member of the American Council on Education, is in complete agreement with Mr. Morse's views. This statement is submitted to emphasize the special need which America's colleges face for adequate federal assistance under the Higher Education Facilities Act.

American public and private two-year colleges and technical institutes share the financial plight of all higher educational institutions. Their enrollments are rising very rapidly, and facilities at many colleges are already seriously overcrowded. What is more, many junior colleges are in special difficulty because of their dependence on local tax resources, resources already overburdened by other demands.

The Administration's request for facilities appropriations for the fiscal year 1968 is below even the support level of the *current* fiscal year, 1967. It is far below the amount authorized by Congress, as the following table shows:

Table I

	Appropriated fiscal year 1967	Authorized fiscal year 1968	Requested fiscal year 1968
Public 2-year colleges	$99,600,000	$177,400,000	$89,700,000
All other undergraduate colleges	353,300,000	550,600,000	300,300,000

This means that federal support for *public* junior colleges and technical institutes is *reduced about ten per cent* below the current fiscal year, in each state of the nation. Support for all other undergraduate colleges, including *private* junior colleges is *reduced about 15 per cent* in each state.

In both cases, funds are reduced far below the levels authorized by Congress in 1966.

The national situation.—These reductions come at a time when junior colleges are growing very fast, and carrying a substantial part of the expansion of American higher education. Today junior colleges enroll almost 1,500,000 students at over 800 colleges in every part of the United States. Enrollments are increasing at a rate of about 150,000 to 200,000 a year, and about 50 new colleges are opening each year. About 200 new colleges are now in the planning stage, and are expected to open between 1967 and 1970. Many states are developing whole systems of two-year colleges, designed to bring the first two years of college within commuting distance of a very large percentage of the American people.

In some states, public technical institutes and two-year branches of four-year colleges—which are eligible for support as two-year colleges under Section 103 of the Facilities Act—are also expanding rapidly.

In the present military emergency, everyone agrees that trained manpower is one of our most important national assets. Junior colleges, like other colleges, are helping to train this manpower, not only through the traditional college programs but through vocational, technical, and adult education courses serving hundreds of thousands of young people and adults.

Congress recognized the special role and potential of the junior college in the American system by providing in the Higher Education Facilities Act of 1963 that 22 per cent of available federal funds be set aside for public two-year colleges in each state. Congress last year increased this percentage to 23 per cent in fiscal 1968 and 24 per cent in fiscal 1969. Some members of Congress have indicated that they would like to go considerably further.

However, junior colleges will not be able to fulfill this special responsibility, unless Congress also makes available financial support at a level closer to actual need.

Enrollments in two-year colleges have more than doubled between 1960 and 1966, and it is likely that enrollments in the next five years will grow by another 1,000,000 students.

Operating costs of junior college education are also increasing, enormously. It is likely that by 1971 *total operating costs for all two-year colleges will approximate $2,000,000,000 per year.* At present, almost all of this sum comes from local and state tax sources, private support, and tuition, since the federal government provides relatively little support for the operating costs of undergraduate education.

Construction costs will also soar. John F. Morse, speaking for the American Council, estimates conservatively that construction costs for all of higher education will average $3,000,000,000 a year for each of the next ten years. *Construction costs for two-year colleges alone are conservatively estimated at $350,000,000 to $450,000,000 a year during the same period.* State, local, and private resources will continue to provide most of the support for both operating and construction costs, but federal assistance is essential.

Some data for selected States and congressional districts.—The nation's need becomes clearer when one looks at the enrollment patterns in selected states and congressional districts. The members of the Labor-HEW Subcommittee of the House Appropriations Committee may be interested in the statistics on junior colleges for their own states and districts, as an example of national trends. These statistics could be duplicated in most other parts of the United States, and for four-year colleges and universities as well.

In the eight states represented on the Subcommittee—Illinois, Iowa, Kansas, Kentucky, Missouri, Pennsylvania, Texas, and Wisconsin—junior college enrollment data speaks for itself:

TABLE II

State	Fall 1960	Fall 1966
Illinois	35,639	75,140
Iowa	5,270	16,403
Kansas	6,778	13,257
Kentucky	2,061	8,953
Missouri	10,753	22,356
Pennsylvania	13,709	42,631
Texas	40,774	71,646
Wisconsin	9,648	14,772

NOTE.—All enrollment data are taken from the annual directory published by the American Association of Junior Colleges.

Even more striking is the fact that in most states, including these eight, the expansion of two-year college programs is just beginning. Almost every one of these states has a master plan for the expansion of junior colleges, and in some cases a plan to expand the state systems of technical institutes and/or two-year branches of state colleges and universities.

Every Congressional district represented on the Labor-HEW Subcommittee includes one or more two-year colleges, or in one instance a new college opening this fall. Most of the districts represented have several public or private institutions.

To take several examples, for the years 1960 to 1966:

Pennsylvania.—11th District, Rep. Daniel J. Flood, Subcommittee chairman. The two-year Pennsylvania State University branch at Wilkes-Barre increased from 440 to 889, and a new Luzerne County Community College will open this fall.

Wisconsin.—7th District, Rep. Melvin R. Laird. The University of Wisconsin branch at Wausau increased from 389 to 591, a new branch at Marshfield has increased from 142 to 342 in its first three years. Marathon County Technical Institute is also located in this district.

Iowa.—5th District, Rep. Neal Smith. Boone Junior College has increased from 124 to 496, Fort Dodge Community College from 295 to 1147, Grand View College from 755 to 1421, and a new college is scheduled to open. Iowa is one of a number of states, like Illinois and Pennsylvania, which has a master plan intended to bring junior college education to practically everyone in the state.

Kansas.—4th District, Rep. Garner R. Shriver. Central College has increased from 140 to 1414—a tenfold increase in six years—Hesston College from 207 to 368, and Hutchison Community Junior College from 917 to 1654.

Texas.—22nd District, Rep. Bob Casey. San Jacinto College has increased from 850 when it opened in 1961 to the astounding figure of 4312.

Missouri.—6th District, Rep. W. R. Hull, Jr. Missouri Western Junior College opened in 1965 with over 1,000 students its first year.

Illinois.—18th District, Rep. Robert H. Michel. The new Illinois Central College is scheduled to open this fall.

Kentucky.—2nd District, Rep. William H. Nathcher. This district includes four two-year colleges; the most rapidly growing is Elizabethtown Community College, which grew from 354 when it opened three years ago to 630 today. Others in the district are Loretto Junior College, St. Catharine College, and Fort Knox Community College.

We conclude by emphasizing once more that these patterns of expansion can be matched in most parts of the United States. Many forces today encourage young people and adults to continue their education beyond the high school. The nation's junior colleges, along with other colleges, are willing and eager to do more to help the nation meet its educational needs and responsibilities. They need help.

Water Fluoridation

Letter and Statement of Elise Jerard

Ad Hoc Citizens Rights Committee,
New York, N.Y., April 28, 1967.

House Subcommittee on Health Appropriations,
Washington, D.C.

Dear Mr. Moyer: Congressman James J. Delaney has advised me that it is time to submit testimony for the inclusion of the views of the public into the considerations of the Subcommittee. Last year the testimony of the associations represented by the Citizens' Rights Committee was included also in the published Record. We ask, as does Mr. Delaney, that this will be done this year.

The enclosed testimony was represented to the New York State Legislature, which defeated a statewide mandatory fluoridation bill, such as is being promoted all over the country, despite worldwide scientific evidence that fluoridation is not safe, nor does it accomplish its alleged purpose effectively.

The promotion by industries which profit by the measure, the Public Health Service whose prestige is at stake, and organizations which endorsed before the first inadequate experiments were even completed is ripe for investigation—and merits no appropriation this year.

Sincerely,

Elise Jerard,
Chairman Phi Beta Kappa Environmental Study Group, Chairman Citizens Rights Committee.

TESTIMONY OF ELISE JERARD, CHAIRMAN, PHI BETA KAPPA ENVIRONMENTAL STUDY GROUP, CHAIRMAN, CITIZENS' RIGHTS COMMITTEE, BEFORE THE NEW YORK STATE ASSEMBLY HEALTH COMMITTEE, FEBRUARY 27, 1967

FLUORIDATION LEGISLATION

My name is Elise Jerard. I have pursued studies toward a doctorate in biological sciences and I have been working as a consumer educator in the field of environmental health problems. I am chairman of the Citizens' Rights Committee. The 20 organizations whose interests have been merged by this committee are listed on the inner cover of this document for legislators which I submit as a prepared statement. I am also chairman of the Phi Beta Kappa Environmental Study Group. One of our projects has been thorough research on fluoridation in its various aspects. I shall deal here with the medical phase.

First, what you have heard about fluoridation is too good to be true. Assurances of absolute safety are absolute nonsense. Consider that mass medication—one dose for everybody, one size fits all—contradicts our most basic physical realities. As has been shown, notably by Dr. Roger Williams, brilliant chemist and nutritionist—in biochemical individuality we differ from one another, by as much as five hundredfold. So unless there is an emergency and no alternative, dosing people in a lump is to be avoided. There are better alternatives to fluoridation. Furthermore, washing the streets with preventive medicine is scientific "overkill."

These are printed warnings with which drug companies accompany their fluoride tablets—by law since May 21, 1963—because it is obviously false that fluoride can do no damage, even at the recommended dose. Abbott Laboratories, Roche, Parke-Davis, Lilly, Upjohn, Stuart, Lovric, Reed Provident and maybe other pharmaceutical firms make the following statements: that illness can result from exceeding the dose of one milligram of fluoride; Upjohn and others establish that there is no difference between fluoride in water and in tablets—"One quart of water contains approximately one milligram of fluoride"; also that illness can result from sensitivity to fluoride.

This letter from Abbott Laboratories, North Chicago, June 18, 1963, answers a physician's query:

"Substantiation can be found as follows: Feltman, R., and Kosel, G., *Prenatal and Postnatal Ingestion of Fluorides—14 Years of Investigation;* Journal of Dental Medicine, Oct. 6, 1961:

"One per cent of our cases reacted adversely to the fluoride. By the use of placebos (dummy pills) it was definitely established that fluoride was the causative agent. These reactions occurring in *gravid (pregnant) women and in children of all ages* affected the dermatologic, gastrointestinal and urological systems. Eczema, atopic dermatitis, (urticaria, epigastric distress, vomiting, headache, arthritic symptoms, have all occurred with the use of fluoride and disappeared upon the use of placebos (dummy tablets), only to recur when the fluoride, unknowingly to the patient, was given again."

When the water supply is fluoridated there is no escape clause for such sensitive people. Moreover, the diagnosis of what ails them is likely to be incorrect because of the perpetual false insistence that fluoride can do no damage.

Point 2: *There are grave hazards from fluoridation to people with kidney trouble.*

Here are a few items of evidence. In an address to the International Association of Dental Research, Dr. J. R. Blayney reported longterm experiments showing that persons with kidney disease *eliminates, on an average, only 60% as much fluoride* as do normal persons, when consuming water fluoridated at 1 p.p.m., which, as you know, is the recommended dose.

This important research was abstracted—published in condensed form—in the Journal of Dental Research, 41.1037, 1962. In this country it was *never published in full*, according to a letter from Dr. Blayney dated December 15, 1963, to Dr. R. H. Lampman, M.D.

Why was this vital work not published in full?

Dr. Patricia Wallace-Durbin demonstrated similar retention of toxic fluoride in the body up to 40% in animal experiments for the Atomic Energy Commission. Dr. Paul Phillips is one of those who made the same findings.

Blayney, Bowers & Zimmerman, 1962, showed that excess storage of fluoride by kidney patients settled in the iliac bone.

Point 3: *Death of a Nurse With Kidney Disease After Treatments of Washing With an Artificial Kidney, Using Fluoridated Water*, Archives of Internal Medicine, Taves et al, February, 1956.

The patient became worse after each of the treatments, had convulsions and expired after the fourteenth treatment. An extremely large amount of fluoride was found in her body on autopsy.

On Page 117, in the body of this article, there is an *inconspicuous* warning, as follows: "*It would seem prudent to use non-fluoridated water for these . . . baths for longterm hemodialysis.*"

"*The question of increased retention of fluoride in patients with kidney disease has not been resolved.*"

This is a serious responsibility for legislators. What can happen to patients receiving such treatments in localities with fluoridated water?

Point 4: Dr. Francis Patton Twinem of New York City, urologist, professor and consultant, is one of many specialists who have expressed the following view: "I oppose fluoridation for toxicological reasons and also as a violation of the rights of doctors and patients. I prescribe bottled unfluordiated water for longterm use by my patients."

But note this: In the Newsletter of the American Dental Association, January 20, 1964, there is a call for all-out fluoridation—"Of all sources of water, including bottled water supplies." What is the cause of this fanaticism?

Point 5: These lines from a speech delivered in the Town Hall of Birmingham, England by Dr. H. M. Sinclair, Doctor of Medicine, Fellow of the Royal College of Physicians, summaries vital points we have no time to make here:

"Some people," said Dr. Sinclair, "need to drink *large amounts of water* which, coupled with an intake of fluorides from food and air make what textbooks agree is a toxic dose. Then, we must remember that there are *undetected diabetics who experience excessive thirst, as those allergic to fluoride also do.* Diabetics frequently cannot excreate salts as well as normal people can. In the case of kidney disease this failure is very serious." He asks:

"Are we to ignorce these people?"

We ask *you*, the New York legislators: "Are we to ignore these people?" In Great Britain where people have a chance to hear such statements as Dr. Sinclair's, votes have been going four-and-a-half to one against fluoridation.

Being unable to discuss the substantial body of documentation, let me just make two more points, briefly.

Point 6: Recent widely advertised claims for fluoride as a boom for older people's bones are based on an exceptionally shaky foundation. The Journal of the American Medical Association carried a report of research emanating from a well-known school of Public Health purporting to show that senior citizens who had been fluoride drinkers were blessed with a firm, healthy boney structure.

Two separate checkings on the North Dakota sites of this study showed that the sampling, which was small, actually contained few old people, and not all had lived in these localities all their lives. The study failed to record how much water they drank. Besides, farm families used their own wells whereas the study considered only the fluoride in the water of the town. Factors other than fluoride which could influence the health of bones had been largely ignored. Most surprisingly, in the so-called "high fluoride area" many wells contained little or no fluoride, while in the so-called "low fluoride area" some wells contained high concentrations. Hardly a conclusive study.

Then again, American and foreign newspapers carried enthusiastic studies about fluoride being so good for bones that it could actually cure bone disease. However, sober scientific men and women in Britain's Royal Orthopedic Hospital reported in the British Medical Journal (May 1, 1965) that no such benefits had been demonstrated. Also they warned as follows: "Fluoride acts as an enzyme system poison . . . fluoride has been implicated in abnormalities of blood coagulation, anemia, impairment of thyroid and renal functions" and "retinal damage" (to the eyes). "Care should be taken in administering fluoride, as it may produce longterm toxic manifestations." Among those similarly warning are two scientists of the Mayo Clinic (Annals of Internal Medicine, Dec., 1965.) J. R. Shapiro of the National Institute of Arthritis and Metabolic Diseases concludes in the New England Journal of Medicine, Oct., 1963 that "the low dose currently employed in an effort to prevent caries in children cannot be extended to include adults in hopes of preventing future osteoporosis." It seems that wishful thinking about fluoride is almost as common as caries.

Point 7: Finally, legislators may not know how sharply the artificial fluoride content of the foods we eat has been increased. Phosphate fertilizers and other agricultural compounds are only one part of the reason. Processed foods are increasingly prepared with fluoridated water, and processing frequently concentrates the fluorides. In the Journal of Food Science, November–December, 1966, Marier and Rose (who is a member of the Canadian Research Council) demonstrate in a careful study that fluoride concentration in beverages and certain prepared foods has increased from 2 to 5 times since fluoridation.

Who foresaw this? Who considers this?

It is impossible now, honestly, to allege that no one passes the threshold of safety, that no one gets a toxic dose of fluoride.

The proponents of fluoridation speak of "a controlled dose." The total amount of fluoride we ingest is, in fact, uncontrollable.

We are blindly rushing in where we should fear to tread.

For all these reasons, there is no justification for pushing through the Harwood bill A1087. This is especially true since there are alternatives to fluoridation which are both safer and cheaper. Fluoride tablets represent a known dose which can be given if wanted and where appropriate. Then there is Dr. Englander's now fluoride gell, which has been tested in Checktowaga, New York, and for which greater claims of dental improvement are made than have been made for fluoridation; moreover, this gell, applied in the form of a mask for the teeth, requires no professional personnel. Furthermore, Army and Naval Dental officials are on record as prefering treatment in the mouth to fluoridation with its hazards and often disappointing results. Dr. A. L. Russell, himself a fluoride promoter, admitted to a convention in Montreal of the American Association for the Advancement of Science, that after twelve years of fluoridation the teeth of Baltimore's children were deplorable.

Assemblyman Hardt and Senator Adams have submitted bills which are, at least, more respectful of citizens' rights, *but if a referendum went in favor of fluoridation it would not protect any people susceptible to harm from fluoride who would be compelled to consume it.*

All these bills accept the premise that no one can be harmed. And the premise is false. This unnecessary measure is therefore ethically irresponsible. It is frightening that promotion can go so far that legislators do not face this fact.

A letter from a citizen of Saranac Lake, one of the plain folks who write to this committee, tells you what the silent millions think about this statewide fluoridation project: "We cherished our freedoms. It seems almost impossible that it should have come to this. The rich can buy unmedicated bottled water. There is no escape, no right to choose, for the poor."

Respectfully submitted to our Public Servants . . . A memo derived from research of the Phi Beta Kappa Environmental Study Group for the Citizens' Rights Committee which merges the interests of 20 organizations and two major medical societies. Edited by Elise Jerard.

Civil Rights Act Enforcement

STATEMENT OF THE NATIONAL MEDICAL ASSOCIATION

On behalf of the National Medical Association I would like to register a very strong dissent against the proposed centralization of Civil Rights Activities in the Office of the Secretary of the Deparment of Health, Education and Welfare.

Considerable confusion has existed over what is involved in the administration of the Civil Rights Act of 1964. Members of Congress, particularly those with law backgrounds, have a tendency to look upon the Civil Rights Act of 1964 as a problem of "enforcement" when in fact the administration of this Act by the Executive Branch has tended to evolve into a role of "eliciting voluntary compliance" as contrasted with "enforcement". The argument used to support centralization of Civil Rights Activities in HEW, that "enforcement" activities should not be included among the responsibilities of operating agency personnel who have a basic function of providing guidance and technical assistance to State and local governments, in the case of the Public Health Service on health programming, is a basically sound argument and in fact represents the manner in which the HEW Civil Rights program has been administered from the beginning. The "enforcement" activity however represents only a small percentage of the total activity in administering the Civil Rights Act. It does represent the type of approach that can most effectively be carried out at the Office of the Sec-

retary level being somewhat removed from the day-to-day operational activities of the constituent agencies like PHS. However, if the Federal government were to rely solely upon this type of approach to administering Civil Rights compliance, the Federal Government would miss completely the real spirit and intent of the Civil Rights Act of 1964, because it is not through the "enforcement" approach but rather through the "voluntary compliance" approach that meaningful progress has been achieved in the nation in eliminating discrimination by institutions receiving Federal funds. It is this latter approach that can be effectively carried out only by operating agencies who with their specialized competancies and understanding of the intricate and complex functioning of, in this case, health institutions can through persuasion and negotiation elicit the changes that are so necessary, and yet sometimes so complex to obtain. It is through voluntary compliance that federally-supported health programs can continue and be made available to minority group members. It is not through arbitrary "enforcement" action that minority group members in this country are benefited since often federal funds would be required by law to be discontinued.

In summary, centralization of Civil Rights functions in HEW will tend to overemphasize "enforcement" action and deemphasize and make ineffective "voluntary compliance" action overemphasis will be placed on the discontinuation of Federal programs. This will be repugnant to both health institutions across the land who are interested in providing quality health care services, and to members of minority groups who may not now receive adequate health services and who should continue not to receive these services, under an "enforcement" type of activity; but who would stand the chance to receive these services as recipients or participants, should "voluntary compliance" activity be preserved in HEW.

A common argument often given to support the centralization of funding and functioning of a program is that it is more economical since through centralization one is able to eliminate duplication of functions and maximize the utilization of available resources, does not hold for the Civil Rights Program in HEW. During the past year there has been a clear definition of activities at the Office of the Secretary and constituent agency levels. The role of each has been entirely different so that there has been no duplication in functions to my knowledge, that could be eliminated through centralization. What one accomplishes then, through centralization, is the buying of a "new product" described above.

While the very nature of constituent agency programming is conducive to the elicitation of "voluntary compilance", the existing and traditional role of HEW Office of the Secretary activities runs counter to successfully managing this type of program. The Office of the Secretary is basically geared to provide staff support and overall program guidance to constituent agencies. It is not equipped to become involved in day-to-day operational matters by virtues of its organizational structure and administrative support arrangements. It is more of a planning and evaluation role which is extremely slow moving and unresponsive to day-to-day operational needs which are inherently a part of any operational program. *If one wished to place HEW in a position of inability to effectively administer the Civil Rights Act, then one would without question centralize Civil Rights activities of the Department, in the Office of the Secretary.*

The common belief seems to be that HEW is moving too rapidly in implementing the Civil Right Act which is now almost three years old. While this issue can be debated at length, I do not believe that the approach HEW has taken in implementing the Act can be seriously questioned. HEW has bent over backwards to work with and assist State and local governments and other recipients of Federal programs, to bring them into compliance prior to the initiation of enforcement action. The advocates of the "go slow" approach would bring about the very situation to which they are so opposed. Arbitrary enforcement action involving the cutoff of Federal assistance to non-complying institutions, which is required by law and which represents the only avenue of approach for the Executive Branch, when dollar and staff resources are so minimized as to prevent the kinds and amounts of technical assistance needed to elicit "voluntary compliance".

Therefore, both the attempt to centralize Civil Rights functions in HEW and the attempt to minimize the amount of resources appropriated for this effort, tend to force HEW into the awkward position of arbitrarily cutting off Federal assistance if the Civil Rights Act of 1964 is to be administered in accordance with the alleged wishes of Congress.

I therefore cannot recommend, too strongly the maintenance of a decentralized Civil Rights program in HEW. The progress that has been made in the past several years, which has been humane and reasonable, for all parties concerned has proven to be a successful approach to a very difficult and complex problem. I feel certain that the proposals to change these operational policies are being made in ignorance of the real situation within HEW and will result in inhibiting future progress towards civil rights compliance. I can think of no greater threat to the progress made to date than the recent action of your House subcommittee and I strongly urge that this entire matter be reconsidered without delay.

JOHN L. S. HOLLOMAN, Jr., M.D.,
President, National Medical Association.
QUENTIN YOUNG, M.D.,
National Chairman, Medical Committee for Human Rights.

The preceding statement is after the fact, in the light of the published announcement of the centralization of Civil Rights Activities in HEW in the Office of the Secretary. I submit it for the record.

The budgetary request made for Fiscal Year 1968 for departmental Civil Rights activities should be appropriated in full. In terms of the re-organization and the enormity of the job which will have to be done, I would earnestly hope that additional funds with some type of budgetary freedom built-in, would also be allocated. In Fiscal Year 1967, 278 positions and $3,434,000 were allocated for Title VI activities. In Fiscal Year 1968, 409 positions and $5,434,000 have been requested. *I wish to reiterate: this request should be met.*

The necessity for more personnel to carry out compliance review seems obvious. The work which must be done cannot possibly be accomplished with a limited staff and resources.

We cannot escape the interpretation that the move to centralize is a means and way to defeat Civil Rights. If there is no increase in positions or funds over last year's budget, this would seem prima facie evidence that the Subcommittee has rendered Title VI null and void. There is nothing else that we can deduce from this course of action. A decrease in funds and personnel will weaken policy in terms of substance and the ability to enforce policy.

The public in general, and the minority groups in particular, are more sophisticated than they are given credit for. Health professionals and paraprofessionals know that an "arrangement" or "swap" is being contemplated, in fact, has been made. Equal opportunities in education and health are to be bartered for the passage of current primary and secondary education bills.

I urgently request that the Subcommittee consider the implications which their action will convey to civil rights leadership and to the minority grassroots. The term "sell-out" is a strong one, but it is much in use these days.

JOHN L. S. HOLLOMAN,
President, National Medical Association.
QUENTIN YOUNG, M.D.,
National Chairman, Medical Committee for Human Rights.

PROGRAMS FOR HANDICAPPED CHILDREN

STATEMENT OF CHARLES W. WURTH, EXECUTIVE DIRECTOR, INSTITUTE OF LOGOPEDICS

Mr. WURTH. Mr. Chairman, I am Charles W. Wurth, Executive Director of the Institute of Logopedics in Wichita, Kansas. For many years the late Dr. Martin F. Palmer, founder of the Institute, appeared to testify before your Subcommittee. I have been a member of the Institute staff for 16 years and following Dr. Palmer's death on August 13, 1965, I was afforded the opportunity of becoming Executive Director. Today I submit this statement in behalf of the National Board of Trustees and Staff of the Institute of Logopedics.

As you may know, the Institute of Logopedics has been keenly interested in the programs advanced by the Congress during the past several years in behalf of handicapped children.

The Institute would again ask your indulgence in carefully reviewing the appropriations for the current fiscal year as well as the monies to be made available for fiscal year 1968. Funds supporting Title VI, as related to Handicapped Chil-

dren and Youth under Public Law 89–10, were certainly appreciated this year as they can be used for good planning for the remaining months available.

However, we understand that the Administration has requested only $15 million for next year for Title VI programs although the Congress authorized $150,000,000 for this purpose. This is a scant ten percent of the authorized amount. We can hardly feel that this is sufficient when our best figures indicate that only 50 percent of handicapped children are receiving appropriate educational and related services such as speech and hearing.

The announcement last year of $150 million was greeted with joy and anticipation by all professional people working in this area, as it provided a source for real progress in meeting the needs of these people. The current request of only $15 million is a bitter disappointment. It is obvious that we cannot accomplish what needs to be done with such a minimal appropriation.

In regards to the traning of teachers, which is a most serious responsibility and is of national concern, over $50 million in training funds were requested by approved traning facilities. This current fiscal year some $24.5 million has been made available for this purpose. This is a commendable sum for fiscal year 1967. Again though, only $24.5 million has been requested for fiscal year 1968, after $34 million was authorized last year for fiscal year 1968.

All of us realize that these are serious and trying times and that monies must be made available for our many commitments around the world. We cannot, though, it would seem to us, minimize our responsibilities in this area during these times.

Mr. Chairman and members of the Subcommittee, the National Board of Trustees and Staff of the Institute join me in requesting your continued support in seeing that sufficient funds are provided for this purpose. Thank you very much.

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