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GRANTS FOR SCHOOLS OF PUBLIC HEALTH

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HEARING
BEFORE THE
SUBCOMMITTEE ON HEALTH
OF THE
COMMITTEE ON
LABOR AND PUBLIC WELFARE
UNITED STATES SENATE
NINETY-FIRST CONGRESS

FIRST SESSION

ON

S. 2809

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT
SO AS TO EXTEND FOR AN ADDITIONAL PERIOD THE
AUTHORITY TO MAKE FORMULA GRANTS TO SCHOOLS
OF PUBLIC HEALTH

OCTOBER 20, 1969

Printed for the use of the Committee on Labor and Public Welfare



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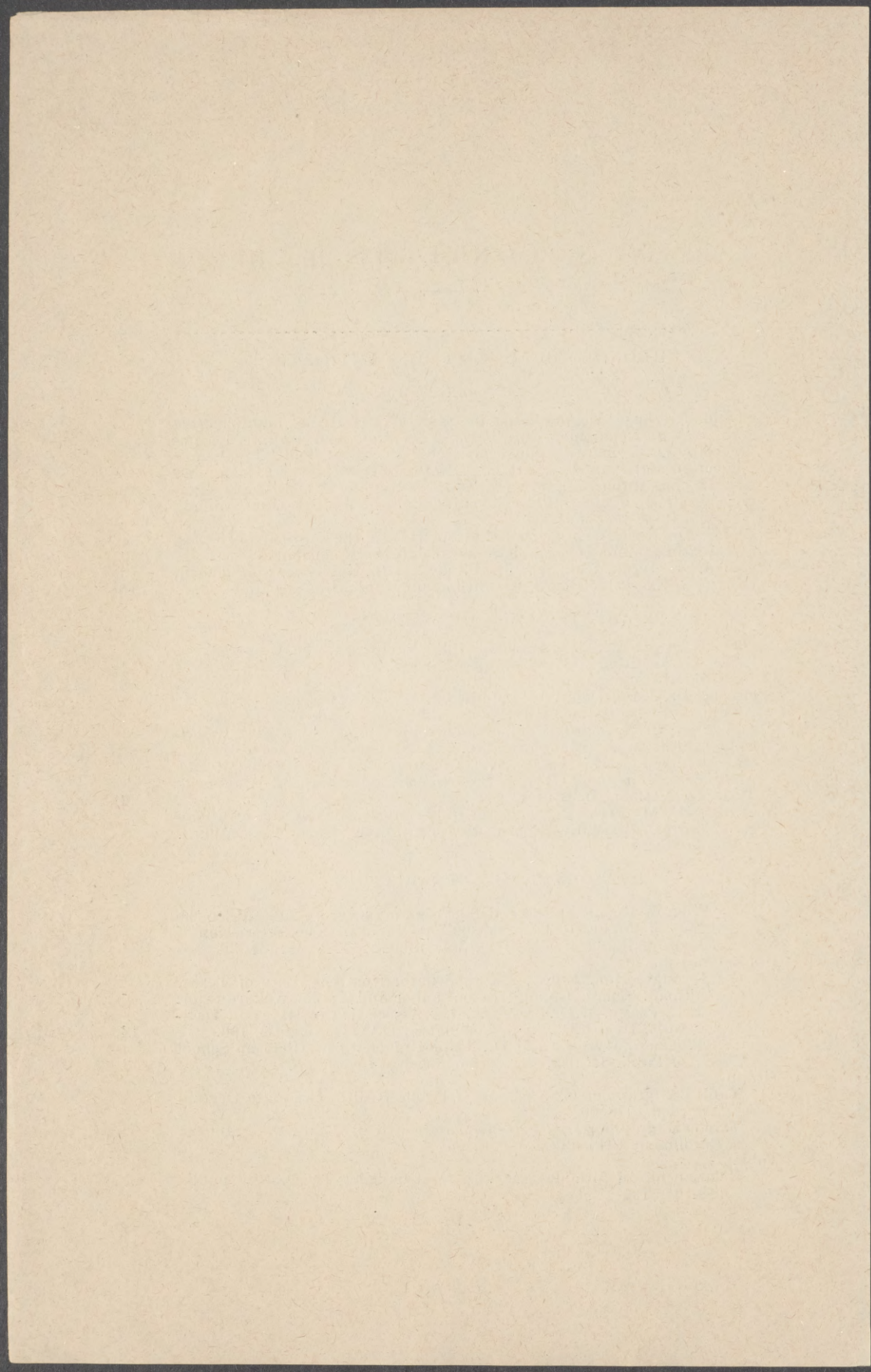
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GRANTS FOR SCHOOLS OF PUBLIC HEALTH

MONDAY, OCTOBER 20, 1969

U.S. SENATE,
SUBCOMMITTEE ON HEALTH OF THE
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C.

The subcommittee met at 10:15 a.m., pursuant to call, in room 4232, New Senate Office Building, Senator Ralph W. Yarborough (chairman of the full committee) presiding.

Present: Senators Yarborough (presiding) and Hughes.

Committee staff members present: Robert O. Harris, staff director; John S. Forsythe, general counsel; and Jay Cutler, minority counsel.

The CHAIRMAN. The Subcommittee on Health of the Committee on Labor and Public Welfare will come to order. We will begin the hearings on S. 2809, grants for schools of public health, a bill introduced and cosponsored as you will notice, by a number of Senators, both on this committee and not on this committee. The bill under consideration, S. 2809, follows:

(The bill referred to follows:)

(1)

91ST CONGRESS
1ST SESSION

S. 2809

IN THE SENATE OF THE UNITED STATES

AUGUST 8, 1969

Mr. YARBOROUGH (for himself, Mr. BROOKE, Mr. CRANSTON, Mr. DODD, Mr. EAGLETON, Mr. ERVIN, Mr. HARRIS, Mr. HART, Mr. HUGHES, Mr. INOUE, Mr. KENNEDY, Mr. MCCARTHY, Mr. MONDALE, Mr. NELSON, Mr. PELL, Mr. RANDOLPH, Mr. SCOTT, Mr. TYDINGS, and Mr. WILLIAMS of New Jersey) introduced the following bill; which was read twice and referred to the Committee on Labor and Public Welfare

A BILL

To amend the Public Health Service Act so as to extend for an additional period the authority to make formula grants to schools of public health.

- 1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That section 309 (c) of the Public Health Service Act is
4 amended by striking out "\$5,000,000 for the fiscal year
5 ending June 30, 1968, \$6,000,000 for the fiscal year ending
6 June 30, 1969, and \$7,000,000 for the fiscal year ending
7 June 30, 1970" and inserting in lieu thereof: "\$7,000,000
8 for the fiscal year ending June 30, 1970, \$9,000,000 for

- 1 the fiscal year ending June 30, 1971, \$12,000,000 for the
- 2 fiscal year ending June 30, 1972, \$15,000,000 for the fiscal
- 3 year ending June 30, 1973, \$18,000,000 for the fiscal year
- 4 ending June 30, 1974, and \$20,000,000 for the fiscal year
- 5 ending June 30, 1975”.

The CHAIRMAN. This bill is to expand and extend the Federal program of grants for schools of public health.

Few causes of social concern have developed in more directions than public health has. What we now call man's environment is but a larger view of public health. Controlling multiple forms of pollution, guarding life against additives and chemicals and their various combinations, mental health, chronic diseases and nutrition are some of the newer additions to the old public health tasks of industrial safety and prevention of infectious and epidemic diseases.

The great advances in health care that have lengthened human life have been those which translated science into preventive measures.

Today a relatively high rate of infant mortality is the major reason why the United States lags behind other major countries in longevity. Prenatal and infant care and nutrition education needed to reduce our infant mortality rate are essentially public health problems. So are the long term chronic illnesses of age becoming a new domain for public health inquiry and control.

The 16 graduate schools of public health are hard pressed to meet this demand for trained people even under the existing Federal program. The existing Federal grant program furnishes only about 12 percent of the financial support for these schools.

This is contrasted to the fact that 60 percent of all the moneys to support conventional medical schools of America has been coming in the past from Federal sources.

Under the existing laws \$7 million is authorized in fiscal year 1970 to support schools of public health in keeping with the fact that new Federal laws and agencies require large numbers of people trained in these fields.

But as new schools of public health are established—the newest being at the University of Texas at Houston—the same amount of Federal money is stretched thinner for all. Worse yet, only \$4½ million is budgeted for all 16 schools this year, although the authorization by the Congress is much larger.

That is less than half the amount of their needs just to keep pace with increased enrollments, higher costs, and to correct shortcomings in instruction.

We know that costs of education have risen faster than the costs of most public services. In the public health schools, the data I have shown that the cost of this has more than doubled since 1963. Some of the data indicate it has tripled. The percentage of cost covered by the Federal support last authorized in 1967 is actually less than it was in 1963.

So we are here to assess these needs and to determine what should be the desirable level of Federal support.

My bill, S. 2809, would raise the authorization to \$9 million for 1971 and to \$20 million by 1975.

I might say that I put this modest authorization into the bill more as a recognition of the difficulties of getting moneys appropriated, getting the bill passed, and then getting the money spent.

I think there is too much of an eye on that and not enough on the needs. If the bill were to meet the need, it would be double what it is. There is a great shortage of manpower in these fields. As America moves to the public health concept of medicine it is certain in the next few years to move away from the proprietary medicine that we have in this country now—medicine for money—and move into the fields of medicine for health. Someday we will have public health care for the people of this Nation as most advanced European nations have now.

I welcome our witnesses. They are all well qualified to attest to the needs of public health schools and to give the committee guidance on the role of the Federal Government in meeting these needs.

Our first witness this morning will be Dr. Jesse Steinfeld, Deputy Assistant Secretary for Health and Scientific Affairs. Come around, Dr. Steinfeld.

You have accompanying you Dr. Fenninger and Mr. Hatch. Will you please introduce them with their titles? Do you have a statement, Dr. Steinfeld?

STATEMENT OF DR. JESSE STEINFELD, DEPUTY ASSISTANT SECRETARY FOR HEALTH AND SCIENTIFIC AFFAIRS, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, ACCOMPANIED BY DR. LEONARD FENNINGER, DIRECTOR, BUREAU OF HEALTH PROFESSIONS EDUCATION AND MANPOWER TRAINING, NATIONAL INSTITUTES OF HEALTH; AND THOMAS HATCH, ASSISTANT DIRECTOR, DIVISION OF ALLIED HEALTH MANPOWER, BUREAU OF HEALTH PROFESSIONS EDUCATION AND MANPOWER TRAINING, NATIONAL INSTITUTES OF HEALTH

Dr. STEINFELD. Yes, I do, Mr. Chairman.

First I would like to introduce Dr. Leonard Fenninger, here on my right, Director of the Bureau of Health Professions and Manpower Training of the National Institutes of Health, and on my left, Mr. Thomas Hatch who is the responsible official in that organization for public health training.

Mr. Chairman, it is a pleasure to be here this morning to testify on the several bills which propose to extend for an additional period the authority to make formula grants to schools for public health. This authority—section 309(c) of the Public Health Service Act—expires June 30, 1970.

S. 2809 would extend the authority for 5 years through fiscal year 1975 and the administration bill would extend it for 1 year through fiscal year 1971.

Section 309(c) authorizes Federal grants to schools of public health to assist them in providing comprehensive professional training, specialized consultative services, and technical assistance in the fields of

public health and in the administration of State or local public health programs.

This authority was initially authorized by the Congress in 1958 in recognition of the importance of schools of public health as a national resource.

The authority provided under this section, together with the authorities of sections 306 and 309 (a) and (b) of the Public Health Service Act, constitute the basic authorities under which the Federal Government provides assistance in the training of professional public health personnel.

Section 306 provides for traineeships for graduate or specialized training in public health, and section 309 (a) and (b) provides for special project grants to a variety of public or nonprofit institutions for graduate or specialized public health training programs.

The authorities of sections 306 and 309 (a) and (b) are due to expire July 1, 1971.

To make the authority for the formula grants coterminous with that for the project grants and traineeships, as well as other health manpower programs, the administration is recommending a simple 1-year extension of section 309(c). The 1971 expiration date would enable the administration to make an across-the-board assessment and evaluation of these public health programs and other health manpower programs in terms of their interrelationships and of their impact on the health needs of the Nation.

In accord with the President's directive for grant consolidation, we are exploring various possibilities of consolidation with the objective of facilitating the provision of Federal aid in these health manpower areas.

The main objective of a school of public health is the graduate education of physicians, dentists, nurses, and other professional health personnel for careers as teachers and as practitioners and administrators in agencies or institutions primarily concerned with the delivery of public health services. The schools have consistently emphasized career development of individuals in the health professions working in health agencies.

The schools of public health provide training in an interdisciplinary environment. In this setting, students from different professions learn to understand the role of each participant in public health programs and how each contributes to the solution of community health problems.

Thus, the training provided by the schools enables the health professional to apply his basic knowledge to the identification and solution of community and environmental health problems.

The interdisciplinary training provided by schools of public health, always complex, has become even more so as a result of changing priorities and problems. The current emphasis on training for planning, organization, and provision of comprehensive community and environmental health services requires broader coverage of the social and behavioral sciences.

Schools are revising their curriculums to meet new training needs, to introduce new courses of study and methods of training, and to expand and improve existing courses and methods. New course offerings receiving special emphasis in recent years include health and medical

care administration, environmental health, health planning, population and demography (including family planning), and nutrition.

In addition to their training role, the schools have been called on to extend their teaching and to render service in the community. Their faculties offer programs of continuing education, perform as advisers to Government and non-Government agencies, and participate actively in the planning and implementation of health programs.

Since 1958 the number of schools of public health has increased from 11 to 16. Several universities are in various stages of planning new schools of public health.

Enrollment of both full-time and part-time students has also significantly increased. However, even with this expansion, the needs for trained public health specialists are not being met.

The support grants to schools of public health provide an extremely important resource in assisting the schools to meet the challenge of training the professional personnel required for today's changing and expanding community and environmental health programs.

Under these formula grants, schools have wide latitude to adapt their programs to new areas of concern in public health. The grants assist in the support of both full-time and part-time faculty and distinguished visiting lecturers. They also assist in support of programs of continuing education for updating the skills of practicing public health specialists and have made it possible for schools to provide technical assistance to State and local agencies.

The continuation of this program of assistance to schools of public health is important to the overall effort to increase and improve the community and public health resources of the Nation.

It is important to maintain the continuity of this program of grants. At the same time, we need the time and the flexibility that a common termination date—June 30, 1971—provides, to complete our across-the-board assessment and evaluation of these health manpower programs in accordance with the President's directive for the consolidation of grant programs, wherever feasible and possible.

We therefore have submitted an administration bill which authorizes the extension of section 309(c) of the Public Health Service Act through June 30, 1971, to make it coterminous with the other public health training authorities of sections 306 and 309 (a) and (b) which will expire on that date.

We shall be pleased to answer any questions that you have.

The CHAIRMAN. Dr. Steinfeld, I am glad to note in your prepared statement that you support these schools. You have narrated what an important asset they are and an important resource in the overall health programs.

You have mentioned the administration bill. I have not seen one. I checked with counsel. They say they have no information of any bill pending for a 1-year extension.

Do you know where that bill is?

Dr. STEINFELD. It is being submitted today, a simple 1-year extension.

The CHAIRMAN. I thought we were trying to tackle our own runner before he got across the goal line. Dr. Steinfeld, can you tell us how much this type of training had been enhanced, created and stimulated by the different Federal laws?

Dr. STEINFELD. Since 1958 the number of graduates of the schools of public health has increased from approximately 500 to 1,500. This has been a threefold increase.

The CHAIRMAN. Per year?

Dr. STEINFELD. More than 1,500 were graduated in the academic year 1968-69. There has been a threefold increase in this specified type of personnel which is greater than the proportion of increase in the medical graduates in the same 10-year period.

The CHAIRMAN. You don't know of any of these graduates who are going around unemployed, do you; looking for jobs?

Dr. STEINFELD. No, sir.

The CHAIRMAN. Doesn't the demand for people to fill jobs exceed the supply?

Dr. STEINFELD. There are an outstanding number of vacancies in this area. A number of these places are filled by people who have not actually had training in the schools of public health. So there is a very real need.

The CHAIRMAN. I have been advised prior to this that the data of the Association of Schools of Public Health show that two-thirds of the students are federally sponsored.

Are these students intended for the staffing of Federal agencies, those federally sponsored, or for any type of health work?

Dr. STEINFELD. For any type of public health work. They can go anywhere. The Federal Government needs personnel, as you know, but so do the States and communities.

The CHAIRMAN. Don't you think the Federal Government ought to bear the major portion of the cost of the students it sponsors? Where it sponsors the students should it not bear the whole cost or the major cost?

Dr. STEINFELD. The Federal Government, in the health field, bears a significant portion of the cost of all personnel in terms of training.

I believe, Mr. Chairman, that probably two-thirds of the total support of these schools of public health comes from Federal sources.

I think the 12 percent relates to the amount of moneys available under these formula grants which we are discussing today.

However, when including projects and traineeships and all other types of Federal assistance the actual Federal money going to schools of public health represent approximately two-thirds of their total operating expenses.

The CHAIRMAN. The information on which I base my statement was that 88 percent of the financial support for these schools was coming from State, local, and private sources.

Is that 88 percent correct? You say most of that comes from the Federal Government.

Dr. STEINFELD. As I understand it, and I will supply the data for the record, the formula grant meets about 12 percent of the cost of basic teaching operations, or about 7 percent of their total budgets—teaching, research, and services.

But there are other sources of income for these schools.

The CHAIRMAN. Federal income?

Dr. STEINFELD. Yes, Federal grants, traineeships, and so forth, from the Public Health Service and other Federal programs. What we are doing, and hope to complete as soon as we can, is to review all these

multitudes of methods of supporting public health, medical schools, and other organizations involved in training health professionals and try to have a more rational method and a more efficient method of assisting these institutions to perform their functions.

(The following information was subsequently supplied:)

Relationship of formula grants to total budgets of schools of public health

Fiscal year 1969:	
Formula grants-----	\$4, 554, 000
Percent -----	7. 4
Other Federal-----	\$35, 909, 764
Percent -----	58. 4
Non-Federal -----	\$21, 051, 638
Percent -----	34. 2
 Total -----	 \$61, 515, 402

Source: Unpublished data reported to the Public Health Service by the individual schools, June 1969.

The CHAIRMAN. The survey I have I think is laudable. We also need more efficient methods and better methods. I think the disastrous thing the administration is doing in the field since you mentioned the whole spectrum, is cutting down on the money to the medical schools of America.

When you reduce money to the National Institutes of Health you are cutting right into the money that goes to support medical schools. We passed an enhancement program in 1968 that looked to getting a thousand more students in medical schools a year than were going to medical schools.

But for the administration reduction there could be at least 500 more in that enhancement program. The National Science Foundation cuts that it is making have the medical schools in this country dismayed.

This administration is whacking away at the support for medical schools before it makes this survey or before it completes it. I think it is wholly indefensible in view of the very short number of doctors we have in America and in consideration of the ratio to total population and the demand.

The greatest shortage in manpower in America is in the medical field. You are cutting the appropriations out from under the improvement in that supply of doctors before this survey is made.

We have had that too, over in the field of veterans affairs in hospitals. Congress is attacked for not having passed veterans bills this year. The VA itself has told the veterans organizations this committee won't act.

At the same time the VA is begging us not to act until they complete their survey. This is a kind of double barrel thing the administration does. It talks about a do nothing Congress, and then comes to committees and tells us wait until we finish surveys.

I mention that because then it involves the area of education also, the veterans going to school under the GI bills. It includes education of different types.

Dr. STEINFELD. Senator, I certainly agree I have no answer to the fact that medical schools have their support cut at the same time we are asking them to provide additional graduates. However, I am new to the Government and I would like to say I have most recently been a professor in a medical school. I had a number of different grants in

order to enable me to conduct research and to train individuals, students, doctors, to become specialists in medical ecology.

There is a bewildering array of grants and various support mechanisms which we have built up over the years. I do think a survey is needed. As you point out, nobody is going to argue with a continuing survey.

Hopefully it will result in something productive.

The CHAIRMAN. You think this is so bewildering we ought to cut them off now?

Dr. STEINFELD. No, sir. I think what we must do is to do our very best to improve the system.

The CHAIRMAN. This system of cutting first because the system is bewildering reminds me of the old country doctor back in the old days before they were well educated in east Texas, when there was a boy with some complicated medical problem they did not understand.

A rural, primitive doctor was called. The doctor prescribed certain procedures, and the boy had a fit. They asked why, and the doctor said: "because I gave him a fit." "Why?" "Because I know how to cure a fit."

It seems to me whacking this money before you complete your survey is following the principles of that rural doctor without formal training who was giving somebody a fit because he knew how to cure fits.

You are giving the people in the medical schools fits by this cutting. But I don't see how you are going to cure it. Basically though I think your statement is a strong case for this bill. The major difference as I see it is you would have only a 1-year authorization.

This present law expires next June 30. Now we have not appropriated money yet to run this present program from July 1, 1969, until June 30, 1970.

If we followed your 1-year rule, we would get the money appropriated for this past year just about the time we start hearings on another bill for another appropriation. I think this is the kind of piecemeal approach that is so disastrous to the training. They have to know how to provide in advance, get competent people to teach there.

It is bad enough to have a 1-year appropriation but I think a 1-year authorization is absolutely disastrous. They don't know whether there will even be an authorization or not.

Dr. STEINFELD. I agree with you certainly. Having been on the outside of Government and having had the experience of not knowing whether there were going to be resources for the following year made it very difficult to either recruit good personnel or to cut them back.

I think stability is essential.

The CHAIRMAN. This is what the academic community has been telling us for years: "We can't plan if you do this in a piecemeal way." It seems to me, Doctor, the administration is recommending here the same thing which has been so disastrous in the past.

Dr. STEINFELD. This is not inconsistent in the sense that we are not recommending a series of 1-year extensions. That is a 1-year extension to be followed by a hopefully much longer extension and a packaging which will be more rational and more useful to the schools of public health.

The CHAIRMAN. What is the plan of the administration, to keep the Congress busy with hearings each year, with 1-year extensions with little bills, so it won't move in the vast field of the real public needs of America? It seems to me there must be some master intelligence behind every bill, chopping them up, having a hearing every year on every bill and bogging down the big ones.

It seems to me there is method in that madness. As far as I can find out the Bureau of the Budget has been the motivating factor over the years closing up the Public Health Service and trying to liquidate the Public Health Service of America.

I have only been chairman of this subcommittee since January and I intend to find out where this effort to cut down the Public Health Service of America has come from. I don't think it originated over in HEW over the years. But this movement, regardless of party or administration in power, is not the Bureau's, it is not the President, there is some force moving into whack down these things.

It is going on since World War II. I have learned that much.

Dr. STEINFELD. I was going to say as a former member of the Public Health Service I assure you the Public Health Service is not attempting to close down the hospitals.

The CHAIRMAN. I am glad to hear it. We found that to be true when the move was made this year to close the only two Public Health Service hospitals engaged in the treatment of narcotics and in research into the cause of narcotics addiction and the prevention of narcotic addiction. It is a great problem in the field of public health.

Now I think the recommendation of the administration wholly overlooks the difficulties of the workings of the Federal legislative system in that the Congress acts on an authorization bill first and then a subsequent appropriations bill. No money can be appropriated until it is authorized.

So holding off on the passing of authorization bills like this means pushing the appropriation off until the year is half over. I am on the Appropriations Committee. We are constantly met with the plea, "The year is half gone, do you need that much?"

You don't hear that though when they are getting ready to appropriate for Southeast Asia. It is just appropriations for the domestic needs of the people in the United States. It is working against the people. I think this is legislative gimmickry and governmental gimmickry to hold down the service to the people.

We know, for example, in fiscal 1969, June 30 of this year, the authorization for these schools was \$6 million. Only \$4,554,000 was appropriated for fiscal 1969. For 1970 the amount authorized is \$7 million.

The budget recommends the same thing, \$4,554,000.

Though the Congress back there recognized there would be increasing costs and raised the authorization from \$5 million in 1968 to \$6 million in 1969, \$7 million 1970, the Bureau of the Budget this time recommended no increase and the costs have gone up much faster than the Congress recognized in the past.

But this will be in the testimony of other witnesses. I don't wish to jump the gun there. You do say in your prepared statement that the need for trained public health specialists is not being met.

It is recognized that the need is not being met, yet you recommend only a 1-year extension of authorization. Doesn't your statement of need not being met overcome your recommendation for 1 year and support my bill for a 5-year authorization?

Dr. STEINFELD. Senator, I think we are agreed on the need. I think we are agreed we want to help as best we can these schools and all the health activities in the country.

I think the questions is, Is this the time? and we think this is the time, to review all these mechanisms and see whether we can't do a better job of providing the mechanisms of assistance.

I think we are certainly agreed.

The CHAIRMAN. You have a patient in the hospital and you have a battery of doctors in one of these serious cases who are not certain, and they go for consultation. Would you recommend that they stop treating the patient until they have this consultation? It seems to me that is the situation we have.

Dr. STEINFELD. I don't think I said that.

The CHAIRMAN. I give that as a comparable situation. Dr. Steinfeld, thank you very much. I am glad to know of your service in the Public Health Service, that you spring from that service, and I hope you don't let this executive malaise about public health reach out and engulf you now that you are over in the higher echelons of it.

The next witness is Dr. Reuel Stallones, dean of the School of Public Health, University of Texas, representing the Association of Schools of Public Health. Come around, Dr. Stallones, I welcome you to this committee. When your uncle was alive we were very close friends. I congratulate you on going into this work. He was in the work of public health. Your uncle was in a field of service in vast areas of Texas, his organization represented about half of the State of Texas in his lifetime. I see you have followed in his footsteps and gone into the public service part whereas his was representing an economic segment of our economy.

We also welcome Dr. Wegman, dean of the School of Public Health, University of Michigan. We have one man representing a starting concern and one representing a going concern. Dr. Wegman, you are chairman of the executive board of the American Public Health Association.

Dr. WEGMAN. Yes, sir.

The CHAIRMAN. We welcome both of you gentlemen.

STATEMENT OF DR. REUEL STALLONES, DEAN, SCHOOL OF PUBLIC HEALTH, THE UNIVERSITY OF TEXAS, REPRESENTING THE ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

Dr. STALLONES. Thank you very much, Senator Yarborough. We thought that since I am representing the Association of Schools of Public Health as well as testifying on my own behalf and Dr. Wegman is representing the American Public Health Association, that it would be desirable for us to present our statements jointly.

The CHAIRMAN. We welcome that. We are glad to see this joint support for this legislation which I think is very modest legislation. It is so modest that it ought to pass as it is, even in a time of budget stringency. You may proceed.

Dr. STALLONES. I have a statement which I would like to have entered for the record. Since it is a little lengthy, I would like to extract some of the essential points from it.

The CHAIRMAN. Your statement is ordered printed in full. I have no doubt it will be read in full even before your abstract of the statement is finished, Dr. Stallones.

Will you proceed, please?

Dr. STALLONES. This statement reflects my recent experience in attempting to establish a new school of public health. This offers a very great opportunity and places one under the requirement to consider very deeply what the role of the schools of public health should be.

The CHAIRMAN. This is the first school of public health in Texas, isn't it?

Dr. STALLONES. Yes.

The CHAIRMAN. We have 11 million people there.

Dr. STALLONES. Yes, sir.

The CHAIRMAN. What is the closest school of public health?

Dr. STALLONES. We recently established a school about 3 years ago in the University of Oklahoma. There is another school close-by which has been in existence for quite a long while, Tulane in New Orleans.

The CHAIRMAN. Tulane is a great medical center.

Dr. STALLONES. Yes, sir.

The CHAIRMAN. Thank you very much. You may proceed.

Dr. STALLONES. The southern tier of States has been very sparsely represented among the schools of public health until quite recently with the addition of Oklahoma and Texas. We are now just coming up to something approaching equality with the other sections of the country.

Almost any list of current, major, health-related problems is likely to include the population increase, the inequitable and inadequate distribution of health care, and the degradation of the environment, together with whatever special health problems are of particular concern to the author.

I would like to proceed beyond a simple statement of the problems to consider our present capabilities for resolving these problems, and indicate the vitally important part the schools of public health must play.

Population: At the root of many of our most pressing and severe health problems lie the more basic problems of population density and distribution. In some countries, this issue is manifested starkly as hunger and starvation, immediately present and holding threats for the future which are as chilling as the specter of nuclear holocaust.

If the bleak predictions of most of the students of this problem are even fractionally realized, the lives of all of us will undergo profound and unforeseeable change. We have existed uneasily for some years as an island of plenty in a sea of want, but we may not be able to survive as an island of plenty in a sea of starvation.

Only in relatively recent years have the natural factors of population control been defined and expressed quantitatively by the students of ecology. Simply expressed, populations are held in check under natural circumstances by starvation, predation, and disease. Translated into human terms, these mechanisms are intolerable.

However, we are now, for the first time in the history of man, able to determine humanely how many of us there shall be. The idea that we can exercise specific control over our own numbers is fantastic. Almost before it is fully born, human ecology may now become an experimental rather than an observational science.

In this country, the population problem is expressed in the frustrations of urban aggregations. The health problems of urban residents are a tangled interplay of environmental pollution, economic difficulties, transportation that fails to transport, and the social, psychic, and physiologic stresses of crowding.

Again, the picture is brightened by the existence of solutions and capabilities that are surely adequate if applied with diligence and dedication. However, cities are dynamic, continually experiencing death, renewal, and growth. If the growth and renewal are controlled and required to reflect a concern for human welfare and dignity, our urban places could be rehabilitated with startling rapidity.

Delivery of health services: The spectacular developments in medical science are tarnished by their limited availability. Among the serious limitations on the distribution of health sciences are the scarcity of skilled manpower and complex facilities, poverty, and social and ethnic barriers to communication.

More important than these, however, is the disorganization and fragmentation of services and the haphazard relation between need and availability of health services. This is clearly the result of many years of development without planning. As long as medical care was relatively simple, inadequate and generally ineffective, this could be tolerated.

Now, however, the successes of medical science have changed the practitioner of medicine from a comforter to a healer, and simple justice requires that the benefits be enjoyed by all. This goal cannot be achieved by building a hospital here, expanding a medical school there, or developing new service programs somewhere else.

All of the varied and complex aspects of health services come to focus when viewed from the standpoint of an individual, his need for surgery, drugs, and nursing care, for clean air and pure water and enough food.

From this vantage point we can begin to treat the whole array of health needs, services, and facilities as an integrated system and begin to bring order from the chaos that now exists. Powerful new tools are available from fields other than the health sciences, such as modern management methods and systems analysis.

Environmental management: Although no one would wish to understate the importance of care for illness, nevertheless, this must be recognized to be an inefficient and unsatisfactory approach to the problem of disease. Few people would choose to become ill, no matter how effective the treatment or how well administered the health care system, if the disease could be prevented.

The great variation in risk of illness that has been observed from one place to another, from one time to another, from one group to another, is a reflection of the fact that virtually all diseases are determined by the physical, social, and biological environments of man.

Modification of these environmental circumstances can sharply reduce or even eliminate major disease problems. Our recent past history

is full of examples of diseases that were unable to cope with the changing environment: malaria, diphtheria, typhus, typhoid fever, yellow fever, hookworm and cancer of the stomach all have declined rapidly during this century.

For some of these, we have almost complete explanation for the decline, some partial explanations, and for some no explanations at all. Nevertheless, the point is clear: environmental modification offers enormous promise in effecting control of disease.

Special health problems: Some special problems are of such great importance at this time that they require special attention. Diseases of the heart and blood vessels will ultimately account for the death of 55 percent of the children born currently, if present rates remain unchanged. Another 15 percent will die of cancer.

If these statistics represented only one or another modes of bringing a long and productive life to a close, they would perhaps be of academic interest only. However, a high proportion of these deaths are premature and demand that we do what we can to control their causes.

I see no inconsistency in a concern with population increase on the one hand, and disease control on the other. The point presented earlier prevails, that disease, starvation, and war are not acceptable solutions to the problem of excess population.

In some cases, this calls for extraordinarily complex and expensive approaches. For example, evidence has been accumulating in vast quantity in recent years indicating that diet, inactivity, and cigarette smoking have something to do with the risk of heart attacks.

Despite the mass of data, the public acceptance, and even the commercial exploitation of those concepts, we are not able to advise anyone with surety as to how he may reduce his risk of disease. To determine this will require the study of several thousand men over a period of 5 to 10 years, inevitably at the cost of tens of millions of dollars.

We have become accustomed in the time since the depression not to flinch when a physicist proposes a single experiment or an apparatus that may expend a detectable fraction of the Nation's tax bill. So far, biologists have not been accorded such confidence, and behavioral scientists are still viewed with unalloyed misgivings.

Nevertheless, however important the acceleration of miscellaneous particles to greater speeds may be, one cannot believe that a reasonable approach to the problem of coronary heart disease is of less moment. Experiments in biological and social sciences are necessary to answer the critical question about disease and human behavior and they will be expensive.

No one could reasonably claim that solving the problems of too many people, a deteriorating environment, and disorganized health services is simple, but neither is the situation hopeless. We can see clearly many things that we should do, and can look forward confidently to learning how to do more.

The schools of public health are specifically and uniquely oriented toward work in these matters. Indeed, if one were to set out to plan a school of public health, as I have recently done, a statement of problems very similar to this one would serve very well to define the school.

Population problems are studied in departments of demography and reproductive physiology, but the application of these sciences to free-living communities is likely to be centered in schools of public health.

Many schools of engineering house activities related to environmental quality, but the melding of engineering, biology, and political and behavioral sciences that is necessary to effect solutions occurs naturally when the faculty and students of a school of public health work together. Only by the joint action of physicians, nurses, social scientists, administrators, and many others can the complex system of health services be made to function well, and this amalgam of skills is uniquely characteristic of schools of public health.

Presently, the Nation is served by only 16 schools of public health. If we are to fulfill the promise that the challenges hold forth, the schools of public health must be strengthened, expanded, and increased. Since the beginning of direct Federal support for public health education, a strong case has been made that the schools of public health fill a national need.

During the past 11 years, the program of financial aid has been of enormous benefit in assisting the existing schools to expand and new schools to become established, a factor of which I am most acutely aware. In this time the schools have undergone massive change, re-orienting their teaching programs to be more acutely attuned to current problems.

We can all take pride in the accomplishments that this partnership between the Federal Government and the educational institutions has brought about. Nevertheless, still greater efforts are required and we most urgently request that S. 2809 be enacted to make these efforts possible.

Thank you.

Thank you, Senator.

The CHAIRMAN. Thank you very much. This is a very, very fine statement, pointing out some problems of the human race as we move away from the unacceptable methods you pointed out of population control, disease, starvation—Winston Churchill said there is nothing more exciting in life than to be shot at providing it does not take effect.

So we hope that this prediction won't happen to us. Has the school you head there received any allocations of Federal moneys at this time?

Dr. STALLONES. Yes, sir, we were eligible for participation in the formula grant as soon as we were accredited. So we were included in this current year.

The formula provides that one-third of the total appropriation be divided among the schools equally. The remaining two-thirds is divided among the schools according to the number of federally sponsored students enrolled.

Since we had no experience on which to base enrollment of federally sponsored students we were only eligible to participate in the allocation of the first third. This meant that we had about \$96,000 made available to us.

The CHAIRMAN. How much?

Dr. STALLONES. About \$96,000.

The CHAIRMAN. That was approximately a million and a half dollars to be divided among 16 schools roughly?

Dr. STALLONES. Yes, sir.

The CHAIRMAN. Do you get Federal support from sources other than that?

Dr. STALLONES. We have no other direct operating support. We have been able to have some of our students supported under a traineeship program of HEW.

The CHAIRMAN. But no direct support for the school as such to finance its operations, its personnel, its teaching and so forth?

Mr. STALLONES. No, sir.

The CHAIRMAN. Of course if we continue this as a 1-year program with present authorizations, as badly needed new schools of public health are created that pulls down the amount for the existing schools which likewise have to increase their enrollment. I think this proves the need for a 5-year program and acceleration of grants to take care of not only the school that you are dean of but other schools.

As these people learn the needs due to pollution of the environment and increasing population and all the things you mention here that are affecting man, and man begins to realize his needs, there will be a great demand for these schools.

Dr. STALLONES. The Senator's earlier point about the need for continuous support over time is extremely important. We can have fragmented service in time just as well as we can in functions and to be supported from 1 year to the next is a very bleak prospect for an institution which must build for the future.

This would be seriously detrimental to the development of programs in all of the schools of public health, to look forward constantly to a possible discontinuation or at least the need for reauthorization of the program.

Surveys of course are important and the integration of activities are important and we believe this kind of survey ought to be going on continuously and integration ought to be going on continuously.

It seems to me it is just as logical to think of really bringing all of the programs to a common termination date in 1975 as it is in 1971. In other words, the other programs might be authorized for a 4-year period instead of a 5-year period or a 1-year period.

The CHAIRMAN. I think that is logical.

Their surveys, if they are thoroughly done, won't be a 30-day deal. This field is too complex. We find in the education subcommittee, too, that 1-year authorizations are an impediment to planning by the officials of all institutions, even down to Headstart, all the way up and down the line.

This piecemeal 1-year authorization is disastrous to orderly administrative procedures in the schools that must prepare budgets and decide from what source they can get the support to carry forward their institutions.

Thank you for your contribution. Your statement will be printed in full at this point.

(The statement referred to follows:)

PREPARED STATEMENT OF DR. RUEEL A. STALLONES, DEAN, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF TEXAS; REPRESENTING THE ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

Almost any list of current, major, health-related problems is likely to include the population increase, the inequitable and inadequate distribution of health care, and the degradation of the environment, together with whatever special

problems are of particular concern to the author. I would like to proceed beyond a simple statement of the problems to consider our present capabilities for resolving these problems, and indicate the vitally important part the Schools of Public Health must play.

POPULATION

At the root of many of our most pressing and severe health problems lie the more basic problems of population density and distribution. In some countries, this issue is manifested starkly as hunger and starvation, immediately present and holding threats for the future which are as chilling as the spectre of nuclear holocaust. If the bleak predictions of most of the students of this problem are even fractionally realized, the lives of all of us will undergo profound and unforeseeable change. We have existed uneasily for some years as an island of plenty in a sea of want, but we may not be able to survive as an island of plenty in a sea of starvation.

Only in relatively recent years have the natural factors of population control been defined and expressed quantitatively by the students of ecology. Simply expressed, populations are held in check under natural circumstances by starvation, predation, and disease. Translated into human terms, these mechanisms are intolerable. However, we are now, for the first time in the history of man, able to determine humanely how many of us there shall be. The idea that we can exercise specific control over our own numbers is fantastic. Almost before it is fully born, human ecology may now become an experimental, rather than an observational science.

In this country, the population problem is expressed in the frustrations of urban aggregations. The health problems of urban residents are a tangled interplay of environmental pollution, economic difficulties, transportation that fails to transport, and the social, psychic, and physiologic stresses of crowding. Again, the picture is brightened by the existence of solutions and capabilities that are surely adequate if applied with diligence and dedication. However, cities are dynamic, continually experiencing death, renewal, and growth. If the growth and renewal are controlled and required to reflect a concern for human welfare and dignity, our urban places could be rehabilitated with startling rapidity.

DELIVERY OF HEALTH SERVICES

The spectacular developments in medical science are tarnished by their limited availability. Among the serious limitations on the distribution of health sciences are the scarcity of skilled manpower and complex facilities, poverty, and social and ethnic barriers to communication. More important than these, however, is the disorganization and fragmentation of services and the haphazard relation between need and availability of health services. This is clearly the result of many years of indevelopment without planning. As long as medical care was relatively simple, inadequate and generally ineffective, this could be tolerated. Now, however, the successes of medical science have changed the practitioner of medicine from a comforter to a healer, and simple justice requires that the benefits be enjoyed by all. This goal cannot be achieved by building a hospital here, expanding a medical school there, or developing new service programs somewhere else. All of the varied and complex aspects of health services come to focus when viewed from the standpoint of an individual; his need for surgery, drugs, and nursing care, for clean air and pure water and enough food. From this vantage point we can begin to treat the whole array of health needs, services, and facilities as an integrated system and begin to bring order from the chaos that now exists. Powerful new tools are available from fields other than the health sciences, such as modern management methods and systems analysis.

ENVIRONMENTAL MANAGEMENT

Although no one would wish to understate the importance of care for illness, nevertheless, this must be recognized to be an inefficient and unsatisfactory approach to the problem of disease. Few people would choose to become ill, no matter how effective the treatment or how well administered the health care system, if the disease could be prevented.

The great variation in risk of illness that has been observed from one place to another, from one time to another, from one group to another, is a reflection of the fact that virtually all diseases are determined by the physical, social, and biological environments of man. Modification of these environmental circum-

stances can sharply reduce or even eliminate major disease problems. Our recent past history is full of examples of diseases that were unable to cope with the changing environment; malaria, diphtheria, typhus, typhoid fever, yellow fever, hookworm and cancer of the stomach all have declined rapidly during this century. For some of these, we have almost complete explanations for the decline, some partial explanations, and for some no explanations at all.

Nevertheless, the point is clear: environmental modification offers enormous promise in effecting control of disease.

SPECIAL HEALTH PROBLEMS

Some special problems are of such great importance at this time that they require special attention. Diseases of the heart and blood vessels will ultimately account for the death of 55% of the children born currently, if present rates remain unchanged. Another 15% will die of cancer. If these statistics represented only one or another modes of bringing a long and productive life to a close, they would perhaps be of academic interest only. However, a high proportion of these deaths are premature and demand that we do what we can to control their causes. (I see no inconsistency in a concern with population increase on the one hand, and disease control on the other. The point presented earlier prevails, that disease, starvation and war are not acceptable solutions to the problem of excess population.) In some cases, this calls for extraordinarily complex and expensive approaches. For example, evidence has been accumulating in vast quantity in recent years indicating that diet, inactivity, and cigarette smoking have something to do with the risk of heart attacks. Despite the mass of data, the public acceptance, and even the commercial exploitation of those concepts, we are not able to advise anyone with surety as to how he may reduce his risk of disease. To determine this will require the study of several thousand men over a period of 5 to 10 years, inevitably at the cost of tens of millions of dollars.

We have become accustomed in the time since the depression not to flinch when a physicist proposes a single experiment or an apparatus that may expend a detectable fraction of the nation's tax bill. So far, biologists have not been accorded such confidence, and behavioral scientists are still viewed with unalloyed misgivings. Nevertheless, however important the acceleration of miscellaneous particles to greater speeds may be, one cannot believe that a reasonable approach to the problem of coronary heart disease is of less moment. Experiments in biological and social sciences are necessary to answer the critical questions about disease and human behavior and they will be expensive.

No one could reasonably claim that solving the problems of too many people, a deteriorating environment, and disorganized health services is simple, but neither is the situation hopeless. We can see clearly many things that we should do, and can look forward confidently to learning how to do more.

The Schools of Public Health are specifically and uniquely oriented toward work in these matters. Indeed, if one were to set out to plan a school of public health, as I have recently done, a statement of problems very similar to this one would serve very well to define the school. Population problems are studied in departments of demography and reproductive physiology, but the application of these sciences to free-living communities is likely to be centered in schools of public health. Many schools of engineering house activities related to environmental quality, but the melding of engineering, biology, and political and behavioral sciences that is necessary to effect solutions occurs naturally when the faculty and students of a school of public health work together. Only by the joint action of physicians, nurses, social scientists, administrators, and many others can the complex system of health services be made to function well, and this amalgam of skills is uniquely characteristic of schools of public health.

Presently, the nation is served by only sixteen schools of public health. If we are to fulfill the promise that the challenges hold forth, they must be strengthened, expanded, and increased. Since the beginning of direct federal support for public health education, a strong case has been made that the schools of public health fill a national need. During the past eleven years, the program of financial aid has been of enormous benefit in assisting the existing schools to expand and new schools to become established. In this time the schools have undergone massive change, reorienting their teaching programs to be more acutely attuned to current problems. We can all take pride in the accomplishments that this partnership between the federal government and the educational institutional has brought about. Nevertheless, still greater efforts are required and we most urgently request that S. 2809 be enacted to make these efforts possible.

Thank you.

The CHAIRMAN. Are there any further questions by the staff?
All right, Dr. Wegman, will you please proceed in your own manner?

STATEMENT OF DR. MYRON WEGMAN, DEAN, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF MICHIGAN, CHAIRMAN, EXECUTIVE BOARD, AMERICAN PUBLIC HEALTH ASSOCIATION

Dr. WEGMAN. Thank you, Mr. Chairman.

Before starting I too have a statement for the record that I have left with the committee. I would like to enlarge on it orally.

The CHAIRMAN. Yes. We will order this statement of Dr. Wegman's printed in full.

Dr. Wegman is dean of the School of Public Health, University of Michigan, and chairman of the legislative committee of the Association of Schools of Public Health and past president of that association.

We welcome you here. Your statement is ordered printed in full.

(The prepared statement of Dr. Wegman follows:)

PREPARED STATEMENT OF MYRON E. WEGMAN, M.D., M.P.H., DEAN, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF MICHIGAN

I am Dr. Myron E. Wegman, Dean of the School of Public Health of the University of Michigan, Past President and currently Chairman of the Legislative Committee of the Association of Schools of Public Health. The Association's membership includes the 16 accredited graduate schools of public health in the United States.¹ I am appearing in support of S. 2809, introduced by Senator Yarborough with 19 co-sponsors, to extend and increase the authorization for formula grants to schools of public health under Section 309(c) of the Public Health Service Act.

Although not changed in basic purpose and orientation, public health has changed significantly in scope and content in just the past few years. The Congress has created a series of programs aimed at improving the health of the American people, programs which, if well administered and staffed, hold great promise for disease prevention and for better health status. Medicare and Medicaid are well known and obvious examples but emphasis on health factors has also been a prominent aspect in OEO programs and Model City programs. The 1967 and 1968 legislation for comprehensive health planning is a major landmark, supporting the principle of taking into account all possible factors before making allocations for health purposes. There are major implications for eventual cutting of unnecessary costs and obtaining more values from public dollars spent for health.

All these and other health programs not only require large increases in prepared personnel but the tasks to be carried out require the type of education best provided in a multidisciplinary setting. For example, senior planning officials need to know the biologic background of disease in order to understand how both personal factors and the influence of the physical environment affect health goals and to appreciate the possibilities which may reasonably be expected of organized preventive health measures. At the same time, planners must understand organization principles, the techniques of gathering data for economic decisions and the possibilities and limitations of applying cost benefit analysis in a health situation. Proper education in these various factors should produce health personnel capable of planning more effective and economical distribution of public resources. Other examples are the physician and nurse able to direct health programs in poverty areas, who need to know more of the social, behavioral and environmental aspects involved.

The variety of persons just mentioned constitute only a small sample of the kinds of personnel prepared at schools of public health. These schools had their impetus in the famous Welch-Rose report in 1915, which concluded that solving the major public health problems of the day—the communicable diseases—in-

¹ At the following universities: California (Berkeley), California (Los Angeles), Columbia, Harvard, Hawaii, Johns Hopkins, Loma Linda, Michigan, Minnesota, North Carolina, Oklahoma, Pittsburgh, Puerto Rico, Texas, Tulane, Yale.

volved more than medical and nursing skills and more than just adding to these a corps of other specialists. Dr. Welch and Mr. Rose particularly noted the importance of environmental factors and the problems of organization and public administration.

The school of public health was established as an institution where physicians, engineers, political scientists, nurses and others could take part as faculty members and as students. The goal has always been a solid base in both the natural sciences and social sciences, for a broad multidisciplinary education and research program. What has perhaps not been emphasized enough is the readiness with which schools of public health have changed to meet new community needs. Since the Welch-Rose report, for example, great progress has been achieved in the relative decline of communicable diseases as causes of death and disability. While insisting that the danger of resurgence and the many still unconquered diseases require ongoing research for new vaccines and methods of protection, the schools have steadily and progressively devoted much more energy to chronic disease and to health maintenance. Techniques successful in studying spread of smallpox, diphtheria, and typhoid can also be adapted to study of the factors influencing development and distribution of heart disease and cancer. It might be noted that the largest single research project at our own school of public health is a continuing survey of an entire city in an attempt to identify the precursors of heart disease and the factors which affect its occurrence.

As the concept of prevention has broadened, every school today is more than ever involved in teaching and research on improving organization of health services and on ways to improve allocation of the community's resources among its health problems—comprehensive health planning.

In a closely related subject the schools are working intensively in regard to population. Our own university is one example; we have three closely inter-related centers, the Population Studies Center in the Department of Sociology, the Center for Research on Reproductive Biology in the Department of Obstetrics and Gynecology and the Center for Population Planning in the School of Public Health, the latter concentrating on the ways to achieve successful programs in action.

Population growth is closely connected with human nutrition, an area in which schools like Harvard, Columbia, Johns Hopkins, Tulane and Minnesota have developed outstanding programs.

All schools are currently giving greater emphasis to the environment. Water supply and sewage control have been central public health interests since the earliest days; the problem of air pollution and protection against ionizing radiation are now increasingly prominent.

Some index of the scope of a school of public health in 1969 may be gained from listing the programs of study offered at one university. I cite the University of Michigan since I know it best but similar statements could be made for the other schools.

TABLE I

Air Pollution
 Biostatistics
 Chronic Diseases, Adult Health and Aging
 Dental Public Health
 Environmental Health—Food Contact
 Environmental Health—General
 Environmental Health—Water Contact
 Epidemiology
 Health Education
 Health Planning
 Hospital Administration
 Industrial Hygiene
 Maternal and Child Health
 Medical Care Organization
 Mental Health
 Nutrition
 Occupational Medicine
 Population Planning
 Public Health Administration
 Public Health Laboratory Practice
 Public Health Nursing
 Radiological Health

One reflection of recent change is seen in two of these programs—Medical Care Organization and Population Planning. In 1961–62 the former had four students

studying for the Master of Public Health degree, while in 1968-69 there were 39; Population Planning came into being as a program of study only in 1966 but by 1969 had 36 enrollees seeking master's and doctor's degrees.

There are two other specific ways in which schools of public health emphasize their multidisciplinary, natural science—social science character: mix of student backgrounds and common core of instruction. The first is well illustrated in the last report of the Committee on Professional Education of the American Public Health Association, the accrediting body for schools of public health. Among 22 widely disparate specified professional groups studying at schools of public health there were significant numbers of physicians, dentists, nurses, engineers, teachers, administrators and laboratory scientists. This varied background brings strength as well as problems. The students contribute to each other's education but the difference in prior preparation makes it much more difficult to organize a high level, stimulating educational program, without having it too easy for some and too advanced for others. Secondly, all students, whatever their background and whatever their specific field of interest, take part in a common educational program designed to insure that all students have an understanding of:

"1. The nature of man, his physical and social environment, and his personal and social interaction, as they affect his health.

"2. The basic techniques of investigation, measurement, and evaluation, including biostatistics and epidemiology.

"3. The basic techniques of administration (organization and management), particularly as applicable to comprehensive health care programs.

"4. The economic and political settings relevant to health services.

"5. The application of these knowledges in the promotion of community health."²

At our School this is achieved through a common, integrated core course. At other schools it may take the form of a series of related courses. But the objective is the same, to take advantage of the uniquely broad setting of the school of public health to provide to students from a wide variety of previous training and interests both a common basis in public health and preparation in some depth for those interested in a specific area.

Yet the setting for these types of education is both complicated and costly. In the earlier years state and private support carried the burden but the rapidly changing situation a decade ago led to the legislation that the Committee is now considering extending. The original impetus came because the Federal Government, to meet growing manpower demands, was supporting training at schools of public health for an increasingly large group of students, while the tuition paid on behalf of these students was far short of covering the costs to the school for this type of education. In essence, the formula grants attempted to compensate in part for unmet educational costs the Government was creating. The original legislation had extensive bipartisan support in both Houses of Congress and was passed unanimously. Since then it has been extended periodically and has become an ever more vital part of the operations of the various schools.

It must be emphasized that the 16 schools of public health, 9 of which are in state universities, have the responsibility for providing graduates capable of duty in the health services of all the 50 states, the territories and the Federal Government, as well as for international activities of the United States and the international agencies. Thus, each school has had to be concerned with an area far beyond that of its ordinary university range of influence. It has been pointed out that the schools of public health are analogous to national service academies in that they must prepare students for public service anywhere in the country. This point is particularly significant in the state schools, since state legislatures, faced with mounting costs in all fields, customarily sharply restrict out-of-state registrants. My own university, for example, has long had a tradition of admitting a substantial number of students from outside the State of Michigan, but in this century the proportion of such students has gradually decreased to a current University average of approximately 25%. In the School of Public Health, on the other hand, the ratio is reversed and two-thirds to three-quarters of the students come from outside the state. One can well understand the reluctance of the state legislature, under such circumstances, to make substantial investment in faculty and facilities that will benefit chiefly nonresidents. In the private universities, while the out-of-state problem is no concern, endowment funds are just insufficient to meet mounting costs.

A corollary fact is that, unlike some of the educational programs leading to qualification of individual practitioners, the public health professional must per-

² American Journal of Public Health, August 1960.

force, with few exceptions, look forward to a career as a salaried person in an agency, public or private, devoted to public service. These careers are not highly remunerated, making it less likely that students will subsidize their own graduate education or be ready themselves to pay for the high cost of operations. Furthermore, schools of public health cannot look forward to the kind of alumni contributions which often form such an important part of the resources of other academic institutions.

Conscious of the fact that Federal formula grant legislation has played such a key role during the past 11 years, the Association of Schools of Public Health undertook, in the spring of 1969, an extensive study of the progress accomplished with the aid of these grants. I ask permission to make the detailed report of this study part of the record of these hearings.

The revealing results of the study may be summarized under several headings: productivity, costs and future needs. The productivity figures are striking, in the light of the fundamental aim of the legislation to increase the number of properly prepared professionals. At the time the original formula grant legislation was enacted there were 11 accredited schools of public health. During the ten-year period, 1948-1957, prior to the formula grant program, some 6,400 degrees were awarded in these schools. In the 10 subsequent years, as the formula grants made possible expansion in existing schools and the advent of four more schools (the University of Texas School of Public Health has not yet graduated its first class), almost *twice* as many degrees were earned. Of even more significance is the fact that in this period there has been an even greater increase in enrollment, almost two and a half times, promising further increase in graduates. Detailed analysis shows, moreover, that the increases since 1963, after the formula grants had had some time to make their effect felt, has been even more striking. In fact, the bulk of the increase, both in degrees awarded and in student body, has taken place in the period between 1963 and 1969.

The study further reveals that more than 90% of graduates enter public service and that they hold the key posts in local, city, state, national and international agencies. The character of professional leadership in the teaching of public health in the United States has been reflected in the frequency with which faculty members are called on for consultation abroad. Moreover, schools of public health on the American pattern have been formed in many countries elsewhere in the world, thus making it possible for students of those countries to see more directly applied the principles taught in our schools of public health.

In the years since the formula grant legislation was first passed the activities of the Federal Government in sponsoring students at schools of public health have grown ever more market. In 1963, 56% of all students in the then 12 schools of public health were sponsored by the Federal Government. In 1968, however, by which time the total enrollment in schools of public health had doubled, the proportion of federally-sponsored students had grown even more rapidly, to a total of 67%, throwing a greatly increased burden on the schools.

The Congress has been mindful of this increase and, as shown in Table II, authorizations have been increased in accordance with demonstrated need. Unfortunately, appropriations have not increased concomitantly and serious gaps now exist. We are, of course, bringing this forcefully to the attention of the Appropriations Committee.

TABLE II.—FORMULA GRANT ASSISTANCE TO SCHOOLS OF PUBLIC HEALTH—AMOUNTS AUTHORIZED AND APPROPRIATED BY CONGRESS, FISCAL YEARS 1959-70

Fiscal year ending June 30—	Number of schools	Amounts authorized	Amounts appropriated
1959.....	11	\$1,000,000	\$450,000
1960.....	12	1,000,000	1,000,000
1961.....	12	1,000,000	1,000,000
1962.....	12	2,500,000	1,900,000
1963.....	13	2,500,000	1,900,000
1964.....	13	2,500,000	1,900,000
1965.....	13	2,500,000	2,500,000
1966.....	14	5,000,000	3,500,000
1967.....	14	5,000,000	3,750,000
1968.....	15	5,000,000	4,000,000
1969.....	15	6,000,000	4,554,000
1970.....	16	7,000,000	1 4,554,000

¹ Local approved by the House of Representatives; appropriation pending.

While the support of the formula grants has been most helpful, serious shortcomings still exist for, as is obvious from the general financial situation of our country, costs in all of the universities have risen sharply. Between 1963 and 1968 the total student body doubled, but the cost of basic operations and teaching, excluding sponsored research, increased almost threefold. Despite the increase in actual amounts received by the schools of public health under the formula grants, the latter met only 12% of the cost of basic teaching operations in 1968 as against 16% five years previously. The greater numbers of federally-sponsored students were, in fact, throwing an ever increasing burden on other revenue sources.

In its survey, the Association carried out an analytic review of the individual schools to disclose their current greatest needs and the most critical shortcomings. The results showed that to fill existing serious gaps in faculty positions and to take care of anticipated student load there will be needed in fiscal year 1971, \$12.5 million, in fiscal year 1972, \$16.8 million, and in fiscal year 1973, \$21.6 million. Thus, the figures contained in the bills under consideration by this Committee are realistic approximations, even if they will not fully satisfy the needs.

The Committee will be interested to know that the kinds of teaching programs cited by the schools as chiefly needing help are the basic ones required for preparing the bulk of health workers being sought by operating health agencies. The programs include health administration and comprehensive health planning; epidemiology of acute and chronic disease; and environmental aspects of health, including the problems of ionizing radiation and of occupational health. These three broad fields, Mr. Chairman, do not have the drama of a heart transplant but more effective teaching of basic concepts and principles will unquestionably result in saving more lives, preventing more disability and helping more people to effective and productive existence.

Another major interest of the schools, crying for further development, is continuing education. With the rapid advance of scientific and technical knowledge practitioners in any field can quickly get out of date. Several of the schools of public health have long followed the practice of using part of their resources to offer short courses for practitioners in order to bring them up to date and to introduce them to new areas of knowledge. The demand from health agencies for such courses far outstrips the supply. A number of the schools would like to expand into this activity if funds, such as those under the formula grant, could be found for faculty and needed supplies. I shall not try to list the other subjects mentioned in detail in the report but will note that important Congressional priorities, such as population, family planning, maternal and child health and health education, are high on the list.

A key factor in relation to need is the establishment of new schools. I remind the Committee that the regulations for administering the formula grant legislation provides for division of one-third of the appropriation equally among all accredited schools and division of the other two-thirds in proportion to the number of federally-sponsored students enrolled in each school. Thus, when a new school is accredited the immediate result is a decrease in the allocation to every other school, unless the total appropriation is increased. Indeed, it appears at present that this will occur this year since the new School of Public Health at the University of Texas was accredited in June, 1969 and is entitled to participate in this year's appropriation, which is unchanged from last year in the budget now before the Congress. The University of Texas has plans for rapid growth and expansion so that its allocation in proportion to the number of federally-sponsored students will also increase. It hardly seems logical to encourage a new school to start operation in order to provide needed manpower while at the same time using a fiscal policy which forces the existing schools to contract.

In addition, there are at least two other schools in the immediate offing. The Regents of the University of Illinois have announced their intention to establish a school of public health in their University and the University of Alabama is working in that direction. Word has been received that the University of Washington and the University of Cincinnati are seriously considering development of full scale schools of public health. Our Association is pleased to learn of these initiatives because the advent of new schools make for greater strength in all. Nevertheless, we believe the situation urgently necessitates Congressional action.

Mr. Chairman, may I close by reaffirming the fact that schools of public health are unique in their concentration on preparing personnel for public service, in

their multidisciplinary character, in the small number of schools with responsibility for meeting the needs of the whole country, in the anomalous situation that two-thirds of all students are sent to the schools under the auspices of the Federal Government, yet the Federal Government is paying tuition covering only a small part of the basic cost of this education. I urge upon the Committee approval of the authorizations requested in these bills. I believe the documentation is completely adequate to support authorization for a five-year period.

TABLE 3A (GRAPHIC)

U. S. SCHOOLS OF PUBLIC HEALTH
Graduate Degrees Awarded
1948 -- 1969

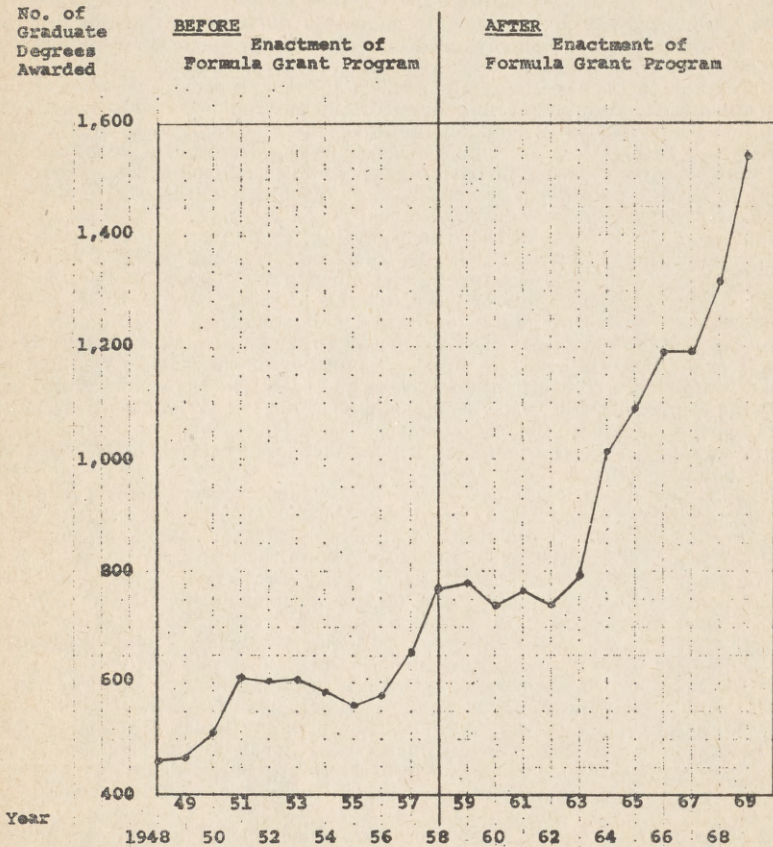
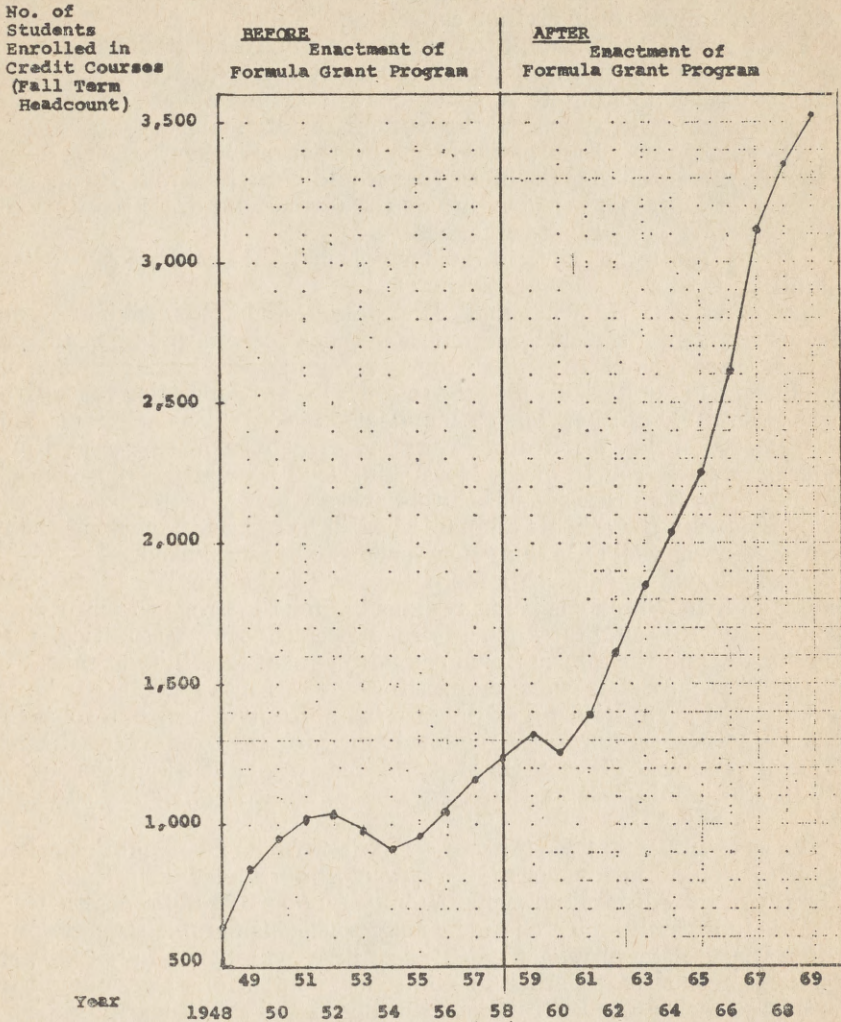


TABLE 3B (GRAPHIC)
 U. S. SCHOOLS OF PUBLIC HEALTH
 Growth of Student Enrollment
 1948 -- 1969



The CHAIRMAN. I have already noted certain extracts from your prepared statement that we have been looking at.

I welcome the representative of the University of Michigan. My own student days there were as a newly commissioned officer in World War II, going there for 17 weeks of war orientation and training.

The University of Michigan made the facility available to the Army. We lived in quarters of the Law Quadrangle, the plushiest I have ever seen. The law school was closed. We used the great library there with the seals of the great universities of the world in the tall glass windows, and enjoyed those days very much.

Dr. WEGMAN. Mr. Chairman, those buildings are beautiful. We in public health look at them very longingly.

The CHAIRMAN. I might state that so far as living quarters were concerned, those were the plushiest days of my Government service either in military or in civilian capacities.

Dr. WEGMAN. Sir, I want to point out just one other item which may be of some interest to you, that the University of Michigan in its magnanimity, looking to a sister State starting a new school, has allowed Dr. Stallones to steal three of our faculty members.

The CHAIRMAN. I am pleased to know that our resources were sufficient to permit us to make offers that would be attractive to them.

Very often we find that we are on the reverse end of a procedure of that type. We are losing to other States.

Dr. STALLONES. I never previously heard this raid spoken of so kindly.

Dr. WEGMAN. Mr. Chairman, Dr. Stallones, Dr. Steinfeld, and you have emphasized the changes that have taken place in public health in recent years. I think it is important to recognize that the magnitude of that change in dollars. In 1963 the total HEW appropriation for health was about \$400 million. The 1970 budget provides in the neighborhood of \$12,500 million for health programs—an enormous increase. Furthermore, three-fourth of the HEW 1970 health budget is represented by funds for the provision of health services.

This is why the schools of public health have been increasing their enrollments as well as helping new schools to be established.

I might put in one small footnote, Mr. Chairman. We speak constantly of the 16 schools being responsible for the preparation of personnel for the 50 States, the Commonwealth of Puerto Rico, the territories, and the international commitments of the United States.

But it is important to recognize that one of those schools, the University of Puerto Rico, an excellent school of public health, teaches in Spanish. Its program is really aimed chiefly at the Commonwealth of Puerto Rico and other Spanish speaking areas and countries to the south who send students there. So it is of limited purpose to the 50 States as such.

Another important part of the activities of schools of public health which I would like to mention is the point again made by Dr. Steinfeld about the interdisciplinary character of schools of public health.

This interdisciplinary character brings us considerable strength because if you have physicians, dentists, nurses, engineers, nutritionists, political scientists, together in one school and in one class they can reinforce each other both in contributing as well as in learning.

This presents however some major problems in teaching, the problem of having sufficient faculty resources and the problem of meeting the specialized needs of the students.

It presents problems of different levels of preparation. The physician who has gone through medical school residency, several years of practice, perhaps in public health or in clinical care, sitting next to the very bright young graduate student in mathematics who wants to be a biostatistician present interesting differences.

The young mathematician does not know the biology in the depth that the physician does. I don't have to tell you that most physicians are not terribly good at numbers. So there is room both for competi-

tion and support. But it adds to the cost of the teaching and of the faculty needed.

I want to underline another point that I made in my written statement, Mr. Chairman. That is the question of productivity. Dr. Steinfeld mentioned earlier the great increase in the number of graduates. This increase has been getting even larger. We recognize now that the enrollment in schools of public health is almost three times as great as it was just 10 years ago.

The new schools have added to that but all of the existing schools have enlarged considerably.

We emphasize also the point, and I think this has been made previously, that our graduates go into public health work. This creates an exceedingly important limitation because the fact that they go into public health means that they are not going to look forward to eventually high remuneration.

The corollary is that most schools in this country look heavily to their alumni for contributions. The schools of public health cannot really look to this source as a very major contribution although our alumni over the country and over the world are extraordinary loyal people.

Every faculty member in the school of public health has had the experience of going to a city and being welcomed by students who look back to their school days as days of hard work but days which they appreciated very much.

Finally, Mr. Chairman, just a word about costs. Dr. Steinfeld noted that the costs had gone up in schools. We believe that our costs in the interval of the 10 years since the formula grant was first passed just about tripled.

During this period the proportion of federally sponsored students have gone up as you have noted and the proportion supported by the Federal Government by the formula grant has gone down.

Dr. Steinfeld is quite correct in pointing out that there are other sources of support under section 309(a). Depending on their interests and capabilities, the schools receive a certain amount of project support for specific purposes.

Dr. Steinfeld used the words traineeships however as an example of additional support for the schools. I would respectfully differ with him on this. The traineeships are supports to only the students.

In essence they are a charge upon the schools because they include tuition but the tuition does not come anywhere near covering the cost of instruction. Every student added because of a traineeship, it is sort of like a loss leader in a department store, you get more students but each student costs more to take care of.

There is an additional factor. The traineeship grants under section 306 carry no provision for indirect costs. The indirect costs item is supposedly covered in large part by having this formula grant mechanism as a completely flexible one. We appreciate that because the formula grant mechanism has allowed us to improve the support within our schools for the handling of the traineeship grants.

But in our school, for example, we have somewhere in the neighborhood of over \$500,000 in grants for special purpose and general purpose traineeships. Administering this much in grants, paying the sti-

pend to the students and handling the tuition and the other matters is a not inconsiderable burden.

So I would differ, I don't think that the traineeships add to the support of the schools although it is perfectly obvious that the schools can't live without students.

(Supplemental information supplied by Dr. Wegman appears on p. 43.)

The CHAIRMAN. As you point out a man who makes this his life's work is kind of like a man who makes teaching his life's work. Unless he is an inventor or is publishing textbooks he does not go into that because of the desire to acquire vast wealth.

Dr. WEGMAN. Exactly.

The CHAIRMAN. Or large fees, quick remuneration. He is looking to the long range contributions he can make to the progress of the human race.

Dr. WEGMAN. I agree. This is the philosophy on which our schools are working. There is just one final point that I want to make. You yourself made the point earlier that you thought that the Federal Government needs to be responsible for the major share of the support of the schools when they are training out-of-State students.

Dr. Stallones has indicated to me that the State of Texas is being very generous in support of this new school within limits. In Michigan, the university as a whole runs about 25 percent out-of-State students. In the school of public health we run between two-thirds and three-quarters out-of-State students.

When the president of the university goes to Lansing to defend the out-of-State proportion he mentions the school of public health and says "If you limit us we will have to close up the school."

I have asked him to please stop saying that, they might take him up sometime on that. Nevertheless we cannot get more money from the legislature. State legislatures have been really quite good in the overall support but they cannot continue to increase their support. This is one reason why I think that your bill is an excellent one in that it will come considerably closer to meeting the needs. I hope your bill will be enacted.

Thank you, sir. Thank you very much.

The CHAIRMAN. Thank you, Dr. Wegman and Dr. Stallones. Since you have arrived here Senator Hughes has joined us. He is a very active member of this subcommittee. He came to the Senate this year from Iowa after a very distinguished career there as Governor of that State.

In these hearings on the Senate bill he has shown some of the greatest interest of any Senator in the Senate. We are glad that he is here again. We found this year a need to move more actively into the field of narcotics and drug addiction and alcoholism than we have had in the past.

I held hearings for 4 days as chairman of this health subcommittee.

The problem is too vast. We did not have time in this health subcommittee to fully give the time needed for that. For the first time we have a Special Subcommittee on Alcoholism and Narcotics, and Senator Hughes has agreed to chair that.

In Iowa he put in effect one of the most progressive programs of care and treatment of alcoholics of any State in the Union. He was a leader there. We were very fortunate to get his services as chairman of that subcommittee.

Senator Hughes, we welcome you to this hearing. Do you have any questions or comments on this bill?

Senator HUGHES. Mr. Chairman, my comment on the bill is already made by joining you in cosponsoring the bill. I appreciate your very kind and generous statement. I think I have no questions at this point except to again express my concern in the areas you have already mentioned.

We have so many fragmented approaches in the country there is little in the way of good public health programs or education programs in the field of narcotics or alcoholism or drug abuse.

It is of great concern to me. I am afraid if we do not pass new legislation at this particular point it will be a long time before we get into it. I might ask the doctor if he would care to comment.

Dr. WEGMAN. Senator Hughes, I would like to comment. Dr. Stallones, in a new school, is just getting into this area. In our school we have a program in alcoholism within our community mental health unit. The University of Michigan has a mental health institute working in the field. We recognize the great difficulties in the programs for alcoholism control. The National Institute of Mental Health sponsored just a year ago a conference on the teaching of mental health in the schools of public health at Airlee House. The problem of alcoholism was discussed there. I believe all of the schools are getting at it in one form or another. We ensure in addition to the specialized ideas program that all of the students are aware of this. We have at our school, and Dr. Stallones is proposing a similar plan in Texas, a common core course that every student takes regardless of his background. All students take this course.

We have a substantial segment of that course devoted to the study of alcoholism as an example of a public health problem.

Senator HUGHES. What do you call a substantial segment?

Dr. WEGMAN. This is where I am trying to back off a little bit. We have a series of some 20 case studies that are used as interdisciplinary case studies for the students in which faculty members from several departments working together take an actual case and analyze it with the students in two half-day sessions.

Alcoholism is one of those. The word "substantial" is perhaps an exaggeration. But let us say we give as much attention to that as we do to some of the serious infectious diseases.

Senator HUGHES. In the field of public education is that what we are dealing with right here?

Dr. WEGMAN. Are you talking about the bill, sir, or as a problem?

Senator HUGHES. As a problem.

Dr. WEGMAN. I would think that largely the matter does fall in the field of education. It falls in the field of services as well though in terms of making available to the potential alcoholic and to others services which will give advice, sustenance and support at the moment he needs it. This service and consultation for him as well as education of the public it seems to me is of importance.

Senator HUGHES. What about the public school assistance in dealing with narcotics and drugs, the changing drug pattern over the years?

Dr. WEGMAN. A good deal of work is being done. I think I would have to be frank to say that the major portions carried out in our uni-

versity, and I suspect in others as well, is through the school of education rather than school of public health.

Our contact—

Senator HUGHES. Could I stop you a minute and ask your professional opinion about that?

Dr. WEGMAN. I think a great deal more needs to be done in the public school system.

Senator HUGHES. Through the Federal education or through the Department of Public Health?

Dr. WEGMAN. Mostly through the field of education. I think in school health there needs to be a working combination of the public health nurse, the school physician and the teacher, both in terms of what the students are instructed and what is shown to them as examples.

If the public health nurse who is likely to be aware of the technical developments in the field can work with each teacher she can update knowledge of a given subject.

Senator HUGHES. I am quite interested in this because I have never yet, if you will forgive me, Dr. Wegman, for expressing my opinions honestly, I have not seen an educational program in America that I think is worth a darn in the field of narcotics and drug abuse, and the changing drug scene anywhere in this country. Nor have I seen a school counselor or public health nurse that I think any kid who has a problem of drug abuse turns to for help.

I think if we continue these lines of programs we are going to fail. We are already in a critical stage of events. I am not critical of what you have said. What I have found in this country is tragic.

We have had a number of recommendations, for example in the field of public health dealing with drugs and narcotics. One recommendation which I thought made sense, and I would like to throw it out at you and let you consider it—I realize that it is not fair because I may not describe it adequately. The school system for example, in Detroit, dealing with the junior high and senior high students primarily, tried to incorporate in the system 10 or 12 people who are trained in that field only, in the field of education and prevention, who will circulate in the school system among the various schools.

I have found very ineffective the program of having law enforcement officers come in and scare the hell out of the kids. They leave and we have a doctor come in, and then a group of addicts 40 years old come in next and tell them what bums they were as kids.

There is no communication between these groups of people at all. On the other hand you see a particular instance, I think it is in the State of Oklahoma, of an athletic coach who the boys like and who can talk to the kids and who knew nothing about narcotics but they started turning to him.

So he made a point to find out something about narcotics and drugs. This resulted on a voluntary basis in one of the most effective programs that I have heard about. Maybe we need specially trained people, in fact I definitely think we do. I don't know at this point, I will have to confess, but we have to do something different than what we are doing.

All the films I have seen, all the literature I have seen, all the families I have been in, and I have sat down to family dinners where a father

specifically said to me, "Please don't mention marihuana while we are in this house" because they had teenage kids to dinner. You could talk about the atomic bomb blowing the hell out of the human race and polluting ourselves out of existence but don't mention marihuana.

The kids knew all about marihuana. Before I left they brought it up much to the parents chagrin. They knew more than their parents did. We must do something now in the field of public education and prevention. This is a rapidly changing drug scene, and the fads change as you know. You know that what was popular last year is gone this year. What is popular this year is gone next year. Every piece of literature and documentary evidence in the libraries is antiquated, it is not up to date. It does not fit the present.

After that 10 minutes speech which I did not intend to make, what do you think we ought to do? How can we reach them? I think we will fail the way you are suggesting.

Dr. WEGMAN. You are far ahead of me and correctly so. I gave I am afraid some of the traditional answers. My traditional answer about getting support from the public health nurse was predicated on the idea that there would be the kind of specialized intelligence and knowledge developed.

Your suggestion however, seems to me eminently more sound provided we can get the technical people who will fill the characteristics you mention in the athletic coach.

It has to be someone that the students will look up to, I am absolutely convinced of that. I am sure that the police authoritarian approach just raises the kind of reaction that we see in students all the time now.

If you can give them some kind of sympathetic support on this so that they will understand at a time when they need to understand. I agree with you about the shortcomings of moving pictures and brochures.

I think you can talk to a man all day and show him something but he is not going to learn from it. You must reach him at a moment when he is willing to be interested with some one sympathetic.

Your suggestion of having a staff move about raises some questions in my mind. I guess I am a little bit hesitant about the moving around part, Senator HUGHES.

Senator HUGHES. I am very interested in any of your opinions. I would like to know what you think of it.

Dr. WEGMAN. I think the notion of having a specialized corps of people concentrating on the major mental problems among the students now is an excellent one but it may be that the person would have to stay at a school for a period long enough to become known and to become accepted if his advice is going to be accepted.

Then he might move on to another school. If by moving around you mean that sort of thing I would accept it. I would not want to have a man going to a school 1 day a week or go for a week and then move somewhere else for a week.

Senator HUGHES. I agree with that. I do think, though, that you have changing programs, the changing problems, and you have to know the kids.

I think you are also going to have to set up a system of no questions asked. If a kid comes to that counselor or to that program and he is going to be hauled in by the principal because he went seeking informa-

tion or seeking help, then you are never going to get anybody to come in.

Dr. WEGMAN. I could not agree more.

Senator HUGHES. I have found and I know the chairman has, so many of the kids these days are not the ghetto residents, it is not isolated to the very hard core poor, it is the middle class that is popping pills and smoking reefers and injecting things into their arms.

Dr. WEGMAN. Senator, I might use this to underline one point that was made earlier that I would like to refer again to the danger of a 1-year extension in this bill. If you are going to attack problems like alcoholism and narcotics you have to build up a unit and recruit faculty who are willing to look at it and are willing to continue for awhile.

Senator HUGHES. You have to have funding that will continue.

Dr. WEGMAN. Yes. We can't tell a man we hope we will have a salary for you next year provided Congress passes the legislation and makes the appropriation.

Senator HUGHES. It has always been a problem in alcoholism. You can't get the professionals in it without an on-going program of some sort. I think it is going to be the responsibility of the university and the responsibility of the medical school and the public health field engineers and all of them to train what is really a paramedical corps to deal with this rather than a medical profession.

This is going to have to be on an on-going funding basis in the future too. But I guess, as I look at these things, with the epidemic problems that we are having narcotics and drugs and with the classification of alcoholism for what I believe it is in America, every year we begin to recognize more—

Dr. WEGMAN. I can just add one little item I read on the plane coming in last night. Cirrhosis of the liver has now moved up in 1968 to the 10th leading cause of death in the United States.

Senator HUGHES. Of course the problem we are dealing with in these families where one or the other are victims of it, counseling the whole family is an extreme problem. I won't belabor this any further, Mr. Chairman. I will say in the field of public health, public health education and the whole gamut, we have to examine this now.

We cannot afford any more time for mistakes. We are long overdue. Our best intentions are not the answer. If I have any impression at all, it is that almost every endeavor we have made in the field of public education and prevention has been of the poorest kindergarten variety that is rejected and not accepted by the kids.

Do you have some comments, sir? I see a strong look.

Dr. STALLONES. I guess it is because I have strong feelings about this. I will not belabor the point except that some drug users are sick and need to be incorporated into the health care system with appropriate facilities for their care.

The vast problem of the present time is not with people who are sick, however. I think they are quite well, at least as well as social drinkers, for example.

We do not have enough information to mount a truly accurate educational program. Every time a college student wishes to he can pin any of us he wants to the wall with questions that are very relevant to his concern with the use of marihuana but for which we do not have answers.

The people who do have answers in this field are the law enforcement agencies and they simply are not believed by the students. So in the face of this kind of a credibility gap and disinclination to obey the law which is massive, clearly our customary kinds of approaches to this are erroneous.

We must do better. One of the kinds of things that we have been involved in is an attempt to get what information we do have into the university where it will be available for the students themselves and also for those people who will be the next generation of teachers, so at least we will have people who are better informed within the limits of our present ignorance.

Senator HUGHES. Also in the extension program, too, would you not say?

Dr. STALLONES. I believe this and I believe in counseling generally. I think that a university student health service should have a preventive program which would include education in such things as the drug scene and along with other kinds of things because again I think in a comprehensive health care system this is an integral part and should be treated as such.

Senator HUGHES. Thank you very much, Mr. Chairman.

The CHAIRMAN. Dr. Wegman, your statement was earlier ordered printed in full in the record. I congratulate you for your including under table 1 in that statement the subjects that are taught in this school and covered in this school of health, the subject of nutrition.

I want to mention that it was this committee that 2 years ago started the hearings on malnutrition and hunger in the United States. That was widely attacked over the country and in the press as being a grand-standing maneuver, oriented and done solely for publicity.

Our committee did not have complete jurisdiction, part belonged to the Agriculture Committee, and as a result of conflict of jurisdiction raised by others in the agricultural committee, a Select Committee on Nutrition and Human Needs was set up.

Enough progress was made in 2 years of hearings by this select committee composed of people both from this committee and from the Agriculture Committee, that in less than 2 years time the President of the United States said this spring, no one in America, no informed person any longer doubts that there is serious malnutrition and hunger in America. The number of the newspapers, including some in my own State, that 2 years ago editorialized and attacked the hearings now have changed and say there is malnutrition and hunger in America and we must do something about it.

I illustrate that as an example of what two committees of the Senate did in 2 years time to bring out that information which affects at least 20 million of our people, up to 30 million according to estimates.

There is serious malnutrition and hunger in some 20 to 30 million people. Estimates were that it could be cured, the lowest estimate was for a billion dollars a year, the highest was \$3 billion. We leveled it out.

The informed people in this field have said with something between \$1½ to \$2 billion a year we could cure malnutrition. We know the great impact that would have on health mentioned in Dr. Stallones' paper. Starvation and disease we know flow from the result of weakened bodies unable to withstand the exposure to virulent diseases.

The war in Vietnam is costing us roughly \$3 billion a month. For a billion dollars a year, or the cost of 20 days of war in Vietnam, we could cure malnutrition and hunger and it would not take as long as it would to cure disease.

The effects of generations of malnutrition and hunger will be harder to wipe out, but immediate cure we can bring about in a year's time.

It will take generations to overcome the effect on the small children and babies and mothers suffering from malnutrition. I think we are facing breakthroughs in America. I think these schools of public health will be in the forefront by training enough people in these multiple disciplines, breaking through the disciplinary lines, getting informed people in the different things, your political scientists to apply this in government to accomplish these aims.

We have just begun. You are going to be the real pioneers in this. Thank you for what you have done.

Dr. WEGMAN. Thank you, Mr. Chairman.

The CHAIRMAN. I will order printed in the record here the Association of Public Schools report for July 1969, a progress report on the Federal program of formula grants to schools of public health, and other pertinent material submitted for the record.

(The material referred to follows:)

A PROGRESS REPORT ON THE FEDERAL PROGRAM OF FORMULA GRANTS TO THE SCHOOLS OF PUBLIC HEALTH, 1959-1969

PREFACE

This *Progress Report on the Federal Program of Formula Grants to Schools of Public Health, 1959-1969* describes how the nation's schools of public health have fulfilled their commitment to the Congress and the American people to help provide expanded and higher quality services to people by training of health personnel. The formula grants allocated to the schools under the Hill-Rhodes Act have been the key factor in training the vitally needed cadre of health specialists that are in such short supply in Federal, State, and local health agencies.

The schools of public health¹ and their deans, faculty members, students, and graduates who are a part of this national health effort are grateful for the assistance, encouragement, and support given them by the Congress, the American taxpayers, and their colleagues in other health professions.

This *Progress Report* also outlines the historical background of the establishment of the formula grant program; the amounts and uses to which such funds have been utilized by the schools; the spectacular results that have been achieved during the past decade; the varied roles played by schools of public health; and the dimension of future needs for the Fiscal 1970-1973 period.

Finally, it shows how the schools of public health—with the assistance of the Federal formula grant program funds—have been able to fulfill their mission in serving the complex changing health needs of our modern society, in meeting new challenges to our health environment, and in seeking innovative approaches to the age-old problems of disease, chronic illnesses, and the protection and promotion of our national health and well-being.

A PROGRESS REPORT ON THE FEDERAL PROGRAM OF FORMULA GRANTS TO THE SCHOOLS OF PUBLIC HEALTH² 1959-69

INTRODUCTION

The purpose of this Progress Report is to render an accounting of stewardship to the Congress and the American people on what has been accomplished during the past ten years in utilizing formula grants to augment the number of trained

¹ Schools of public health are located at the following institutions—University of California (Berkeley), University of California (Los Angeles), Columbia, Harvard, Yale, Johns Hopkins, North Carolina, Michigan, Minnesota, Tulane, Pittsburgh, Puerto Rico, Oklahoma, Hawaii, Loma Linda, and Texas (Houston), accredited in June 1969.

² Section 309(c) of the Public Health Service Act.

public health professionals to provide services to the people of our country through Federal, State, and local health agencies.

A relatively small amount of Federal funds have been invested in this program. But few Federal programs have produced such a significant impact in furthering national objectives and in meeting urgent national needs. This *Progress Report* describes how such results have been achieved, notes the key role that graduates of schools of public health play in our country, and projects the needs for continued formula grant support over the next several years.

LEGISLATIVE HISTORY

The Hill-Rhodes Act of 1958 (P.L. 85-544) was the first formal recognition by Congress of the Federal responsibility in providing formula grant assistance to institutions of higher education to assist in comprehensive graduate training in the public health professions.

The bi-partisan bill was sponsored in the House of Representatives by Rep. George M. Rhodes (D., Pa.) and was co-sponsored in the Senate by Senators Lister Hill (D., Ala.), John F. Kennedy (D., Mass.), Pat McNamara (D., Mich.), Irving Ives (R., N.Y.), and John Sherman Cooper (R., Ky.). It was passed by a unanimous vote in both the House and Senate after extensive hearings and was signed into law by President Eisenhower.

The Act amended Section 314(c) of the Public Health Service Act by earmarking \$1 million a year for a two year period in grants to accredited schools of public health to provide comprehensive professional public health training. It specified that primary consideration be given in the allocation of funds to the number of Federally-sponsored students attending each school.

During the debate on the measure, it was pointed out that the eleven schools of public health were—in effect—the public health equivalent of West Point, Annapolis, and the Air Force Academy in providing professional health training and leadership for the Nation. Most graduates of the schools go into the public service in staffing essential public health positions in municipal, county, State, and Federal governmental levels.

When the original formula grant legislation was enacted, there were eleven accredited schools of public health eligible for grants—five State universities (California at Berkeley, Michigan, Minnesota, North Carolina, and Puerto Rico) and six privately-endowed institutions (Columbia, Yale, Harvard, Johns Hopkins, Pittsburgh, and Tulane).

Since then, four new schools have been accredited and have shared in the formula grant program. Three are State universities (Hawaii, California at Los Angeles, and Oklahoma) while one is privately-endowed (Loma Linda University in California). Another State university—the University of Texas at Houston—was being accredited in June 1969 and is eligible for formula grant funds for the 1969-70 school year. Several other schools are expected to apply for accreditation during the next several years to help meet the growing need for professional public health personnel.

In 1960, Congress enacted P.L. 86-720, which extended the formula grant program with a \$1 million annual authorization and removed the time limitation on the program. It also authorized \$2 million annually for project grants to schools of public health, nursing, and engineering to strengthen and expand graduate public health training.

A provision of the Community Health Facilities and Services Act of 1961 (P.L. 87-395) amended the original formula grant program by increasing the annual authorization from \$1 million to \$2.5 million to meet rising teaching needs and student enrollment at the schools. The program was also extended until June 30, 1966.

A section of the Community Health Amendments of 1965 (P.L. 89-109) increased the formula grant authorization from \$2.5 million to \$5 million for one year.

The Comprehensive Health Planning and Public Health Service Act of 1966 (P.L. 89-749) again extended the formula grant program to schools of public health for two years and authorized \$5 million for each of the two succeeding fiscal years. This measure also transferred the program from Section 314 to Section 309(c) of the Public Health Service Act.

The Partnership for Health Amendments of 1967 (P.L. 90-174) further extended the formula grant program, authorizing \$5 million for the fiscal year ending June 30, 1968, \$6 million for the year ending June 30, 1969, and \$7 million

for the year ending June 30, 1970. These step increases were further recognition by Congress of the growing magnitude of the public health training needs of the country. Authorization for the formula grant program will expire unless extended during the present Congress.

ALLOCATION FORMULA

Regulations promulgated by the Public Health Service pursuant to the legislative intent of the original Act have resulted in the following formula in the allocation of formula grant funds:

One-third of each annual appropriation is allocated equally among the schools of public health in recognition of basic teaching costs that do not vary in direct proportion to the number of Federally-sponsored students.

Two-thirds of each annual appropriation is allocated to the various schools in proportion to the number of Federally-sponsored students in each school, using the average of the past three fiscal years to avoid wide fluctuations from year to year.

Thus, the accreditation of new schools of public health (without a corresponding increase in appropriations) actually *reduces* the proportionate share of total funds allocated to each school.

CRITICAL NEEDS—FISCAL 1970 APPROPRIATIONS

This unfortunate situation presently faces all schools of public health in the 1969-70 school year. The University of Texas at Houston school of public health was accredited in June 1969 and is eligible for formula grant funds. Under the present law, \$7 million is authorized for the Fiscal 1970 year; but only \$4,554,000 of this amount has been requested in the new budget—the same amount as appropriated by Congress last year. Thus, unless additional funds are appropriated this year, each school of public health will *lose* part of its allocation to help provide funds for the new school in Texas.

Actually, even the full appropriation of the \$7 million in formula grant funds authorized for this year would still fall short of meeting actual needs of the schools. In a survey conducted by the Association of Schools of Public Health in April, 1969 the fifteen presently accredited schools of public health have estimated their formula grant needs at \$8.8 million for the 1969-70 school year. This amount would be required just to keep pace with increased student enrollment, higher costs, and to correct existing shortcomings in instruction. This is \$1.8 million *more* than authorized by Congress for Fiscal 1970 and almost *double* the amount of formula grant funds requested in the Fiscal 1970 budget.

In the recent survey conducted by the Association of Schools of Public Health, schools have indicated that additional funds that are needed would be used to correct what they consider to be major existing shortcomings in instruction in such vital areas as:

Environmental Health, including Radiation Health and Occupational Health.

Comprehensive Health Planning and Health Administration.

Epidemiology and Related Fields.

Population and Family Planning, including Maternal and Child Health.

Mental Health.

Nutrition.

Medical Care and Hospital Administration.

FORMULA FUNDS VS. TOTAL COSTS OF SCHOOLS

Formula funds provided under the Federal program have *not* kept pace with rising costs of basic operations and teaching at the schools of public health. Table 1 shows that while total student enrollment has almost *doubled* since 1963, total costs have increased by almost *three times*. The proportion of costs met by formula grant funds in 1968 was actually less than it was in 1963. Meanwhile, the number of Federally-sponsored students at the schools has steadily increased and now amounts to *two-thirds* of the total enrollment.

While the 1,961 Federally-sponsored students attending the fifteen schools of public health represented 67 percent of the total student enrollment, tuition received by the schools for these students was only \$2.1 million, or about 6.5 percent of the total costs for basic operations and teaching for the year. Even with the formula grants and various other restricted types of grants received by

the schools under other Federal programs, it is clear that the schools are—in effect—heavily *subsidizing* the training of the essential cadre of public health professionals for all levels of government service. Limited State funds or private endowments *cannot* meet the rapidly growing needs of the schools of public health in fulfilling these vital national health responsibilities.

TABLE 1

Year	Total enrollment	Total cost basic operations and teaching	Formula funds allocated	Proportion of costs met by formula funds (percent)	Proportion of federally-sponsored students in total enrollment (percent)
1963.....	1,618	\$11,600,000	\$1,900,000	16	56.4
1968.....	2,908	\$32,500,000	4,000,000	12	67.0

¹ When one adds research and service activities, the total becomes \$64,099,000.

ROLES OF SCHOOLS OF PUBLIC HEALTH

Schools of public health have a vital national and an international role. The Federal government and the 50 States are dependent on the fifteen schools in twelve States and Puerto Rico for the supply of graduate trained public health professionals. A survey shows that *only 25 percent* of the graduates actually work in the States where they attend public health school—a clear indication of the national characteristic of the schools. States that do *not* have schools rely on the continuing efforts of institutions in other States for trained public health manpower. The schools have also been heavily involved in the international health field for many years. Many graduates are foreign nationals, often sponsored by our government as part of the AID program. Most return to careers of public health leadership in their own countries.

The schools play essential roles in many diverse fields that are important to the national welfare:

Teaching.—The teaching role of the schools prepares physicians, dentists, engineers, nurses, and other professional public health personnel to organize and administer programs and to perform research and teaching functions aimed at controlling and preventing disease and other health hazards. It is also directed toward the promotion of sound health practices among population at the local, State, and Federal levels.

Public service.—A survey of graduates of public health schools shows that *more than 90 percent* enter professional employment in public agencies at the local, State, or Federal health levels. Many faculty members of the schools also serve as expert consultants to public and private health agencies concerned with public health matters. The increasing concern with such health problems as air and water pollution, aging, chronic diseases, radiation, accident prevention, mental health, and nutrition has caused a corresponding increase in demands for new curricula and training of professional public health personnel in these and other fields to fill existing vacancies in public agencies.

Research.—The schools' research role is oriented primarily to the search for the causes and for the means of controlling and preventing disease, accidents, and other health hazards on a mass basis, rather than to the clinical aspects of healing sick persons—the primary concern of research in medical schools and hospitals. Other public health research develops basic knowledge of the social, cultural, and economic factors involved in effective application of proven health measures among various population groups.

INVESTMENT AND RESULTS

Since the enactment of the Federal formula grant program in 1958, Congress has authorized \$41 million in assistance to the schools of public health. Of this amount, \$26,454,000 has been subsequently appropriated by the Congress, allocated by the Public Health Service, and expended by the schools to carry out the purposes of the program. Table 2 shows the figures for each fiscal year in which the program has functioned. During this period, the number of schools of public health has increased from eleven to the current level of sixteen, reached by the accreditation of the University of Texas (Houston) in June of 1969.

TABLE 2.—FORMULA GRANT ASSISTANCE TO SCHOOLS OF PUBLIC HEALTH—AMOUNTS AUTHORIZED AND APPROPRIATED BY CONGRESS, FISCAL YEARS 1959-70

Fiscal year ending June 30—	Number of schools	Amounts authorized	Amounts appropriated
1959.....	11	\$1,000,000	\$450,000
1960.....	12	1,000,000	1,000,000
1961.....	12	1,000,000	1,000,000
1962.....	12	2,500,000	1,900,000
1963.....	13	2,500,000	1,900,000
1964.....	13	2,500,000	1,900,000
1965.....	13	2,500,000	2,500,000
1966.....	14	5,000,000	3,500,000
1967.....	14	5,000,000	3,750,000
1968.....	15	5,000,000	4,000,000
1969.....	15	6,000,000	4,554,000
1970.....	16	7,000,000	(¹)

¹ Appropriation pending.

In the fiscal year ending June 30, 1969, \$6 million in formula grants were authorized and \$4,554,000 appropriated by Congress and allocated to the schools of public health. Grants ranged from a high of \$639,000 for one school down to a low of \$119,500. The average size grant for the fifteen schools sharing in the formula program was \$303,000 for the 1968-69 school year.

The success of any program in which the public interest is involved must be measured by the amount of Federal funds expended and the significance of the results achieved. What has been the result of this investment of taxpayers' dollars in the type of programs carried on by the nation's schools of public health? To what extent have these expenditures helped to meet our health needs? Federal formula grant funds—plus those they helped to generate—have produced these dramatic results in the 1959-69 years since enactment of the program as compared with the comparable time period immediately preceding its enactment:

A 124 percent *increase* in the number of students enrolled at schools of public health (24,361 as compared with 10,872).

A 74 percent *increase* in the number of graduate degrees awarded by schools of public health (11,240 as compared with 6,451). (See Table 3 for data listed by years for this period.)

A 195 percent *increase* in the number of Federally-sponsored students at schools of public health (from 717 in 1959 during first year of program to 2,115 in the current school year).

A 187 percent *increase* in the total number of students currently enrolled at schools of public health in the 1969-70 year as compared with the 1957-58 year (3,525 as compared with 1,230).

An *increase* from 11 to 16 in the number of accredited schools of public health providing comprehensive graduate training and degrees in the health professions.

The *addition* of hundreds of new courses in the schools to meet the health needs of our changing society, such as Environmental Health, Mental Health, Maternal and Child Health, Radiological Health, Medical Care for the Aged, Comprehensive Health Planning, Epidemiology, Nutrition, Hospital Administration, Industrial Health, and many others.

TABLE 3.—U.S. SCHOOLS OF PUBLIC HEALTH—GRADUATE DEGREES AWARDED AND STUDENT ENROLLMENT, 1948-69

Year	Number of graduate degrees awarded	Number of students enrolled in credit courses	Year	Number of graduate degrees awarded	Number of students enrolled in credit courses
Before enactment of formula grant program:			After enactment of formula grant program:		
1948.....	460	638	1959.....	785	1,304
1949.....	471	865	1960.....	744	1,266
1950.....	524	969	1961.....	766	1,399
1951.....	620	1,025	1962.....	747	1,619
1952.....	604	1,039	1963.....	798	1,848
1953.....	608	998	1964.....	1,032	2,047
1954.....	584	915	1965.....	1,092	2,267
1955.....	567	971	1966.....	1,195	2,608
1956.....	582	1,045	1967.....	1,196	3,115
1957.....	659	1,177	1968.....	1,337	3,363
1958.....	772	1,230	1969.....	1,548	3,525
Total.....	6,451	10,872	Total.....	11,240	24,361

Analysis of Table 3 shows, as is generally true in higher education, that there is a delayed and cumulative effect from the increase in formula grant funds. Thus, from 1959 to 1963 there was little difference in the number of graduates, which, from 1963 to 1969, the last six years, the number of graduates practically doubled. A similar effect, with a shorter lag period and a greater proportional growth, is obvious for student enrollment.

USES OF FORMULA GRANT FUNDS

Schools of public health, unlike other institutions, cannot rely on alumni contributions for financial support since virtually all graduates are engaged in public service activities. Thus, they must depend more heavily on grant programs than many of the other professional schools. Of the total expenditures of \$64 million by the fifteen schools during the 1967-68 school year, the level of support they received from their parent institutions ranged from 6 percent to 33 percent of their operating expenses, with an overall average of only 23 percent.

In this situation the importance of formula grant funds is characterized not only by the amount but by the flexibility of this type of financial support, which enables the schools to stretch the funds for more effective use.

Over the years, each school has devised methods to maximize the effective use of formula grant funds. In its questionnaire to Deans of the schools in April, 1969, the Association of Schools of Public Health asked for statements on how the formula grants have been used. Here is a representative sample of comments received:

"The major programs for which formula grant funds are currently being used * * * are public health nursing, maternal and child health, biostatistics, support staff for core curriculum, and strengthening field training needs in health education. Existing teaching programs have been expanded and improved by the purchase of audio-visual equipment, instructional and library materials, and laboratory equipment * * * In community service, continuing education has been a major support item of this School's activities for health workers in the State."

* * * * *
 "Formula grant funds constitute an indispensable component of our budget for instructional purposes. Literally speaking, these funds undergird, in varying degrees, all of the ten academic departments * * * Between 1958 and 1968, student enrollment increased by more than 100%. This rapid expansion could not have taken place without the financial support of formula grant funds."

* * * * *
 "Formula grant funds made possible a full-time obstetrician with training and experience in Maternal and Child Health and Population Problems, enabling us to offer courses in this area such as Family Planning, Maternal Health Guidance Programs, etc. Extension programs for outlying health departments were conducted as well as the organization and presentation of a program on Drug Abuse. Currently, a program is being initiated to develop community betterment programs in a Mexican-American community and another among a Negro and Mexican-American community."

* * * * *
 "Departments chiefly aided by formula grant funds are Microbiology, Behavioral Sciences, Environmental Sciences, Health Services Administration, Biostatistics and Demography, and Human Ecology. Since the formula funds have not significantly increased, they can provide little base for further expansion until appropriations are increased.

"The formula grant funds are interwoven into the fabric of this School's staff budgets to such an extent that, if they were no longer available, the entire program would be in jeopardy. They are used in practically every programmatic area in the School's teaching and training activities. Further, an increase in grant funds is needed urgently if existing programs are to keep pace with rapidly changing events and if programs needing basic development are to be instituted. Areas which need updating and improvement are environmental health, epidemiology, and public health administration. Newer areas which need development are within the scope of behavioral sciences as they affect the public's health, population control, and area-wide comprehensive planning."

* * * * *

"Formula grant funds play an extremely important role in the teaching program of the School * * * Changing social needs require flexibility in planning of teaching. Formula grants permit the development of specific training programs which will meet immediate needs, such as family planning, programs meeting health needs of ghetto areas * * * and problems of urban populations."

* * * * *
 "Formula grant funds have been used to meet a variety of needs in the School. They have provided for the employment of faculty in the areas of public health nursing and mental retardation * * * Formula grant funds also enabled the School to purchase some of the more expensive and urgently needed teaching equipment for which other funds were not available. Equipment such as calculators, microscopes, and projectors were purchased."

* * * * *
 "Formula grant funds have enabled us to continue to meet the varied teaching responsibilities imposed by new and changing public health needs. Faculty have broadened and strengthened programs in Air Pollution, Biochemistry, Health Administration and Planning, Health Education, Occupational Health, Public Health Nursing, and Sanitary Engineering * * * The availability of these funds has been a significant factor in making it possible for us to more than double student enrollment during the past decade. Without these funds, it would have been practically impossible to expand our faculty to provide high quality training for the rapidly expanding student body * * *"

"Formula grant funds have been important in the instrumentation of various activities in our School which have had considerable impact on community affairs. Our School has functioned actively as consultant to various legislative bodies in health matters. Through an evaluation study we were instrumental in the reorganization of health services provided to workers through the State Insurance Fund. Our cooperation was also requested by the committee planning a project for a Model City * * *"

* * * * *
 "If formula grant funds ceased during one month, the School would have to close down the following month. Thirty-five fulltime faculty members receive part of their salary from such funds and the entire salary of nine lecturers is dependent on these sources . . . This money has enabled us to approximately double our class size in three years, has equipped a good library for us, paid for a librarian, enabled us to obtain up-to-date teaching supplies, enabled our biometry section to begin converting its teaching from calculators to computer terminals, and brought many distinguished scientists to address our students and faculty * * * Formula grant funds are the oxygen supply of our scholastic body and we shall surely asphyxiate without them * * *"

NATIONAL HEALTH LEADERS

Graduates of schools of public health play vital roles in our national health effort. The list that follows represents the wide range of activities and agencies—Federal, State, and local—in which key positions are currently held by public health school graduates. This listing is drawn from a sample of graduates of the various schools.

Federal level:

- Public Health Service
- Food & Drug Administration
- Indian Health Service
- Air Pollution Control
- Migratory Workers Program
- Environmental Health Sciences
- Tuberculosis Control Bureau
- Accident Control Bureau
- Center for Health Services and Development
- Center for Radiological Health
- Chronic Disease Control Bureau
- National Institutes of Health
- Atomic Energy Commission
- Social Security Administration
- Regional Medical Programs
- Comprehensive Health Planning

Federal level—Continued

International Health Programs
 Population Control Bureau
 Communicable Disease Center
 Center for Vital Statistics
 Heart & Stroke Control Bureau
 Office of Economic Opportunity
 Aedes Aegypti Eradication Program

State and municipal levels :

State Health Commissioners
 County Health Officers
 City Health Officers
 Public Health Nurses
 Nutrition Programs
 Mental Retardation Programs
 Dental Health Programs
 Health Education Programs
 Comprehensive Health Planning Agencies
 Rehabilitation Programs
 Rat Control Programs
 Maternal & Child Health Programs
 Tuberculosis Control Programs
 Veterinarian Service Programs
 Secretaries of Health & Welfare
 Vital Statistics Offices
 Sanitary Engineering Offices
 Mental Health Centers
 Comprehensive Health Service Programs
 Hospital Planning Councils
 Computer Units
 Regional Medical Programs
 Drug Control Programs
 Social Service Departments
 Alcohol Control Programs
 Air & Water Pollution Control Programs
 Venereal Disease Control Programs
 Laboratory Health Services

Miscellaneous :

Voluntary Health Agencies
 Health Insurance Programs
 Mental Health Agencies
 Cancer Societies
 Research & Teaching in Schools of Medicine, Nursing, Dentistry, Veterinary
 Medicine, Public Health, and Allied Health Professions
 Departments of Preventive Medicine in Medical Schools
 Health Foundations
 Heart Associations
 International Health Organizations
 Tuberculosis Associations
 Mental Retardation Agencies
 Population Control Organizations

DIMENSIONS OF NEED—1971-73

As has been already noted, the schools of public health have estimated their financial needs for the 1969-70 school year (FY 1970) at \$8.8 million in formula grant funds. This amount is required just to keep pace with increased student enrollment, the need for new courses, and rising operating costs. This compares with a current authorization ceiling of \$7 million for Fiscal 1970 and the President's budget request of only \$4,554,000—the same amount as appropriated by Congress last year.

The serious financial crisis facing schools of public health during the next several years poses a growing threat for the 1970's in their ability to supply the increasing demands by health agencies for trained professional health manpower. Vacancies already exist in key health positions at all levels of government despite the tremendous increase in the numbers of skilled health personnel being trained each year by the schools of public health.

At their annual meeting in Minneapolis last April, the Deans of all the schools of public health in the United States expressed their concern in a communication sent to President Nixon, HEW Secretary Finch, and Budget Director Mayo. It said:

"Deans and Directors of the sixteen university schools of public health, meeting to review current educational situation, respectfully but urgently call attention to critical need to provide increased financial support for comprehensive preparation of graduate physicians and other health leaders needed for public service in Federal, State, and local governments, who are not vitally important to present and future health of our people, particularly those now deprived of health services in inner cities and poverty areas.

"Although \$7 million authorized in fiscal 1970 for formula grants so essential to operation of schools of public health, only \$4,554,000 requested by past administration. Unless Congress appropriates full amount authorized we must report that increased manpower shortage will seriously impair possibility of meeting nation's health needs."

It is clear that since the schools of public health are the *only* source to train these vitally needed health professionals, our national needs can only be met by increasing the appropriations level in the Fiscal 1970 budget and by raising the authorization ceilings by legislative action in the 91st Congress to more realistic levels. Only then and by the subsequent appropriation of adequate funds during the Fiscal 1971-73 years can our Nation be assured of meeting our national, States, and local health manpower requirements.

How can these needs be determined? The Association of Schools of Public Health in April 1969 solicited data to pinpoint specific quantitative and qualitative needs in a questionnaire to the Dean of each school of public health. Detailed data for each of the three years—1970-71, 1971-73—were furnished by the schools and carefully analyzed. The results are shown below:

An estimated \$51 million in Federal formula grant funds will be required by the nation's schools of public health during the Fiscal 1971-1973 period to meet the expanding student enrollment, teaching programs, and increases in basic operating costs:

	<i>Million</i>
Fiscal year 1971-----	\$12.5
Fiscal year 1972-----	16.8
Fiscal year 1973-----	21.6

The schools have estimated that these funds, if authorized and appropriated by Congress, would be distributed approximately as follows in the various areas of instruction:

	<i>Percent</i>
Epidemiology-----	14
Environmental health, including radiation and occupational health-----	13
Health administration, including comprehensive health planning-----	13
Continuing education-----	10
Population and family planning, including maternal and child health-----	8
Health education-----	7
Biometry-----	7
Medical care and hospital administration-----	6
Mental health-----	5
Nutrition-----	5
Behavioral sciences-----	4
Public health nursing-----	2
Aging and chronic diseases-----	2
International health-----	2

The remaining two percent of the funds would be used to improve supportive service for the teaching programs of the schools of public health.

SUMMARY

This *Progress Report* has described how Federal formula grant funds have been utilized by the nation's schools of public health and presented the remarkable record of accomplishment made as a direct result of the financial assistance provided during the Administration of four Presidents by the 85th through the 90th Congresses under bi-partisan support.

It is clear that such progress in public health training and practice could *not* have been made without formula grant funds, which provide the flexibility required in the schools' teaching and administrative structure.

It is also clear that future progress in the public health field in America depends, in large part, on the continuing and expanding support of the schools of public health through formula grant funds. Estimates of the dimension of these needs during the next several years have been provided.

To the achievement of this growing dimension of needs for the decade of the 1970's, the Nation's schools of public health rededicate themselves.

THE ASSOCIATION OF STATE & TERRITORIAL HEALTH OFFICERS,

Washington, D.C., October 23, 1969.

HON. RALPH YARBOROUGH,

Chairman, Senate Committee on Labor and Public Welfare, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: I am writing on behalf of the Association of State and Territorial Health Officers to support S. 2809 that you introduced to extend and expand the formula grants for schools of public health that are authorized by Section 309(c) of the Public Health Service Act. We urge the enactment of this legislation.

State health departments must have adequate numbers of trained public health personnel in order to carry out their responsibilities for improving the level of health. Furthermore, these responsibilities have increased in recent years with the passage of health legislation, including the enactment of Medicare, Medicaid, and the Comprehensive Health Planning and Public Health Services Act. Since there are only 16 schools of public health to serve the 50 States, it is apparent that the Federal investment in the Section 309(c) formula grants is justified. The rising costs of education, expanded enrollments, and the establishment of new schools of public health are factors that warrant the increased authorizations for appropriations as provided for by S. 2809.

I respectfully request that this letter be made a part of the printed record of hearings.

Sincerely yours,

J. E. PEAVY, M.D., *President.*

THE UNIVERSITY OF MICHIGAN, SCHOOL OF PUBLIC HEALTH,

Ann Arbor, Mich., November 4, 1969.

HON. RALPH YARBOROUGH,

Chairman, Committee on Labor and Public Welfare, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: At the hearings before your Subcommittee on Health, held on October 20, 1969, there was some question regarding the overall proportion of federal funds supporting basic operations and teaching at schools of public health. Accurate data for all the schools are not readily available but I do have the information for our own school which, as the largest, is probably not significantly different from the average.

When one takes into account, in addition to the formula grants under Section 309(c), the project grants under 309(a), and the various kinds of faculty and teaching support coming through other grants such as those from the National Center for Health Services Research and Development, the Office of Comprehensive Health Planning, the National Center for Air Pollution Control and various grants from the National Institutes of Health, our total figure is 34.9%, \$1,619,473 out of a total of \$4,633,989, expended for basic operations and teaching.

Dr. Steinfeld, as I indicated in my testimony, is completely right in noting that federal aid is not limited to the formula grants. I do not understand, however, how he could have gotten the figure of 67% which he cited, unless perhaps he included both traineeships and sponsored research. Traineeships, of course, although administered by schools, are actually awarded to students. Furthermore, I would point out that the other grants are earmarked for specific purposes and only with the

formula grant, with which S. 2809 is concerned, may we maintain the broad coverage of multidisciplinary subjects necessary for a high quality educational performance.

I hope this additional information is helpful and urge the Committee once more to approve your bill as introduced.

Very truly yours,

MYRON E. WEGMAN, M.D., *Dean.*

The CHAIRMAN. I want to thank the witnesses for their contributions and if there is nothing else we will now adjourn the hearing.

(Whereupon, at 11:35 a.m., the subcommittee adjourned, subject to call of the Chair.)

