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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT—INDEPENDENT AGENCIES APPROPRIATIONS FOR 1982

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETY-SEVENTH CONGRESS

FIRST SESSION

SUBCOMMITTEE ON HUD—INDEPENDENT AGENCIES

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PART 8

MEMBERS OF CONGRESS AND PUBLIC WITNESSES

Printed for the use of the Committee on Appropriations

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U.S. GOVERNMENT PRINTING OFFICE

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT—INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1982

THURSDAY, MAY 7, 1981.

MEMBERS OF CONGRESS AND PUBLIC WITNESSES

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESS

HON. DAN GLICKMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mrs. BOGGS [presiding]. Good morning. The Committee will come to order.

We welcome our colleague and good friend, Dan Glickman. Dan, it is delightful to have you here.

Mr. GLICKMAN. Thank you.

Mrs. BOGGS. We will be happy to hear your testimony. You may proceed as you wish.

Mr. GLICKMAN. I ask that my entire statement appear in the record. Maybe I can expedite matters a bit.

Mrs. BOGGS. Without objection.

Mr. GLICKMAN. I would like to talk basically about two things today.

One concerns my role as Chairman of the Science and Technology Subcommittee on Transportation, Aviation, and Materials.

We have jurisdiction over the NASA Aeronautics budget. We have some of the jurisdiction on the space side but most of that is handled by Mr. Flippo's Subcommittee.

This year the Administration requested a level of funding for aeronautics that was four percent less in actual dollars than the amount appropriated in fiscal year 1981, which was in turn ten percent less than the year before. There has been a steady decrease, even during the end of the Carter years, in funding for aeronautics research.

I suppose the point that I would make is that while I don't expect to see any major increases in the aeronautics budget this year, particularly if the Gramm-Latta budget passes, but I submit that there is really one industry that America is still number one in, and that is the production of airplanes. We sell roughly 90 percent of all commercial airplanes in the world. They are made in the United States of America.

NASA is largely responsible for the fact that the U.S. is still the number one producer of airplanes. Most of the new technologies that Boeing, Lockheed, Douglas, Cessna, and Lear Jet utilize and

the new engine technologies that Pratt & Whitney and General Electric employ have come from NASA's work.

Within the NASA budget the Administration did recommend some increases, but aeronautics is the only one that is being cut below the 1981 level. Most are not experiencing big growths, but we have had several years of decline. Our Subcommittee increased the Reagan budget by $11.2 million. That is still $50 million below the Carter budget of 1982 and still below what was actually appropriated last year.

We just didn't want the cuts to go quite as deep. We added money for a variety of areas which appear on pages three and four of my testimony. As I recall, the total NASA aeronautics budget was $510 million, including personnel.

I suppose my main point is this: When I was in Japan in January on a science trip, the MTSI board there that handles the relationships between government and industries said the problem with Americans is that we neglect our winners and subsidize our losers. I suppose the main point is that the production of airplanes is a winner for America. The reason why it is a winner is because we have been ahead of every other country in the world in terms of research and development. I just hope that the Subcommittee will do its best to fully fund the aeronautics portion of the NASA bill within our current budgetary limits.

The second point I would like to make is one of my pet peeves I have had since I have been in Congress. That has been on printing, wasteful printing, wherever it exists. One of the things that I would just like to mention to you on this is the Consumer Information Center By the way, now I am talking not as the Subcommittee chairman, but personally.

The Consumer Information Center is operated by the GSA in Pueblo. I think that is where they are headquartered.

I am convinced that much has been published by the Federal government that should not be published by the government, and is distributed at prices which either reflect below cost or are absolutely free.

Looking over the budget materials submitted by the Consumer Information Center, along with its appropriation requests, it seems to me the Center is in the business of encouraging production and distribution of government publications developed by agencies throughout the government. From that budget presentation, it is evident that the center has been extremely successful in that endeavor. According to the documentation, 21 million catalogues were distributed so people would know that publications were available in fiscal year 1982 and 25.6 million publications were requested in fiscal year 1980. Ninety percent of the publications distributed by the Consumer Information Center are free or cost less than $2 and the participating agencies pay proportionate shares of the costs of distributing free publications. But still the Center comes to the Congress for an appropriation of about $1.3 million. Admittedly, that is down from $1.58 million that the Carter Administration requested for the upcoming fiscal year, but the cuts have been proportionately small.

I know the President and OMB are looking into the whole area of printing costs. I am not advocating eliminating this center, but it

may be possible to either reduce or strike the appropriation and to include instructive language in the Committee report directing the Center to adjust the prices of various publications which it distributes to cover all associated costs.

It would seem to me that this is a small example of the kind of cuts that we can make. You know, we publish information on a lot of things: dried flower arrangements, low calorie protein diets, and tips for motorists. These are all interesting documents, some productive, some not so productive. I don't want to make a value judgment on that. My point is, if we are going to go to a system of user fees, I think the public that wants these documents should pay for them.

That concludes my testimony regarding my concerns about the aeronautics budget my side concern about printing at the Consumer Information Center.

[The statement follows:]

STATEMENT BEFORE THE
APPROPRIATIONS COMMITTEE
BY
CHAIRMAN DAN GLICKMAN
SUBCOMMITTEE ON TRANSPORTATION,
AVIATION, AND MATERIALS
COMMITTEE ON SCIENCE AND TECHNOLOGY
MAY 7, 1981

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO BE HERE TODAY. MY PURPOSE IS TO REPORT ON THE ACTIONS TAKEN BY THE SCIENCE COMMITTEE IN THE AERONAUTICS PORTION OF THE NASA AUTHORIZATION.

AS YOU KNOW, JURISDICTION OVER NASA IS SPLIT BETWEEN TWO OF OUR SUBCOMMITTEES. THE SPACE PORTION IS HANDLED BY THE SUBCOMMITTEE ON SPACE SCIENCE AND APPLICATIONS, AND THE AERONAUTICS ACTIVITIES ARE HANDLED BY THE SUBCOMMITTEE ON TRANSPORTATION, AVIATION, AND MATERIALS, WHICH I CHAIR.

IT IS THIS SECOND PART THAT I WANT TO DISCUSS BRIEFLY.

THIS YEAR, THE ADMINISTRATION REQUESTED A LEVEL OF FUNDING FOR AERONAUTICS THAT IS 4% LESS, IN ACTUAL DOLLARS THAN THE AMOUNT APPROPRIATED FOR FY 1981, WHICH WAS, IN TURN,

10% LESS THAN THE YEAR BEFORE.

NOW, MR. CHAIRMAN, I WOULD SUBMIT THAT THIS IS THE WRONG DIRECTION IF WE WANT TO PRESERVE ONE OF AMERICA'S SUCCESS STORIES -- OUR AVIATION INDUSTRY. TO MY MIND, CONTINUED BUDGET CUTTING IN THIS AREA IS LIKE EATING OUR SEED CORN.

AS YOU KNOW, NASA AND ITS PREDECESSOR AGENCY HAVE A 66 YEAR RECORD OF SOLID CONTRIBUTIONS. IT'S NOT AN ACCIDENT THAT WE BUILD 80% OF THE FREE WORLD'S AIRCRAFT. THERE IS A CONNECTION BETWEEN GOVERNMENT INVESTMENTS IN TECHNOLOGY DEVELOPMENT AND SUCH SUCCESS.

ALSO, I WOULD POINT OUT THAT, OF ALL THE BUDGET CATEGORIES WITHIN NASA, AERONAUTICS IS THE ONLY ONE THAT THE ADMINISTRATION IS CUTTING BELOW THE '81 LEVEL. ALL THE OTHERS ARE EXPERIENCING SOME, ALTHOUGH ONLY MODEST, GROWTH.

CERTAINLY SUCH RESTRAINT IS CALLED FOR THIS YEAR. BUT TWO SUCCESSIVE YEARS OF DECLINE, PLUS THE ADDED BURDEN OF INFLATION IS TOO MUCH.

ACCORDINGLY, THE COMMITTEE INCREASED THE REAGAN REQUEST BY A TOTAL OF $11.2 MILLION. THIS BRINGS AERONAUTICS BACK TO THIS YEAR'S LEVEL, BUT STILL LEAVES IT ALMOST $50 MILLION SHORT OF THE CARTER REQUEST FOR '82.

THE INCREASE REPRESENTS THE NET EFFECT OF SEVERAL CHANGES THAT WE MADE THIS YEAR TO ACHIEVE A BETTER PROGRAM BALANCE. I'LL JUST LIST EACH OF THESE, AND THEN EXPAND ON THEM LATER, IF YOU HAVE QUESTIONS.

1. +$3.0 MILLION - ALTERNATE FUELS AND MATERIALS RESEARCH.

2. +$8.0 MILLION - HIGH SPEED STRUCTURES, AERODYNAMICS AND INTEGRATION.

3. +$4.0 MILLION - LARGE COMPOSITE AIRCRAFT STRUCTURES

4. + $4.0 MILLION - HIGH TEMPERATURE ENGINE CORE TECHNOLOGY.

5. +$12.0 MILLION - PROP-FAN PROGRAM ACCELERATION.

6. -$19.8 MILLION - GENERAL REDUCTION (LOW PRIORITY R&T BASE ACTIVITIES, AVIONICS, PROGRAMS WITH NEAR-TERM APPLICATION, AND LAMINAR FLOW CONTROL).

MR. CHAIRMAN, THAT COMPLETES MY REPORT ON THE FY 82 NASA AERONAUTICS AUTHORIZATION. I'LL BE HAPPY TO ANSWER ANY QUESTIONS.

MR. CHAIRMAN, NOW I WOULD LIKE TO TAKE A FEW MOMENTS TO MAKE A RECOMMENDATION TO THE SUBCOMMITTEE REGARDING ANOTHER MATTER WITHIN YOUR JURISDICTION, THE CONSUMER INFORMATION CENTER OPERATED BY THE GENERAL SERVICES ADMINISTRATION. THE CENTER IS CLEARLY NOT WITHIN THE JURISDICTION OF THE SUBCOMMITTEE WHICH I CHAIR, AND HERE I AM SPEAKING FOR MYSELF AND NOT FOR THE SUBCOMMITTEE.

AS YOU MAY BE AWARE, I HAVE OVER THE LAST FEW YEARS BEEN CONCERNED ABOUT THE AMOUNT OF MONEY THE FEDERAL GOVERNMENT IS SPENDING ON PRINTING AND BINDING OF PUBLICATIONS COVERING A WHOLE RANGE OF SUBJECT AREAS. QUITE FRANKLY, I AM CONVINCED THAT THE FEDERAL GOVERNMENT HAS GOTTEN INTO THE PUBLISHING BUSINESS FAR BEYOND WHAT CAN LEGITIMATELY BE EXPECTED. FROM ALL I CAN TELL, THE ACTIVITIES OF THE

CONSUMER INFORMATION CENTER HAVE SERVED TO FUEL THAT EXPANSION. I CALL UPON THIS SUBCOMMITTEE TO BRING THIS INTO LINE.

IN LOOKING OVER THE BUDGET MATERIALS SUBMITTED BY THE CONSUMER INFORMATION CENTER ALONG WITH ITS APPROPRIATIONS REQUEST, IT SEEMS EVIDENT THAT THE CENTER IS IN THE BUSINESS OF ENCOURAGING PRODUCTION AND DISTRIBUTION OF GOVERNMENT PUBLICATIONS DEVELOPED BY AGENCIES THROUGHOUT THE GOVERNMENT. AND, FROM THAT BUDGET PRESENTATION, IT IS EVIDENT THAT THE CENTER HAS BEEN EXTREMELY SUCCESSFUL IN THAT ENDEAVOR. ACCORDING TO THAT DOCUMENTATION, SOME 21 MILLION CATALOGS, WERE DISTRIBUTED SO PEOPLE WOULD KNOW THAT PUBLICATIONS ARE AVAILABLE IN FY 81 AND SOME 25.6 MILLION PUBLICATIONS WERE REQUESTED IN FY 80.

NINETY PERCENT OF THE PUBLICATIONS DISTRIBUTED BY THE CONSUMER INFORMATION CENTER ARE FREE OR COST LESS THAN $2.00 AND THE PARTICIPATING AGENCIES PAY PROPORTIONATE SHARES OF THE COSTS OF DISTRIBUTING FREE PUBLICATIONS. BUT STILL THE

CENTER COMES TO THE CONGRESS FOR AN APPROPRIATION OF $1.314 MILLION FOR FISCAL 1982. ADMITTEDLY, THAT IS DOWN FROM THE INITIAL CARTER ADMINISTRATION REQUEST OF $1.581 MILLION FOR THE UPCOMING FISCAL YEAR AND EVEN FROM THE REVISED FY 81 BUDGET REQUEST, BUT THE CUTS HAVE BEEN PROPORTIONATELY SMALL.

THE ADMINISTRATION HAS INDICATED ITS INTENT TO CUT BACK THE PUBLICATIONS AND PUBLIC RELATIONS COSTS OF THE EXECUTIVE BRANCH. SINCE THAT IS JUST WHAT THIS CONSUMER INFORMATION CENTER IS ALL ABOUT, I THINK WE HERE IN THE CONGRESS SHOULD HELP THEM ALONG. I DO NOT ADVOCATE ELIMINATING THE CONSUMER INFORMATION CENTER, BUT I DO URGE THIS SUBCOMMITTEE TO STRIKE THE APPROPRIATION IN YOUR BILL AND TO INCLUDE INSTRUCTIVE LANGUAGE IN YOUR COMMITTEE REPORT DIRECTING THE CENTER TO ADJUST THE PRICES OF THE VARIOUS PUBLICATIONS WHICH IT DISTRIBUTES TO COVER ALL ASSOCIATED COSTS: PERSONNEL, TRAVEL, AND TRANSPORTATION OF MATERIALS, RENT AND SO FORTH, PRINTING

AND REPRODUCTION COSTS, PUBLIC RELATIONS ACTIVITIES AND ALL OF THE REST OF THE CENTER'S ADMINISTRATIVE COSTS. IN SHORT, USERS OF THE SERVICE SHOULD PAY THE COST.

CERTAINLY WHEN YOU LOOK AT THE VARIOUS PUBLICATIONS WHICH COME OUT OF THE CENTER, THEY COVER TOPICS WHICH COMPETE WITH PUBLICATIONS AVAILABLE FROM PRIVATE SECTOR SOURCES: "DRIED FLOWER ARRANGEMENTS", "LOW CALORIE PROTEIN DIETS", "TIPS FOR MOTORISTS", AND THOSE ARE JUST SOME OF THE PUBLICATIONS WHICH ARE FREE FOR THE ASKING. AT A TIME WHEN WE ARE TRYING TO REDUCE THE COST OF GOVERNMENT, DOES IT MAKE SENSE TO BE SUBSIDIZING THE DISTRIBUTION OF PUBLICATIONS LIKE THESE? I THINK THAT THE ANSWER IS NO.

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Mrs. BOGGS. Thank you, Dan. Among items one through six on page three of your statement, which is the highest priority in terms of restoring some of the funds?

Mr. GLICKMAN. Obviously I think the highest priority to the Committee would be those things that would increase fuel economy of aircraft. That would be a variety of items. For example, alternative fuels and materials research that goes into maybe using different kinds of fuels besides petroleum. That would be a high priority. The composite aircraft structures has to do with weight of aircraft. That relates to fuel—high temperature engine core technology may relate to fuel economy. Prop fan acceleration, the prop fan, of course, is a new fuel-efficient, propellor-driven aircraft that would use far less energy than a comparable speed jet aircraft. I don't know. I would say that all of the items that we added relate to fuel economy.

The subcommittee felt fairly strongly about item five, which was the prop-fan. The subcommittee also felt quite strongly about items one and three, which have to do with fuels and composites.

Number two, the whole issue of aerodynamics, has to do with what a plan looks like and feels like to reduce fuel consumption. What we are trying to do in our authorizing committee is to instruct NASA to try to direct more of their activities towards fuel efficiency of aircraft, but basically that is kind of—if you look at number six, we reduced some items which we felt were low priority activities which did not have any short-term application to them.

Mrs. BOGGS. Thank you very much for your testimony.

Mr. GREEN. Yes. As one goes through the NASA budget and some of the others under our jurisdiction, one gets the impression that the Administration in these proposals was making a judgment as to what research activities it thought the private sector could and would be likely to pick up and those which it thought the Administration would not.

Arguably, one could say that fuel efficiency has become so important in the sale of airplanes that that is something which the private sector will take up on its own. What is your response to that?

Mr. GLICKMAN. They are doing some of that on their own. The kind of work we are talking about here is what you call—the work on composite aircraft structures is still very basic research.

As a matter of fact, even in the Administration's NASA budget, the Administration and OMB have pretty much let NASA set its own guidelines on how the money should be spent within that budget. You are right, we do not want to be doing work that the aircraft companies and the engine manufacturers can do themselves.

Now, I might tell you that NASA has done a lot of work with the companies. What is called the energy-efficient engine program has been done with the companies. There is a recoupment provision in that where the companies pay back a portion of NASA funds spent.

It is arguable that they could do that totally on their own, but you have seen over the years a historic relationship develop between the government and the aircraft industry.

It is far unique, different, from the automobile industry, where there is massive distrust, and from most other industries. Part of

the reason is because of the military influence in aviation and part of it is because of NASA.

It has been a uniquely American industry.

My only point would be that we don't want to see NASA spend money that Boeing or Douglas can spend themselves, but that because of capital problems much of the work we are talking about is pretty high technology basic research.

We don't advocate anything that has got an application in the next two years if they can do it themselves.

Mr. GREEN. You supplied an offset for $19.8 of the $31 million that you would add in. Do you have any ideas as to where to get the remaining $11.2 million, if you want to hold the overall?

Mr. GLICKMAN. I suppose you could do two things: One is, you could further reduce what is called the R&T base, which is about $130 or $140 million of the kind of—what you call discretionary funds.

This is where the meat and potatoes of NASA's work is. The subcommittee—the $11 million that we went over, some of that had to do with what I call variable cycle engine and supersonic research.

It is not to develop an SST. It is to do some basic engine research. We made the decision we are not going to build an SST.

Some of the research, we felt needed to be done in order that five years from now we don't wake up and Japan has a flight from Tokyo to the west coast in five hours using a Japanese SST. We felt we needed the technology.

I suppose it is not possible that that might not be considered the highest priority research. That would be another possible area, although the subcommittee did feel—and we had a roll call vote on it—that we needed some work on it.

Mr. GREEN. Thank you for your very helpful comments.

Mr. GLICKMAN. Thank you.

Mrs. BOGGS. Thank you very much.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. CHARLES D. HOLLISTER, DEAN OF GRADUATE STUDIES, WOODS HOLE OCEANOGRAPHIC INSTITUTION

Mrs. BOGGS. Dr. Hollister, we know you are not scheduled to be present your testimony at this time, but we would appreciate it if you would come forward now.

Dr. HOLLISTER. Thank you very much.

I am basically here to plead for the continuation within the NSF budget of the graduate fellowships, which is something that I am personally very attached to and have a great deal of experience with. I speak from the point of view of Woods Hole as well as MIT. In fact, the largest number of NSF fellowships that go to MIT as compared to Stanford and Harvard. It is not an insignificant number. They usually fight for second place. It is something that I feel very strongly about.

In 1950, the 81st Congress made a charter to the Science Foundation to promote the progress of science and to advance national prosperity and welfare. I submit that this is an impossible task without new, young, innovative thinkers. I also maintain that the U.S. economy and the technological supremacy we enjoy cannot and will not work without these young minds coming in from below.

The NSF fellows are the quickest through the program. They are the fastest PhDs through the educational system, and they are the most productive. The details are in my written testimony, which I have submitted for the record.

I can assure you that the industrial demand for NSF fellows is impressive. Industry is in the halls at MIT and Woods Hole on a day-to-day basis. They are encouraging the students to leave graduate school at salaries that are competitive with their own advisers. Often, the advisers and the students are up for the same job. The salaries are very, very high.

I think perhaps the most troubling trend in graduate education in this country in science has been the doubling of foreign students coming in as compared to the U.S. American students. I see a trend towards our educating more and more foreign students in the PhD level and going back to the foreign countries, increasing this economy, and not helping ourselves very much. In fact, they come from other countries fully funded, Federally funded. To me it is a real crime that centers of excellence like MIT, Stanford, and Cal Tech that rely so heavily on NSF fellowships end up training foreign students in science and technology. I think that is a real crime.

I am going to close by reading just the last sentence of my written testimony, which I am very pleased to submit.

It is, that the termination of support of brilliant young students in all fields, but especially in the scientific and technological fields, will mean that the tradition of higher education in America for all people, no matter what their economic background, will indeed become a myth.

It is very important to remember that some of the brightest minds we have in this country come from impoverished backgrounds. They just don't happen to be wealthy enough to go to school. We have been able through Federal grants to support these minds. That has had an enormous impact upon the economy. The computer industry started at MIT. It started with Federal funds. To take a $15 million budget out of NSF, or to not line item that and make that a non-negotiable item within the NSF budget, is not only shortsighted, but it is very depressing—especially when you think how little that money is compared to an insurance policy for the future.

I think it would be a sad comment on the 97th Congress to not take this small amount of money into serious consideration for the future of the country, particularly in economic development. It is no surprise to any of us who travel to West Germany, to Japan, to see their students supported and to see their emphasis on Federal support for graduate students be a front line item in their budget.

This is the type of money that is not coming and will not come from industry. Industry does not have the time or the inclination nor do the stockholders allow them to bankroll a five year commit-

ment to graduate students who may or may not choose to work in that particular company.

But I can tell you that the leaders in industry are being hired directly from our top graduate student pool at institutions like Woods Hole and MIT. The industry continues to plead with us to produce more students, more engineers, more scientists. They are in the process of hiring them as fast as we can produce them.

There is not a single student with a PhD that doesn't have at least four job offers. All they have to do is choose where they want to go. I think the Federal government itself would be in a sorry mess if we left all of the innovation to the tenured full professors at these universities and didn't feed from below.

Thank you.

[The statement follows:]

I am here to testify on behalf of the National Science Foundation Graduate Fellowship Program because of its importance to the nation's long-term scientific and technological health. I speak from a position of direct experience with the program and the success it has had in creating futures for individuals and for this country.

The Woods Hole Oceanographic Institution is a private organization dedicated to research and education in the ocean sciences. In 1968 it was given authorization by the Commonwealth of Massachusetts to grant graduate degrees, and entered into a unique partnership with the Massachusetts Institute of Technology to offer graduate programs in oceanography and oceanographic engineering leading to a single degree conferred jointly by both institutions. This graduate program, now in its 13th year has been successful by almost any standard. We feel that certainly one of the most significant measures of success is the number of National Science Foundation Predoctoral Fellows that have been attracted to the program. To date the MIT/WHOI Joint Program in Oceanography and Oceanographic Engineering has granted one hundred doctoral degrees to individuals who are now leaders in their fields of marine science in educational institutions, industry, and government facilities nationwide. Sixteen of these individuals were funded in part by NSF Graduate Fellowships. In addition, over 15% of the current enrollees in our graduate program (13 out of 85) are presently supported by the National Science Foundation. Our experience with the NSF

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Graduate Fellowship Program has greatly reinforced our belief that this is a program that has significant value to the nation far in excess of its $15 million annual cost.

The National Science Foundation is the nation's lead agency in the promotion and support of scientific and technological progress. The fellowship program is a symbol to young people in science and engineering that the United States Government encourages excellence to the extent that it will support those who pursue graduate study. One could argue that if the United States Government does not encourage our brightest young students to undertake advanced education, why should the private sector bother? The 450 annual recipients of NSF Fellowships are a remarkably able group of students who set standards of excellence, dedication and accomplishment where they choose to pursue their graduate study. The record shows that NSF Fellows take about 30% less time on average from B.A. to Ph.D. than the typical Ph.D. of the same field, sex, and graduation cohort, and there is evidence that former NSF Fellows are more frequent contributors to the scientific literature than the typical Ph.D. (ref. "Career Achievements of NSF Graduate Fellows: The Awardees of 1952 - 1972", National Academy of Sciences, 1977).

The United States is faced with some serious technical problems that can only be solved by innovative thinkers. We know that in both engineering and science serious shortages of well trained people are developing. In engineering the number of Ph.D. degrees earned has declined 27% since 1970. The percentage of these degrees earned by foreign citizens has increased from 26% to 46% during this period. At

the present time too few U.S. students are entering Ph.D. programs in engineering to reverse these trends. At the same time a critical shortage of candidates for engineering faculty positions has developed. The needs are great because of the recent increases in undergraduate majors in engineering, but the problem is being compounded by the fact that enrollment of graduate students in Ph.D. programs in engineering is decreasing. This will cause greater shortages of engineering faculty members in the future.

As in engineering, the Ph.D production in the sciences has been declining since 1970. The decline in earned Ph.D. degrees from 1970 to 1979 was 37% in mathematics, 33% in physics, and 30% in chemistry. These declines are being reflected in developing shortages which are only apt to grow because of the erosion of research project funding by inflation.

The abolishment of the National Science Foundation Graduate Fellowship Program will not only reduce the number of graduate students in Ph.D. programs in science and engineering, but more important, it will send the wrong signal to prospective graduate students. Our hope for the future is with the intellectually gifted young people who are given the encouragement, free choice, and support to pursue graduate studies in the best educational environment the nation has to offer. The NSF Graduate Fellowship Program is an incentive to these future leaders.

The health of the U.S. economy is closely tied to our nation's scientific and technological capabilities. We have seen how the ecomomics of Japan and West Germany, for example, have outstripped the

U.S. economy since World War II. This has been, in part, due to their long term decision to invest a significantly larger percentage of their countries' Gross National Product in research and development than the United States. A key to reversing this trend in the U.S. is to encourage our greatest resource, American students pursuing careers that will help us strengthen our scientific and technological base. The health of an economy is based on a strong industrial complex, which requires constant feeding from below by people who are ready to be independent thinkers with unbridled minds. These are the types of individuals that the National Science Foundation Graduate Fellowship Program has been supporting and by its very example has encouraged to pursue graduate studies.

The termination of support of brilliant young students in all fields, but especially in the scientific and technological fields, will mean that the tradition of higher education in America for all people, no matter what their economic background, will indeed become a myth. American supremacy in science and technology will rapidly become past history.

Mrs. BOGGS. Thank you very much for your excellent testimony.

What effect does taking away the graduate fellowship program from students at smaller, less affluent institutions have on the institution itself?

Dr. HOLLISTER. Probably none. The problem with the NSF fellowships is that the students apply for the fellowship. They obtain the fellowship. Then the fellowship travels with the student. It doesn't go to the institution.

Mrs. BOGGS. I know that.

Dr. HOLLISTER. So the student chooses to go to a place that they think would be excellent for them. The fact that most of the fellowships are concentrated in the top ten universities in the country is because the institutions themselves, in the students' eyes, are excellent. So the answer to your question is very little impact will be felt by other schools that do not attract these. So the asymmetry in damage is such that the centers of excellence, or whatever we want to call these crazy places that I love so much, they will be the ones that are hurt in comparison to others.

Once again, this to me is a really un-American approach to live, to penalize the excellent center as compared to the others.

Mrs. BOGGS. Thank you.

Mr. Green?

Mr. GREEN. By and large the NSF budget request of the Administration this year was one that did not show the same fiscal stringency as some of the other non-defense sides of the budget.

On that premise, if we fund this, do you see other places at NSF that are lower priority from which we could take the funds? In other words, suppose we decide that given the restraint that our budget resolution is going to have the non-Defense side of the economy, NSF hasn't really been very badly treated. If we want to stay within that ceiling, do you see lower priority items there from which we could shift the funds? That is the decision we may well have to make.

Dr. HOLLISTER. Right, Mr. Green. That is obviously a loaded question. I will give a loaded answer.

It is a real problem. I have such a strong feeling that the innovation of this country is so closely tied to its economic well-being that my feeling is that many of the social and behavioral sciences in the Science Foundation budget, with respect to the original charter of the National Science Foundation, have a lower priority than the engineering and graduate science training programs.

It is clear to me that this is a time of financial conservatism. I agree with that wholeheartedly. My feeling is that the Science Foundation is the only center of support, Federal support, for seemingly esoteric, seemingly long-term research, the ones that normally pay off greatly.

So, yes, my feeling is that the non-science and non-engineering side of the Science Foundation budget should be looked at much more closely, as it has been. I think perhaps rightfully so. That is really a biased answer because I am a scientist. That is a tough one to answer.

Mr. GREEN. Thank you.

Mrs. BOGGS. I think we all agree that productivity results from science education. We thank you very much for your testimony.

Dr. HOLLISTER. Thank you very much.

NATIONAL SCIENCE FOUNDATION

WITNESSES

HON. CLARENCE D. LONG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND
DR. WILLIAM BAUMOL, PRESIDENT, AMERICAN ECONOMICS ASSOCIATION
DR. HERBERT SIMON, NOBEL LAUREATE, 1978

Mrs. BOGGS. We are very honored to have our colleague, Clarence Long of Maryland, with us today. Dr. Long, please introduce the members of your party.

Dr. LONG. I want you to understand we believe in quality, not numbers. We like to have both on our side.

I will read my statement.

Thank you, Mrs. Boggs, for allowing me to testify in behalf of the Economic Research budget of the National Science Foundation.

This program is of utmost importance to the Nation and of great personal interest to me as a Member of Congress and one who, except for time out in the service, and with the staff of the President's Council of Economic Advisers, was a university research economist from 1936 to 1962.

Appearing with me are two distinguished economists—William Baumol, President of the American Economics Association and Professor of Economics at Princeton and New York Universities, and Nobel laureate Herbert Simon of Carnegie-Mellon University.

The Administration budget would gut the Economic Research program of the National Science Foundation, cutting it from $12.3 million in fiscal year 1981, to $3.7 million in fiscal 1982. We urge that you restore at least a portion of this cut because of the national significance of the research.

The stakes are enormous to the Nation, to every business, to all of us. Congress right now is considering an economic program that represents the most far-reaching departure in nearly 50 years from the economic assumptions that govern this country. The tiniest success or failure in economic analysis or economic forecasting can save or cost America billions, even hundreds of billions of dollars. To avoid costly mistakes without making even worse ones (and I recall the most costly mistake we ever had was just before the great depression, we put in the Smoot-Hawley tariff and simply plunged the whole world into a kind of an economic tailspin) we must have as much reliable information as possible on how the Federal programs will shape the economy, whom they will affect, and to what degree. This is the information and thinking that National Science Foundation-sponsored research seeks.

The National Science Foundation, through its support of individuals and organizations, has been a major factor in producing some of the most fundamental tools and methods of contemporary eco-

nomic decision-making. These include gross national product measurement, national income and flow of funds accounts, measurement of unemployment, and analysis of savings and investment incentives and disincentives.

Since the inception of the Nobel prize in economics, 18 awards have been made to economists worldwide. American economists have won half of these, as many as all the other nations together. Of the nine American Nobel Prize winners, six—Paul Samuelson, Kenneth Arrow, Wassily Leontief, Tjalling Koopmans, Lawrence Klein and Herbert Simon—have relied on the NSF to fund their studies of modern economic systems and behaviors. Two others, Nobel laureate Simon Kuznets, my colleague at Johns Hopkins before he went to Harvard, and Milton Friedman, received support for their work from the National Bureau of Economic Research, itself a major recipient of NSF funding. Incidentally, I was a member of the National Bureau of Economic Research for 14 years, so I know a good deal about it.

The Congressional Budget Office, the House and Senate Budget Committees, and the Council of Economic Advisers use the results of NSF-supported economic research to advise Congress and the President on national policy.

Private forecasting firms and major U.S. corporations rely on the tools developed through NSF research as well.

You may ask if the research is so useful, why doesn't the private sector fund it? Two reasons: basic economic research does not usually provide direct, immediate and proprietary returns, and quantitative research is particularly very expensive. Nonetheless, basic research must be carried out to fill in gaps in our economic knowledge. What is needed, especially given our current national debate, is an acceleration of basic research, not a 70 percent cut.

There are those who say that economic forecasting should be stopped because it hasn't been very reliable. By the same rationale, years ago we would have stopped weather forecasting. When we have had a major military setback, such as in the Iran rescue, we interpret this as a powerful reason not to reduce but greatly to step up our defense spending. We may be falling behind some western nations in the technology of our steel and auto production for reasons owing heavily to the tremendous costs of holding a defense umbrella over the free world.

For all its imperfections, economic investigation in America is by far the strongest in the world. It is to America that the students of the world come for their study of this difficult and important discipline. It is to America that the world looks for most of its new ideas in economics, and the National Science Foundation has, with relatively small costs compared to what we spend elsewhere, had a considerable role in making for this pre-eminence.

Let's keep it that way. Thank you.

Mrs. BOGGS. Thank you very much. That was an excellent presentation.

Dr. Baumol, I, too, have a son-in-law who teaches politics at Princeton, Paul Siegmund.

Dr. BAUMOL. Yes, I know him.

Mrs. BOGGS. And my daughter is your freeholder.

Dr. BAUMOL. I see I am surrounded by your family.

Mrs. BOGGS. We are very happy to have you with us.

Dr. BAUMOL. Thank you so much for permitting us to come. I am going to cut out large portions of my prepared statement, partly because they overlap what Dr. Long has already said. You have already heard about the American Economic Association and about the pre-eminence of our research in the world as indicated by the substantially large proportion of Nobel prize winners who come from the United States and who have received support from the National Science Foundation.,

What I would like to do today is to speak on behalf of the 18,000 members of the Association who have urged me to speak to you about the proposal by the Administration virtually to condemn the social science budget and the economics budget in the National Science Foundation to extinction. I will show that this would do incalculable damage to the next generation of American social scientists, deprive the United States of valuable practical knowledge and threaten our pre-eminence, our international pre-eminence, in the affected fields. I will also show that this proposal is inconsistent with the Administration's desire to decentralize the decisionmaking process. A minor modification in the budget proposal, that is entirely consistent with the goal of decentralization, can eliminate much of the problem for the social sciences imposed by the contemplated budget.

The National Science Foundation has played a vital role in the history of success of the social sciences in this country. It is the one consistent source of funding of basic and disinterested research. It continually supports research, much of which has already paid off and some of whose payoffs will accrue in future decades and not just the day after tomorrow. Its support has already paid off in terms of practical results and continues to do so. Its help has been extended impartially to investigators of differing political beliefs and to every region of the country. It has included research along lines as diverse as rational expectations underlying much of the Administration's economic views on the one side and Keynesian economics on the other.

All of this is confirmed by the variety of practical contributions which have emerged from these programs. Research on supply-side economics and rational expectations theory, which many consider to be the analytical underpinning of the present Administration's fiscal and monetary programs, owe a heavy debt to the National Science Foundation, a debt which all of those who have worked in these fields have stood ready to acknowledge. With the help of the National Science Foundation, economists have carried out research which has helped to increase the rational effectiveness and efficiency of the programs of deregulation under both a Democratic President and a Republican President. Such research has made essential and acknowledged contributions to the design of deregulation of the airlines and of the railroads. The Staggers Act actually has some language which was taken from research sponsored by the National Science Foundation, as I understand it.

Under NSF sponsorship, economists have worked on environmental issues, investigating how desired improvements in environmental quality can be achieved in ways that reduce government inter-

ference in private decisions and minimize the cost to the general public.

Modern economic forecasting techniques have been designed and tested with the aid of the NSF. I can go on indefinitely citing examples, but I think enough has been said to make the point.

But, funding by the NSF has played a particularly crucial role in funding the work of younger economists. In preparing for this morning's testimony, I spoke to virtually every one of our Nobel prize winners, most of whom emphasized that the support they received from the NSF came predominantly in the early stages of their careers and that most of them were now getting funding from other sources.

These early years, of course, are the years when scholars make some of their most important contributions. But it is also something which present circumstances, having nothing to do with either the National Science Foundation or the Administration's program, have placed into jeopardy. The baby boom that was an aftermath of World War II created an enormous demand for college teachers and many faculty members were hired for the purpose. Two decades later, as that demand dropped off, universities found themselves with a surplus of teachers and it became almost impossibly difficult for young people of reasonably high abilities to acquire teaching positions. At Princeton, for example, it is now expected that one person out of perhaps twelve will be promoted. What this means is that the young researchers are under an enormous handicap already and there is a very great danger that the United States will be deprived of a full generation of their research efforts. To have that compounded by depriving them of the one source of funds which is accessible to them before they have achieved their reputations, before they have become well known, will surely make the problem for them and for the nation far, far worse.

Let me end by saying that economists recognize the legitimacy of aspirations for a reduced level of government expenditures. We recognize, moreover, that when budgets are reduced virtually every one, including the social scientists, must be prepared to take a cut. Although our funding has never been excessively abundant, we are fully prepared to accept a share in a general cutback, but a proposal to reduce social science funds by 75 percent is not a cutback. Rather, it smacks of a vendetta, particularly since the amounts involved are so insignificant.

I understand that this Subcommittee has already proposed to keep the reduction in funding for the social sciences to a more reasonable level, and if it is appropriate, I should like to express my enthusiastic support for this proposal. However, merely as an indication of our flexibility, it may not be amiss to report that some of our colleagues have also suggested another possibility, that as an alternative to the designation of a fixed sum for the social sciences, no attempt be made to predetermine legislatively the apportionment of the total NSF funds among the various disciplines.

Rather, they would suggest that a total NSF budget be decided upon by Congress with the Foundation itself authorized to apportion the funds among the various disciplines upon the advice of a

body of eminent and informed persons. This surely would be consistent with the Administration's own emphasis upon the desirability of the centralization of decisions.

I should like to close by reminding you that our society and our economy are beset by many critical problems threatening our welfare and our Nation's pre-eminence in the short run and in the long run.

We cannot afford to act upon them without analysis and without information. It is surely essential that those who can provide the required ideas and insights be given the resources required for the purpose. To do less is to shortchange our futures.

Thank you very much.

Mrs. BOGGS. Thank you very much.

[The statement follows:]

Statement before the Subcommittee on HUD, Committee on Appropriations of the U.S. House of Representatives.

As President of the American Economic Association I represent more than 18,000 economists in business, government, colleges, universities and research organizations. Members of the organization have urged me to appear before you and on behalf of the program in the Social Sciences of the National Science Foundation. That program is now threatened with virtual extinction under the administration's current budget proposals.

I shall show that this proposal, if carried out, can do incalculable damage to the next generation of American social scientists, thereby depriving our economy of invaluable practical knowledge, and threatening our international preeminence in the affected fields.

I shall also show that the administration's proposal is inconsistent with its desire to decentralize the decision making process, and that a minor modification in the budget proposal that is entirely consistent with this goal can eliminate much of the problem for the social sciences imposed by the contemplated budget.

Today the U.S. is preeminent among the nations of the world in the quality of its research in economics. This is illustrated dramatically by the enviable American record in terms of Nobel Prizes. Of the 18 awards made since the inception of the Nobel Prize in economics, nine have gone to Americans. During the postwar period outstanding students from other countries came in a steady stream to the United States to complete their postgraduate training and to join our research programs before returning

to their homelands. Famous social scientists from every free country hope for the opportunity to spend a year in the U.S. so that they can work with their American counterparts.

The National Science Foundation has played a vital role in this history of success. It has been the one consistent source of funding of basic and disinterested research. It continually supports research, some which has paid off already, and some of whose payoffs will accrue in future decades, and not just the day after tomorrow. Its support has already paid off in terms of practical results and continues to do so. Its help has been extended impartially to investigators of differing political opinions and in every region of the country. It has included research along lines as diverse as rational expectations analysis on the one side and Keynesian economics on the other.

The American Nobel Laureates in economics stand ready to confirm the role that support by the National Science Foundation has played in the work cited as the basis for their awards. This alone indicates how fruitful the small amounts spent on the social sciences over the years have been.

It is further confirmed by the variety of practical contributions which have emerged from these programs. Research on supply side economics and rational expectations theory which many consider to be the analytical underpinning of the present administration's fiscal and monetary programs, owe a heavy debt to the NSF, a debt which those who have worked in these areas acknowledge readily. With the help of the NSF, economists have carried out research which has helped to increase the rationale, effectiveness and efficiency of the process of deregulation under a Democratic and a

Republican president. Such research has made essential and acknowledged contributions to the design of the deregulation of the U.S. airlines and railroads. Under NSF sponsorship economists have worked on environmental issues, investigating how desired improvements in environmental quality can be achieved in ways that reduce government interference in private decisions and minimize the cost to the general public. Modern economic forecasting techniques have been designed and tested with the assistance of the NSF. I can extend, indefinitely, the list of NSF projects with practical payoffs, but enough has been said to make the basic point -- while NSF finances "pure" research, it is research which bears invaluable fruit. It is basic research, but it is research which has an extraordinary potential for practical application, and whose long run contribution is demonstrable.

Funding by the NSF has played a particularly crucial role in facilitating the work of younger social scientists during the years before they have achieved their full reputation. These are often the years when many make some of their most important contributions, as is illustrated by the fact that the researches of the Nobel Laureates typically received NSF support early in their careers.

This is a matter which is particularly crucial now because, as a result of fortuitous events, younger faculty are in a disadvantageous position unparalleled in recent memory. The baby boom that was an aftermath of World War II created an enormous demand for college teachers two decades later, and many faculty members were appointed to meet this unprecedented demand. But as the size of the student body has declined in recent years, the institutions of higher education, already under severe financial pressure

attributable to inflation and other causes, have found themselves overstocked with faculty. Thus, openings for new faculty members have actually declined far more than in proportion to the fall in the size of the student body. In many departments young persons entering the faculty today are told routinely that there is virtually no hope of promotion to a permanent position. As a consequence, there is very real danger that economics will lose the contribution of most of a generation of potentially productive researchers, a loss I believe society can ill afford. It is precisely this generation which would be hit hardest by the proposed withdrawal of NSF funding from the social sciences. Established economists and social scientists, those who already have acquired their reputations, will no doubt find it more difficult than they do now to get the resources they need, and there will, doubtless, be some retrenchment on their part. But they may be able to obtain the minimal resources required to prevent their work from being stopped altogether. It is the younger researchers, those who are just entering their most creative period, who will find their research opportunities foreclosed and who will be unable to find alternative sources of support. It is a prospect which simply makes no sense, which will bring with it an end of our country's preeminence in the social sciences. It would mark an abrupt end to a remarkably productive period in the development of economics which has already done much for the benefit of man. It would halt the present vitality of economic research and deprive the economy of the vital information and ideas that this generation would otherwise have contributed.

Let me end by saying that economists recognize the legitimacy of aspirations for a reduced level of government expenditures. We recognize,

moreover, that when budgets are reduced virtually everyone, including the social scientists, must be prepared to take a cut. Though our funding has never been excessively abundant we are fully prepared to accept a share in a general cutback. But a proposal to reduce social science funds by 75% is not a cutback. Rather, it smacks of a vendetta, particularly since the amounts involved are so insignificant in total.

I understand that this Subcommittee has already proposed to keep the reduction in funding for the social sciences to a more reasonable level and, if it is appropriate,I should like to express my enthusiastic support for this alternative proposal.

However, merely as an indication of our flexibility it may not be amiss to report that some of our colleagues have also suggested another possibility -- that as an alternative to the designation of a fixed sum for the social sciences, no attempt be made to predetermine legislatively the apportionment of the total NSF funds among the various disciplines. Rather, they would suggest that a total NSF budget be decided upon by Congress, with the Foundation itself authorized to apportion the funds among the various disciplines, upon the advice of a body of eminent and informed persons. This surely would be consistent with the administration's own emphasis upon the desirability of decentralization of decisions.

I should like to close by reminding us that our society and our economy are beset by many critical problems threatening our welfare and our nation's preeminence in the short run and in the long. We cannot afford to act upon them without analysis and without information. It is surely essential that those who can provide the required ideas and insights be given the resources required for the purpose. To do less is to short-change our futures.

Mrs. BOGGS. Dr. Simon, we will be very happy to hear from you.

Dr. SIMON. Thank you. I will do a little ad-libbing and read a little from my statement.

I think perhaps one reason I was asked to come by my peers here is that a couple of years ago I served as Chairman of a Committee of the National Academy of Sciences which looked at the NSF research programs in the social sciences at the request of the National Science Foundation. Perhaps you have available to you a report of that Committee. We found that the basic social science research supported by NSF is indeed impressive work and work of exceptionally high quality.

The standards have been very fine. Someone mentioned that I have been a recipient of NSF support at some time in my career. I can also say that I have had an NSF proposal refused by the Agency, which is either a commentary on the quality of that proposal or maybe on the competitiveness of the search for support from that Agency and the wide range of proposals that they can draw from.

My own research on decision-making in economics has drawn me into other parts of the social sciences, particularly into cognitive psychology.

In my examples I would like to talk about that part, particularly of the social science budget.

Economics, is about one-third of the total NSF basic social science appropriation.

I would like to begin with a topic upon which Professor Baumol closed. The matter at issue here is not really the total spending for basic research, but whether the social and behavioral sciences should bear the brunt of any cuts that the Congresss sees fit to make in research spending this year, cuts, which in the Budget proposal, would virtually destroy the continuity of research in many of these fields.

The view that expenditure reductions should be spread widely over all the sciences and that the allocation of funds should be made after the whole science community has been consulted is a view which is not held only by social scientists, but also by our colleagues in the physical and biological sciences.

About three weeks ago, as you may know, the National Science Board made a public statement to this effect, urging that the cuts be made on the basis of quality of research and not on the basis of field. Last week the Council of the National Academy of Sciences and the members of the Academy at its annual meeting both adopted resolutions decrying this disproportionate and apparently ideologically motivated cut in the social and behavioral science appropriations for NSF and other Federal agencies.

In fact, our physical and biological science colleagues are prepared to contemplate reductions in their own funding if that is necessary so that the same standards of research quality and significance may be applied to allocations of funds across the board for science.

I think these actions by the National Science Board and the Academy and its Council are clear indications of the dismay with which the entire scientific community has greeted what seemed to

us arbitrary and rather cataclysmic reductions proposed by the Office of Management and Budget.

Let me just say a few words about matters of substance in the social sciences. The central question here is whether social science research is important enough to the Nation to justify support on the very modest scale that it has had, something like $40 million, I believe, for the total social and behavioral science budget in the National Science Foundation last year.

Since Professor Baumol has already given examples of the value of research in economics, I would like to look for a moment at another part of the social sciences.

One measure of the progress and significance of any area of science is the excitement it engenders. Within the social sciences that excitement has been very high in recent years when talking about cognitive science, the study of human thought processes and the study of computer augmentation of human thinking. Research on these problems is at the cutting edge of experimental psychology today and spread out in many directions to computer science, economics, to business management, and to business decision-making.

For the first time in human history we are gaining an understanding of the information processes that have to take place in the human brain in order for people to solve problems, to make decisions, or to learn a new skill. Our knowledge of these processes is becoming so complete that often we can simulate the processes with computers at the level of professional tasks like diagnosing diseases, designing an electric motor, or finding a solution for a physics problem.

We know, for example, how many chunks of information a professional person has to have at his command in order to recognize key features in situations that he encounters professionally. The magic number is around 50,000. If I had more time, I would tell you what kind of research leads us to that sort of quantitative understanding in the thinking process.

We know the ability of an expert to react intuitively to problems, with almost no time for thought, is based on this recognition capability and that the number of chunks stored in the brain is probably comparable over most professional fields.

As my examples show, these developments in psychology have taken it far beyond the rat in the maze or the college sophomore learning syllables by rote, which were popular topics for research a generation ago. We are now gaining understanding of the kinds of mental tasks that are typical of the solving of professional tasks and the difficulty of acquiring new knowledge and skills. A major part of the support for that research has come from federal granting agencies, particularly NSF and NIH.

Already research of the kind I have been describing has led to important applications in our society. Schedules for complex industrial projects are sometimes constructed by a process known as heuristic search, first understood and elucidated when it was discovered as an important component of human problem-solving. The major chemical companies today are using computer aided techniques to discover efficient reaction paths for producing organic compounds. Computer programs using this application are a direct

outgrowth of research on how human problem solvers use means-ends analysis to pick their way through difficult problem situations. At the present time much of the work in cognitive science is being directed to the understanding of learning processes. We know a bright student can often acquire a new skill simply by analyzing with care a problem in the textbook. Tomorrow I will attend a final doctoral examination in which a student will describe a computer program that, mimicking the human processes, is able to reprogram itself by looking at a worked out example to solve algebra problems. Having achieved this understanding of the human process, to the point of being able to imitate it, we can begin to ask how this skill can be taught to students not gifted enough to discover it for themselves.

The central resource in our society is knowledge and skill stored in human heads. All of the factories and equipment of the world would do us no good without that human capital to work for our needs and goals. The productivity of our society rests directly on the effectiveness of our decision-making process, our design process, our problem-solving process and our learning and teaching process, The principal road to improving the processes is to understand them better and understanding them is the goal of the research arm I am describing.

I don't need to tell you here that central to the difficult problems of our society is the behavior of human beings, the behavior of ourselves. To reach wiser decisions on these matters, we must all, legislators and citizens alike, acquire a continually deeper understanding of the behavior of human beings as individuals and groups. It is the task of the social scientists to provide us with the factual evidence. There is no magic in them. There is no substitute for common sense, much less wisdom, but they can provide us with a setting of fact and data in which our deliberations and decision-making can take place.

The responsibility of the National Science Foundation is to support basic research of high quality and usefulness in all domains of science. In my remarks, I have used as illustration just one small area of the social sciences in which research goes on today. This particular area is perhaps not atypical in the very direct and obvious ways in which gains in basic knowledge—which is the NSF task—can be translated into important applications in our everyday life. Acting from knowledge, I think we would all agree, is better than acting from ignorance. I think all of us hope very much that the Federal government will find its way to continue to support, at an appropriate level of funding the continued advance of knowledge about ourselves and our society.

Mrs. BOGGS. Thank you very much.

Mr. GREEN. I want to thank Dr. Long for bringing two such distinguished economists to join him in presenting the case this morning.

Thank you very much.

Dr. BAUMOL. Excuse me. If I may, I would like to present for the record a statement by Professor Kenneth Arrow and several other Nobel prize winners.

Mrs. BOGGS. We would be honored to have them. They will be made a part of the record. Thank you for your testimony.

[The information follows:]

UNIVERSITY of PENNSYLVANIA
PHILADELPHIA 19104

Faculty of Arts and Sciences

DEPARTMENT OF ECONOMICS
3718 LOCUST WALK CR

April 10, 1981

Professor W.J. Baumol
Department of Economics
Princeton University
Princeton, N.J.

Dear Will,

Not only do I fully support continued funding for economics in NSF, at levels reached in recent years, on its own merits, but I have also been able to analyze the way that NSF support has been helpful in the past in enabling this country to maintain a commanding lead in economic analysis. An indicator of this lead is our predominance in the winning of Nobel Prizes in economic.

Speaking for myself, I can say that the work for which I was cited by the Nobel Committee received a great deal of support in the past twenty years from the NSF. My citation covered macro model building for the United States, other individual countries, and the international trading system. NSF support for the Brookings - SSRC model project, for project LINK, for the development of computer software applicable to econometrics, and for conferences on econometric subjects. These research activities figured importantly in my award and depended heavily on NSF support. I believe that in order to preserve the strong position achieved by the United States, we have to keep support flowing for promising young scholars in economics.

I hope that these thoughts suggest evidence that will be helpful to you in preserving NSF support for economics. As far as Nobel awards are concerned, I feel that NSF support has been instrumental in our past successes.

Sincerely,

Lawrence R. Klein
Benjamin Franklin
Professor of Economics and
Finance

Yale University *New Haven, Connecticut* 06520

DEPARTMENT OF ECONOMICS
Cowles Foundation for Research in Economics
Box 2125, Yale Station

April 27, 1981

Professor William Baumol
President, American Economic
Association
Department of Economics
New York University
8 Washington Place
New York, New York 10003

Dear Will:

I am writing first of all to express my strong sympathy and support for your initiative, as President of the American Economic Association, to draw the attention of the appropriate levels of the U. S. Government to the adverse impact that a drastic curtailment of the NSF budget for the Social Sciences would have on the balance between the sciences. The growing need for joint studies of interdisciplinary problems, such as concern the choice of future energy technologies, the protection of the environment, and the uses made of the ocean, require a balanced use and development of several sciences, natural, social and economic. But, as we all know, the application of these sciences needs to be preceded by the development of basic theory.

Secondly, responding to a suggestion you made in a recent telephone call, I would also like to describe my personal experience with regard to my research in economic theory, carried on over a number of years with the support of the National Science Foundation. In an Attachment (A), I cite from a speech by Professor Ragnar Bentzel, of the Royal Academy of Sweden, held on December 10, 1975, the date on which the Alfred Nobel Memorial Award in Economics was bestowed on me. It is not for me to say whether Professor Bentzel's praise was deserved. But I do want to bring out that this research was made possible by continued support by the National Science Foundation, as described in Attachment (B).

Finally, allow me to add that, during the calendar year of 1974, I was on leave from the Cowles Foundation as a Research Scholar of the International Institute for Applied Systems Analysis, located in Laxenburg, Austria. In that year I presented the ideas, soon thereafter described in his speech by Professor Bentzel, to my colleagues at the Institute, and did further research on their application to the economic modeling of future supply and use of energy and of natural resources. The U. S. share in the financial support of

this Institute has been based, since its establishment in 1973, on a periodical grant from the National Science Foundation to the National Academy of Sciences.

Please feel free to share the above information with pertinent decision makers at all levels of the U. S. Government concerned with the role of the National Science Foundation in supporting research toward the further development and application of the social sciences in general, and of economics in particular.

Sincerely yours,

Tjalling

Tjalling C. Koopmans

TCK;z
Enc.

ATTACHMENTS

(A) Concluding paragraph of a speech by Professor Ragnar Bentzel of the Royal Academy of Sciences of Sweden, summarizing the research in economics by Tjalling C. Koopmans over the years 1956-1975:

"In a series of papers published during the 1960's Koopmans treated the problem of how to divide national income between consumption and investment in an optimal fashion. This question which is important to all long term economic planning, concerns a choice between present and future consumption and involves consequently judgments of the welfare distribution between different generations. Koopmans stands out as the great pioneer in this field of research. He has taught us how to put the problems and he has formulated a number of important theorems concerning optimum conditions."

(B) Sentences quoted from the Report for July 1973-June 1976, of the Cowles Foundation for Research in Economics. The passage, lifted from Page 44 of the report, describes the principal sources of financial support of the Cowles Foundation over the period 1968-76:

"During the period of this report, the Cowles Foundation was also fortunate in receiving a substantial amount of external support in the form of large, institutional grants from the National Science Foundation and the Ford Foundation. The continuing, institutional grant from the National Science Foundation was for the period 1973-1976 and replaced the previous institutional award which had covered the 1968-73 period."

Much of the research done by Tjalling C. Koopmans at the Cowles Foundation during the period 1956-1968 was supported by individual grants by the National Science Foundation, in which Koopmans was listed as Principal Investigator.

STATEMENT OF KENNETH J. ARROW

To identify myself, I am currently Joan Kenney Professor of Economics and Professor of Operations Research at Stanford University and have previously taught and engaged in economic research at Harvard University and at the University of Chicago. I have been president of the American Economic Association, the Econometric Society, and The Institute of Management Sciences, and am currently president of the Western Economic Association. I have served on committees of the National Academy of Sciences and of the Institute of Medicine to use research literature to evaluate such matters as the climatic consequences of the supersonic transport and the development of an information system for measuring the health consequences of man-made environmental alterations. I have been a staff member of the President's Council of Economic Advisers and a consultant to the Rand Corporation. I have been awarded the John Bates Clark medal of the American Economic Association, in 1957, and the Nobel Memorial Prize in Economic Science, in 1972. None of the above organizations has any responsibility for any statements I make.

The budget proposals for a 75 percent reduction in the National Science Foundation budget for economics and the other social sciences are in flat contradiction to the needs of the nation and the lessons of recent history. Scientific work in any field, social or physical, requires financial support. In an earlier era it might have been the product of gentlemen of leisure living on inherited incomes; but apart from the questions of justice involved, there are simply too few such to sustain the levels of scientific inquiry which we have found essential to a modern society. The great universities

of course expect their faculty members to engage in research as well as teaching. But modern scholarship, in economics as in other subjects, requires expenditures that the university cannot hope to supply out of its limited funds: data collection, computing, and research assistants, who thereby also serve an apprenticeship in the ways of scholarship.

Further, the days when faculty were appointed and promoted on the basis of publication alone, without regard to the quality of teaching, are fortunately gone. Teaching has become a much more absorbing and demanding activity, as it should be. But, by the same token, the need for sustained time to pursure research has increased; this requires released time once in a while, which can only be achieved with the kind of financial support that the National Science Foundation supplies.

These needs are not peculiar to economics but apply to all scientific and humanistic scholarship. The experience of World War II made clear the practical importance of research. The defense authorities of the day were intelligent enough to perceive that, in the long run, basic research, not directly tied to immediate results, was essential as a foundation for useful and important applied research. Through the Office of Naval Research and the Air Force support of the Rand Corporation and other agencies, research was encouraged and supported. The work for which I was awarded the Nobel prize, the development of the theory of social choice and fundamental work on the theory of general economic equilibrium and its implications for economic efficiency, were in fact supported by these agencies; the National Science Foundation was not yet in existence. The military agencies then, as the National Science Foundation later, understood that the "soft" sciences were as essential to successful application as the physical and biological sciences.

The successful use of weapons depended on recognition that their use was embedded in a system including human beings and their social interactions. More broadly, the allocation of resources among competing systems required an understanding of cost-effectiveness analysis, a concept which derived from classical microeconomics and whose development in turn raised new questions for economic theory.

The sense of the vital creative role of research in general and research in the social sciences in particular was strengthened over the subsequent years. It was recognized that not only the military but also and in even greater measure the civilian economy and health benefited from the implications of research. This commitment was institutionalized in the National Science Foundation and the extension of its charter to the social sciences.

It would be tedious to go into detail on the accomplishments of American economic research with the support of the National Science Foundation. There is hardly a major policy area, even to the provision of health care, which has not been influenced by increasing sophistication in our understanding of economic behavior. Fundamental theoretical developments on economic reactions to uncertainty and to the presence of information and on the role of externalities have already informed policy developments in diverse fields. The quality of data and the methods of analyzing them have been greatly extended. New concepts of expectation formation have altered the way we all look at economic fluctuations.

It is easy to point to the limitations on the accomplishments of economics. Prediction from large econometric models is not all that could

be desired, though the quality and accuracy is much higher than is sometimes alleged today. But economics deals with an intrinsically difficult field of analysis. Indeed, all prediction in large uncontrolled systems, physical as well as social, is difficult. Physics has, in the last fifty years or so, seen a development which is one of the great intellectual triumphs of all times; yet the accuracy of weather forecasting has increased only marginally and that due to better observations. The understanding of economic phenomena derived from research does not seem impressive until it is compared with the economic misunderstandings of those who have never been exposed to it.

In a time of troubles with inflation and productivity, of an increasing future orientation of the business community with its need for forecasting, of increasing need to subject expenditures to the test of economic efficiency, of setting the limits of economic regulation, of increasing scarcity of energy sources, and of adaptation to shifts in economic regional balance and foreign trade, depriving economics of the tools for further development of knowledge can only be described as a foolish and destructive economy.

FEDERAL EMERGENCY MANAGEMENT AGENCY

WITNESS

HON. DONALD J. MITCHELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mrs. BOGGS. Our colleague, Mr. Mitchell, has been very patient.

Mr. MITCHELL. Thank you, Madam Chairwoman.

I would like to submit a rather lengthy statement and offer a briefer version today.

My purpose here today is to urge the Subcommittee on Appropriations to adopt our Armed Services Subcommittee's authorization for civil defense for $174 million. For the first time our Armed Services Committee has designated the D-prime program, and I will explain that a little later. The D-prime program by name is a program to provide a civil defense program for our country. The $174 million we are talking about represents the first year of a seven-year comprehensive program for civil defense. As you recall, D-prime resulted from an interagency study requested by President Carter.

The only paragraph I want to read from my statement is the one that is language from our Committee Report which is as follows:

> The level of funding in the authorization of appropriations in subsection (a) represents the first year of a comprehensive seven-year upgraded funding program for civil defense known as the D-prime program which is based upon the goal of achieving a comprehensive population relocation capability for time of crisis.
>
> The program originated in executive branch studies in the civil defense area that provided the basis for Presidential Directive 41, issued in September 1978 and is consistent with the action of Congress in enacting Title 5 of the Federal Court Defense Act of 1950 in Public Law 96-342.

We have talked about this before—the case for civil defense is clear in America. If you spoke with any of our colleagues, they would agree that peace is one of our primary goals. We are told by leaders in the area of defense strategy that the best way to maintain peace is to keep the strategic balance between the United States and the Soviet Union.

The Soviet Union has a very excellent civil defense program. We have almost nothing going for us. We are told also by our leaders in defense that to maintain the peace—that we have—we enjoy roughly equivalence in weaponry. In other words, we have about the same destructive capability as the Soviet Union, but if the Soviet Union can protect their people from our weapons and we cannot protect our people from theirs—and that is the case today—it really makes a mockery of the strategic balance.

It gives the Soviet Union a marked advantage in any sort of confrontation, whether it be the table for discussions or whether it be as an invasion of Afghanistan.

No one knows precisely how superior their system is. There are all sorts of estimates. I don't think anyone argues that it isn't considerably superior. If their system doesn't work anywhere near as well as they think it will, the fact that they think it will, the perception, is very dangerous to us. We know we don't have any system, and they think they do have a good system.

Even though you can't quantify the results, you can quantify the effort. They are trying about ten times harder than we are in their civil defense effort. When it comes to people, we have about ten thousand individuals fully employed in civil defense. They have 100,000. When it comes to money, we spend about $100 million a year for almost nothing, as I will demonstrate. They spend about $1 billion a year for their program. When it comes to casualties, the tables are reversed. In an all-out nuclear war, our experts tell us if they had time to put their civil defense system into place, they would lose about—and we hit them with everything we had and they hit us with everything they had—they would lose about 15 million Soviet citizens. We would lose 150 million Americans, ten times their losses. It is quite frightening.

The point is, if we want peace, we have somehow got to balance these scales. They are not in balance now because they have a system and we don't. We have three choices. We can surrender. That gives us peace. We can build bigger and better and more expensive weapons to have the capability for destroying more of their citizens. Or we can develop a civil defense system which is far less expensive and will save American lives. Primarily it will prevent a war, but in the event of a war, it will save American lives.

This is the result of the interagency study that was made at the request of President Carter. It is a comparison of the effectiveness of various civil defense programs and what they would cost.

(a) is the first alternative. That means we stop spending $100 million. We do nothing. In any event, in a nuclear war, 20 percent of our population would survive.

(b) is what we are doing now, a little more than nothing. In an all-nuclear war, we would save about 30 percent of the American population.

D-prime is a program that the Armed Services Committee has adopted. By spending a lttle more than we do now, about the cost of a couple of bombers a year, we can save 85 percent of the American population. You get a huge increase in survivability by just spending really a small amount of money when you think of the cost of our defense budget. We jump from 30 percent to 85 percent by just adopting this program. So it has the most impressive cost/benefits ratio of any program you can imagine. We would save about 100 million American lives in the event of war if we adopted this program.

According to our experts, it would cost us about $2 billion more than we are spending now in civil defense over seven years, which figures out about 100 million lives, about $20 an American life which is a great investment, I think. This also adds up to only one-tenth of one percent of what we are spending on the destructive capability of our defense budget. It is a great savings from that point of view also.

This balloon chart, as Mr. Green says, is on the back of our testimony. I don't know the makeup of the Committee as far as the hawk-dove relationship is concerned. On Armed Services we have rather definite lines drawn, but it is one defense measure that actually everyone can accept regardless of whether you are an extreme hawk or an extreme dove.

It is not destructive. It is perfectly passive. It doesn't kill anyone. It doesn't knock down any buildings. It is inexpensive. It helps prevent war. In the event of war, it helps to save 100 million American lives. It is a small investment in peace. I urge the Committee's adoption of what the Armed Services Subcommittee on Military Installations has done.

Thank you for your time.

[The statement follows:]

Statement of
REPRESENTATIVE DONALD J. MITCHELL
House Committee on Appropriations
Subcommittee on HUD-Independent Agencies
May 7, 1981

Mr. Chairman and Members of the Subcommittee.

I am grateful for the privilege of testifying at this hearing in support of an appropriation to implement legislation I introduced to provide an adequate civil defense system for our nation, HR 1917.

It is my belief one of the most pressing and unmet needs facing our nation is for an adequate civil defense program -- one which is responsive to existing threats and prepares us for future challenges.

To respond to this need, I proposed a comprehensive, seven-year civil defense program. Its cost of approximately $2.6 billion, represents but a fraction of our estimated total defense expenditures for the period covered -- the increase in funding over our present program amounts to approximately 1/10 of 1 percent of our Department of Defense annual budget.

The program I am advancing is one that will give us, for the first time in this nuclear era, the protection we must be assured of as we face our idealogical adversaries who lack our commitment for the pursuit of peace. Simply put, my goal is to help to balance the strategic scales but, if there should be a war, to guarantee the survival of our nation. We have no such guarantee today. It's time we did.

The seven-year plan would concentrate the use of the funds requested for:

*Crisis Evacuation
*Research and Development
*Emergency Operating Centers
*Training and Education
*Management and Coordination

In each one of these critical areas our present civil defense program fails the test of adequacy.

This program was not developed by me, rather it emerged over an extended period of time after protracted study by civil defense experts who have earned respect and a national reputation for their work in this area. It is a product of serious, well-intentioned people who share a concern about our present, have learned from lessons of the past and are determined to prepare us to live in peace. It is the Program D' recommendation of the Civil Defense Workshops which were held in Rosslyn, Virginia in the Fall of 1977 by the Systems Planning Corporation for the Defense Civil Preparedness Agency.

We're in trouble. The Soviets have an excellent civil defense system. We don't. Neither nation had an adequate program in the mid-sixties. But for more than a decade the Soviets have been spending over $1 billion a year on civil defense. We've averaged less than $100 million. They have a three track program: individual protection, community shelters and population

evacuation. We have only one, community shelters, and it's in disarray in spite of the dedicated and dogged efforts of many professional and amateur civil defense leaders.

Why is this a problem? Because it destroys the strategic balance. The best hope for peace, we are told, is the maintenance of the strategic balance. There are varying estimates on the effect of an all out nuclear war. If the Soviets have time to put their civil defense program into operation -- three or four days prior to the holocaust -- the results would be far more destructive to the U.S., which doesn't have a plan (over 100 million dead) than the Soviet Union (5-20 million killed). Should we adopt the D-Prime Plan of the Interagency Study on Civil Defense, developed under the aegis of the National Security Council, they estimate we can save up to 85 percent of our population. Should the Soviets target population, they estimate up to two-thirds of our population will be preserved.

Most experts agree we enjoy "rough equivalence" with the Soviets in weaponry. (From my perspective it appears to get rougher each year). But if Soviet weapons have a far greater destructive effect on us than our weapons on them, it's as though they had far more weapons. This makes a mockery of the strategic balance. It doesn't exist.

Once the balance of terror is gone the Soviets have an awesome edge in any confrontation, whether it be at the bargaining table, an act of adventurism in Europe, Africa, the Mid-East or in-all out nuclear war.

It has been said that "eternal vigilance is the price of liberty". Events in Iran and the invasion of Afghanistan have shown that to be true. If Russia is able to grab up one or two more countries, we may be forced into war -- with a strong possibility that the conflict could develop into a nuclear confrontation. Why not provide at least minimal protection for our civilians. Why not teach them to survive?

Why haven't we done something about civil defense? Chiefly because far too many Americans are the victims of three misconceptions -- the first being the "overkill" fallacy, wherein the casualties per kiloton in Hiroshima and Nagasaki are multiplied by the number of kilotons in the world's arsenal. This implies that by some means we can collect the entire target populations in the same density as existed in Hiroshima and Nagasaki, and keep them unwarned and vulnerable. A statement of identical validity is that the world's inventory of small arms ammunition, or for that matter, kitchen knives, can also kill the human population several times over.

Another widely held misconception is that much of the world's population would be destroyed by fallout from a large scale nuclear war. On the Beach reflects how this thinking originated. The National Academy of Science estimates that the long term effect of this fallout would only amount to a two percent increase in the cancer rate over a 15 year period. This increase

could be countered by not rebuilding many of the cigarette plants that would be destroyed in such a holocaust.

Finally, victims of the doomsday scenario feel, mistakenly, that survivors of a large scale nuclear war would have to live underground for weeks at a time. Not so, our scientist tell us. An individual can protect himself from the most dangerous type of radiation because it travels like light, in a straight line. A handkerchief, folded over six or eight times, can serve as an effective gas mask to provide protection from the less dangerous type of radiation.

That's the bad news. The good news is it's not too late to do something about it. A relatively inexpensive remedy is to develop a civil defense system of our own. Some of our defense leaders suggest the way to compensate for Soviet superiority (they no longer claim it doesn't exist) is to "retarget" our weapons. "Retargeting" would supposedly balance through civil defense -- the potential saving of American lives rather than the potential destruction of Soviet citizens.

We must begin today to rebalance the strategic equation. How do you deter an attack unless you can convince an enemy that you will win the war that he is starting? I find it doubtful that anyone aware of the strategic imbalance believes we would fire any nuclear weapons if it meant the destruction of our society. Without a civil defense system that's precisely what it means.

Basically, this $2.6 billion program requires the authorization of the Federal Emergency Management Agency (FEMA) to increase from $174 million in 1982 to $487 million in 1988.

For the first time ever the House Armed Services Subcommittee on Military Installations designated D' Prime as the desired program for civil defense in the United States. The $174 million authorized for 1982 represents the first years cost of this seven year comprehensive program

The committee language is an follows, " The level of funding in the authorization of appropriations in subsection (a) represents the first year of a comprehensive seven-year upgraded funding program for civil defense known as the "D-Prime" program, which is based upon the goal of achieving a comprehensive population relocation capability for time of crisis. The program originated in executive branch studies in the civil defense area that provied the basis for Presidential Directive 41, issued in September 1978, and is consistent with the action of Congress in enacting title V of the Federal Court Defense Act of 1950 in Public Law 96-342."

It is my understanding that Mr. Bernard T. Gallagher, FEMA's director, will testify that the President's proposal for civil defense of $132 million will allow a reasonable start on the D' program but only in limited areas. Since the difference between a full fledged beginning and a half hearted start is relatively slight, it seems a shame we can't make an all-out commitment.

The Congress of the United States will spend approximately $225 billion for our offensive capability. Without the $174 million for civil defense we are doing almost nothing to protect American citizens. We learned in our hearing that the Administration program would protect only 5 percent of the American people. At this rate it would take twenty years to complete a civil defense program for all Americans. But, in twenty years -- the year 2000 -- we would have to begin all over again because of the huge demographical changes in the interim period. In other words, at the rate the Administration recommends, we'll never have a civil defense program.

Doesn't it make good sense to spend a little more to provide a plan that would help prevent war, but in the event of war, would help protect all Americans?

I hope your Subcommittee members will join me in implementing the D' program by approving an appropriation of $174 million in 1982 for nationwide civil defense. Our total national defense demands no less.

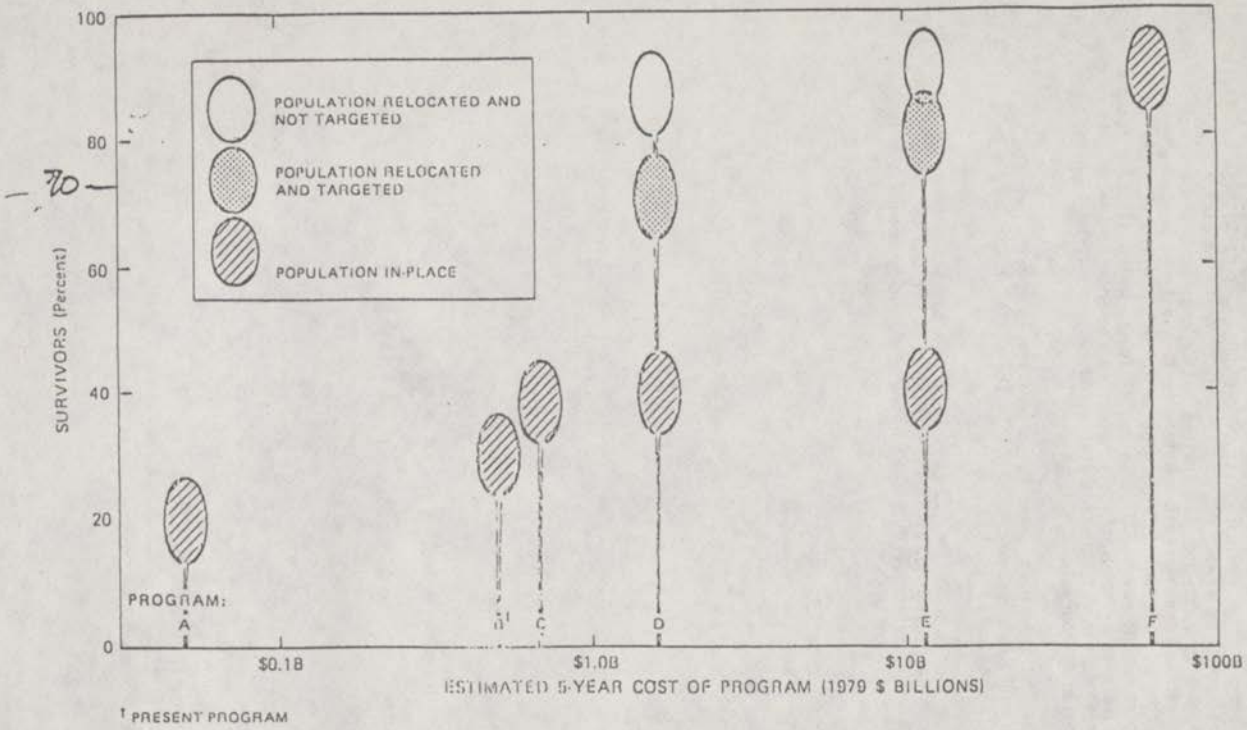

FIGURE 1. COMPARISON OF EFFECTIVENESS AND COST OF CD PROGRAMS
(Large-Scale Mid-1980s Soviet Attack Versus U.S. Military and Industrial Facilities, and Population)

Mrs. BOGGS. Thank you.

Mr. Green?

Mr. GREEN. Recently we had a group in the medical profession going around the country suggesting that even if in the short run you could shelter everyone, it would be such a hostile environment they would be returning to when they came out of the shelters they would die slowly instead of quickly.

How do you respond to that?

Mr. MITCHELL. This is the physicians for survival, I think. That is really antiquated thinking. That was the mid-seventies, late sixties thinking. It sort of ties in with a defeatist attitude and explains why we don't have a civil defense system today.

No one knows whether this will work or how well it would work. All we are trying to do on Armed Services is to balance the scales and give the American people as good a system for survival as the Soviets may have. Theirs may not work. They don't know whether it will or not. We should be able to protect our people as well as they can protect theirs.

We have all sorts of PhDs who explain that survival is possible, they have diagrams where a one megaton bomb explodes. I had one done for the Capital one year to show what the devastation would be. If you are five miles away, upwind, you aren't bothered much at all by it.

Even contemplating nuclear war is horrible. It is too destructive, too cataclysmic to think about and make any sound decisions. I don't know what would happen.

I do know that I would like to see our people, for a minimal expense, have as good a system as the Soviet Union has. I think it would help to prevent war.

Mr. GREEN. Thank you.

Mrs. BOGGS. We thank you for being with us and for your consistent support of this position.

VETERANS ADMINISTRATION

WITNESS

HON. ARLEN ERDAHL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mrs. BOGGS. Mr. Erdahl.

Mr. ERDAHL. I have a statement for the record and other documents. I will make a brief statement.

I appreciate the chance to be with you today and speak out on behalf of the Veterans Administration Data Processing Center in St. Paul, Minnesota. I suppose as a Minnesotan I could be accused of being provincial. This does not happen to be in my district. I am pleased that one of my colleagues, Mr. Sabo, is a member of the Subcommittee.

Like a child scorned and rejected by his parents, the St. Paul Center soon will be sent off to relatives in a distant city, unless this subcommittee acts to save it. The VA's Office of Data Management and Telecommunications already is far along its timetable to close the center by October 1, 1981.

As you know, the VA is undertaking this closure in an apparent effort to meet funding and manpower levels set by the Office of Management and Budget for fiscal year 1982. The VA hopes to eliminate 140 full-time positions by closing the St. Paul center and consolidating its functions in one or more of the four remaining data process centers around the country. The St. Paul center is the only one that will be closed. The VA is taking this action without the benefit of adequate and reliable cost-benefit analyses, and at a time when less sweeping consolidations are under sharp attack by executives within the Veterans Administration itself.

I recently obtained several internal studies completed by the VA in response to outside criticism over a proposal to shift programmers at the Hines, Illinois, Data Processing center to Austin, Texas. With your permission, I will submit these studies for the official record of this hearing.

[The information follows:]

VETERANS ADMINISTRATION MEMORANDUM

APRIL 3, 1981.

To: Acting Administrator
Subj: Establishment and Staffing of the Centralized Development Center

1. Due to the Interest shown by Members of Congress and their request to GAO to determine feasibility and cost/benefits, my office began a survey of the process of establishing the CDC on March 11, 1981, We have developed some serious concerns relative to the adequacy of the original COM&T study and the haste with which implementation is being pursued. It does not appear that sufficient consideration was given to problems which might be encountered in a reorganization of this magnitude nor to less costly alternatives for accomplishing the stated objectives. Some of the concerns we have are:

a. Possible adverse affect on the VA's ability to maintain the level of service currently provided our clients.

b. Probable adverse effect upon the timely completion and implementation of the redesign of the TARGET Central System (TCS).

c. Insufficient supporting evidence for the assumptions that a CDC will benefit VA as a rresult of: (i) an increase in productivity; (ii) that this is the cost effective method for increasing productivity; (iii) that the increase will result in an overall savings of 57 FTE; and (iv) that a transfer of the CP&E redesign effort from Hines to Austin in fiscal year 1981 will result in savings of 33 FTE as estimated by COM&T.

d. Lack of full consideration of all costs and seeming underestimation of some costs.

e. Seeming deviations from the plan and schedule approved by the Administrator and presented in the 8/1/80 CDC Management Study.

A detailed discussion of each of these concerns and our reasons for them follows.

2. *Adverse Effect on Level of Service.*—Our TARGET audits of documentation of the CP&E systems have repeatedly shown serious deficiencies. Formal documentation, especially for the batch system, is practically non-existant. Knowledge of these systems is, to a great extent, confined to those individuals who have worked on them over the years, i.e., current or former Hines employees. Transfers to Austin and the exodus of personnel who fear losing their jobs to the CDC will have a detrimental effect upon the maintenance activities to be retained at Hines. In addition, the Director of the Hines DPC expressed concern over the transferring of equipment in a 2/27/81 letter to the AA/COM&T. In his letter he stated that removal of the fourth TCS Datanet, which was justified based on workload, could very likely provide unsatisfactory service to the users. It was also stated". . . "to maintain day-to-day operational readiness of the production environment, including troubleshooting of terminal system software and firmware problems' at the Hines Data Processing Center it is felt that the removal of three regional office test facilities (ROPT's) will severly impair the overall operation of these processes."

3. *Adverse Effect on TCS Redesign.*—The lack of formal system documentation makes it difficult for experienced personnel to produce specifications for a redesigned system and probably close to impossible for those with no knowledge to do so. The 3/81 report indicated at least 50 percent of the Hines staff would not move. The

loss of knowledgeable people will delay the redesign effort. No estimate of the length of delay can be made without knowledge of who will transfer and consideration of the extent of their knowledge. This delay is in addition to COM&T's estimate of a 2-3 month delay based on the movement of equipment.

4. *Productivity increase.*—The assumptions on productivity and the translations of productivity increases into FTE do not appear to be adequately supported. In the 8/1/80 report, COM&T stated there was no acceptable measurement to determine FTE savings from increased productivity and efficiency. since the savings attributable to the CDC are all bases on increased productivity, the inability to measure certainly makes our projected savings suspect.

5. *Associated Costs.*—We feel that some costs were underestimated and some not considered in determining the cost of transferring CP&C to the CDC.

The costs for movement of people, in particular, seems to be underestimated. Our information is that 1979 figures were used in deriving the estimates. With an inflation rate in excess of 10 percent for both 1980 and 1981, the per person cost will probably exceed $12,000, as opposed to the $11,000 estimate, by the end of 1981. If 50 percent of the Hines people alone transfer, an additional $50,000 would be added to the $940,541 estimated. (We note that DVB is currently using $19,000 as its estimated transfer cost.)

We understand that the General Services Administration is now looking for space to temporarily house the CDC. We do not believe the cost of modifying the temporary space to fit the needs of the CDC, the cost of providing permanent space, or the cost of moving from the temporary to the permanent space have been considered. Recurring costs for training new hires and their "learning curve" times were not considered nor the probable increased travel costs for user and COM&T analyst personnel between Hines and Austin.

6. *Deviations from the Plan and Schedule Approved by the Administrator.*—The original request to study the feasibility of a COC contained a schedule for the conduct of studies which would provide information needed to decide the feasibility of each phase and how it would be implemented. For example, the Phase III study was to relate to the transfer of systems scheduled for or undergoing development or redesign. Approximately 45 days prior to the scheduled completion date, a "Preliminary Project Plan" was presented to Hines DPC management. This plan reflected target dates for the movement of software, hardware, and personnel. Thus it appears that a conclusion as to the outcome of the study had already been reached. The completed study addressed only the DP&E system, not all the systems undergoing to scheduled for redesign as originally intended. Moreover, it does not discuss the possibility of adverse effects on the level of service or the TCS redesign.

7. This office does not question the concept of a COC. We recommend that all alternatives to full scale implementation should be explored to insure that the projected benefits will in fact be realized. The COC implementation plan chosen should be the least costly and least disruptive to achieve the stated objectives.

8. The following is our analysis/comparison of the current implementation plan and two alternatives we think have merit:

Present Plan.—Full implementation of the COC with CP&E being transferred in fiscal year 1981

Advantages: Possible savings of 57 FTE.

Disadvantages: Full scale implementation without proof of cost/benefits; Possible adverse effect on ability to process CP&E systems; Possible extended slippage in TARGET system development; Possible loss of experienced programmer/analysts; additional required training for new people as well as current CDC staff.

b. Test Concept with present systems at Austin and those from St. Paul.

Advantages: No movement of people or equipment nor associated costs; Allows full test of concept without disrupting other DPCs; If concept doesn't prove effective VA can revert to prior system at no cost; No loss of experienced personnal; Minimum training costs; Provides justification and proof of concept to Congress and OMB; Allows time for planning and phased moves of people, systems and equipment.

Disadvantages: Postponement of potential 57 FTE savings (33 FTE from CP&E); Possible reprogramming in fiscal year 1982 to offset last savings.

c. Establish Two Design Centers based on type of equipment.

Advantages: No movement of people or equipment nor associated costs; Allows time to prove concept to OMB and Congress; Does not disrupt current development efforts; No loss of experienced personnel.

Disadvantages: Postponement of potential 57 FTC savings (33 FTE from CP&E); Additional administrative overhead; Possible reprogramming in fiscal year 1982 to offset lost savings.

9. Our study of the establishment of the CDC and the proposed transfer of CP&E development work from Hines to Austin has led to the aforementioned concerns. As a result of this survey, I am instructing the Office of Audit to conduct an audit of this effort. It should be noted that GAO is also conducting an audit into selected aspects of the matter.

10. Recommendation: I recommend that further actions to staff and move equipment to the CDC be held in abeyance pending completion of detailed analysis and evaluation of this potentially costly course of action and consideration of alternative CDC implementation concepts.

MORRIS B. SILVERSTEIN,
Deputy Inspector General.

VETERANS ADMINISTRATION MEMORANDUM

APRIL 3, 1981.

To: Acting Administrator
Subj: A study Concerning Relocation of CP&E Programing Activities, March 1981

1. We have reviewed this report, comparing it to the earlier Management Study, Automatic Data Processing, Centralized Development/Maintenance Center, August 1, 1980. We find that the subject report does not provide top management with information adequate to make a sound, informed decision whether to relocate the CP&E programming activities from the Hines DPC to the Centralized Development Center at Austin, Texas. The report is an implementation plan that provides a reasonably detailed technical and logistics plan. It does not adequately determine the feasibility of the proposal since it barely touches the possible negative impacts on the operation of the current Target system and on the completion of the development and redesign of Target. It also does not adequately support the proposal in terms of costs and benefits. It is a fragmented approach to creating the development center that can result in losing sight of the overall concept and plan.

2. The impact of relocating the equipment and people from Hines to Austin could be very detrimental to the operation of the current Target system and therefore to DVB's ability to perform their duties. This is an especially critical factor in a time of budget and staffing reductions in DVB. The Director of the Hines DPC points to several problems that could impact on the operation of Target in his letter dated February 27, 1981. The study provides no assessment of these possible problems yet concludes that "the study has not found any technical barriers of sufficient magnitude to impact seriously the proposed relocation." Without benefit of any further analysis it is difficult to arrive at that conclusion when the Hines DPC Director uses phrases such as "severely impair," "less than acceptable production environment" and "less than satisfactory service to our users."

3. The report states that there will be "a two or three month slippage of development projects." It seems reasonable to expect a two to three month slippage if the relocation was reviewed favorably by the employees and virtually all of the employees who are trained and knowledgeable about Target and the VA actually move to Austin. The report acknowledges that there has already been strong negative reaction at Hines to the relocation. The report further estimates that fully 50 percent of the people will not move. Thus the move seems likely to result in employees moving who do not want to move and who will be less productive than they were in Hines. If 50 percent or greater of the 102 employees must be replaced by new employees hired at Austin, a massive formal training and OJT effort must be undertaken which would seriously degrade performance. Both of these factors would have to cause extensive slippage in the continuing development; and redesign of Target. We would guess that this could cause a slippage of six months to one year on top of the two to three months estimated because of the move itself.

4. While no savings are presented, the report reiterates the earlier assumption that productivity can be improved from 64 percent to 75 percent. The report acknowledges that the current productivity is only estimated at 64 percent and that the goal is to obtain 75 percent. We disagree that there are "no fully quantitative methods for accurately projecting increase productivity and efficiency." There are definitely methods that can be used, however, some of the methods require extensive efforts. Apparently the "generally accepted industry parameters" are based on something besides guesswork. Of course if the report is correct it means we will never know if we have reached our goal of 75 percent. According to both of the studies on the development center, the only savings are due to increase productivity. *The Agency cannot support such an assertion without data to* back it up. One further point on this subject, OMB Circular A-76 specifies that 18 percent of available time must be allocated to leave and holidays. Additional allowances for fatigue and

personal time (10 percent) and delay (2.5 percent) are normally calculated which means that 30.5 percent of available time is not normally calculated as productive time. Thus, 69.5 percent rather than 75 percent would be a more realistic goal. Regardless of the basis for the producitivity savings, the report does not clearly portray the staffing changes. There is not clear explanation of the current staff at Hines, who will remain, who will transfer and what the savings will be. From the information that is included it appears that there will be an increased staffing for audit, from six now supporting SDD1 to 10. There is also no indication of the status of the increased overhead cost of 11 FTE as described in the August report.

5. There are numerous questionable areas in the cost analysis. It is unclear whether a new building will be required. The August report estimated the cost of a new building at $10.2 to $12.2 million. This cost is not included although the report discusses two temporary options "while permanent CDC facilities are being constructed." We also seriously question the facility of placing 102 employees and 40 timesharing terminals along with the normal office equipment to be moved from Hines in 6,450 square feet of warehouse space. In comparison the August report said that 37,000 square feet of space would be required for 205 people. This included executive space and storage space and was calculated using 135 square feet per person. The current proposal would only allow 64 square feet per person including storage, equipment, files, executive space, etc. This is clearly inadequate space and would obviously seriously degrade productivity. Furthermore, this inadequate space would preclude future transfers of people from the Los Angeles, Philadelphia and St. Paul DPCs and VACO that were contemplated in the August report. The number expected to be transferred from those locations was 105, three more than will be transferred from Hines. Another space related cost not included in the report is the cost of converting the warehouse space to office space. There is no cost associated with carpet, dividers, painting, etc., necessary to make a warehouse acceptable.

6. Other costs not included in the one-time costs that will be needed to establish the center include the costs for the permanent air conditioning and power supply ($450,000) and the dual operation while the transfer is taking place. In addition, the cost of training is not included other than to state that $30–40,000 presently in the Hines DPC budget could be used. The training course requirements are carefully itemized but no costs are associated with them. Recurring costs such as travel, office space, parking space and computer space are not specified. Finally, the costs and benefits are not depicted as life cycle costs and then discounted to present value. This should be done in order to clearly identify the costs and benefits of the proposed relocation. If a new building is required at a cost of $10 to 12 million, the centralization will not be cost-beneficial even if productivity can be improved somewhat.

7. In view of the many questions that remain and the controversy that has so far surrounded this proposal, we recommend *that any decision on this relocation be deferred.* Many issues must be resolved prior to any decision in order for the Agency to be able to justify the decision with solid facts. Because of the potential impact of the decision not only on the operation of ADP in the Agency but on the users, we recommend that the decision be made by the Administrator with the advice of the ADP Review Group. We would be pleased to assist in the preparation of the needed cost and benefit data.

RAYMOND S. BLUNT,
Assistant Administrator for Planning and Program Evaluation.

VETERANS ADMINISTRATION MEMORANDUM

APRIL 10, 1981.

To: Acting Administrator
Subj: Establishment and Staffing of CDC

1. Aa a result of meetings with ODM&T and P&PE and information provided by them, we have been able to more clearly focus on the concerns which we brought to your attention by our memorandum of 4/3/81. This information has enabled us to clarify certain points as well as correct certain misunderstandings. The explanations and information provided to us in these meetings have eliminated certain aspects of our concerns. There are, however, remaining serious concerns that we still have which are set forth below, along with our understanding of ODM&T's position. These concerns are:

a. The FTE savings from moving the CP&E development to Austin will result in an FTE savings of only 14 rather than the 32 as previously indicated. Six of these 14

are administrative and overhead savings which could be obtained without moving CP&E to Austin.

b. The cost benefit study done by P&PE shows that under all three of the cases analyzed (the best, the most likely, and the worse), a breakeven point will not be achieved by the proposed move from Hines to Austin.

c. There is a definite possibility that a significant number of the people remaining at Hines will leave. This would have a detrimental effect on the CP&E betch system development and maintenance.

d. If a significant number of the remaining people at Hines left, there would be a substantial impact on TARGET Central System (TCS) redesign.

2. *FTE Savings From Movenemt of CP&E From Hines to Austin.*—Background: Of the 57 FTE savings projected by ODM&T last August which would result from the CDC, 32 were attributed to movement of CP&E development from Hines to Austin. The present projections of ODM&T are that this move would result in a net savings of only 14 FTE. Of the 14, ODM&T estimated that 6 will result from administrative and overhead savings from combining two development groups (SOD I and SOD II). In our opinion these administrative and overhead savings could be achieved whether at Hines or Austin. Consequently, we conclude that the real savings from moving CP&E to Austin is only going to be 8 FTE.

3. The above 14 FTE savings figure is based on ODM&T's estimate. It should be noted that this estimate was not based on increased efficiency and effectiveness resulting from the CDC as we previously thought. ODM&T indicates that the savings will result from better balancing to eliminate dead time, although they are not able to translate the elimination of dead time into FYE savings. ODM&T's estimate is, as we understand it, calculated by deducting the number of people they think they will need in Austin for CP&E development (88) from the number of people presently doing that work at Hines (102).

4. We question whether there will be any savings at all from moving CP&E to Austin. Because of the use of differrent types of equipment and different versions of computer language, we think that only a small number of people will be shifting back and forth between those devoted to CP&E and those devoted to everything else.

5. *ODM&T's Position.*—We understand ODM&T's response to these concerns is that the benefits from moving CP&E to Austin rather than leaving it to Hines cannot be measured by the 14 FTE savings along. Other benefits that they have indicated are there would be more flexibility for the future if CP&E is moved; they would better be able to control the flow of work; and they would be better able to adjust to the agency priorities for work to be done.

6. Our response to ODM&T's position is that these concerns can be better met by improved management techniques and do not appear to be directly related to eliminating dead time which would result from the establishment of a CDC.

COST-BENEFIT STUDY

7. CP&E's cost-benefit study indicates that the proposed move is not effective under even their best case analysis. Consequently, the proposed move will result in a loss of $1.4 million for the 14 FTE savings. If the FTE savings of 8 were used, the cost-benefit study would indicate a greater loss.

ASSESSMENT OF CONSEQUENCES TO DVB IN ON-GOING CP&E OPERATIONS

8. Background: The CP&E batch system is not formally documented. The documentation is primarily in the heads of these people at Hines. ODM&T estimates that it takes 2 to 2½ years to learn this system. ODM&T's present intention is not to move to Austin the development and maintenance performed in the CP&E batch system. Those people left behind will be working on modifying the current batch system as required by legislative changes and DVB and trouble shooting to keep the system operational. The TCS redesign according to ODM&T is now estimated to be completed in 1986 rather than 1983.

9. *Risk.*—If a significant number of people remaining at Hines in the CP&E development/maintenance group leave before there has been sufficient implementation of the TCS redesign, there is a risk that the VA may not be able to keep the CP&E batch system operational. The consequences of this risk could be severe and devastating; VA may not be able to get the benefit checks out and/or may not be able to implement legislative changes.

10. *Assessment of Risks.*—We have no hard information on who of the CP&E batch emplyees would stay and leave if the redesign work was moved from Hines. In our opinion if all that is left at Hines is maintenance, job satisfaction will be more likely to decrease and trunover increase.

In addition, it is our opinion that people not near retirement will be more likely to leave in the next two years rather than stay with VA. Our understanding is that of the 45 people remaining in our CP&E batch group, approximately half are under the age of 40 and approximately 9 are eligible for retirement in the next 3 years. Therefore a movenemt of CP&E from Hines at Austin at this time could, in our opinion, accelerate the trunover of the younger group.

11. If 50 percent of the remaining CP&E development maintenance people leave within the next two years, VA would be running a high risk of system failure. If 25 percent leave within the next two years, VA would be running a moderate risk of system failure.

12. *ODM&T's Position.*—As we understand ODM&T's response, they disagree with our conclusion that a significant number of CP&E people at Hines will leave within the next two years. They believe these people will stay at their jobs until the new TCS is in place (which could be up to five years). In ODM&T's opinion, those people would look for new jobs at that time and possibly be offered other opportunities at Hines by VA. ODM&T also indicate that if there are problems with the operations of the CP&E batch system, people from Central Office at Austin could be detailed to prevent any systems breakdown.

13. Our response to ODM&T's position is that we believe that ODM&T's approach would be costly and cannot be pergatuated for any length of time.

ADVERSE IMPACT ON TCS REDESIGN

14. If a significant number of the Hines CP&E development/maintenance people leave within the next two years, we believe there will be a substantial impact on the TCS redesign.

15. *ODM&T's Position.*—

ODM&T's position is that the functional specifications for the redesign are properly the responsibility of the user, i.e., DVB and other ODM&T Central Office systems analysts. We agree.

16. Our response is that DVB has indicated that they do not have sufficient resources and are hard pressed to provide detailed functional specifications for TCS redesign in a timely fashion. Implementation of SDM/70 will not change this. Therefore, we see a requirement for the use of Hines CP&E batch system personnel: In TCS redesign to aid in the provision of detailed functional specification. If they left VA the iniformation would not be so readily available. Therefore, there could be a substantial delay in addition to ODM&T's 2-3 month delay based on the movement of equipment.

RECOMMENDATION

The proposed move of CP&E development/maintenance personnel from Hines to Austin will yield only limited FTE savings from further implementation of the CDC concept at this time; Is not cost beneficial and could have serious adverse consequences. Based on these factors, the proposed move is not justified.

MORRIS B. SILVERSTEIN,
Deputy Inspector General.

VETERANS ADMINISTRATION MEMORANDUM

APRIL 10, 1981.

To: Acting Administrator
Subj: Centralized Development Center

1. According to your request at the end of our meeting of April 3, 1981, my staff and I have met with ODM&T and the IG concerning the proposed actions relative to the CDC. ODM&T has been very helpful in providing a detailed amount of information. As we agreed, certain points of concern were clarified with additional data and some of our incorrect interpretations were eliminated. This was a very helpful process for all participants and it served to clarify the issues that you should be aware of in making any decisions.

2. The primary thrust of our previous concerns related to making a major, controversial decision with a lack of data and experience as a basis for that decision. As a result of our discussions with ODM&T and the more thorough documentation they have provided, we have prepared an analysis of the costs and benefits associated with the movement of CP&E development to the CDC. This is an analysis which I believe is essential to understanding the decision impact and also is one which has been requested by the Senate Veterans Affairs Committee and other concerned sources. To assist your review, we have prepared an analysis of the probable costs

and benefits as well as the "best" possible and "worst" possible cases. In no instance would this decision be cost beneficial.

3. In light of this analysis, I would continue to counsel a more prudent course of action, namely, one which would examine the impact of operating the CDC with the 166 Austin personnel and assigning the CDC all new development activity other than CP&E. This would enable an observation of the impact on productivity at Austin (presently 64.5 percent, and the ability to manage work flow. This is a normal course of action in a major change—namely to "pilot" the effort to gain experience. I would couple this with a management review at Hines DPC to isolate those present management factors which may be contributing toward problems there—including turnover. I would make members of my staff available to ODM&T to assist in this review. I believe this course of action which could be only a matter of a few months would put this agency in a better position to assess this decision and its magnitude and to defend any actions taken. It would further allow for a positive endorsement and a course of direction by the new VA leadership which would have to contend with any adverse circumstances. It would also place this decision downstream of a GAO report which may result in adverse findings and a recommendation to defer all further action.

4. In a climate of severely limited resources, I believe a more thorugh review and analysis is warranted. Our first priority is to close the St. Paul DPC which will result in an expenditure of approximately $1.53 million. Our estimate of the one time costs associated with CP&E moving to the CDC is $2.05 million. It is my present understanding that funding is not available for the St. Paul closure. Before a final decision is made, the question of funding availability should also be resolved. This will not occur until the end of April. Otherwise, adverse effects could be expected to occur in other priorities such as the establishment of the pharmacy system.

5. In summary, after very frank and informative discussion with ODM&T, two concerns remain: the decision would not be cost beneficial; the decision lacks an assessment of a "pilot" CDC experience which could lead to a more informed position. The funding question and associated impacts would also need to be resolved. My recommendation is to defer this decision for a minimum of 90 days. Such a decision would still allow for any savings to realized prior to the beginning of fiscal year 1982.

RAYMOND S. BLUNT,
Assistant Administrator for Planning and Program Evaluation.

Attachment.

ANALYSIS OF COSTS AND BENEFITS—RELOCATION OF CP&E DEVELOPMENT

The Office of Planning and Program Evaluation has prepared the following analysis of the costs and benefits associated with the proposed transfer of the CP&E development function to the Austin, Texas Centralized Development Center (CDC). As such, this report is intended to be considered along with the possible intangible benefits and associated risks. As ODM&T has stated the transfer of the CP&E function is the only major current development activity not already transferred to the CDC. Therefore, the decision concerning the CP&E transfer is the only real issue remaining in the establishment of the CDC. The proposal would involve the transfer of functions of 102 positions as well as the relocation of the computer equipment that currently supports the programming activities.

Our analysis is based upon information contained in ODM&T's Management Study of the Automated Data Processing Centralized Development/Maintenance Center dated August 1980. ODM&T's March 1981 implementation plan entitled, "A Study Concerning Relocation of CP&E Programming Activities," ODM&T's memorandum of April 8, 1981, to P&PE and the Inspector General, as well as information provided by the Office of the Controller and ODM&T and estimates of relevant costs. The following is a description of the costs and benefits of the proposed relocation that are considered to be the most likely. A sensitivity analysis then describes what are considered the best possible case and the worst case so that the range of possible results is understood.

ONE-TIME COSTS

The one-time costs required to relocate the CP&E development activity from the Hines DPC to the Austin CDC are expected to be $2,054,027. These costs will occur during the balance of fiscal year 1981 and fiscal year 1982. Table 1 provides a breakdown of these costs. They include $561,000 for transfer of personnel and $218,790 for severance pay for those who elect not to transfer. The transfer cost was calculated based on an estimated 51 people electing to transfer at $11,000 each. The

severance pay assumes that 25 people will find other federal employment and 26 people will receive an average of $8,415 each. Both of these estimates were made by ODM&T.

The training required for those who transfer and to make the estimated 37 new employees fully qualified is estimated by ODM&T to cost $100,000. Especially critical and costly will be the training required for system's programmers. Some training, mostly in-house, will be required to train Honeywell programmers on IBM programming. The cost for planning and managing the relocation is estimated to be $25,000 and the cost of travel in addition to that required to relocate the 51 people is estimated at $25,000 for fiscal year 1981 and for fiscal year 1982. An estimated $70,000 will be required to move from the temporary space to permanent quarters. This estimate used the Honeywell quote of $89,912 for the shipment of equipment and furniture from Hines to Austin as a guide. An estimated $50,000 will be required as improvements to the temporary space for such normal things as furniture, carpet, dividers, etc.

A cost of $64,000 is estimated by ODM&T for temporary air conditioning and power supply for the computer equipment. $27,739 will be needed for other miscellaneous site preparation work.

ODM&T has estimated that the relocation of people and equipment will result in a slippage of at least two to three months in development projects. During this period the staff salaries will continue but productive work will be lost. The personnel cost of a three-month slippage would be $707,586 and would be a one-time cost of the relocation.

The final one-time cost is a portion of the cost of the upgrade of the air conditioning and electrical power supply at the Austin DPC. The total cost of this upgrade is estimated by ODM&T at $450,000. Twenty percent of this cost ($90,000) is included in the one-time cost of relocating the CP&E development activity since the Honeywell computer will be one of five large computers at Austin.

The one-time costs of the CP&E development activity relocation would thus be $1,769,027 in fiscal year 1981 and $285,000 in fiscal year 1982 for a total cost of $2,054,027.

RECURRING COSTS

The recurring costs of the relocated CP&E development activity would be an estimated $12,530,436 over the four-year period fiscal year 1982–1983. The bulk of this cost will be the salaries and fringe benefits for the staff of 88 FTE. This cost will be $2,830,344 annually and includes 26 percent for fringe benefits as prescribed by OMB. The Standard Level User Charge (SLUC) of $169,770 annually was calculated based on space for 88 FTE with appropriate space for computer equipment, storage, executive offices and parking. The estimated cost for telecommunications of $80,000 in fiscal year 1982 and $50,000 each succeeding year is based on budget estimates by ODM&T as are the estimated costs for travel and miscellaneous shipments of $150,000 in fiscal year 1982 and $50,000 in each succeeding year. Thus, the recurring costs are estimated as $3,230,114 for fiscal year 1982 and $3,100,114 each succeeding year for a total of $12,330,456.

TOTAL COSTS

The total costs of the proposed are estimated as $14,384,483. This consists of $2,034,027 in one-time costs and $12,330,456 in recurring costs.

SAVINGS

The gross savings to be realized from the relocation will result from eliminating the salary costs of the current staff of 102. This is $3,280,626 annually and $13,122,504 during the period fiscal year 1982–1985. The result is a net savings of 14 FTE. However, this savings does not offset the cost of $14,584,483 and results in a loss of $1,461,979.

DISCOUNTED COSTS AND BENEFITS

The proposal will result in a present value net loss of $1,430,780 and a benefit to cost ratio of 0.87 to 1.00. Thus, the VA would lose 13¢ for each dollar spent. Table 2 provides a breakdown of the discounted costs and benefits.

SENSITIVITY ANALYSIS

As mentioned previously, in addition to calculating the costs and benefits for the circumstance most likely to occur we have also conducted a sensitivity analysis

examing the "best" and "worst" cases. This additional information will allow the decisionmaker to have the broadest range of possibilities before him when deciding if the transfer of CP&E should take place.

The "best" case meaning the one in which the least costs will be incurred has reduced one-time costs projected for lost time associated with the move and no costs for permanent air conditioning and power requirements. Costs associated with the move are reduced from $707,586 (a three-month slippage) to $94, 500 (a three-week slippage). This reduced cost is the minimum expected as presented by Honeywell in their letter of March 10, 1981 (Attachment H to ODM&T's March 1981 Implementation Plan). For this case, no costs associated with ODM&T's estimate of $450,000 for permanent air conditioning and power were attributed to the relocation of the CP&E equipment.

These adjustments for slippage, and power and air conditioning requirements reduces the one-time costs by $523,086. Consequently, the cost-benefit ratio is raised from 0.87 to 0.92 for the "best" case.

The "worst" case situation, meaning the highest reasonable costs are incurred, shows adjusted costs in seven categories: five one-time and two recurring. For this situation it was assumed 75 people chose to move as opposed to 51 and of the remaining 27 FTE, 14 leave the government. This results in increased personnel transfer costs of $264,000 and decreased severance pay of $100,980. Training costs are estimated at $200,000, an increase of $100,000. ODM&T's shopping list of possible training courses costing $286,640 was used as a guide for this estimate. The personnel costs associated with project slippage are increased by $707,386 based upon a six-month delay. Additionally, the Datanet processor removed from Hines is assumed to be replaced at a cost of $150,000 based upon the acquisition cost in 1980. These adjustments in the one-time costs result in an increase of $1,120,606.

In addition to the foregoing, for the "worst situation is is assumed that ODM&T's estimate of FTE saved cannot be fully realized and that one-half of the estimated 14 FTE or 7 FTE is saved. This results in increased recurring costs for personnel and space. Based upon a personnel cost of $32,167 per FTE the recurring personnel costs increase $225,141 and using the same SLUC rates as previously used, the recurring SLUC costs increase by $9,161.

The net result of these adjustments for the "worst" case reduces the cost-benefit ratio from 0.87 to 0.72.

BREAK-EVEN ANALYSIS

All three of the possible cases analyzed (the best, the most likely, and the worst) result in negative cost-benefit ratios. Therefore, a break-even point is not achieved.

TABLE 1.—LIFE CYCLE COSTS

	Fiscal year—					Totals
	1981	1982	1983	1984	1985	
PRESENT SYSTEM						
Recurring personnel (102 FTE)		3,280,676	3,280,626	3,280,626	3,280,626	13,122,504
PROPOSED SYSTEM						
One-time costs:						
Personnel transfer	581,000					
Severance pay	218,790					
Training		100,000				
Personnel for planning and managing move	23,000					
Travel	23,000	23,000				
Move from temporary to permanent space		70,000				
Equipment move and reinstallation	89,912					
Improvement to temporary space	30,000					
Temporary A/C	23,000					
Temporary power	39,000					
Miscellaneous	27,739					
Personnel—Slippage, 3 months	707,386					
Permanent A/C and power		90,000				
Total, one-time costs	1,769,027	285,000				2,034,027
Recurring costs:						
Personnel (88 FTE)		2,830,344	2,830,344	2,830,344	2,830,344	
SLUC		169,770	169,770	169,770	169,770	

TABLE 1.—LIFE CYCLE COSTS—Continued

	Fiscal year—					Totals
	1981	1982	1983	1984	1985	
Telecommunications		80,000	30,000	30,000	30,000	
Travel and miscellaneous shipments		150,000	50,000	50,000	50,000	
Total, recurring costs		3,230,114	3,100,114	3,100,114	3,100,144	12,530,434
Total costs	1,769,027	3,313,114	3,100,114	3,100,114	3,100,144	14,584,483

TABLE 2.—DISCOUNTED DEFERRED COSTS AND BENEFITS

Year since initiation	Expected yearly cost	Expected yearly benefit	Discount factor for 10 percent	Present value cost	Present value benefit
1	1,769,027	0	.909	1,608,046	0
2	3,515,114	3,280,626	.026	2,903,484	2,709,797
3	3,100,114	3,280,626	.751	2,328,186	2,463,750
4	3,100,114	3,280,626	.681	2,117,378	2,240,668
5	3,100,114	3,280,626	.621	1,925,171	2,037,269
Total				10,082,264	9,451,484

Present value net benefit: 1,430,780.
Benefit-cost ratio: 0.87.
Most likely case.

I want to make the observation to members of the committee—we have several from the north and several from the south—that we see several shifts in some of these things from north to south. We hope it isn't a reopening or a continuation of the civil economic war.

Anyway, these studies shed serious doubts on the wisdom of making this and other major changes within the VA's data processing system at this time. I believe that they also serve as a meaningful basis for questioning the VA proposal to close the St. Paul center.

I urge the Subcommittee to study these documents closely. They were completed in early April and were thus unavailable to the subcommittee during its March hearings on the VA budget. The documents raise several objections to the changes at Hines, foremost among them the question of cost/benefit and the long term consequences on the overall operation of the computer operation. I believe that similar objections could be raised in the situation at St. Paul.

The St. Paul center has a unique function shared by no other VA data center around the country. Its main task is to operate the Centralized Accounts Receivable System, which helps the VA recover overpayments to veterans. As of the end of April, the center was handling more than 559,000 collection cases, totaling $547 million. The St. Paul center has received high praise for its cost effectiveness in this area, about $8 returned for every one dollar it spends.

In recent days I have scoured the record in search of evidence that closing this center would produce greater cost effectiveness and savings. I have found none. The computers and manpower are in place in St. Paul. The VA caseworkers assigned to debt collection are stationed in St. Paul and will remain there. Removing the

data center will greatly hamper the VA's efforts to collect overpayments to veterans at a time when debt collection is receiving greater emphasis from the Administration, the Congress and the American people.

I will skip the next few paragraphs, in which I make some remarks about my farm background concerning consolidations. I will turn to the last part, where my recommendations are that I hope the Subcommittee will consider. First of all, to instruct the VA to restore the St. Paul Data Processing Center for fiscal 1982 to allow for more detailed study on the cost/benefits of closing the center at some future date. Instruct the Veterans Administration to redistribute its proposed manpower reductions more equitably throughout the Office of Management and Telecommunications to assure continued services of all functions at the St. Paul Center.

If you have questions, I will be happy to try to answer them.

[The statement follows:]

STATEMENT OF REPRESENTATIVE ARLEN ERDAHL

Mr. Chairman and Members of this distinguished Subcommittee, I appreciate this opportunity to speak out on behalf of retaining the Veterans Administration's Data Processing Center in St. Paul, Minnesota.

Like a child scorned and rejected by his parents, the St. Paul center soon will be sent off to relatives in a distant city, unless this Subcommittee acts to save it. The V.A.'s Office of Data Management and Telecommunications already is far along its timetable to close the center by October 1, 1981.

As you know, the V.A. is undertaking this closure in an apparent effort to meet funding and manpower levels set by the Office of Management and Budget for fiscal year 1982. The V.A. hopes to eliminate 140 full-time positions by closing the St. Paul center and consolidating its functions in one or more of the four remaining Data Process Centers around the country. The St. Paul center is the only one that will be closed.

The V.A. is taking this action without the benefit of adequate and reliable cost-benefit analyses, and at a time when less sweeping consolidations are under sharp attack by executives with the Veterans Administration itself.

Mr. Chairman, I have recently obtained several internal studies completed by the V.A. in response to outside criticism over a proposal to shift programers at the Hines, Ill., Data Processing Center to Austin, Tex. With your permission, I will submit these studies for the official record of this hearing.

These studies shed serious doubts on the wisdom of making this and other major changes within the V.A.'s data processing system at this time. I believe that they also serve as a meaningful basis for questioning the V.A. proposal to close the St. Paul center. I urge the Subcommittee to closely study these documents. They were completed in early April and were thus unavailable to the Subcommittee during its March hearings on the V.A. budget.

The documents raise several objections to the changes at Hines, foremost among them the question of cost-benefit and the long-term consequences on the overall operation of the computer operation. I believe that similar objections could be raised in the situation at St. Paul.

The St. Paul center has a unique function shared by no other V.A. data center around the country. Its main task is to operate the Centralized Accounts Receivable System (CARS) which helps the V.A. recover overpayments to veterans. As of the end of April, the center was handling more than 559,000 collection cases totaling $547 million.

The St. Paul center has received high praise for its cost-effectiveness in this area—about $8 returned for every $1 it spends. In recent days I have scoured the record in search of evidence that closing this center would produce greater cost-effectiveness and savings. I have found none. The computers and manpower are in place in St. Paul. The V.A. caseworkers assigned to debt collection are stationed in St. Paul and will remain there. Removing the data center will greatly hamper the V.A.'s efforts to collect overpayments to veterans at a time when debt collection is receiving greater emphasis from the Administration, the Congress and the American people.

Consolidation is a risky business. I have spent much of my life working the fields on my farm back in Minnesota. I know from experience that farmers argue among themselves about the merits of consolidation.

Some will tell you that the way to get ahead in the farming business is to concentrate the land and livestock in as few hands as possible. Others will say that the small family owned and family operated farms are the most efficient and the most profitable.

I am not here today to argue the highs and the lows of consolidation. But I know two things about it for sure. The first is that the farmer or the businessman or the government official who would consolidate must be certain that it would result in a profit or a savings. Failure is the offspring of uncertainty over the results.

The other is that consolidation is permanent, or nearly so. I know many good farmers living in Minnesota's towns and cities who wish they had never sold out to the consolidators. Once the barn is gone, once the land is tilled by someone else, once the family has left the old homestead, it's awful tough to get back into farming.

I see a similar situation developing in the Office of Data Management and Telecommunication's decision to start closing the doors of the St. Paul data processing center. Once the 170 full-time employees are dispersed, reassigned, laid off, or transferred, it will be difficult to bring them back if we find it necessary to do so in the future.

I am urging the Subcommittee to consider the following recommendations:

Instruct the Veterans Administration to restore the St. Paul Data Processing Center for fiscal 1982 to allow for more detailed study on the cost-benefits of closing the center at some future date.

Instruct the Veterans Administration to redistribute its proposed manpower reductions more equitably throughout the Office of Management and Telecommunications to assure continued services of all functions at the St. Paul center.

If you have questions, I will be happy to try to answer them.

Mr. ERDAHL. As I explained to your colleague, I suppose I could be accused of being provincial about this. It doesn't happen to be in my district. It is of real concern to all of us in the upper Midwest. Therefore, I submit this statement and request you and your colleagues give it careful consideration.

Mrs. BOGGS. We are very pleased to have you with us and pleased to have your statement. Of course, we will give it careful consideration.

Mr. Green?

Mr. GREEN. We had a problem with this center in the sense that there was testimony here that the positions to be saved by consolidating this center were such that even if we were to put the money for the center back in OMB would not give back the positions.

If I may just read one question and answer; it happened to be a question I asked:

"Basically I understand you are saying that it would not make any difference if the Committee added the funds for St. Paul; you would still target the St. Paul center as the best place to absorb these cuts and you would partially close down the center before the 1981 decisions are final."

Mr. Wilson replied: "That is correct, Mr. Chairman."

Mr. ERDAHL. I might make an observation there. I had attended meetings in Mr. Sabo's office with representatives of the VA. I was quite surprised to find out at that time that evidently the directive to close this specific center came from OMB rather than the Administration. Obviously I am not setting this overall policy, but it would seem to me more reasonable for the OMB to instruct the Veterans Administration, you must save x millions of dollars and you must eliminate in order to meet our guidelines x number of employees. It would seem like the Veterans Administration, not the OMB, would have the expertise and probably the proper

wisdom to determine whether those cuts could best be made. I think in my mind at least that is a defensible position.

Mr. GREEN. You are certainly correct and the testimony is quite clear before us that that instruction did come from OMB. I guess the problem is that it also appeared that the VA, if it has to absorb that number of positions lost would, in fact, go ahead with the St. Paul closing. Therefore, just putting in dollars for the facility doesn't seem to solve the problem.

Mr. ERDAHL. Madam Chairwoman, I regret our colleague Martin Sabo from the Minneapolis area is not here now. He is also very knowledgeable of it. I am sure he will enter into your deliberations when a final decision is made. I am sure you will give his concerns proper attention as well.

Mr. GREEN. I appreciate the fact you took the time to come to this meeting.

Mrs. BOGGS. Mr. Sabo is a valuable member of this Subcommittee, and we will be anxious to have his input.

Thank you so much.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

FELIX M. BECK, CHAIRMAN, LEGISLATIVE COMMITTEE, MORTGAGE BANKERS ASSOCIATION OF AMERICA

SHARON M. CAVANAN, ASSOCIATE LEGISLATIVE COUNSEL, MORTGAGE BANKERS ASSOCIATION OF AMERICA

Mrs. BOGGS. Mr. Beck, we are very pleased to have you with us. We will be happy to make your entire statement a part of the record. You may summarize as you wish.

Mr. BECK. I am Felix Beck, Chairman of the Board of Margaretten & Company, located in Perth Amboy, New Jersey, and I also serve as Chairman of the Legislative Committee of the Mortgage Bankers Association of America.

Mortgage Bankers are a principal source of residential mortgage credit, providing between 20 to 25 percent of single family mortgages in this country in recent years.

As this Nation focuses on its fundamental macro-economic problems, there is a real danger that we may lose sight of equally significant economic and social problems plaguing America's homebuying public. The convergence of several critical forces, high interest rates, the increased cost of housing, and the greatest demand for shelter in our history, are sowing the seeds of a housing crisis of monumental proportions.

In the decade of the 1980s, 43 million people will enter the homebuying market, more than twice as many as at any previous time in our Nation's history. The solutions to this housing crisis cannot wait patiently for broad-gauged tax and spending cuts to reduce inflation and interest rates over a three or four year planning horizon. Government must be careful not to worsen this housing crisis with ill-timed steps that could increase the cost and reduce the availability of mortgage credit.

In particular, MBA strongly opposes the proposals to phase out the non-subsidized FHA insured loan and GNMA guaranteed mortgage-backed security programs, either directly by setting a cutoff date, or indirectly by setting unrealistically low credit budget ceilings, such as are projected by the Administration's budget for fiscal year 1982 and subsequent years. Ceilings will reduce the viability of the FHA and GNMA programs and inhibit the affordable housing finance alternatives of moderate and middle-income homebuyers, especially the first time homebuyers, precisely at a time of unprecedented demand. The timing of such proposals could not be worse, especially in light of serious shortfalls in the availability of conventional mortgage credit in recent years.

I should like to call the Subcommittee's attention to an unintended result of imposing a restrictive ceiling on the GNMA-MBS program. That is, the potential harm it could have on the VA home loan guaranty program. Should the GNMA ceiling be reached, VA loan originations could either be restricted or temporarily halted, because this program depends so heavily on the GNMA secondary market financing system, despite the fact that the VA loan guarantee program is an entitlement program. For these reasons, MBA strongly urges that these ceilings be set high enough to allow the FHA and GNMA programs to accommodate homebuying demand. Further, MBA urges that the procedure established to enforce limits be flexible enough to respond quickly should these ceilings be reached. MBA urges the adoption of language similar to that provided by this Subcommitee last year.

In the remainder of my time, I would like to highlight several particular provisions of the proposed legislation while referring you to our written statement for the details of our views.

MBA supports Section 203 of H.R. 3018 that authorizes a one year extension of the Section 235 Homeownership Assistance program, and proposes a $43 million appropriation for contract authority and $1.29 billion in budget authority.

Also, MBA believes the GNMA Tandem program should be continued beyond fiscal year 1982. We support the Administration's proposed $2.7 billion increase in GNMA's purchase authority, which would result in a total purchase authority of $3.6 billion in fiscal year 1982. However, MBA strongly opposes the proposed phase-out of this program after a buyout of projects currently in the pipeline. The GNMA tandem program is a vital means for providing affordable financing for low income, multi-family rental housing. Until a workable substitute is developed, we believe the Tandem program should be continued.

MBA appreciates the opportunity to present its views and would be pleased to answer any questions or to provide additional information for the record.

[The statement follows:]

Mr. Chairman and Members of the Subcommittee, my name is Felix M. Beck. I am Chairman of the Board of Margaretten and Company, Inc. located in Perth Amboy, New Jersey. I serve as Chairman of the Legislative Committee of the Mortgage Bankers Association of America.* MBA is the trade association of the Nation's mortgage banking industry. Accompanying me is Sharon M. Canavan, MBA's Associate Legislative Counsel.

We appreciate the opportunity to appear before you today to testify on the appropriations for FY 1982 for the Department of Housing and Urban Development (HUD). Our comments will focus on the disruptive effects of setting ceilings on the non-subsidized, user-fee supported Federal Housing Administration (FHA) insurance and Government National Mortgage Association (GNMA) guaranty programs. We will also comment briefly on the funding proposals for the GNMA Tandem program, as well as other appropriations proposals.

ECONOMIC OUTLOOK

Economic activity during 1981 is proving to be very similar to that experienced in 1980. Interest rates began the year at all time record levels and have stayed high through the first quarter. The level of interest rates at the bottom of the 1981 cycle is likely to exceed 12 percent for both short- and long-term debt.

Inflation, which has been running at double digit levels for some time, is not likely to show significant improvement during 1981, or even during 1982. The Administration's forecast of an eight percent inflation rate during 1982 is not only optimistic, but even if achieved, remains high. As long as inflation remains at historically high levels, so will interest rates.

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*The Mortgage Bankers Association of America is a nationwide organization devoted exclusively to the field of mortgage and real estate finance. MBA's membership is comprised of mortgage originators, mortgage investors, and a variety of industry related firms. Mortgage banking firms, which make up the largest portion of the total membership, engage directly in originating, financing, selling, and servicing real estate investment portfolios. Members include:

- Mortgage Banking Companies
- Mortgage Insurance Companies
- Life Insurance Companies
- Commercial Banks
- Mutual Savings Banks
- Savings and Loan Associations
- Pension Funds
- Mortgage Brokers
- Title Companies
- State Housing Agencies
- Investment Bankers
- Real Estate Investment Trusts

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Growth in real economic activity, which remained below three percent during 1980, will stay below that level for 1981. In terms of housing construction, housing starts were slightly below 1.3 million in 1980, and are expected to remain near or below that level during 1981. While housing starts of 1.3 million are not low by historical levels, these numbers are not high enough to keep pace with the increased housing demands being generated by the post World War II baby boom. As a result, housing prices continue to climb rapidly and are exacerbating the housing affordability problems facing millions of American families.

In previous periods of slow economic growth, this Nation has looked toward the housing industry as a source of renewal, with new housing starts expanding to stimulate a strong recovery. Housing starts hit about 2 million units in 1978 before falling to 1.75 million in 1979 and just 1.3 million starts last year. Most forecasters indicate that housing starts need to average nearly 2.1 to 2.2 million units annually during the decade of the 1980's in order to meet the burgeoning demands, especially those of first-time homebuyers. Thus, a backlog of potential demand for new construction is inexorably building.

Mortgage interest rates are not likely to fall below 13 percent during the next two years. At the same time, the strong competition for savings dollars will continue to leave thrift institutions strapped for liquidity and under continued earnings pressure. Because the capital markets will become an increasingly important source of residential mortgage credit, the development of secondary mortgage market sources of funds gains evermore importance.

The tremendous demand for housing, both teamed with, and contributing to continued inflation in house prices, will detonate mortgage and capital markets in the decade of the 1980s. The volume of funds necessary for future mortgage financing will be expanding, requiring further radical restructuring of the mortgage markets.

CEILINGS ON FHA INSURANCE AND GNMA GUARANTY PROGRAMS

MBA strongly supports the role of FHA, which, in a working partnership between the government and private enterprise, has successfully delivered housing and mortgage finance to American families for nearly fifty years. MBA opposes the institution of limitations on the non-subsidized, user-fee supported FHA mortgage insurance and GNMA Mortgage-Backed Security (MBS) programs. The institution of these limits has been characterized by some as the prelude to phasing out FHA, or to allocating the non-subsidized FHA programs to geographic or neighborhood areas that are underserved by private mortgage insurance companies. Before such a fundamental redirection is taken, the issue should be fully explored. MBA urges that a study should be undertaken by the Congressional Budget Office to determine the role in mortgage finance that FHA and GNMA play, and the future direction of these programs. This study should also focus on the ability and capacity of conventional mortgage insurers to handle the volume and type of loans currently being made with FHA insurance.

The Administration in its FY 1982 budget has proposed to limit FHA insuring authority to $35 billion and GNMA guarantee authority to $64 billion. In the First Concurrent Resolution for FY 1982, the House Budget Committee approved an amendment to increase FHA insuring authority by $5 billion to a $40 billion total, and to increase the GNMA total by $4 billion to $68.2 billion. The Senate Budget Committee approved an even larger increase of $6 billion for FHA to total $41 billion, and $5.3 billion for GNMA for a total of $69.5 billion. The House Banking Committee in the HUD reauthorization bill, HR 3018, "The Housing and Community Development Amendments of 1981," is considering limits of $44 billion for FHA and $72 billion for GNMA.

MBA strongly opposes the imposition of any credit budget limits on the non-subsidized FHA and the GNMA MBS programs. In order to measure the size of these programs, targets, rather than inflexible ceilings, could serve a useful purpose. If Congress does establish commitment authority limits on these programs, nonetheless, such limits should be high enough to allow the programs to respond flexibly to demand, as they were designed, should interest rates decline enough to generate the demand that high interest rates have frustrated recently.

In this context, MBA is concerned about the language contained in the Senate's First Concurrent Budget Resolution establishing a point of order procedure limiting the ability of Congress to increase these ceilings should they be met. Rather, MBA prefers the flexibility in the enforcement mechanism contained in H. Con. Res. 115, which states that it is the sense of the Congress that the credit budget shall be limited through the appropriations process. (See Appendix).

MBA also would seek to include the same language as that which appeared in the full Appropriations Committee's report last year, stating that, "The Department (HUD) is directed to notify the Committee promptly if it appears the limitation will require a moratorium on commitments." (See H. Rpt. 96-1114, p. 8). Such language would assure that this Subcommittee could take appropriate actions should the credit budget limitations prove to be restrictive.

A ceiling set high enough to accommodate demand recognizes the function and importance of these programs, that have helped to deliver affordable mortgage finance to moderate- and middle-income homebuyers, many of whom are young, presumably, first time purchasers.

The Administration, in its justification for limitations on the non-subsidized FHA and GNMA MBS programs, has stated that these programs "accounted for over 55 percent of the $171 billion of total new commitments issued to guarantee loans by the Federal Government in 1980." (See Additional Details on Budget Savings for FY 1982 Budget Revisions, April 1981, page 185). In FY 1980, gross commitments under FHA totalled $30.585 billion and gross commitments for the GNMA MBS program totalled $63.165 billion, accounting for $93.75 billion in gross commitment authority, which is over 55 percent of the $171 billion figure noted above.

However, the gross commitment figures for these two programs are not reliable indicators of actual FHA insurance written and GNMA guarantees issued. There is significant "fallout" in these programs between the commitment stage and the point when FHA insurance is written and GNMA guarantees are issued. In FY 1980, FHA wrote $23.344 billion of insurance and GNMA guaranteed $22.996 billion worth of mortgage-backed securities.

The reason for the wide disparity between commitments and final insurance and guarantees is because these programs are designed to operate flexibly as "market hedges" for borrowers, builders, and lenders. If no other form of mortgage insurance or no other secondary market placement is available on preferable terms or at more desirable rates, then a person will opt to use the FHA or GNMA MBS programs, and only then is final insurance written or securities issued.

Additionally, it should be noted that the figure for GNMA guarantees issued reflects secondary guarantee activity rather than primary. GNMA MBSs are backed by pools of FHA and VA mortgages. Thus, the dollar volume figure for GNMA MBSs does not represent completely additional contingent liabilities for the Federal government, nor

does it represent additional Federal activity in the Nation's credit markets above and beyond the totals for FHA-VA loans. The alarms that are being sounded about the Federal Government's overwhelming exposure in the area of mortgage finance are simply overstating that involvement in real terms.

Additionally, MBA is concerned that the ceilings Congress sets, even if they are established at the limits of projected demand, may nonetheless, prove insufficient. In a review of the estimates over the past seven years, which are estimated two years in advance of the actual fiscal year, it is evident that these estimates have been consistently understated. This points out the problem of trying to estimate interest rates, housing activity, and the possibility of increased FHA mortgage limits two years in advance.

The following Table 1 tracks gross and net commitments, estimated and actual, for the FHA insured programs and the GNMA MBS program over the past seven years, and illustrates the uncertainty in this process.

Table 1

LOAN GUARANTEE COMMITMENTS AND LOANS GUARANTEED

(in millions of dollars)

Fiscal Year	Gross FHA Commitments	Net FHA Guaranteed	Gross GNMA Commitments	GNMA Issuances
FY 1982 BUDGET				
1982 Estimate	44,284	31,840	72,360	31,360
1981 Re-estimate	39,232	25,911	72,000	31,000
1980 Actual	30,585	23,344	63,165	22,996
FY 1981 BUDGET				
1981 Estimate	34,155	24,288	53,000	25,000
1980 Re-estimate	31,514	21,695	47,200	20,500
1979 Actual	33,976	21,081	41,750	22,176
FY 1980 BUDGET				
1980 Estimate	27,705	18,601	16,500	16,500
1979 Re-estimate	24,656	16,450	15,000	15,000
1978 Actual	23,953	14,292	15,194	15,194
FY 1979 BUDGET				
1979 Estimate	24,709	18,231	15,500	15,500
1978 Re-estimate	20,262	13,384	16,000	16,000
1977 Actual	19,776	12,929	17,019	17,019
FY 1978 BUDGET				
1978 Estimate	16,095	16,095	10,000	10,000
1977 Re-estimate	11,594	11,594	10,000	10,000
1976 Actual	8,316	8,316	8,999	8,999
FY 1977 BUDGET				
1977 Estimate	15,161	4,905	10,000	10,000
1976 Re-estimate	12,056	6,436	10,000	10,000
1975 Actual	11,221	6,130	5,905	5,905
FY 1976 BUDGET				
1976 Estimate	6,093	7,731	7,500	7,500
1975 Re-estimate	5,102	5,663	5,100	5,100
1974 Actual	5,638	5,712	4,125	4,125

Source: Special Analysis, Federal Budget

Actuarial Soundness and Self-Supporting Nature of Non-Subsidized FHA Insured and GNMA Guaranteed MBS Programs

Both the non-subsidized FHA mortgage insurance programs and the GNMA MBS guaranty program operate to assure a constant flow of mortgage credit, especially during credit short periods, at no cost to the Federal government. The FHA Mutual Mortgage Insurance Fund (MMIF) includes the FHA Section 203, 244, and 245 programs. These are non-subsidized programs that are actuarially sound. That is, program losses and claims do not exceed the mortgage insurance premiums collected from borrowers. According to HUD, these programs, as well as the Section 234 program under the FHA General Insurance Fund, are "actuarially sound by any measure." User-fees—the income obtained from mortgage insurance premium payments—cover interest on debentures, losses on acquired properties, as well as administrative costs including, salaries, expenses, overhead, rent, etc.

The MMIF has historically been profitable. The net income is used to build up reserves and to pay "dividends" to borrowers who have successfully paid off their mortgages. According to estimates projected in the FY 1982 Revised Budget compiled by the Office of Managment and Budget (OMB), the Treasury will forego savings totalling $363 million through FY 1986 if program commitment levels are artificially restricted by credit budget ceilings to a constant $35 billion ceiling (see FY 1982 Budget Provisions, dated March 10, 1981, Appendix C, page 149). These savings result from the investment of the MMIF Reserve Funds, totalling $2.6 billion at the end of FY 1980, in U.S. Government securities. To the extent that the MMIF invests in government securities, the U.S. Treasury limits its borrowings in private capital markets, and thereby pays a lower interest rate on that portion of the Federal debt.

In contrast, the reserves accumulated by private mortgage insurance compaines are tax-free, under Internal Revenue Code Section 832(e), and thus represent a drain on revenues to the U.S. Treasury. These aggregated reserves totalled $834 million, as of December 31, 1980, according to the Mortgage Insurance Companies of America (MICA).

The GNMA MBS program incurred a negative net income only in 1970, its startup year. Since that time, it has been profitable. Commitment and guaranty user-fees pay operating expenses, including, salaries, rent, overhead, etc.; pay guaranty claims; and are used to establish a substantial reserve fund to cover future losses. The GNMA MBS Reserve Fund now contains approximately $240 million in reserves. If the GNMA MBS program is restricted to the proposed levels of $64 billion annually through FY 1986, the Treasury will forego savings, as explained above, totalling $24 million.

The FHA Non-Subsidized and GNMA MBS Programs Do Not Restrain Expansion of Conventional Mortgage Insurance Activities

An important point to emphasize is that FHA acts as the insurer of last resort in offering its non-subsidized programs on a demand basis. There are no income or age limitations imposed--the only restriction is the maximum mortgage amount, which serves to factor out higher income families who prefer to buy more expensive homes. FHA can be characterized as the insurer of last resort, because it does not offer consumers as attractive a product as that ordinarily offered by conventional mortgage insurance companies. The FHA non-subsidized programs require a significantly higher mortgage insurance premium for the entire term of the loan, whereas lenders often allow mortgage insurance to lapse on conventional loans once a borrower has sufficient equity in the home to reduce the risk of default. FHA also has a longer processing time, necessitated by underwriting reviews,

and involves more redtape, as it demands appraisals, certain minimum property standards, etc., where conventional mortgage insurance approval can be obtained much quicker. Therefore, FHA can hardly be characterized as having a competitive edge.

The consumer who is interested in less costly, quicker service will naturally turn to conventional mortgage insurance, but only so long as a conventional loan itself is available on terms that the consumer can afford. It is this facet that makes FHA the insurer of last resort in many instances. If lenders were making conventional loans with low downpayments in all geographic or neighborhood areas, then consumers would choose, in most circumstances, a conventional loan with private mortgage insurance.

The important argument here is that FHA does not interfere with the capability of private mortgage insurers to operate in all areas at all times. Conventional mortgage insurers claim that they offer low downpayment loans on an increasingly competitive basis. If that is true in all areas and at all points in the economic cycle, FHA non-subsidized programs would represent no barrier whatsoever to the further expansion of conventional mortgage insurance activity.

A principal inducement offered under the FHA programs is the ready availability of the GNMA MBS. The GNMA Mortgage-Backed Security program was established in 1968 to introduce alternative sources of capital into the secondary mortgage markets. The secondary market is especially important in credit short areas, as a means of importing mortgage money to local markets, and mobilizing money on a nationwide basis. One of the ways lenders assure themselves of a source of permanent financing for their FHA and Veterans Administration (VA) loans is to obtain a commitment to guarantee a mortgage-backed security from GNMA. For a variety of reasons, such as fluctuations in market interest rates or lower than anticipated volume, mortgage bankers sometimes cannot use each GNMA conditional commitment that has been obtained. This happens particularly during times of volatile market conditions such as we are presently experiencing. Mortgage finance has come to depend upon the accessibility of secondary market investment, especially today, as traditional mortgage lenders have become increasingly unable to provide sufficient mortgage credit to satisfy the demands of the marketplace from their internally generated sources.

With the role of the traditional sources of capital for loans diminishing, the continued operation of the GNMA MBS as a demand-oriented program available as a vehicle for the sale of mortgages, is more important than ever. Authorized GNMA MBS issuers pool a minimum of $1 million in FHA and VA mortgages and obtain a guaranteed security from GNMA that is backed by those mortgages. The issuer sells the guaranteed security to an investor and then services the mortgages by collecting monthly payments and forwarding them to the investor. Issuers are obligated to advance the monthly payments to investors from their own funds if the borrowers fail to make their payments. GNMA guarantees the performance of the issuer and charges the issuer an initial and annual fee for the guaranty. In turn, these GNMA MBSs are backed by the FHA-insured and VA-guaranteed loans. A default by an issuer normally does not result in a loss to GNMA. In fact, losses have rarely occurred in the GNMA MBS program.

The FHA and GNMA MBS programs operate as a hedge for lenders and builders who must operate in all economic cycles in order to survive financially. However, GNMA is not the sole government backed or supported secondary marketing entity. The secondary mortgage market is permeated by a Federal presence. The Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) are also tied to the Federal government in various ways--through a line of credit to the U.S. Treasury, tax exemptions, or simply the ability to sell securities as a Federal entity. These entities

each operate to fulfill a specific, Congressionally mandated purpose, and they function to improve the efficiency of housing finance and thereby to achieve the goal of fostering homeownership by American families. As FNMA and FHLMC expand their capabilities in the conventional sector, it is almost certain that the GNMA MBS program, which has in many respects served as the role model for development of securities to tap the capital markets for mortgage finance, will naturally diminish in importance. But this development will take time, and must occur naturally in order to avoid market disruptions.

MBA certainly supports the expansion of a conventional secondary market, but there remain a number of problems to resolve in this area. The conventional mortgage-backed security is a relatively recent innovation, having had a mortgage pool balance of only $1.1 billion at the end of 1978. However, the conventional mortgage-backed security should not be underestimated. By the end of 1980's second quarter, the outstanding balance of such pools had grown to over $6 billion.

A necessary requirement for the development of an efficient nationwide market in conventional mortgage-backed securities is that the market be large. Security dealers typically "make the market" in various types of securities. In order for security dealers to incur the necessary set-up costs for developing a market, they must be assured that there will be enough volume in that security to warrant their investment. If the market is relatively small, which occurs when each security possesses different features, the dealers will either not develop the market, or will impose transaction costs that will be large and possibly prohibitive. Therefore, the development of the conventional MBS market is not being delayed because of the growth and success of the GNMA MBS program, but is being restricted due to the lack of uniformity in the conventional loan market itself. In fact, an enlarged GNMA security program makes it more likely that the conventional mortgage backed security market will develop because it spurs competition. The FHLMC is currently studying a proposal to alter its operation to pattern itself after that of GNMA with the exception that the FHLMC's program would deal only with conventional mortgages. However, the development of these secondary markets is a complicated process that will require years of evolution and cannot be forced to develop by mandate.

Impact of Credit Budget Limits On Veterans Administration Home Loan Guaranty Program

While the current Administration, like the previous Administration, has not proposed to limit the veterans' home loan guaranty programs, a reduction in GNMA-MBS activity could very well restrict the VA loan activity. If the credit budget limits for the GNMA MBS program are reached, then the principal secondary market investment source for VA loans will shut down. This could drastically curtail or even terminate VA loan originations. Last year, this Subcommittee set no ceiling for the VA home loan program, recognizing its entitlement nature. However, a ceiling on the GNMA MBS program, if the limits are reached, could translate into a limit on the VA home loan program, even if such an effect is unintended.

In the past five years, from one-half to three-fourths of all VA loans have been placed in GNMA MBS pools. Constraints on funds available for VA loans will reduce the effectiveness of the program, cause some veterans to be denied their entitlement, and increase mortgage costs for veterans. Additionally, the developing attraction of non-traditional sources of capital to the VA mortgage market will be severely hampered.

Through the GNMA MBS, mortgage bankers have been able to attract investors who would otherwise not be interested in purchasing VA and FHA mortgages, but who are willing to

purchase a Government-guaranteed, mortgage-backed security. Initially, these new investors in VA mortgages were important, but essentially supplementary, to the traditional capital sources for VA mortgages--the thrift institutions and the FNMA. However, since 1976, the GNMA MBS has been the dominant means of VA loan sales in the secondary market. If GNMA MBS activity is curtailed, it is extremely unlikely that thrift institutions (mutual savings banks and savings and loan associations), which have traditionally purchased VA loans, would again purchase significant numbers of VA-guaranteed loans. The thrift industry is currently in severe financial straits, in large part because earnings from their portfolios of fixed rate, long term loans are well below the interest rates they must certainly pay to attract and hold deposits. The future mortgage activity of thrift institutions is likely to lie in adjustable rate mortgages rather than fixed-rate, long term loans.

The other large institutional purchaser of VA loans, FNMA, is also experiencing financial difficulty. While FNMA hopes to remain in the market, its prices are not nearly as attractive as previously. Prices for FHA and VA loans are lower because they are freely assumable, whereas FNMA now requires due-on-sale or call provisions in all conventional loans it purchases. Sellers are forced to price the loans lower in order to raise the yield to the level set in the FNMA auction, thus requiring a higher number of points. This will probably cuase lenders to place even more VA loans in GNMA MBS pools.

The availability of several vehicles for the sale of VA-guaranteed mortgages permits mortgage bankers to go to a number of different capital market investors in search of funds. Unlike thrift institutions that must curtail lending when savings deposit inflows drop off, mortgage bankers can, through their choice of delivery vehicles, shift among capital markets until they secure a supply of lendable funds at the most reasonable price available. Thus, the veteran is assured of the ready availability of funds for VA-guaranteed loans.

The VA home loan program is an entitlement program, the effectiveness of which should not be curtailed by limits on a supporting program, the GNMA MBS, which is vital to its proper functioning.

Mortgage Availability: The Ability of Conventional Markets to Serve the Entire Market

It has been charged that FHA's non-subsidized programs constitute an undue governmental interference in the private marketplace. The FHA mortgage insurance programs represent a working partnership that involves the private sector to the maximum degree possible, while including enough oversight to protect the potential liability of the Federal Government inherent in a full guaranty of principal and interest. Conventional mortgage insurers argue that such enterprises have perfected the concept and that, consequently, the limited role FHA plays in the mortgage market should be phased out, or restricted to only the subsidized markets that mortgage insurance companies are unwilling to enter. MBA believes that the non-subsidized FHA programs provide a valuable benefit to homebuyers, without expending the revenues of the Federal government, and that FHA does not compete with private enterprise, but rather is an insurer of last resort.

While the mortgage insurance companies have vigorously expanded their activities in the marketplace over the last decade, it has become apparent from experience during the two economic downturns in that period that conventional lending is especially vulnerable during these economically troubled periods. FHA lending does not suffer as heavily at such times, because of the availability of the GNMA MBS, which is familiar to, and accepted by, investors.

Currently, the conventional mortgage market is in disarray. Large numbers of thrifts are operating in the red because they must pay savers high short-term rates, while their incomes are dependent on old below-market rate mortgages held as assets. As a result, the thrift industry is focusing on the design of new mortgage instruments that will fluctuate with their costs of funds. They are also diversifying their portfolios by increasing their holdings of assets bearing shorter maturities and selling their new mortgages to investors. However, competition from Treasury debt and inflationary expectations limit the willingness of investors to buy these mortgages. Until the conventional lenders solve their problems, or the secondary market institutions, including FHLMC and FNMA, as well as others, are able to expand their capabilities, it is sophistic to argue that mortgage insurance companies can absorb the FHA activity. The difficulty does not lie with the financial capacity of the mortgage insurance companies—they are able to deliver their product—but they are insurers, not lenders. Conventional lenders and conventional secondary market investors are currently encountering such difficulties that they are unable to provide an affordable, steady stream of mortgage funds.

In the strong markets of 1977 and 1978, FHLMC Participation Certificates (PCs) sold at yields close to, and occasionally lower than GNMA MBSs. Conventionally insured, five percent downpayment mortgages were available to consumers on equal, and occasionally better, terms than FHA-insured mortgages. Unfortunately, this is no longer true. FHLMC's PC program has not been able to maintain its record of sustained growth. FHLMC sales of PCs during 1980 were $2.4 billion—down from $3.9 billion in 1979, and $5.6 billion in 1978. Even the established, more liquid GNMA MBS just barely held its own in 1980, guaranteeing $23 billion, up from $22 billion in 1979.

It is precisely this continuing cyclical instability of the conventional market that underscores the necessity of preserving the FHA and GNMA MBS as demand programs, until these problems are resolved. The FHA non-subsidized programs, with the readily available secondary backing of the GNMA MBS program, serve a vital countercyclical purpose during economic downturns.

As Table 2, following, illustrates, the FHA percentage share of the mortgage markets has expanded during economic downturns (1974-75 and 1979-80) while it has naturally contracted during boom housing years.

TABLE 2

CONVENTIONAL LOANS INSURED BY MORTGAGE INSURANCE COMPANIES (MIC), FHA AND VA INSURED AND GUARANTEED LOANS BY UNIT VOLUME/1-4 FAMILY HOUSING

Year	Conventional MIC	FHA* New	FHA* Existing	FHA* Total	VA	Total Loans Insured	FHA as % of Total
1970	59,384	55,580	247,798	303,378	167,734	530,496	57 %
1971	163,334	59,133	277,654	336,787	282,278	782,399	43
1972	396,008	58,393	178,323	236,716	370,023	1,002,747	23
1973	499,895	28,940	109,740	138,680	315,509	954,084	14.5
1974**	330,646	22,559	130,300	152,859	309,830	793,335	19
1975**	322,204	35,946	192,594	228,540	299,768	850,512	27
1976	450,810	32,128	200,230	232,358	328,876	1,012,044	23
1977	617,398	42,786	246,386	289,172	389,098	1,295,668	22
1978	695,620	40,409	263,056	303,465	364,543	1,363,628	22
1979**	578,111	62,960	368,013	430,973	356,105	1,365,189	31
1980**	392,808	58,964	289,450	348,414	266,256	1,007,478	34.5

*Includes: Sec. 203(b), 234, 244, and 245 (GPM)
**Boldface indicates periods of restricted mortgage credit.

Source: HUD, 1979 Statistical Yearbook, Survey of Private Mortgage Insurance Activity, FHA Monthly Report of Operations, Veterans Administration. Prepared by the Mortgage Bankers Association of America, April 1981.

Table 2 also illustrates the growing share of the market that conventional mortgage insurers have vigorously pursued and won. But this long term trend contrasts sharply with experience during the last two years, when conventional lenders sharply curtailed lending, in part because the conventional secondary market was unable to accommodate further growth. This problem was not due to weakness or failure on the part of the mortgage insurers, however, who are among the most innovative, aggressive members of the mortgage fraternity. Rather, the difficulty stems from uncertainties in the future form of mortgage instruments, and the ability of secondary markets to fashion a suitable vehicle for long-term investment in conventional mortgages.

MBA believes that the current problems facing the conventional mortgage market can and will be sorted out over the next decade. New alternative mortgage instruments acceptable to the secondary market will be developed, as will a conventional MBS capable of delivering mortgage finance at affordable rates. In 1978, this day appeared close at hand, but with the intervening difficulties of the past two years, even such financial giants as Bank of America, Merrill Lynch, and the Sears group have had to postpone, or scale back, their secondary market activity, and it will take several more years to develop investor understanding and acceptance of the new alternative mortgages and the conduits to deliver them.

MBA is working aggressively with other lenders and with the mortgage insurance industry to develop a conventional mortgage-backed security. We would hope that the conventional mortgage markets will solve these problems by 1982, but unless the conventional market gains the capacity to handle increased demand, there will be a spurt in FHA activity, especially if interest rates decline as the Administration has predicted. Accordingly, if ceilings must be imposed rather than targets set for FHA and GNMA volumes, we urge Congress to set the ceilings on FHA mortgage insurance and GNMA-MBS guaranties at levels sufficient to meet this contingency of potentially strong demand. Failure to do so will interfere with the gradual reduction in long-term rates throughout the economy, while causing totally unnecessary hardship to homebuyers.

Crowding Out

The disappointing industrial performance of the United States over the past five years is a matter of great concern. A few well known economists have pointed to the "explosion" of mortgage credit, arguing that a key factor in the lack of industrial capital formation is that housing has taken a disproportionately large share of available funds. The answer depends on the choice of statistics and periods of comparison. In this case, limiting the comparison to the early seventies versus the late seventies shows that business' share of total capital declined from over 53 percent to slightly less than a quarter of the total funds raised. (See Table 3 on page 13, following.) This compares with a long-term historical share of about 40 percent of total funds raised. Clearly, the percentage of borrowing devoted to business has been cut in half relative to the unusually high levels of the early seventies, and is currently well below its historical average. However, a careful examination of Table 3 reveals that it is not mortgage activity that has "crowded out" business borrowing, but large increases in U.S. Treasury borrowing and other categories that are the cause. Business borrowing's share declined 28.7 percentage points, of which 14.7 percentage points, or over half, was accounted for by an increase in Treasury borrowings. The other half was absorbed by residential mortgages (+6.5 percentage points), consumer credit (+2.9 percentage points), Federal agencies (+1.7 percentage points), state and local government (+1.1 percentage points), and other, mostly foreign, borrowing (+8.8 percentage points).

The failure of business to reindustralize has many complex causes, but increased mortgage activity is not one of them. A closer examination of the years 1975 through 1980 contained in Table 4 indicates that business' share of credit demand has strengthened, even though Government borrowing has expanded. Housing credit has fluctuated, but centered roughly around its 23.1 percent average during the entire post World War II period. Similarly, residential investment as a percentage of gross national product (GNP) over the last five years has been below the historical average. While mortgage activity did increase substantially in the late seventies versus the early seventies, both in terms of dollar amount and market share, it merely recaptured its historical share of the market. A bar graph (Table 5) illustrates the expanding and contracting shares of credit demand during the past five years.

TABLE 3

Composition of Credit Demand
Share of Total Funds Raised by Sector
1946-1978
(in billions)

	Average Annual Funds Raised	Business	Residential Mortgages	Consumer Credit	U.S. Treasury	Federal Agencies	State & Local	Other
1946-1949	$24.4*	48.2%	22.4%	12.0%	%*	0.1%	6.4%	10.9%
1950-1959	36.6	37.4	28.5	9.4	5.8	1.8	12.3	4.8
1960-1969	79.9	36.7	24.4	8.9	5.5	4.0	8.6	11.9
1970-1974	254.7	53.0	16.8	5.5	5.7	5.1	5.8	8.1
1975-1978	351.0	24.3	23.3	8.4	19.0	6.8	6.7	16.9
Average Share		39.9	23.1	8.8	7.2	3.6	8.0	9.4

*During the 1946-1949 period the U.S. Treasury loaned funds of $8.63 million. Thus, the share of total funds raised by the other sectors does not take this amount into account.

Source: Federal Reserve Flow of Funds Accounts, Annual Net Flows, December 1980.

Table 4
Trends in the Use of Funds in U.S.
Money and Capital Markets
(Net New Flows)

Billions of dollars/Calendar Year

	1975	1976	1977	1978	1979	1980P
Government						
State & Local	16.3	17.7	23.9	26.7	19.1	23.2
US Treas	85.8	69.1	57.6	55.1	38.8	79.8
Agency	12.3	19.0	26.7	40.1	51.1	47.1
Mtge Pools	-9.9	-14.5	-19.0	-15.8	-24.0	-21.2
Agency less Mtge Pools	2.4	4.5	7.7	24.3	27.1	25.9
Subtotal	104.5	91.3	89.2	106.1	85.0	128.9
Percentage	48.3%	31.7%	24%	23.7%	19%	32.3%
Business & Agriculture						
Corp Bonds	36.4	37.2	36.1	31.6	32.9	35.6
Stocks	10.8	12.9	4.9	4.7	7.6	15.0
Credit	13.9	12.3	48.9	74.4	96.6	59.9
Non-Res Mtges	15.8	19.7	27.2	33.5	41.9	35.6
Subtotal	49.1	82.1	117.1	144.2	179.0	146.1
Percentage	22.7%	28.4%	31.6%	32.2%	40%	36.6%
Housing						
Res Mtges (includes pools)	41.4	67.3	106.8	115.5	116.7	89.2
Subtotal	41.4	67.3	106.8	115.5	116.7	89.2
Percentage	19.1%	23.3%	28.8%	25.8%	26.0%	22.3%
Other						
Consumer Credit	9.7	25.6	40.6	50.6	44.2	3.1
Other (mostly Foreign)	11.5	21.9	16.9	31.2	22.7	31.7
Subtotal	21.2	47.5	57.5	81.8	66.9	34.8
Percentage	9.8%	16.5%	15.5%	18.3%	14.9%	8.7%
TOTAL	216.2	288.2	370.6	447.6	447.6	399.0

P: Preliminary

Source: Federal Reserve Flow of Funds Accounts IV-80 (February, 1981) Prepared by MBA Government Agency Relations Department (March, 1980)

Totals may not add due to rounding.

TABLE 5

Trends In The Use Of Funds In U.S. Money And Capital Markets

Source: Mortgage Bankers Association Of America (April 1981)

The recovery of mortgage finance in the mid-seventies is not particularly the result of a bias toward homeownership, but rather, results from the maturation of the post-World War II baby boom generation. In view of the strong demographic demands of the past five years, and looking forward to the next five years, housing, far from receiving an unfair share of available funds has, and must, maintain its historical market share, roughly one out of every four investment dollars. Since we have already seen serious shortages of housing finance develop "naturally" in recent years, it is frightening to think what housing activity would be like in the future if government made a deliberate effort to direct credit away from housing.

Consumer Benefit

The FHA home loan insurance and GNMA MBS programs have contributed to a percentage of American homeownership that is among the highest worldwide. By offering this assistance on a demand basis where the volume of program activity is determined by consumer need, FHA programs have helped this Nation reach for its asserted goal of providing safe, decent, and sanitary housing for all Americans. GNMA programs have fostered a nationwide secondary mortgage market that has attracted non-traditional sources of private financing, and serves as a model for the eventual development of conventional mortgage-backed securities.

FHA has also made significant contributions toward innovation in mortgage lending. A recent example is the Graduated Payment Mortgage (GPM) program that reduces initial loan payments, thus qualifying more first time homebuyers and younger families whose incomes are expected to rise. FHA has fostered consumer protections by requiring properties to conform to Minimum Property Standards. New technologies in construction and energy-saving techniques have also made substantial headway because FHA has approved these methods and offered financing.

These arguments do not presume that conventional mortgage lenders do not apply reasonable construction standards. It is simply that FHA programs, backed by government insurance, have fostered innovative lending and building techniques that are accepted by conventional mortgage lenders only after they have been proven in the FHA market.

Consumer Choice

There are differences between what FHA and individual mortgage insurance companies can offer. FHA imposes a one half percent mortgage insurance premium that offers 100 percent insurance against default and is paid on the declining balance of the loan for the term of the mortgage. The mortgage insurance premium (MIP) on a conventional loan varies by insurer, but it can generally be said that it is less than the fee imposed by FHA, because the default coverage only applies to a specified portion of the loan. Also, mortgage insurance companies often do not impose the fee for the full term of the loan.

The maximum interest rate on an FHA loan is determined by the HUD Secretary, not the free market. Although the HUD Secretary is under a Congressional direction to follow the free market closely, in actuality, the FHA rate often lags behind changes in the free market rate being charged on conventional loans. When this occurs, and interest rates are rising, FHA lenders charge "discount points" in order to bring FHA loans up to market yield requirements. A point is one percent of the mortgage amount. Therefore, although it may appear on its face as if the FHA loan has a preferential interest rate or enjoys some form of indirect subsidy, this is simply not true.

The minimum downpayment requirement for an FHA loan is three percent of the first $25,000 and five percent of the balance. The minimum downpayment requirement for a

LOW-INCOME HOUSING

Section 201 of both HR 3018 and HR 3261 provides for funding authorization for FY 1982 for the public housing and Section 8 Housing Assistance programs. HR 3018 authorizes approximately $1.5 billion, while the Administration calls for approximately $1 billion. The ratio between funds for new and substantially rehabilitated and existing units in HR 3018 is approximately 58 percent new and 42 percent existing, while the Administration would set this at approximately 55 percent new to 45 percent existing. MBA supports these programs, but would urge a somewhat higher percentage of new units in the mix between new and existing units, as well as the higher appropriation HR 3018.

Both bills would provide for assistance for troubled multi-family projects suffering problems caused by increased utility expense and inflation. MBA supports this assistance as a necessary aid to low-income families, as well as to preserve existing multi-family housing inventory.

SECTION 235 AMENDMENTS

Section 203 of HR 3018 authorizes a one year extension of the Section 235 program through September 30, 1982, and an appropriation of $43 million in contract authority and $1.29 billion in budget authority for the Section 235 program. This authority would be in addition to any funds previously authorized. No such additional authority is proposed by the Administration in HR 3261. While the Administration, in Section 301(d) also provides for a one year extension of the Section 235 program, it would not permit the HUD Secretary to enter into new assistance payment contracts after September 30, 1981, unless pursuant to a commitment issued prior to that date. In this connection, it is interesting to note that while the Administration calls for a two year extension of most of the HUD insurance programs, it is only calling for a one year extension of the Sections 235 and 236 programs.

MBA supports the provisions of HR 3018 extending the Section 235 program and authorizing additional contract and budget authority. We believe that the program is a useful one and merits continuation. Even at a modest level of funding, such as the $43 million provided for by HR 3018, the Section 235 program can continue to assist a substantial number of low-income households.

RESEARCH

Section 308 of HR 3018 and Section 303 of HR 3261 contain an authorization for research appropriations for FY 1982 of $35 million. MBA has consistently supported the research activities of the Department at a level of funding deemed appropriate by the Department and the Congress.

GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

Section 206 of the Administration's bill, HR 3261, would increase GNMA's Special Assistance purchase authority by $2.7 billion for FY 1982. However, this would result in a total purchase authority of $3.6 billion, which GNMA estimates will be necessary for the operation of its program during FY 1982. MBA strongly supports the continuation of the GNMA Tandem program beyond FY 1982, and further urges Congress to provide that the $3.6 billion limit shall not apply to any authority to enter into commitments which were authorized for use during FY 1981, but were not utilized in that year.

Prevailing financial market conditions make it impossible for conventional lenders to meet the need for affordable financing for multi-family rental projects serving the

conventional loan is not a standardized, constant figure, but is determined by the individual lender. When mortgage investment sources are plentiful, downpayment requirements range as low as five percent. In such a market, conventional loans are more attractive to consumers, because the mortgage insurance premiums will be less than FHA premiums, and the interest rates are likely to be comparable.

When there are insufficient or restricted sources of mortgage funds, however, there is a tendency for conventional lenders to increase the downpayment requirement to as much as 20-30 percent, in order to ration available supplies of mortgage funds. Lenders simply stretch available sources of funds, while also according a preference to loans that will carry a lower loan-to-value ratio, and therefore a lesser risk. It must be pointed out that it is the lender, not the individual mortgage insurer, that sets the downpayment requirement. Under such conditions, it is usually buyers of lower-priced homes that are rationed out of the market, because of their inability to meet the harsher terms required by conventional lenders. Because FHA insurance is limited by statute, and these maximum mortgage amounts are set at the lower end of the price scale, the FHA programs are directed toward that part of the market having the greatest need in periods of tight money.

During economic downturns, when mortgage credit availability is restricted, the consumer, especially the first time homebuyer, has little choice but to rely much more heavily upon the availability of FHA-insured mortgages, with their low downpayment requirements. When low downpayment conventional mortgage loans are sufficiently available, consumers tend to prefer the more attractive deal that conventional loans with private mortgage insurance can offer. Historically, the amount of FHA mortgage insurance written has increased significantly during periods of 'tight' mortgage money, and decreased when mortgage credit availability increased.

MBA and many other mortgage market participants are working, and will continue to press, for the development of a conventional MBS that will be readily accepted by investors, as well as for the development of new types of mortgage instruments designed to respond to change in all financial markets. While some may argue that FHA, because of the readily accessible secondary market provided by the GNMA MBS, has impinged on the conventional market share or stunted the development of the conventional secondary market, the answer to such a charge is that FHA and the GNMA MBS have offered stability in a volatile market and performed a proper countercyclical purpose in easing housing through difficult economic periods. This simply underscores the importance of a workable secondary market--once a conventional MBS is developed, FHA's and GNMA's role during countercyclical downturns will diminish. Until such time, these programs serve a vital function in stabilizing mortgage finance markets, and until an alternative is developed, it would be unwise to disassemble the one market that does work, and easily responds to demand during economic downturns.

OTHER MBA RECOMMENDATIONS

The following are MBA's recommendations with respect to appropriations for the various programs covered by proposed legislation now being considered by the House Banking Committee, HR 3018, introduced by Housing Subcommittee Chairman Henry B. Gonzalez and the Administration's version, HR 3261, both entitled "The Housing and Community Development Amendments of 1981."

disadvantaged, namely low-income persons, the elderly, and the handicapped. The GNMA Tandem program helps to meet this need. MBA does not believe that exclusive reliance upon tax-exempt bonds for financing, as provided for in section 11(b) of the 1937 Housing Act, will be sufficient. The need for low-income rental housing is so great and the uncertainties of the market--even the tax-exempt bond market--are so considerable that there will be a need to continue the Tandem program for the indefinite future if Section 8 new construction projects are to be financed.

We are well aware that under current Federal government budgetary procedures, the GNMA Tandem program appears enormously expensive. However, we would like to point out that appropriations for the Tandem program are treated simply as outlays that are never recaptured. In fact, GNMA does recapture the majority of the money spent to purchase multi-family rental project mortgages when it discounts and re-sells those mortgages in the market.

MBA appreciates the opportunity to appear before the Subcommittee, and would be happy to furnish any additional information the Subcommittee may want.

APPENDIX

SENATE

Excerpt from S.Rpt.No. 97-49, Calendar No. 63, 97th Congress, 1st Session, First Concurrent Resolution on the Budget, FY 1982, Report of the Committee on the Budget, United States Senate, to accompany S Con Res 19, at page XLV, May 1, 1981.

" SEC. 7. It shall not be in order in the House or the Senate during fiscal years 1981 and 1982 to consider any bill, resolution, or amendment authorizing new direct loan obligations or new loan guarantee commitments unless that bill, resolution, or amendment also provides that the authority to make or guarantee such loans shall be effective only to such extent or in such amounts as are contained in appropriation Acts. "

HOUSE

Excerpt from H.Rpt.No. 97-23, 97th Congress, First Session, First Concurrent Resolution on the Budget--Fiscal Year 1982, Report of the Committee on the Budget, House of Representatives, to accompany H Con Res 115, at page 9, April 16, 1981.

" (c) It is the sense of the Congress that the President and the Congress, through the appropriations process, should limit in fiscal year 1982 the off-budget lending activity of the Federal Government to a level not to exceed $23,700,000,000, the on-budget lending activity to a level not to exceed $33,150,000,000, new primary loan guarantee commitments to a level not to exceed $87,750,000,000, and new secondary loan guarantee commitments to a level not to exceed $68,750,000,000."

Mrs. BOGGS. We are very grateful to both of you for being with us.

Mr. Green?

Mr. GREEN. I am particularly delighted to welcome Mr. Beck, who is an old friend from my days at HUD.

Is the view implicit in your statement that the private mortgage insurers are not largely going to be able to take over the FHA role?

Mr. BECK. I think while their intentions are good and their capabilities are very good in the insurance sense, they are not lenders.

The capacity to finance today is based primarily on a link to the securities market through GNMA. Of course, FNMA primarily handles insured and guaranteed loans of the VA and FHA type. I believe until we can develop a conventional mortgage backed security—and we all want that to happen—we are not going to have the link to the capital markets that will allow lenders who just don't have the funds, like the thrift institutions today, to make the loans.

Until they make them, we can't have the insurers insure them.

Mr. GREEN. Several depository institutions have started programs of mortgage backed securities, haven't they?

How have those been working?

Mr. BECK. We started off back in 1978 trying to get conventional mortgage backed securities programs together. Some have been put together. We found that between 1978 and 1980 some of the major companies that wanted to gather loans together and put them into conventional mortgage backed securities pools—Merrill Lynch, Sears, companies like that—were finding it very difficult to do.

One of the problems in the mortgage-backed security today is that we are getting all kinds of mortgage instruments. In order to have an effective mortgage-backed security, we are going to need uniformity. It will take time for this to evolve. We hope it does evolve. We are trying to play a part. In the meantime, we think there is a desperate need for FHA to continue.

Mr. GREEN. Won't there be the same kind of problem for FNMA with these variable mortgages?

Mr. BECK. That remains to be seen. So far we are still talking about fixed rate FHA loans. We are still able to put together FNMA securities on a fixed rate basis. I don't happen to be of the opinion that fixed rate is gone forever.

I think when markets turn—as they inevitably do—that we may see a more ample supply of securities monies seeking mortgages. While I think there will be development, further development and refining of the alternative mortgage instruments, I think we may still see the long term fixed rate loan in the insured and guaranteed area which makes it attractive.

Mr. GREEN. Thank you.

Mrs. BOGGS. Thank you very much.

Mr. BECK. Thank you.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. BERNARD P. SAGIK, VICE PRESIDENT FOR ACADEMIC AFFAIRS, DREXEL UNIVERSITY

Mrs. BOGGS. Our next witness is Dr. Bernard P. Sagik, Vice President for Academic Affairs, Drexel University.

Dr. SAGIK. Thank you, Madam Chairwoman.

This is J. K. Lee Smith, Vice President for Government Relations. We appreciate this opportunity to appear before you.

Madam Chairwoman, Members of the Committee, I represent Drexel University, a private non-sectarian co-educational institution which since its founding in 1891, has stressed "sound training in practical fields". . . seeking to . . . "open the way to happiness through usefulness . . ." As a means of achieving these goals, Drexel has pioneered in cooperative education for over 60 years. In all disciplines, undergraduates spend from three to seven quarters working away from campus after the freshman year. Over 1,400 employing companies and agencies are involved in this effort. Drexel's undergraduates, after the freshman year, earn nearly $20 million annually towards their own cost of education. Given some financial aid in their first year-and-a-half, they become major financial contributors to the educational process thereafter.

This self-help attitude pervades the institution. Colleges and departments are encouraged in their efforts to acquire advanced equipment by institutional matching funds. We will acquire a $110,000 NMR apparatus for use by a new polymer scientist in the Chemistry Department in just this fashion this summer. We submitted a CAUSE proposal to NSF on behalf of the Electrical and Computer Engineering department last Fall. In it we pledged to provide nearly $500,000 in advanced equipment for education in computer-aided (engineering) design.

If funded, the government's share of this proposal would provide initial faculty support to develop the necessary software and interface it with the current curriculum. Drexel would continue faculty support after the grant's expiration. In keeping with our philosophy, we have obtained a significant industrial contribution ($200,000) for this department for that work.

During the last complete academic year nearly 23 percent of Drexel's extramurally-funded research support came from industrial sources. A significant portion of this was given as institutional research funding rather than for a specific project, thus enabling the university to continue to upgrade its scientific and engineering instructional and research equipment through NSF programs such as CAUSE (Comprehensive Assistance to Undergraduate Scientific Education) and ISEP (Instructional Scientific Equipment for Undergraduate Science Education).

In the fifteen years prior to this academic year, Drexel University has received equipment grant funding under various NSF programs totaling more than $557,000. As our part in these projects,

we have contributed close to $450,000. We believe these and similar programs are effective, precisely because they require recipient institutions to make a contribution.

Finally, I wish to address briefly the growing need for innovative programs of faculty development; we must address the problem of renewal and retraining. This is becoming an increasing area of concern as the number of U.S. graduate student applicants in science and engineering declines. While it is difficult to measure effectiveness, our own limited experience with industrial leaves suggests that this device can be one means of benefitting university faculties in areas as divergent as accounting and engineering. Concomitantly, the experience is beneficial to the host corporation which also may be facing personnel freezes. We already utilize as adjuncts many persons employed professionally outside the University.

Inducements to facilitate increased exchanges with industry include (1) NSF support of regional registries of industrial and university personnel interested in the program, and (2) contributions to continuing faculty benefits, a direct cost to the universities, which at Drexel equals 20 percent of salary.

The relationship of Drexel University to its area's industry has been fostered by the cooperative education program. The resulting benefits have determined the direction of my testimony. Thus, my remarks have been directed towards support of those of NSF's programs which provide opportunities to upgrade scientific and engineering instructional equipment as well as urging favorable consideration of programs aimed at the professional renewal of both university and industrial engineers and scientists.

Mrs. BOGGS. Thank you very much.

Mr. Green?

Mr. GREEN. How would you answer the concern that these various science education programs of NSF have been going now for two decades, they really had their genesis in the post-Sputnik era, and those are two decades in which we have seen a steady decline in the number of American students opting to concentrate in the science areas in their college studies?

In other words, while on their face the programs may be effective in terms of number of students aided or pieces of equipment bought or number of science teachers getting some special training, they don't seem to be very effective in terms of the overall objective of having more Americans trained in scientific disciplines or even understanding what science is all about?

Dr. SAGIK. I think that I would be inclined to say that the focus of some of those programs, or the focus of those programs should be sharpened to those areas where we have evidence of improvement and of benefit.

I think that it is not likely that the science education programs which may improve, if you will, delivery or effectiveness in the classroom, are necessarily going to make recruits. I do notice that economics makes recruits in that there has been a jump of about 100 percent in ten years of high school seniors opting for engineering over the 1971 survey and 250 percent for computer science.

There is a vocational thrust there that is not unrelated to that. I would say that programs supportive in these areas where we al-

ready have deficiencies, obviously, in terms of supply might well be used for that targeted focus.

Mr. GREEN. Thank you.

Mrs. BOGGS. Thank you both very much.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. ARTHUR C. GENTILE, EXECUTIVE DIRECTOR, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

Mrs. BOGGS. Dr. Arthur Gentile, Executive Director of the American Institute of Biological Sciences.

Dr. GENTILE. It is a pleasure to be here again to have the opportunity to speak on behalf of our Institute on particular items in the budget for the National Science Foundation. I have submitted a copy of my statement for the record, and therefore will try to abbreviate my remarks in the interest of saving some time.

We were quite pleased that the current Administration voiced strong support for continuing our national efforts in the area of research and development. Indeed, the two divisions of the National Science Foundation which support most of the research in the biological sciences are budgeted for an approximate increase of 6.5 percent in the fiscal year 1982 budget. This is particularly gratifying in a period of austerity, and we hope that the Congress will support the President's budget in this area. We are disturbed, however, by the absence of two programs which we feel are very important. We have heard a great deal about oxen being gored. I am here today not to speak about oxen being gored, but that oxen that are being slaughtered are about to be shipped off to the processing plant.

The first of these is a new program proposed by the National Science Foundation after a great deal of study, to provide new equipment and modernize research facilities in university laboratories. In the United States most of the basic research is conducted in university laboratories. Modern research is highly specialized and sophisticated and requires equally sophisticated and unfortunately expensive instrumentation. Over the last 15 years, funds for instrumentation have been severely curtailed and today university laboratories fare poorly in comparison to their counterparts in government and industry.

The deterioration of university instrumentation is threatening the capacity of even our best universities to conduct research and provide quality training. The costs for the acquisition, operation, and maintenance of modern instruments now exceed the capacity of institutional funds to meet them. Since 1970 the average cost of five basic important representative scientific instruments has risen at an annual rate of 20 percent through 1978, far exceeding even the average inflation rate for each of those years. At the same time, funds available for the purchase of these instruments by universities have decreased. The lack of state of the art instrumentation and tempted use of obsolete, frequently malfunctioning instruments is bound to impede research efforts.

In addition to instrumentation needs, research programs cannot operate at full capacity without adequate facilities such as laboratories, animal facilities and greenhouses. Many of these facilities were built when universities were expanding during the 1950s and 1960s and are becoming old, while replacement and renovation funds are difficult to obtain from Federal grants and are becoming extremely difficult to obtain from any other source. In recognition of the responsibility of the Foundation to ameliorate these conditions as part of its mission to support basic research, the House Committee on Science and Technology has authorized $16.5 million for this special program. We would certainly urge you to appropriate this amount to meet what we feel is a very, very important need at this time.

Our second concern deals with scientific manpower. It is quite obvious that equipment and laboratories and buildings are of no avail if we don't have the trained manpower to do the work. I think the prospects for trained scientists coming down the pike in the United States are very poor, especially when you compare them to some of the major western nations, Germany, for example, and the Far East, and of course, Japan.

In a joint report to the President, the National Science Foundation and the Department of Education warned that the United States is moving toward virtual scientific and technological illiteracy. Similar views have been expressed by other organizations conducting independent studies, the Science Education Center at the University of Iowa and the Regional Education Board. The fact of the matter is, we need more and better science education, not less and in the fiscal 1982 budget which was submitted to the Congress, science education is virtually eliminated.

I would like just to outline briefly some of the goals of a science education program to illustrate what needs will be met with the proper program supported by the Foundation. The first step, of course, is to stimulate an interest in scientific careers at the precollege level as well as at the college level, particularly among women and minorities who are strikingly underrepresented in the scientific labor force. I would emphasize particularly the need to stimulate high school students to follow careers in science. Some of the statistics emerging from studies of high school curricula are very distressing. For example, today only about one-third of the Nation's high schools require more than one year of mathematics or science for graduation. Colleges and universities have, in response to this, reduced the number of these subjects that they require for admission. If a student takes no science or mathematics after their tenth school year, they have virtually eliminated science as a career because they are just going to be unable to catch up later on. So, one goal should be to stimulate this interest and see that students, as early as high school, are beginning to get the preparatory work to pursue scientific careers.

Secondly, of course, is the improvement of science-teaching by providing high school teachers and college teachers opportunities to keep up to date in their knowledge of science. This can be accomplished in a wide variety of ways by supporting conferences, short courses, giving teachers opportunities to return to college for additional training and things of that sort. Last summer our insti-

tute managed a two-week intensive program in a particular area of biology for college teachers. We had approximately thirty teachers from just about all over the United States. It was extremely effective and we have received responses from teachers saying how much they gained from it and how they could bring this back to the classroom and either upgrade courses they are currently teaching or actually introduce new courses into the curriculum. If you have been out of school for ten years or more, certainly in the sciences, you can't keep science effectively unless you go back and do something to upgrade your education.

Finally and perhaps the most important aspect of a science education program is to promote the public understanding of science. Back in the Sputnik days, the public was quite interested in science. People followed it with great interest. We have become somewhat jaded, I think—maybe the Shuttle is helping a little. We keep shooting rockets up in the air, but nobody pays much attention to them any more. It is almost like driving to work in your car in the morning. This may be a sign of how successful we have been. The fact of the matter is that science has become very mysterious to the average American. They don't understand it. They hear all these new terms: genetic engineering, things of this sort. Some of these things are actually frightening people. They have a strange idea of all sorts of terrible things happening because of these major breakthroughs in science.

I think the public understanding in science is vital if we are going to ask the public to continue to support it. If we want to continue to use tax money, then the least we can do is be able to let the public understand what their money is being used for, why it is being used, and what the possible benefits and risks of this scientific research are. So that these two areas we think, which have been virtually eliminated from the budget, are extremely important.

Again, the Science and Technology Committee of the House has authorized $75 million for Science and Engineering Education. I would urge you to support this recommendation.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I am grateful for the opportunity to appear before this committee once again as the spokesman for the American Institute of Biological Sciences. The Institute is a consortium of forty professional societies with an aggregate membership of approximately 100,000 biological scientists. Since the great majority of our societies' members are at universities and colleges and are engaged in basic research and since the National Science Foundation is the major source of support for this research, we have a long-standing and continued interest in all legislation which impacts upon the Foundation.

Last time I appeared before this committee I discussed some of the interesting and important research being conducted under the sponsorship of the NSF which promises to be of great economic importance. In the interest of brevity, I shall not go into detail at this time, but would simply like to point out that the Foundation continues to place emphasis on research in two vital areas, namely, genetic research and gene transfer techniques for the improvement of plants of economic importance and studies of long-term environmental changes including the environmental and economic consequences of heavy falls of acid rain.

The Reagan administration has voiced support for continuing our national efforts in research and development and for the two divisions of the NSF which provide most of the support for research in the biological sciences. The executive budget for FY 1982 provides for an increase of approximately 6.5% over the revised spending levels for 1981. Although the proposed increases do not keep up with the current level of inflation, we find these increases in a period of austerity most gratifying and urge this committee to maintain them.

However, we are disturbed by the absence of recommended funding in the executive budget for two very important programs. These are a special program for modernization of research equipment and facilities and science education. Permit me to discuss these two programs briefly.

In the U. S., most basic research is conducted in university laboratories. Modern research is highly specialized and sophisticated and requires equally sophisticated and expensive instrumentation. Over the last fifteen years, funds for instrumentation have been severely curtailed and today, university laboratories fare poorly in comparison to their counterparts in government and industry. The deterioration of university instrumentation is threatening the capacity of even the best institutions to conduct research and provide quality training. The costs for the acquisition, operation, and maintenance of modern research instruments now exceed the capacity of institutional funds to meet them. Since 1970, the average cost of five basic, important scientific instruments has risen at an annual rate of 20% through 1978, far exceeding the average inflation rate. At the same time, funds available for the purchase of these instruments by universities have decreased.

The lack of state-of-the art instrumentation and attempted use of obsolete, frequently malfunctioning instruments is bound to impede research efforts. In addition to instrumentation needs, research programs cannot operate at full capacity without adequate facilities, such as laboratories, animal facilities, and greenhouses. Many of these facilities were built when universities were expanding during the 1950's and 1960's and are becoming old, while replacement and renovation funds are difficult to obtain through federal grants and are becoming extremely difficult to to obtain from other sources. In recognition of the responsibility of the NSF to ameliorate these conditions as part of its mission to support basic research, the House Committee on Science and Technology has authorized $16.5 million for this special program. We urge you to appropriate this amount to meet a dire need of the research community.

Our second concern is scientific and technological manpower because the major scientific and technological resource of any nation is its trained manpower. With shortages of trained scientists already being experienced in some fields by universities and industry, with the prospect that these shortages will include additional fields in this decade, and with the apparent need for more and better science education to ameliorate this situation, it is vital that the NSF continue its mandate to support education in science.

In a joint report to the President, the NSF and the Department of Education warn that the U. S. is moving toward "virtual scientific and technological illiteracy" in the population at large. Similar views have been expressed in independent studies conducted by the Science Education Center of the University of Iowa and the Southern Regional Education Board.

In view of our need for more and better science education, it is inconceivable that the federal support for science education in the 1982 executive budget has been virtually eliminated. It is apparent that we shall face increasing difficulties in securing talented and highly trained minds for the professional disciplines in the future unless we strengthen rather than abandon our efforts to improve science education at all levels. The minimum goals of our efforts in science education should be to:

(1) stimulate interest in science careers at the pre-college and college levels, particularly among women and minorities who are strikingly under-represented in the scientific fields. Today, only about one-third of the nation's high schools require more than one year of mathematics or science for graduation. Colleges and universities have reduced the number of these subjects they require for admission. If students take no science or mathematics after their tenth school year, they have effectively eliminated science as a career.

(2) Improve the teaching of science by providing opportunities for teachers at the secondary school and college levels to keep up to date in their knowledge of science. This goal can be accomplished

by supporting conferences and short-courses and giving teachers the opportunity to return periodically to colleges and universities for additional study.

(3) promote public understanding of science. Indeed, the increase in the number of popular science magazines and the success of television science programs indicate that the public is not only supportive of science education but thirsty for a knowledge of science. If the public is being asked to support science and all its ramifications, it should be provided an opportunity to learn what science is doing, how it is being done, and why. To the average American, science has become too arcane, and this condition must be remedied if we are to expect popular support for scientific endeavors.

We believe the House Committee on Science and Technology acted wisely in authorizing $75 million for science and engineering education. We urge you to add your endorsement to this important program by appropriating the authorized amount.

It is our opinion that the conduct of basic research, the need for modern laboratory equipment and facilities and the education of future scientists are inextricably intertwined. We need young people being educated to carry on the marvelous work of our current researchers in order to insure the continuation of the kinds of developments that have made life easier and more productive for millions of people. We also need adequate funding for research and the best available equipment and facilities in order to continue the major advancements we have come to expect from American scientists as they strive to maintain and enhance our position of leadership in the world today.

As President Truman said on the occasion of the founding of the National Science Foundation: "No nation can maintain a position of leadership in the world today unless it develops fully its scientific and technological resources." We are urging you to assist us in doing just that.

Thank you, Mr. Chairman and Members of the Subcommittee for allowing me to discuss this important topic with you today.

Mrs. BOGGS. Thank you very much.

Goals for science education are a splendid blueprint for making certain that we have a populace that is literate in science. That literacy in turn, is a prerequisite to making any moral, social, economic or political decisions in the future.

Dr. GENTILE. I certainly think so.

Mrs. BOGGS. Mr. Green?

Mr. GREEN. There is some indication in the NSF testimony before us that the Foundation felt it could deal with the instrumentation problem despite the cut in that segment of its budget, because its other science grants in essence have a component that covered the instrumentation necessary. Would you care to respond to that?

Dr. GENTILE. Well, of course, I am not privy to the manner in which the National Science Foundation may or may not intend to do this, but the National Science Foundation is free to include in any research grant, money for equipment. However, it has not been the practice in recent years to give substantial amounts of money for equipment for the simple reason that there just hasn't been that much money to go around.

Now you are usually discussing equipment in an individual research grant. Much of the equipment I am discussing is not the kind that you would give to an individual—it is much too expensive. If you had a department of 35 scientists, you wouldn't want every one to have one of these things. You might have one per department or you might have one per institution, and here is where it gets difficult: how do you go about funding a piece of equipment of this type? No one individual can ask for it in his or her grant, and to try to coordinate proposals to get this piece of equipment turns out to be very difficult. The system just works against it. I think that is the kind of instrumentation I am really talking about, not less expensive pieces of equipment for individual scientists.

Mr. GREEN. Thank you.

Mrs. BOGGS. Thank you so much. So nice to see you again.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESS

MICHAEL L. AINSLIE, PRESIDENT, NATIONAL TRUST FOR HISTORIC PRESERVATION

Mrs. BOGGS. Mr. Michael Ainslie, the President of the National Trust for Historic Preservation.

Mr. AINSLIE. Good morning, Madam Chairwoman.

If I may have my formal statement made part of the record, I would like to speak extemporaneously.

Mrs. BOGGS. You may proceed as you wish.

Mr. AINSLIE. I believe I am the first President of the National Trust to come and testify for a HUD budget. You may wonder why I am here. HUD has been the greatest benefactor of preservation in America—the Urban Renewal program created America's preservation movement. Thirty thousand acres of cleared urban renew-

al space still stands in our American cities. Fortunately, not only the preservation community, but also HUD, has learned from those mistakes.

I am particularly distressed by three particular aspects of the proposed Administration's budget for HUD and would like to address those this morning. The preservation community nationally now represents some two million Americans of all income groups and all races. We have become actively involved throughout the country in our neighborhoods and our revitalization efforts of not only our national landmarks and monuments, but of our important historic neighborhoods. It is the people who have lived in those neighborhoods, many of them of lower incomes, who are in fact America's great preservationists. They have preserved those neighborhoods. I see in the trend of eliminating neighborhoods as a possible applicant under the UDAG program a very disturbing trend, because UDAG in its neighborhood projects has been an extremely productive program. It has provided for all kinds of creativity to allow local communities to provide for housing acquisition, for interest rate subsidy programs, and other methods of insuring a long-term opportunity for housing in historic and older neighborhoods for our lower and moderate income population. I would strongly urge that your Committee give serious consideration to changing that aspect of the Administration's plan for modification of UDAG.

In a related matter, the proposed either dramatic cuts or elimination of the 312 program, which is initially a code enforcement rehabilitation program, also causes us great distress. Without question the 312 program, which really was the key to historic Savannah's early success, much of the work in New Orleans, much of the work in cities all over our country is a program that once again has provided us the opportunity to provide housing opportunities in our historic neighborhoods for a mix of incomes. It is a program that has worked. It is a program that, in spite of relatively small allotments every year, has continued to be administered, in a very successful way. It stimulates home ownership which very few of our federal programs provide at this point in time. You well know, most of the money goes to single to four family occupancies. We would very much like to see the 312 program continued. In fact, in light of other housing cuts, we think it merits expansion.

As a closing note on the neighborhood, I would like to present both of you with a neighborhood conservation poster because, as evidence of our national commitment to neighborhoods, the National Trust sponsors every year, the National Preservation Week. This year, next week is National Preservation Week. The theme this year is that of conservation, keeping America's neighborhoods together. We think that we have come a long way in preservation when we can perhaps wink at ourselves and make light of architectural styles in this manner and, most importantly, stimulate the kind of exciting activity all over America that will be occurring next week as income groups all across the board get together and celebrate the history and the importance of their neighborhoods.

In closing, let me mention one other aspect of this year's appropriation proposal that concerns us. The UDAG program had a provision in it that was changed by the amendment known as the

Wiley amendment last year whereby local communities could, by merely checking off a box, indicate that they had complied with the NEPA and Historic Preservation Act requirements. Frankly, they were doing that with no audit from HUD and there were extreme problems that resulted. The UDAG's became embroiled in controversy, litigation, and other problems because in many cases the cities did not fully understand and were not, in fact, fully carrying those out.

The Wiley amendment, which was negotiated with all parties concerned, put some time frames on the reviews by the Advisory Council on the status of preservation offers. We all felt that was a major step forward, including HUD. Once again, we see in the new proposal an elimination of that provision and a going back to the checking-off by the municipality, putting themselves as the agent for HUD in the responsibility to carry out these laws. We are concerned that this is a step backward. We have made great progress with HUD and municipalities in making UDAG a positive force for improved urban design and preservation. We would hate to see a reversal in that positive development.

Thank you very much.

[The statement follows:]

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TESTIMONY OF MICHAEL L. AINSLIE
PRESIDENT OF THE NATIONAL TRUST FOR HISTORIC PRESERVATION
ON BEHALF OF APPROPRIATIONS FOR THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
BEFORE THE SUBCOMMITTEE ON HUD -- INDEPENDENT AGENCIES
OF THE COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
MAY 7, 1981

Mr. Chairman and Members of the Committee, thank you for this opportunity to give you the perspective of the private preservation community on the appropriations for various programs of the Department of Housing and Urban Development for the coming year. We are concerned about the severity of the budget cuts proposed by the Administration in some very cost effective programs, and we are concerned about the effect of proposed changes in the laws defining these programs.

I am sure that some of you may find the idea of a preservationist testifying for HUD a bit novel, if not plainly contradictory. It is true, Mr. Chairman, that we have had our problems with some HUD programs, with insensitivity and poor administration by those responsible for their implementation, and yes, with the short sightedness of some local officials and businessmen. Urban renewal destroyed invaluable housing and commerical stock and left us with too many square miles of empty desolation in the hearts of our towns and cities. More recently, deficiencies in the Urban Development Action Grant program resulted in last minute confrontations between mayors, developers and local citizens outraged over the impact of some projects on their communities' heritage.

Unfortunately, it is too often the failures and the confrontations that preoccupy us and claim popular attention. We must not focus on these. We should turn our attention to HUD's successes and the benefit of its activities to our nation's historic main streets, neighborhoods and industrial complexes. Perhaps most significantly, we should focus on the contributions of these historic resources to the economic revitalization of our communities and to the provision of adequate shelter for all Americans.

HUD and the National Trust share common interests in the design of our cities, in their economic well-being, and in their social diversity.

Most of our historic resources surveyed and identified to date -- individual landmarks, commerical districts and neighborhoods -- are in urban areas which are targetted as beneficiaries of HUD's programs.

Socially, the National Trust is committed to making the benefits of preservation available to all Americans regardless of race, ethnic background or income level. We, as well as HUD, are concerned about displacement. Minorities live in much of this nation's historic housing stock, and they should not be displaced when rehabilitation programs get underway. Our commitment is being translated into action through our new Inner City Venture Fund. The Fund is designed to catalyze substantial inner city neighborhood rehabilitation projects for the benefit of low income, primarily minority residents of historic districts. Through grants for equity capital, loans from our Preservation Revolving Fund, and help in obtaining conventional financing, these groups will be able to leverage themselves into the market and become proud historic property owners.

Economically, available studies and statistics demonstrate a high correlation between historic landmarks and commerical districts and the economic vitality of a community. The Booz, Allen and Hamilton study The Contribution of Historic Preservation to Urban Revitalization reveals impressive benefits in the number of jobs created, leveraging of private investment, the development of stronger retail centers, increased tourism, increased municipal revenues, and substantial municipal savings through reuse of the existing infrastructure of sewers, streets, transportation facilities, and utilities. Alexandria, Virginia, one of the cities studied, is a striking success within sight of the Capitol.

I am here today to tell you that preservation is the most promising strategy that any city or town has for the future of its development. And that is not an idle promise. It is a truth that has been proven in Baltimore, Boston, Philadelphia, Charleston, Seattle, Portland, and San Francisco. Through our National Main Street Center it is a truth that has been proven as well in Galesburg, Illinois, Hot Springs, South Dakota, and Madison, Indiana. Preservation, sensitively combining existing architecture with new construction, is the way of the future, and it is profitable.

Mr. Chairman, the Congress has wisely made historic preservation an eligible activity in these programs aimed at people's problems, and we are proud that historic preservation is contributing so successfully to the solving of those problems. Let me now relate my general observations to specific HUD programs for which you must set funding levels.

We are primarily concerned that the Administration is proposing to fold a number of worthy programs into a combined Community Development Block Grant and Urban Development Action Grant Program with substantially fewer total dollars to go around. This increased competition will, of course, put tremendous pressure on states and local communities. Also, it may well work to the detriment of less dramatic but critical activities like resource identification and community economic development and reuse planning. With historic preservation facing the anomolous Administration request to eliminate historic preservation matching grants to the states through the Department of the Interior, adequate community development funds to accomplish the essential first step of historic resource survey and identification will be that much more important. The need to continue adequate public participation in the CDBG program becomes imperative

As you know, Mr. Chairman, North Hampton and Southbridge, Massachusetts, are amoung the thirty smaller towns and cities in six states being helped by our National Main Street Center. The Center was established with the support of HUD and six other Federal agencies and the cooperation of private business groups like the International Downtown Executives Association. Main Street teaches economic revitalization through reuse of downtown historic and architectural assets and by good business practices.

Government still has a role to play. For example, the three year comprehensive CDBG of $2.1 million in Southbridge will be used in the downtown to assist acquisition and development of parking areas behind the commerical buildings on Main Street, conversion of upper floors into housing and commerical space, and storefront improvements. More private investment will result. An existing Massachusetts success is New Bedford where a $4.5 million CDBG grant over 4 years has generated over $90 million in private investment resulting in business expansion for 25 companies. We must have a viable CDBG program, one adequately funded, to stimulate the Southbridge and New Bedford approach across the country.

Let me now turn to the UDAG program. We support the UDAG program because it has made a real difference in attracting needed private development to urban areas and because it has been flexible enough to accomodate the

varied needs of towns and cities. Projects involving historic preservation have been among the most successful in terms of stimulating private investment in untried areas, of creating long term jobs, and of making the most out of a community's existing assets. Let me give you a couple of examples:

-In Portland, Maine, a $9.7 million UDAG investment in Congress Square led to private investment of $200 million in rehabilitation of older properties in the city's commercial center.

-In the historic Pullman Neighborhood in Chicago, a $300,000 UDAG resulted in the creation of 250 jobs to create, in turn, 250 lower and middle income housing units. These kinds of neighborhood projects should not be excluded from UDAG eligibility.

Consequently, we would like to see UDAG funding kept as close as possible to the appropriations levels set for this year. We also urge the Congress to be sure that there is adequate funding for state technical assistance to help towns and cities implement these programs. The National Main Street Center has been out in front working through states to develop their capacity to do and to help others do economic preservation planning. We know that a transition is necessary before states and towns and cities will be fully prepared to carry out the responsibilities proposed for them by the Administration.

Finally, with National Historic Preservation Week starting on Sunday, we cannot ignore help for our neighborhoods. The focus this year is "Conservation: Keeping America's Neighborhoods Together." Neighborhood associations, civic groups and local preservation organizations will be joining together to hold neighborhood history workshops that encourage community pride and a sense of local heritage and to conduct tours through neighborhoods undergoing rehabilitation. The National Trust's neighborhood office, funded with a small HUD grant of $36,000, shares information through the Conserve Neighborhoods newsletter going to more than 2,500 subscribers and holds how-to do-it workshops for neighborhood leaders. With the shift of many governmental responsibilities to state and local governments, neighborhood initiative and self reliance will be more critical than ever before.

We urge the Committee to provide adequate funding for the Neighborhood Self Help Development Program. Its direct grants to neighborhood

organizations have involved a broad range of preservation related activities including housing rehabilitation, commercial revitalization, and energy conservation. Noteworthy efforts include the nationally acclaimed Savannah Landmark Rehabilitation Project, restoration of the Haffenreffer Brewery in Boston's Jamaica Plain as a neighborhood center, and the Tucson Barrio Association's rehabilitation of historic adobe structures for continued residential use.

We are greatly concerned by the Administration's proposal to change the amendment agreed upon last year that assures adequate identification and consideration of historic resources impacted by a UDAG project before HUD releases funds. This and a number of other proposed changes in the Housing and Community Development Act Amendments of 1981 should be reviewed very carefully by the Congress with an opportunity for public comment.

Thank you.

Mrs. BOGGS. Thank you very much.

Mr. Green?

Mr. GREEN. No questions.

Mrs. BOGGS. I am such a prejudiced chairwoman in this regard that I don't think I should make any comments.

Mr. AINSLIE. Thank you.

NATIONAL SCIENCE FOUNDATION

WITNESSES

FATHER T. BYRON COLLINS, S.J., SPECIAL ASSISTANT FOR FEDERAL RELATIONS, GEORGETOWN UNIVERSITY

LINDA H. GRAY, ASSISTANT DIRECTOR, CENTER FOR IMMIGRATION POLICY AND REFUGEE ASSISTANCE, GEORGETOWN UNIVERSITY

Mrs. BOGGS. Father Collins?

Father COLLINS. Good morning, Chairwoman Boggs. I am delighted to see you.

I am accompanied by Linda Gray. Father Bradley is in Southeast Asia. Linda is his Assistant, and I would like to make a few comments.

First, I would like to thank you and the committee for the years of assistance in the national programs that we have represented. We had one this morning that I think is particularly germane to the National Science Foundation. We would like to ask for the Committee's support. It concerns immigration and emigration.

I don't know if either of you have been reading the series of articles in the *Washington Star* that are very enlightening. Georgetown, together with other associated universities, has a center for emigration and refugee assistance. We found that the capability of getting information at the Federal level, at the State level, at the county level and the city level does not exist. Tt could be done relatively easily. The reason it isn't done is because the Bureau of the Census is under Commerce; Immigration is under Justice; Education is under the Secretary of Education, and Health Resources is under another secretary. The White House tried to set a coordinating effort and it didn't work, but the information can be put together relatively easily.

What we are recommending is that there be a Committee. We would also like to support the request of funds of President Reagan in all the areas that he has asked for, the amounts that he has asked for, noting that other witnesses are pointing out some difficulties and omissions, but this one wouldn't require any—they have sufficient money. It is trying to get their attention, and we have talked to them but I think it is something that only the National Science Foundation can do. We will match that amount of money. It would take about $75,000 just to set the plan up. The States, the counties, the Federal government, can, among themselves, carry it forward. So our request is simple.

We would like some Committee support for having National Science Foundation set up a plan to coordinate this. We, among others, would be delighted to cooperate with them. So that is what we are here for.

We do thank the Committee for last year for the request we made on the international picture. It is working out. It takes quite some time, even with NSF, to address national problems. This is one in which there is a great vacuum. We have a great interest in it. We have a Foundation that is willing to supply substantial money if we can get the thing started.

Thank you.

[The statement follows:]

APPROPRIATIONS COMMITTEE - SUBCOMMITTEE FOR NATIONAL SCIENCE FOUNDATION

Mr. Chairman and Members of the Committee, I am Father T. Byron Collins, S.J., Special Assistant to the President of Georgetown University, Rev. Timothy S. Healy, S.J.

I would like first to urge that President Reagan's National Science Foundation Budget Request be fully funded. It is a cut from the budget request of the former President.

I testified concerning an item in the Cross Directorate Program last year and because of this Committee's support, the program is underway.

This year an item that is becoming an accentuated national problem is data on refugees and immigrants.

REPORT OF: Rev. Harold Bradley, S.J., Director
Center for Immigration Policy
and Refugee Assistance

Data on Refugees and Immigrants

States, countries, and cities receiving substantial numbers of immigrants or refugees need to finds ways to facilitate the mutual adjustment of the newcommers and the resident population. This involves anticipating and dealing with strains on the systems for providing education, health care delivery, and public assistance. In order to do this well, the national government must develop effective coordination with organizations, both public and private, in the states, countries, and cities. An important aspect of this coordination concerns the flow of information about the number and characteristics of the newcomers. Both national and subnational organizations need such information in order to plan how to provide the services needed by the newcomers and how to facilitate the mutual adjustment of the newcomers and the resident population.

In the United States there has been little coordination, or information flow, between the federal government and state and local organizations. The most important step which needs to be taken is to plan for a system for estimating the number of refugees or immigrants in a community. Currently the secondary migration of Indochinese refugees to certain communities in California and the secondary migration of Cuban refugees to communities in Florida is causing social disruption. These communities are unable to estimate the number of newcomers for whom they must provide services. The Georgetown University Center for Population Research is capable of developing a system to provide this information.

I would like to request Committee support of this item.

Mrs. BOGGS. Thank you, Father Collins, for always giving us testimony that is vital to our decisions. We are very pleased to have you with us.

Mr. Green?

Mr. GREEN. I just wanted to clarify something for myself. Is this new program you are proposing something that would also fit under the Cross-Directorate programs?

Father COLLINS. Yes. Also there is another division of the National Science Foundation that deals specifically with problems in Federal, State and local governments.

Mrs. BOGGS. Thank you.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. ARLISS ROADEN, PRESIDENT, TENNESSEE TECHNOLOGICAL UNIVERSITY

Mr. GREEN [presiding]. The American Association of State Colleges and Universities, Dr. Arliss Roaden.

Dr. ROADEN. Thank you.

Mr. GREEN. We will put your full statement in the record and permit you to summarize.

Dr. ROADEN. Thank you.

Mr. Chairman, Members of the Committee, I appreciate your allowing me to meet with you this morning to speak on behalf of the proposed fiscal year 1982 budget for the National Science Foundation, with particular reference to the Science and Engineering Education Directorate.

I am here representing 341 member institutions of the American Association of State Colleges and Universities and 11 other organizations. Our universities graduate about one-fourth of the baccalaureate degrees, and we have 106 engineering schools that produce about one-fourth of the engineers at the baccalaureate level in the country.

I am very supportive of the primary objectives which have been espoused by the President, that have a healthy economy and a secure Nation, and, as a university president, I face every day the problems of our economy. I do think it is important that we get those matters under control. At the same time, I don't see any way that those two primary objectives can be achieved unless we address the problems of increasing our industrial productivity, of having a cadre of skilled manpower in science and engineering fields, and also in improving our know-how in those particular fields.

Recently, the House Committee on Science Research and Technology reported out H.R. 1520 and suggested a budget level of $75 million for Science and Engineering Education. I think that is a sound proposal and represents a balanced distribution of funds across the categories for the National Science Foundation, but I was particularly distressed to note yesterday that the Senate Labor and Human Relations Committee voted out a $20 million proposal for that budget.

As you know, the President has proposed virtual elimination of Science and Engineering Education at a $9.9 million level. That will only fund some continuing scholarships and eliminate all of the programs. Some have suggested that private industry can pick up where the Federal government leaves off in these important areas. I think the role of private industry is terribly important, but many of the Nation's interests just cannot and will not and have not been addressed by private industry. Although small, the role of the Federal government in science and engineering education is a very crucial one. The health of our economy and the strength of our national security are at stake. I would like to provide some examples of that, if I may.

The manpower shortages in engineering and computer specialists are contributing to the decline in U.S. share of world trade. Between 1963 and 1977, productivity increased in the manufacturing industries of the United Kingdom by 51 percent; West Germany by 114 percent; Japan by 197 percent; and the United States, by 39 percent. During that time, the U.S. share of world trade in manufactured items declined from 21 percent to 16 percent while in Japan it went from eight percent, for example, to 15 percent. Only one-third of the Nation's 17,000 school districts now require graduates to take more than one year of math or science. The Department of Energy reports problems in recruiting engineers to man the complex equipment. Last year a half million American students studied calculus in high school. In contrast, five million students in Russian high schools studied calculus. In Japan last year, more degrees were awarded in engineering than in the United States with a population base half of what it is in the U.S. Most of the equipment of our engineering schools dates to the 1950s, which is not up to date by far with that now in use in industry.

A year ago, President Carter called for a report to be prepared by the National Science Foundation and the Department of Education addressing the science and engineering education needs for the 1980s and beyond. That report asked specifically that the grave problem of preparing scientists and engineers be addressed.

I have some specific recommendations that I should be very pleased if this Committee would let me address. Although the Science and Engineering Education directorate would be funded at a level of $75 million as proposed in H.R. 1520, it would at that level be able to fulfill its contractual obligations and support at cost effective levels a limited number of program activities that have the very highest priority.

Second, I should like to see the authorization of the entire 1982 Science and Engineering Education budget in three sub-activities, without explicitly requiring they be for particular programs. There are now some 30 programs, all terribly important, in the Science and Engineering Education directorate, but each one individually at the level of funding prescribed would be very limited in its impact, and if the $75 million could be distributed across three major categories, it would be most helpful. Those major categories are research and analysis—one million dollars; pre-college programs—$30 million; and higher education programs at $35 million.

I will not go into the details of those three major categories. I think you can see how they break out.

If I may, I would like to discuss the importance of the Science and Engineering Education programs to our institutions. Most of my examples will be drawn from my own university, since I am more familiar with them. I could cite examples at universities across the country. The goal of the local course improvement program—the LOCI program—to Tennessee Tech was to improve undergraduate courses in engineering mechanics and material science. This program that is tutorial in nature and allows for active interaction of the students and provides computer graphic instructions to all of our students in such areas as stress, strain, curves, volume fraction analysis, and trust and frame analysis; that is how the NSF Science Education programs have encouraged colleges and universities to produce important new scientific concepts to undergraduates.

Second, how have NSF Science Education programs encouraged colleges and universities to upgrade instructional laboratory equipment? My university has received an ISEP program grant for the electrical engineering department. This department has developed a thick film microelectronics laboratory that has added to it a thin film laboratory. It serves both undergraduate and graduate students in studying the fundamental electrical properties of materials. That is something that would not have been possible without this level of support.

Third, how have NSF Science Education funds been used to improve the quality and effectiveness of undergraduate science education? A CAUSE grant was used in the development of an undergraduate interdisciplinary real time digital system program. We would have been at point zero in that area in the use of modern microprocessors without this particular grant. It is a three-year program that involves six engineering departments and four science departments in the arts and sciences college.

Four, how have NSF Science Education funds provided opportunities for the professional development of pre-college teachers of science so that they can provide students with more current instructions? I should like to give one example at the University of South Florida. There is a project in human genetics education that will allow junior high school and senior high school teachers to participate in the development, implementation, and evaluation of a program in biology for teachers in Florida.

Five, how have NSF Science Education funds attracted women to careers in science, which is a terribly important objective today. The Center for Womens' services at Western Michigan University in Kalamazoo is conducting workshops and offering career counselling and professional and personal development programs for women.

Six, how have NSF Science Education funds increased and facilitated the participation of handicapped individuals in science? An example, at the New Jersey Institute of Technology, a unique laboratory is run for handicapped students to develop the skills that are now being used by non-handicapped students.

Seven, how have NSF Science Education funds provided college students with experience in independent self-directed study and

research of their own design? I should like to provide one example from Memphis State University where they designed and tested what they hoped to be a reliable and economically feasible device for monitoring gas usage in households. No such device exists at the present time.

The programs of Science and Education Directorate have really been of major importance to all AASC institutions.

In 1980 they provided close to $7 million for our institutions.

I mentioned that we were in a state of crisis in Science and Engineering Education. Let me cite examples of that. I will use my own university as an example. In the last six years, our engineering enrollment has doubled. The size of our engineering program now ranks in the top 25 in the country, yet over that period of time we have been unable to add any permanent faculty members to the faculty during that time. We have had to deal with more students and less equipment.

The hiring of additional PhD faculty for engineering schools is a very substantial problem for two reasons. One, the salaries are not competitive with business and industry. Our undergraduate students, once they get the baccalaureate degree, many of them go into business and industry, making more money than their PhD professors are receiving who are fresh out of graduate schools. The second, is that the pool is just too small. We are not building up that pool. We have only about a third of the number of potential faculty members available to fill the spaces that are now open. I estimate that over two-thirds of our classes are now too large. Some introductory freshmen classes where we introduce the students to the computer, where they need individual attention, we have enrollment averages of over 200 in those classes. That is a problem that is being experienced by colleges and universities across the country.

I mentioned earlier the problem of obsolete equipment which is not up to standards with that used in business and industry. Without the CAUSE program, we would not be able to be using any microprocessors at all today in our instructional programs.

These are some of the problems we face, Madam Chairwoman and Members of the Committee. I do hope that you will look very carefully at the Science and Engineering Education directorate. We are experiencing very grave problems. I think the Federal government has a significant role to play in insuring that we are able to turn the tide to increase our productivity and increase our know-how in science and technology and have a cadre of trained manpower to carry out the objectives which have been set.

I would be glad to respond to any questions that you might have.

[The statement follows:]

My name is Arliss Roaden and I am President of Tennessee Technological University in Cookeville, Tennessee, a position I have held for the last seven years. Prior to assuming the Presidency at Tennessee Tech I was at Ohio State. During my twelve years at Ohio State I served as an Assistant Professor, Associate Professor and Professor of Education, as a Vice President for Graduate Affairs and Dean of the Graduate School and Vice Provost for Research. I received my B. A. degree at Carson Newman College and my Ed. D. at the University of Tennessee in Educational Administration with related fields of sociology and higher education. I am a member of the American Association for the Advancement of Science, American Academy of Political and Social Science and American Educational Research Association.

I am pleased to have the opportunity to appear before this subcommittee today to testify on the FY 1982 National Science Foundation Appropriations bill with particular emphasis on the Science and Engineering Education Directorate.

I represent the 341 member institutions of the American Association of State Colleges and Universities, and am currently chairman of its Committee on Science and Technology. Today, I also represent the following organizations:

American Council on Education

Associated Colleges of the Midwest

Association of Affiliated College and University Officers

Association of Catholic Colleges and Universities

Association of American Colleges

Council for the Advancement of Small Colleges

Council of Graduate Schools in the United States

National Association of Schools and Colleges of the United Methodist Church

National Council of Teachers of Mathematics

State University of New York

Our institutions are located throughout the United States and include the following colleges and universities which will be familiar to the members of the subcommittee: Worcester State College (MA), Saginaw Valley State College (MI), Cleveland State University (OH), University of New Orleans (LA), Metropolitan State University (MN), CUNY - Bernard Baruch College (NY), and the University of North Florida (FL).

With a combined enrollment of 2½ million students, the 341 state colleges and universities of AASCU enroll one out of four of all baccalaureate degree students in the country. Our institutions play a major role in our nation's science effort. Many students who ultimately pursue advanced degrees in scientific and technical fields receive their basic undergraduate training at our institutions. A large portion of the nation's future elementary and secondary school science and mathematics teachers are

educated at AASCU colleges and universities. These teachers must be able to communicate the knowledge and skills that will enable our youth to live in an increasingly complex scientific and technical society.

In engineering AASCU's 106 Schools of Engineering award close to 25% of the B. S. degrees in engineering annually. Our involvement in engineering is a long-standing one -- one of our member institutions, New Jersey Institute of Technology, recently celebrated its centennial. Our involvement is also expanding to meet new needs, and in 1978, one of our members, the University of Northern Iowa, became the first institution to offer a doctoral program in industrial technology.

Mr. Chairman, it gives me great pleasure to appear before you today in the company of my distinguished colleagues from the research universities and from the private undergraduate colleges.

Though we approach the problem from differing perspectives, we are all concerned with the adequacy of science and engineering education in the U. S. today. The American system of science and engineering education is in a state of crisis which warrants immediate attention and appropriate action. We are at a fundamental turning point, a time in which our system will either rise to meet the challenges ahead or will falter and ultimately undermine our nation's security and economic well being.

Today this committee will be making a decision of ultimate importance to the future of American science and engineering education. I urge you to support these programs to the fullest extent possible within current budgetary constraints.

Recently the House Science and Technology Committee reported out H. R. 1520. The levels authorized in that bill, I believe, represent a realistic and balanced approach to spending within the National Science Foundation. I am particularly pleased that the Committee approved funding at $75 million for Science and Engineering Education. The Committee's decision to increase the Reagan Administration's recommendations for the Biological Behavioral and Social Sciences and to include start up funds for instrumentation are also a step in the right direction. I urge this subcommittee to support the spending levels in H. R. 1520 as a basis for your deliberations.

I wish to place my testimony in the following context:

-- Our institutions of higher education are a national resource;

-- Federal support of science and engineering education is an investment in America's future scientific and technological strength;

-- This federal support has been steadily declining, and now faces virtual elimination; and

-- Current budgetary decisions must be weighed against their future impact on the American economy, society and nation as a whole.

I would also like to tell this Committee some of the ways in which National Science Foundation funding has benefitted the institutions that are members of AASCU.

The National Investment in Higher Education: 1981, a recently released paper by the American Council for Policy Analysis and Research, stated that "Higher education is one of America's greatest national resources. It educates our citizens, enriches our communities, conducts much of our most important research and contributes countless other benefits. Fulfillment of its mission is indispensable to America's well-being and justifies a major national investment."

A by-product of this educational process is the scientific knowledge vital to our country's well being. In releasing the FY 1982 NSF budget, Dr. John B. Slaughter, its director, said, "Success in achieving virtually all our national goals for the 1980's -- more vigorous economic growth, a stronger competitive position in world markets, enhanced national security, better health and quality of life for all people -- will depend in part on new knowledge which can come only from scientific and engineering research."

The American system of higher education couples the production of new knowledge with the training of skilled manpower at its universities and colleges. Scientific discovery depends upon education and training. There is a highly complementary relationship between the performance of basic research and the education of future scientists and engineers. If we as a nation do not adequately support the training of our scientists and engineers, then our technological base will erode and our store of scientific knowledge will diminish. The elimination of funds for science education may deny U. S. the next generation of creative scientists and innovative engineers.

In the past support for our research and training has been multi-faceted and dependent upon federal, state, private and institutional sources. This mix meant that no one sector could dominate or dictate the teaching or the research occurring at our colleges and universities.

Now President Reagan is proposing the virtual elimination of federal support for science and engineering education. How will these programs continue? The states are already experienceing budgetary deficits and taxpayer revolts; therefore, they will not be able to fill the gap. Institutional resources are already strained to the limit. And industry cannot replace lost government dollars. As Richard Lyons, Vice President for Petroleum Research at Exxon Research and Engineering Corporation, recently noted industry funding should supplement and complement federal funding since "many national objectives would not attract industry's attention. In my preferred model . . . these funding sources would form a national partnership with public and private sectors, each concentrating in areas of competence while respecting societal roles and responsibilities of the partner."

The experience of one of our members, New Jersey Institute of Technology, is illustrative of the importance to industry of the tripartite arrangement with federal and state funding.

New Jersey Institute of Technology has a large and successful Center for Pre-College Programs. The aim of these programs is to provide disadvantaged students -- many of them from minority groups -- with the technical skills necessary to pursue careers in science and engineering. It is a demanding program, but 92% of the participants successfully complete it and go on to college.

The NSF originally funded support for this program and it served 245 students. With this in operation, the Institute was able to go to the corporate and industrial community for additional support. Now the programs serve 1,000 students. The government seed money stimulated an investment by private industry that was 2½ times the original federal support. I have also worked with the private sector in building programs at my institution and I know that the federal support is the crucial catalyst in building industrial support.

Though limited, the federal role in science and engineering education is, thus, a crucial one. The nature and extent of this support for science and engineering education has changed in response to national needs -- for example, the public alarm resulting from Sputnik saw a surge in funding. Yet this support has been an integral part of the U. S. science and technology policy for the last thirty-five years.

This commitment seems to be diminishing rather dramatically with the Administration's current budget requests and is contrary to national needs. This action is proposed at a time in our history when the United States' position of world leadership in science and technology is being severely challenged. The health of our economy and the strength of our national security are at stake. For example:

-- manpower shortages in engineering and computer specialists are contributing to the decline in the U. S. share of world trade. Between 1963 and 1977 productivity increased in the manufacturing industries of the United Kingdom by 51%, of West Germany by 114%, of Japan by 197% and of the United States by 39%. During that same time the U. S. share of world trade in manufactured items declined from 21% to 16% while Japan's share increased from 8% to 15%.

-- only one-third of the nation's 17,000 schools districts require graduates to take more than one year of math or science.

-- the Department of Defense reports that it has problems recruiting and retaining civilian and military engineers. It also notes that it is more and more difficult to find officers and NCO's who are qualified to be trained to operate increasingly sophisticated military hardware.

-- a total of 500,000 American students take calculus during their last year in high school or first year in college, while five million Soviet students take it as part of their high school curriculum.

-- in Japan the number of degrees granted to engineers in recent years has surpassed the number granted in those same years in the U. S. though Japan's base population is one-half of ours.

-- most engineering school equipment dates form the 1950's and is not representative of modern industrial practice.

I strongly believe that the National Science Foundation is the agency best able to restore the health of American science education. To do so, its budget must acknowledge the strong interdependence between science research and science education and both these activities must be adequately supported.

Though my request to you today is to insure the future of Science Education at NSF, I think I would be remiss to ignore the grave economic situation in our country today. As a college president I am all too familiar with the problems caused by inflation, rising costs and diminishing support. The economic recovery of our nation must be the goal for all Americans. But to cut funds for science and engineering education is, I believe, a serious strategic error. The investment that the federal government makes in science and engineering education today -- minimal by comparison to many other programs -- will have a long-term return to society.

In examining budget proposals for the elimination of Science Education within the National Science Foundation, it is important for all of us -- the authorization committees, the appropriations committees, the Foundation, the OMB, the President -- to take into account the findings of a recently published report, Science and Engineering Education for the 1980's and Beyond. The report's

findings indicate that there is a need to improve the quality and amount of science, mathematics and engineering education provided to U. S. students. Our schools and colleges are falling behind the Soviet Union, Japan, West Germany and France in science and mathematics education. The level of scientific literacy in the U. S. is lower than in other industrialized countries.

To rectify these problems a new national "commitment to excellence in science and technology for all Americans" is called for. A coordinated program to "increase public awareness of the need for excellence in science and technology and help the schools fulfill their role in formal science and technology education" is recommended.

The former Administration's budget proposals for Science and Engineering Education were a response to the findings of that report. The data in this report and its implications transcend partisan politics. I urge this Committee to conisder its findings as it makes its decisions on funding levels for the Science and Engineering Education Directorate.

I would like to point out here that the American Association of State Colleges and Universities and the other groups listed concur with the statement of Dr. Zdanis, Vice Provost, Johns Hopkins University, representing the Association of American Universities and the National Association of State Universities and Land-Grant Colleges. Specifically, the groups that I represent recommend that the Subcommittee on HUD - Independent Agencies, Committee on Appropriations take the following steps:

1. Authorize the Science and Engineering Education Directorate of NSF to be funded at $75 million as proposed in H. R. 1520. At that level it would be able to fulfill its contractual obligations and to support at cost-effective levels a limited number of program activities having the very highest priority because of their unique national significance.

2. Authorize the entire 1982 SEE budget in three subactivities. Do not explicitly require the funding of any existing programs or specify their budget levels. Even at current levels, or higher, SEE has too many separate mandated programs (almost 30). Most programs are badly underfunded and hence only partially effective. At lower levels, flexibility and focussing are essential. We suggest the following subactivities and 1982 budget levels:

Research and Analysis	($10 million)
Pre-College Programs	($30 million)
Higher Education Programs	($35 million)

3. Require the NSF to reorganize SEE to reflect the new budget authorization policy. While the specifics should be left to the agency, the functions should be made clear by the Congress.

Research and Analysis. This division as a unit of SEE would provide support for carefully selected research applied to the most urgent problems in science and engineering education. It would also be responsible for the collection, analysis and dissemination of information about key aspects of the nation's science education enterprise including its status relative to that in other countries.

Pre-College Programs. This unit should design and administer a set of activities that are targeted at those, and only those, parts of the pre-college science education enterprise in which the federal role can be decisive and for which it is uniquely qualified. Of special concern should be up-grading the quality of junior and senior high school teachers, and student-oriented activities -- such as "3-2-1 Contact," "Saturday Academies," and summer research internships -- to attract talented youngsters into thinking about careers in science and engineering.

Higher Education Programs. This unit would be charged with supporting a carefully focussed and coordinated set of college/university level activities to improve the quality of science education available to both general students and science and engineering majors. The activities, the priority and individual magnitudes could change over time in relation to shifting needs as identified by the Research and Analysis unit. Support for science student recruitment, faculty development, course development, interinstitutional resource and information sharing, and instructional instrumentation could be included.

I would like to give this Committee some idea of the importance of Science Education programs to AASCU institutions and the relevance of these programs to our nation's scientific endeavor. For example, Science Education programs have addressed the following questions:

How have NSF Science education programs encouraged colleges and universities to rapidly introduce important new scientific and educational concepts to undergraduates?

• The goal of a Local Course Improvement Program grant to Tennessee Tech was to improve undergraduate courses in engineering mechanics and material science. Instructional computer graphics programs were developed to supplement lecture presentations. The program, tutorial in nature, allows for active interaction of the students. It is anticipated that these computer graphics will aid the students in better understanding of difficult topics such as stress-strain curves, volume-fraction analysis, and truss and frame analysis.

• Another grant from the Local Course Improvement Program to William Paterson College of New Jersey permitted the development of curriculum incorporating ethical value issues in the biological and behaviorial sciences.

How have NSF science education programs encouraged colleges and universities to upgrade instructional laboratory equipment?

•An Instructional Scientific Equipment Program grant to the Electrical Engineering Department at Tennessee Tech permitted the development of a thick film microelectronics laboratory. This laboratory has now been expanded using university resources to include thick film facilities. Although the lab initially served undergraduate students, it now serves both undergraduate and graduate students for the fundamental study of electrical properties of materials.

• At Humboldt State University (CA) a 1980 ISEP award permitted the acquisition of a scanning electron microscope for joint use in the biology and geology departments. This microscope will allow students to study such diverse subjects as blood cell structure, plant pollens and microfossils.

• NSF funds have also been used to extend the life of existing instructional scientific equipment. The University of Missouri at St. Louis received funds to renovate a T-60 Nuclear Magnetic Resonance Spectrometer. Refurbishing the equipment will be completed at 1/3 the cost of replacement and will result in improving the quality and scope of the chemistry curriculum from sophomore to senior year.

How have NSF science education funds been used to improve the quality and effectiveness of undergraduate science education?

• A Comprehensive Assistance to Undergraduate Science Education (CAUSE) grant to Tennessee Tech was used in the development of an undergraduate interdisciplinary real-time digital system program. This is a three-year interdisciplinary project involving six engineering departments and four non-engineering departments -- biology, earth science, chemistry and computer sciences.

In the past undergraduate students at small universities such as Tennessee Tech have been unable to do real-time computer work due to the cost of standard computer equipment. This project has permitted the development and acquisition of four "stand-alone" microcomputer systems at about one-tenth of the cost of standard systems. The laboratory will permit undergraduate students to learn and apply data acquisition systems currently being used by large processing industries. Biology students will learn techniques for acquiring environmental information through data acquisition systems designed and tested in the microcomputer laboratory.

Faculty from ten teaching areas are presently undergoing training in the lab so that they will be able to use and teach in the laboratory. For the first time this fall, Tennessee Tech offered an undergraduate course that will deal with the design and use of microcomputers in the processing industries.

•At Lyndon State College (VT), a CAUSE grant will support the college's efforts in the development of curriculum resources in computer sciences and encourage an increase in computer literacy among students. Computer assisted instruction (CAI) will take place in courses related to the College's science and meteorology programs permitting students to study theories and solve problems at a pace commensurate with their understanding of the material. The CAUSE grant was supplemented by $80,000 from the Digital Corporation.

How have NSF Science Education funds provided opportunities for the professional development of pre-college teachers of science so that they can provide students with more current instruction?

. The Pre-College Teacher Development Program at Northern Arizona University brought together local university scientists and teachers, administrators and tribal representatives from a number of reservations to determine their special science education needs. Proposals for science and math education that reflect their particular cultural settings were developed and are now being implemented in a number of schools with large Indian populations.

. Laboratory and class work utilizing faculty from the New Jersey Institute of Technology's chemistry, physics, mathematics and engineering departments provided secondary school teachers with an objective view of the complex and ever-changing energy problem. This energy and conservation information was then carried back to the high school classroom and incorporated in the curriculum.

. At the University of South Florida, a project in Human Genetics Education will allow junior high school and senior high school teachers to participate in the development, implementation and evaluation of a continuing program in biology for teachers in Southwest Florida.

How have NSF Science Education funds attracted women to careers in science?

•The Center for Women's Services at Western Michigan University in Kalamazoo will conduct workshops and offer career counseling and professional and personal development programs. The Center also will advise student groups, conduct monthly discussion meetings on science topics, and publish a bulletin on regional science career opportunities.

How have NSF science education funds increased and facilitated the participation of handicapped individuals in science?

• At the New Jersey Institute of Technology a unique laborator run by two handicapped engineers developed the technical skills of the physically impaired students enrolled. It gave these students the confidence to proceed with their career goals. Non-handicapped students also participated in the laboratory in adapting and designing the equipment and procedures to the students' particular needs.

How have NSF Science Education funds provided college students with experience in independent, self-directed study and research of their own design?

•Responding to the increasing concern over the nation's growing consumption of limited natural resources, a team of engineering students at Memphis State University (TN) designed and tested what they hope to be a reliable and economic device for monitoring gas usage in households. No device for such measurement is presently available and an aim of this study is implementing a processor which can provide quantity and cost information regarding gas usage.

The programs of the Science Education Directorate have been of major importance to all AASCU institutions. In FY 1980 they provided close to seven million dollars in vitally needed funds to our campuses. The long term pay off when the generation of students currently enrolled at our colleges and universities become actively involved in our science effort and industrial base will be significant. Without these funds it is unlikely that we would have been able to move ahead as rapidly.

Today, I would also like to comment on some of the unique problems that Tennessee Technological University, as an engineering school, encounters. Other members of our Association note similar expereinces.

At Tennessee Tech our engineering enrollment during the last six years has just about doubled in size. Yet this tremendous increase in size has not been reflected in equal growth of faculty, resources or equipment. On the contrary our institution has had to deal with more students and less faculty.

A similar story can be told at California Polytechnic State University at San Luis Obispo where there has been a 31% increase in engineering enrollments over five years despite the fact that the university has a ceiling on enrollments by major. This 31% increase has taxed the university's resources to the point where they are no longer able to meet the demand for students wishing admission. For fall 1981, 1,161 students who applied to the School of Engineering have been rejected because of faculty and facility restrictions.

The hiring of additional PhD faculty for our engineering school to cope with enrollment surges has been difficult for two reasons: the faculty salaries are not competitive and the available pool of potential faculty is too small.

At the present B. S. graduates from engineering schools are getting annual salaries upon graduation which exceed academic salaries of new faculty with doctorate degrees. This discourages qualified students from pursuing graduate studies which eventually would lead to a faculty position. Nor are we able to retain the faculty that we have. Each year some are lured away by the higher salaries offered by industry.

The University of Alabama in Huntsville for the past several years has only been able to fill half the engineering faculty positions open; this year, they were only able to fill one position. In addition, the university lost to industry six faculty members this year.

The difficulty of acquiring and maintaining adequate faculty size coupled with surging enrollments has meant that many of our classes are double the size they were several years ago. I estimate that over two-thirds of our classes are now too large. This is particularly devastating in our design courses where individual and small group attention is a must -- where many solutions to design problems are possible and all have to be checked individually.

California Polytechnic State University at San Luis Obispo has found class size to be a leading contender in the decline of faculty morale and a contributor to faculty looking for employment opportunities elsewhere. Class size is excessive at all levels due primarily to budgetary problems and lack of faculty. In the engineering programs there is a serious shortage in faculty which has resulted in the inability of the university to offer certain necessary courses

at times when they are required. The possibility of some students making normal progress in their degree programs is thus being jeopardized.

At the Montana College of Mineral Science and Technology record levels of enrollment coupled with problems of hiring and retaining faculty have resulted in class sizes large enough to threaten the school's accreditation.

Problems caused by faculty shortages and retention are further compounded by the poor state of our laboratories. The fact is that we have been unable to maintain our laboratory equipment. It is currently outdated and in a state of disrepair. We have not been able to replace the equipment that we need. Our students are being trained on equipment which is obsolete to industry. During the last ten years we have depended very heavily upon the NSF Science Education programs to help in the replacement of our obsolete equipment. For example, without the CAUSE program described above we would be at ground zero in microprocessors.

Because funding by the state of California has been cut back in the past few years California Polytechnic State University at San Luis Obispo has been unable to keep abreast of needs in laboratory equipment, maintenance and replacement. They lack technicians to maintain and repair equipment: there aren't enough funds to purchase repair parts and much of the equipment is so old it is difficult to obtain replacement parts. In some cases the University has asked for and received donations from industry. Industry's obsolete equipment

is then used in the laboratory instruction programs -- though obsolete by industry standards this equipment is in most cases newer than the equipment already in the laboratories.

Thank you for giving me the opportunity to appear here today. I hope that my plea has been heard. I would be happy to answer any questions you might have.

Mrs. BOGGS [presiding]. Thank you so much.

Mr. Green?

Mr. GREEN. No questions.

Mrs. BOGGS. We do appreciate your testimony. We know it will be very helpful in our Committee deliberations.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. RICHARD D. ZDANIS, VICE-PROVOST, JOHNS HOPKINS UNIVERSITY

Mrs. BOGGS. Dr. Richard Zdanis.

Dr. ZDANIS. Thank you very much, Madam Chairman.

Mrs. BOGGS. We would be happy to make your testimony part of the record in its entirety. Please summarize for us.

Dr. ZDANIS. Thank you.

Over the years, the National Science Foundation has played a very vital and unique role in leading the Nation's investment in basic research and science education. It has demonstrated its understanding of the basic nature of research and led in the development of flexible programs, consistent with the appropriate accountability necessary to foster research at universities.

Paramount among these flexible programs are the material science laboratories which have been successful for many years and the current AAU/NSF experiment on grants administration.

We are facing an important moment in the history of basic research. The nation needs to consider carefully the many ways on which it is dependent upon the quality and vitality of the national capacity for science research and education. We must also consider the extent to which that capacity is dependent upon the nature, level, and consistency of the Federal investment in these areas.

There are already several disquieting signs that our national commitment is falling behind those that are made by other developed nations, particularly Japan and West Germany. The degree to which this level of commitment is already having consequences in the marketplace of highly technical products is on the front pages of our papers every day.

Within the budget being addressed here today we find three major areas of concern. The first is science education. There is broad agreement that the absence of training and fellowship oppor-

tunities will exacerbate the shortages already visible in certain areas. Industry and government will not be able to hire the trained technical talent needed to address the problems of the 1980s and 1990s.

Second, instrumentation and equipment. The research and training capabilities of the major research universities are steadily and increasingly eroded by the rapid obsolescence of the facilities and instrumentation. I was a member of the project team that surveyed the university's government laboratories and industrial laboratories. That experience left a vivid impression on me. While it is true that in certain isolated segments of universities the equipment available is comparable with that in some of our industrial laboratories, the median age of the university instrumentation that we found was twice that of comparable industrial laboratories. Much valuable time by both students and faculty is being spent trying to repair worn-out equipment or to make those repairs with inadequate test instruments. Both the research and the training of the students have suffered as a consequence.

Research facilities is the third area that I would like to draw your attention to. Intertwined with the problems of the research, worn-out or obsolete instrumentation is leading to the progressive deterioration of many of the nation's leading university laboratories. Front line research and training can only be conducted within an environment provided by adequate facilities. After an intense investment in facilities during the latter part of the 1960s, we have experienced almost a decade of neglect of these facilities. The deterioration of the infrastructure of the research capability found in the universities is an example of deferred maintenance. It has reached a point where that productivity is affecting the sciences. If the areas do not receive additional funding, we will be able to educate students only partially in the newer technologies and inadequately familiarize them in the use of newer instruments.

The consequence to government and industry flow from the prospect of a weakened knowledge base and from the likelihood that in key fields we will have insufficient numbers of highly trained and educated people to address the problems of the eighties and the nineties.

Thank you very much.

I would be pleased to respond to any questions you may have.

[The statement follows:]

Testimony before House Appropriations
SubCommittee on HUD-Independent Agenices

Mr. Chairman and members of the Committee:

My name is Richard Zdanis and I am Vice Provost of The Johns Hopkins University. I am pleased to have this opportunity to present to you views on the science and engineering research and education needs of the nation as they pertain to the FY 1982 budget requested for the National Science Foundation. My statement is being presented on behalf of several higher education associations: the American Council on Education, the Association of American Universities, the Association of Graduate Schools, the Council of Graduate Schools in the United States and the National Association of State Universities and Land-Grant Colleges. The universities and colleges represented by these associations carry out over 50% of all federally-funded basic research programs. In addition to educations virtually all of our nation's scientist and engineers, these institutions educate many of the elementary and secondary level teachers and administrators who play indispensable roles in science education.

The National Science Foundation has played a vital role in leading the nation's investment in basic research and science education. The Foundation's research programs provide more than 34% of federal support for basic research in our universities and colleges. Unlike other federal agencies, such as the Departments of Defense and Energy, the Foundation maintains no laboratories of its own. All NSF research and education programs are carried out by universities, colleges and other nonfederal organizations. NSF has, however, been outstanding in developing experimental means for bettering the prosecution of research at universities. The Materials Research Laboratory concept of block grants has been outstandingly successful. The current AAU/NSF experiment in grants administration, which is now being tested on several campuses, gives universities greater flexibility in fiscal matters, without decreasing accountability, increases the efficiency of research by eliminating unnecessary reporting and gives every indication of enhancing the partnership between research investigators on our faculties and federal agencies. NSF truly occupies a unique place in the scientific development of capabilities for our society.

I. A Stable Investment Policy for Research is the First Priority

This hearing occurs at a singularly important moment in our history. A new administration is establishing its priorities

and policies, and a new Congress is weighing responses to them. It is an important moment for all of us, one which demands that we give very careful consideration to the many ways in which our nation is dependent upon the quality and vitality of our national capacity for science research and education and the extent to which that capacity is dependent upon the nature and level of national investment made through the Federal government. The National Science Foundation, and this Committee, perform crucial roles in exercising stewardship of that investment.

In recent years, there has been broad bi-partisan agreement on and commitment to the need to sustain the federal responsibility and investment for research and training, particularly in the basic sciences and engineering. That commitment is essential if the United States is to remain at the forefront in the discovery and the application of new knowledge, be a world leader in science and technology, retain our position in the world marketplace and provide for our national defense. Were our national resolve in this effort not sustained, or were it to experience severe or sudden dislocations, the price we as a nation will pay in foreseeable and unforeseeable ways will be enormous.

There are already several disquieting signs that our commitment in the area of fundamental research is weakening. Data indicates, that since 1967 the percentage of the federal budget expended for research and development has fallen from 11% to 6%; and that the percentage of the gross national product (GNP) devoted to research and development has declined from 2.2% to 1.3%. I am told that, by comparison, the budgetary commitments to research and development in Japan and West Germany show the reverse trend. Perhaps the lesson for us already is clear.

As we begin a new debate on national priorities and problems it is perhaps well for us to recall something of the history of the federal role in basic science and education and the extent to which the country is fundamentally dependent upon them.

In the period roughly since the end of the Second World War a consensus has been forged in this country that research and training for research indeed are indispensible to our health, economic prosperity, cultural vigor and military strength. It has been understood that some of the most extraordinary discoveries are not fully appreciated until long after they are first made. Ultimately, it also is agreed, the entire nation shares in the fruits of research and that

the costs to society of modern research cannot be met without a substantial and diversified federal contribution. Clearly, the individual states have neither the monetary capability nor the sense of national responsibility to establish the necessary priorities in areas such as national defense, public health and fundamental basic research that provides for our continued advancement as a society. It has been clear for some years that there is a general consensus on this fundamental principle.

The most visible sign of the general consensus on this fundamental issue has been the growth of a group of research universities whose performance in research and training has been a triumph of American public policy. I believe it is fair to say that this group of nationally distinguished universities remains the unduplicated envy of the world. It is difficult to think of an achievement in science and technology during this entire period that does not bare the mark of work done in one or more of these institutions.

The results truly have been remarkable. For example, scientists from the United States received only 20 of 142 Nobel prizes awarded prior to World War II in the sciences: chemistry, physics, physiology, and medicine. Between 1945 and 1978 American scientists received 94 of 184 prizes awarded.

Out of basic, fundamental research have come such important discoveries as antibiotics, computers, bio-technology, nuclear energy and lasers. Studies conducted years ago by geologists interested in cataclysmic environmental changes in the ancient world suddenly have taken on new meaning as companies try to locate additional oil deposits. Current efforts to harness the power of nuclear fusion can be traced back to a fundamental interest in the nature of the stars and the origins of the universe. We now have CAT scanners in hospitals because some people thirty years ago were doing basic research in nuclear physics, solid state physics; and because, even earlier the mathematicians expanded our knowledge of three-dimensional geometry for which computer programs had been written to analyze particle physics phenomena.

In defense our current superiorities in the technologies of missile guidance, advanced aircraft, submarines, and space defense systems rest on a foundation of research built up over the last decade or more. If we are to retain our lead in critical areas and remain competitive in the world market place additional work is needed in fields such as computer sciences, materials and advanced electronics. The stream of knowledge needed to keep pace with world-wide competition, cannot be turned off and on at will. Each discovery builds on earlier discoveries, often in unpredictable

ways. Unless new, stronger foundations are laid in the 1980s by people trained to new levels of excellence, there will be no way to meet the needs of the 1990s.

In the area of health, Dr. Lewis Thomas, President of Sloan Kettering Memorial Hospital has noted that it required 50 years of concentrated basic research to pave the way for antibiotics. "Without the long painstaking research on the bacillus," he has written, "we would be thinking that tuberculosis was due to night air and we would still be trying to cure it by sunlight. We need reminding now more than ever that the capacity of medicine to deal with infectious disease was not a lucky fluke; nor was it something that happened simply as a result of the passage of time. It was the direct outcome of hard work done by imaginative and skilled scientists... It was basic science on a very high order, storing up a great mass of interest and knowledge for its own sake, creating so to speak, a bank of information ready for drawing out when the time for intelligent use arrived."

The storing up of information and replenishing the bank of information described by Dr. Thomas is the primary mission of the National Science Foundation. It is in fact the only major federal agency of the Federal government which has as its primary mission the support of fundamental, basic science. It is for that reason that the National Science Foundation in its 30-year history has made historic contributions to science and the nation.

The universities of this country are our reservoir of basic research and are our major resource for research training. Our research universities have been built over a long period of steady support and we have extraordinary depth in them in relation to research. We are at present, I believe, still preeminent in the world in this respect. It requires, of course, 15 to 20 years to build research depth. Yet in vital areas it can be torn down, in a year or two greatly reduced in capacity, aand severly damaged. If erratic or insufficient funding patterns result in the dismantling of existing, working research groups, it will take us again 15 to 20 years to regain the position we now have. While we all recognize the economic restraints and problems we face, it is conceivable that we may be embarking upon a penny-wise, pound foolish approach if we seriously disrupt or dismantle our research and training capabilities with the kinds of deep cuts that are being proposed.

The nation's universities bring to the research enterprise a strong commitment to independent thinking, an increasingly robust interdisciplinary environment, and a mutually supportive relationship between research and training. Together these produce multiple benefits: research is accomplished in an unusually conducive atmosphere while those who will become the research leaders and teachers of later years are instructed

and encouraged as their fresh ideas nourish the enterprise. The apprentice/scholar relationship between our faculty members and their graduate and post-graduate students is clearly a major key to the production of the scientific leaders of tomorrow.

Our universities can remain in the forefront of the advancement of science and technology; they can conduct the fundamental research which adds to the store of knowledge, they can prepare the scientists, engineers and teachers for future generations (for service in industry, government and private laboratories as well as universities and other educational institutions) only if they have both substantial and stable assistance in meeting the inexorably rising costs of research and education; i.e., costs for skilled personnel, materials, facilities, and increasingly sophisticated research instrumentation and equipment.

If the National Science Foundation is to continue to lead the nation's search for new knowledge, and if we are to educate the scientists, engineers and teachers in the numbers and specialties the nation needs, we must consider several inescapable facts. The first is that a research and education enterprise requires time to become productive. The very nature of research involves a long gestation period but is commensurately rewarding. There is no more proper or effective

expenditure of public funds than to provide a stable investment policy that protects the endeavor from sharp and disruptive changes.

For several years, beginning with President Ford's administration, the Federal government has sustained an effort we fully supported to reverse the decline in federal support for basic science. Now the Administration's effort to address our pressing economic problems includes proposals to impose real and substantial reductions in some NSF research programs, especially in key initiatives designed to meet acute research instrumentation and facility needs and in the social and economic sciences. If they are approved, the reductions in our social and economic sciences will have a damaging and disruptive effect on our nation's research and education activities in those fields disproportionate to the relatively small savings that may be achieved. We urge the Congress to reject such disruptive reductions.

There are three major areas of concern that I would like to share with you which I believe the majority of my research and scientific colleagues in the academic world share. The first of these is the national need for more highly trained people.

II. The Nation Needs More Highly Trained People

The programs in support of research training have enabled us to select from among the most talented of our young people and attract them into science.

The Administration proposes to terminate the entire science education activity of the Foundation. To this we must strenuously object, and we urge the Congress to reject such steps as short-sighted budgetary expediency.

The proposal strikes directly at the heart of the Foundation's charter. Since it was created in 1950, NSF has had the dual mission of supporting excellence in research and in science education. As recently as a year ago, in creating the Department of Education, the Congress reaffirmed the importance of retaining a vigorous comprehensive science education activity as part of the Foundation. The Congress specifically rejected proposals to move science education from NSF to the Department.

If all science education programs are eliminated from the Foundation, the education of many future scientists, engineers and teachers will be seriously harmed. The Science Education Directorate provides the focus for the continuing development of programs, and initiatives designed to address the well-documented shortcomings of our nation's schools, colleges and society at large. The recent report by the NSF

and the Department of Education (Science and Engineering Education for The 1980s and Beyond, October 1980) describes many of the serious challenges we face in upgrading the quality of science and engineering work throughout our education system, from the elementary and secondary levels to advanced graduate work. We must now not retreat from the struggle against the growing scientific illiteracy of our people.

The research and training capacities of the major research universities are threatened by a growing shortage of advanced graduate students and young researchers in all fields of engineering (e.g., chemical and petroleum engineering, electrical engineering), in the physical sciences, in Computer Science and related areas. We do, in fact, suffer from our very success in scientific achievements and their contributions to the welfare of society. Industry, in turn, is experiencing severe shortages of trained researchers, and so is turning to the universities for them. As researchers leave academic careers we are in danger of "eating our seed corn" in these disciplines. Rather than terminate the NSF competitive doctoral fellowship program, once the premier national science fellowship and an important symbol of federal leadership and commitment to excellence, we urge the Congress to restore it to the position of prominence and respect it once enjoyed.

The science education directorate must be sustained. To do that we urge the Committee to see that sufficient funds are appropriated. In considering the Foundation's future mission in science education we join with the American Association of State Colleges and Universities, represented today by Dr. Arliss Roaden, and others in offering the following recommendations.

1. Fund the Science and Engineering Education Directorate to $75 million. This will enable NSF to fulfill its contractual obligations and to support at cost-effective levels a limited number of program activities having the very highest priority.

2. Fund the entire FY 1982 Science Education budget in three subactivities, and do not explicitly require the funding of any existing programs or specify their budget levels. Even at current levels, or higher, SEE has too many separate mandated programs, resulting in administrative inefficiencies and insuring that most programs are badly underfunded and hence only partially effective. At lower levels, flexibility is essential. We suggest the following subactivities and 1982 budget levels:

Research and Analysis	($10 million)
Precollege Programs	($30 million)
Higher Education Program	($35 million)

3. Require the NSF to reorganize SEE to reflect the new budget authorization policy. While the specifics should be left to the agency, the functions should be made clear by the Congress.

Research and Analysis. This division as a unit of SEE would provide support for carefully selected research applied to the most urgent problems in science and engineering education. It would also be responsible for the collection, analysis and dissemination of information about key aspects of the nation's science education enterprise including its status relative to that in other countries.

Precollege Programs. This unit should design and administer a set of activities that are targeted at those, and only those, parts of the precollege science education enterprise in which the federal role can be decisive and for which it is uniquely qualified. Of special concern should be up-grading the quality of junior and senior high school teachers, and student oriented activities---such as "3-2-1 Contract," "Saturday Academies," and summer research internships--to attract talented youngsters into thinking about careers in science and engineering.

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Higher Education Programs. This unit would be charged with supporting a carefully focused and coordinated set of college/university level activities to improve the quality of science education available to both general students and science and engineering majors. The activities, the priority and individual magnitudes of which would change over time in relation to shifting needs as identified by the Research and Analysis unit, could include support for graduate fellowships, science student recruitment, faculty development, course development, interinstitutional resource and information sharing, and instructional instrumentation.

The second major problem area that I would like to discuss with you is the severe and critical need for continued support for instrumentation and equipment. The provision of the tools for basic sciencific research.

III. Instrumentation and Equipment: The Tools of Basic Science Are Wearing Out

The research and training capacities of the major research universities are being steadily and increasingly eroded by the rapidly increasing obsolescence of research facilities and instrumentation.

Almost every major university has made a telling and effective case over the past several years that its research equipment and research facilities are growing increasingly

obsolescent and that the problems of maintenance of equipment for research in the university are becoming almost insurmountable. This provides an increased threat to our ability to keep up with the technological advances in scientific fields and thus diminishes our ability to carry out research and to train the next generation of researchers. To delay longer the support of an instrumentation provision program begs our viability in research and research training and contributes to the process of dismantling the research effort in our country.

In June 1980 the Association of American Universities presented a report to the National Science Foundation: "The Scientific Instrumentation Needs of Research Universities." Copies have been provided to the Committee. (The attached March 6 Science article summarizes the report.) The study was carried out under the guidance of an advisory committee comprised of individuals from industry and other private institutions. With other team members I visited with several hundred research scientists and administrators in sixteen universities and in a number of government and commercial laboratories.

When the instrumentation available in university laboratories was compared with that in some of our best commercial laboratories, it was found that the median age of university instruments is twice that of our most advanced commercial laboratories. The serious consequences of this both for the

quality of research that can be conducted in the universities now and for the adequancy of the training that can be accomplished on our leading campuses are obvious.

Problems were found across all institutions in five departments (physics, chemistry, biological sciences, earth sciences and electrical engineering) in the acquisition, use and maintenance of research instrumentation. While the configuration of these difficulties varies widely and reflects the great diversity among the institutions, the capabilities of institutions and departments to meet these difficulties vary also.

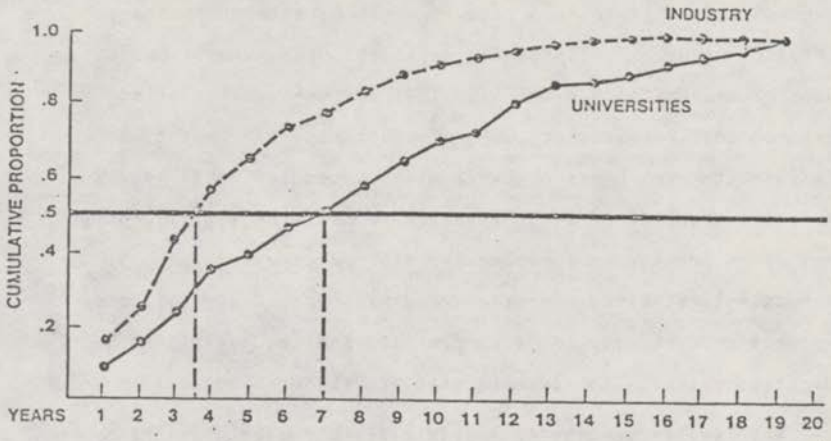


FIGURE 3. *Age of Instrumentation in Universities Twice That In Industry (Proportion of Instrumentation Inventory Purchased Less Than n Years Ago).*

Source: L. Berlowitz, R. Zdanis, J. Crowley, J. Vaughn. The Scientific Instrumentation Needs of Research Universities, The Association of American Universities, June, 1980.

Leading researchers face great difficulty in replacing worn out and obsolete instrumentation and in acquiring new instruments needed to sustain work at the frontiers of their fields. In the leading research universities scientists simply

have not been able to keep pace in meeting research instrumentation needs. Those heavily dependent upon federal project funds have seen their grant size fall way behind escalating research cost requirements. As a result many of the nations pre-eminent researchers now work with inadequate tools and find that the pace of their research is hampered significantly. They often are forced to abandon preferred lines of inquiry. Increasingly strained operations and maintenance budgets cause research productivity to be compromised and the quality of education provided to advanced graduate students suffers.

New faculty seeking to initiate fresh research programs must do so in the face of escalating start-up costs. Routine support equipment needed to test, calibrate and augment primary research instruments often is especially difficult to acquire. In field after field the nation's leading academic research laboratories are falling behind to the point where scientific leadership and the development of new ideas and new lines of inquiry are shifting from universities to industrial laboratories and foreign competitors. Evidence of our declining ability to compete with Western European, in some cases Eastern European, and Japanese laboratories has grown to a convincing level. There now seems little doubt that in key fields the United States is waging a losing battle in an increasingly competitive world.

The effect of the declining competitiveness of our academic laboratories also is being felt by American industry. The development of new products and processes is being compromised by the lack of highly trained people. New scientists and engineers who join industry now often require additional training because they have not had hands-on experience with the state-of-the-art instrumentation and facilities. The pace of industrial innovation and invention thereby is slowed, further hampering our productivity and our ability to meet stiffening foreign competition.

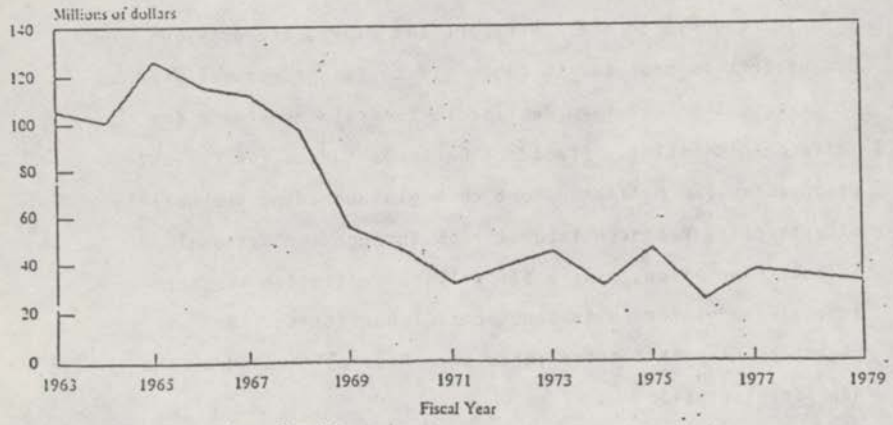
In response to the AAU report and others the previous Administration proposed to begin now to take steps designed to reverse the long-term decline in federal investment for research facilities. President Carter's budget for FY 1982 proposed an $75 million effort to begin upgrading the quality of university research laboratories through the National Science Foundation, plus a $25 million initiative to start improving engineering instructional laboratories. We regret to hear that these funds have been eliminated by the new Administration.

IV. RESEARCH FACILITIES

Intertwined with the problems of research instrumentation is the progressive deterioration of many of the nation's leading university laboratories.

For about 15 years the level of federal investment in research facilities in universities and colleges has declined steadily, from about $126 million in 1965 to only $32 million in 1979. Now only the National Science Foundation, the Department of Energy and the National Institutes

Federal obligations to universities and colleges for R&D plant



SOURCE: National Science Foundation

of Health provide any funds for research laboratories. Most of these are targeted on the development of major national facilities intended to serve a large and diverse population of users. For many years essentially no funding has been provided by federal agencies to upgrade laboratories where federally-supported research and education programs are carried out. State and private investments have continued. In total dollars the level of expenditures by universities is increasing. But these sources are inadequate to fill the vacuum left by the withdrawal of federal investment.

A survey of the research facilities needs of leading universities now is being done by the Association of American Universities. The survey is gathering information from 15 universities, which in FY 1979 accounted for about 22% of total Federal R&D obligations to universities and colleges. (A list of universities participating in the survey is attached.) Six fields are included:

- Biological Sciences
- Chemical Sciences
- Earth Sciences
- Engineering
- Physics
- Medical Schools

The report will address the following questions:

- In the absence of any significant federal investment, what has been the recent trend in expenditures by universities for the renewal and rehabilitation of their research facilities?
- What level of expenditures do the universities estimate will be needed over the next few years to allow faculty who will be in place to carry out their research?
- What are the consequences to science and engineering, and to industry and government, of the present condition of university laboratories?

The completed survey will be made available to the Committee shortly. As a preview of that report I would summarize some of its key findings.

A. Expenditures Last 3 Years

- In the last three years fifteen universities spent $194.6 million for new construction,[a] facility modernization,[b] major repair and renovation,[c] and special research equipment in six fields:

  Biological Sciences

  Chemical Sciences

  Earth Sciences

  Engineering

  Physics

  Medical Schools (10)

- Estimated total expenditures by the top 100 universities and colleges, ranked by FY 1979 Federal R and D obligations received,were $856 million.

- Ten medical schools accounted for almost one-third of the total expenditures; biological sciences 24% and engineering 18%.

(a) "new construction" includes new buildings and new wings added to existing buildings. Major general purpose fixed quipment, i.e., equipment costing $5,000 or more and having a useful life of at least two years is included. Furniture and research instrumentation and equipment are excluded. Items such as cold rooms, ventilation hoods, and benches are included. Libraries are excluded; computer facilities are included. Expenditures for shared facilities are apportioned by discipline. Expenditures for construction planning are included.

(b) "facility modernization" means upgrading necessary to conduct a new generation of science; NOT routine maintenance or operations.

(c) "major repair and renovation" means substantial maintenance and repair (e.g., roofing, wiring); routine or light maintenance (e.g., painting) is excluded. Major general purpose fixed equipment as defined under (a) is included.

(d) "special research equipment" means major research equipment capitalized at $100,000 or more.

Total Expenditures Last 3 Years for Research Facilities*

	New Construction	Facility Modernization	Major Repair and Renovation	Special Research Equipment	Total	% of Total	% Private	% Public	% Government Regulations
Biological Sciences	30,258	9,758	5,388	461	45,865	23.6	79.3	20.7	13.0
Chemical Sciences	4,662	6,283	2,890	6,701	20,536	10.6	58.8	41.2	35.9
Earth Sciences	9,846	2,128	355	2,096	14,425	7.4	20.4	79.6	2.6
Engineering	8,515	7,401	3,623	16,101	35,640	18.3	55.7	44.3	2.8
Physics	2,412	3,961	5,326	4,603	16,302	8.4	73.5	26.5	2.3
Medical School	18,234	38,671	2,299	2,577	61,781	31.8	47.3	52.7	7.6
Total	73,927	68,202	19,881	32,539	194,549	100.0	57.8	42.2	10.2
% of Total	38.0	35.1	10.2	16.7	100.0				
% Private	72.2	41.4	85.7	42.5	57.8				
% Public	27.8	58.6	14.3	57.5	42.2				
% Government Regulations	10.5	10.7	23.3	0.3	10.2				

*In thousands

National Estimate for top 100 Universities and Colleges = $856,016

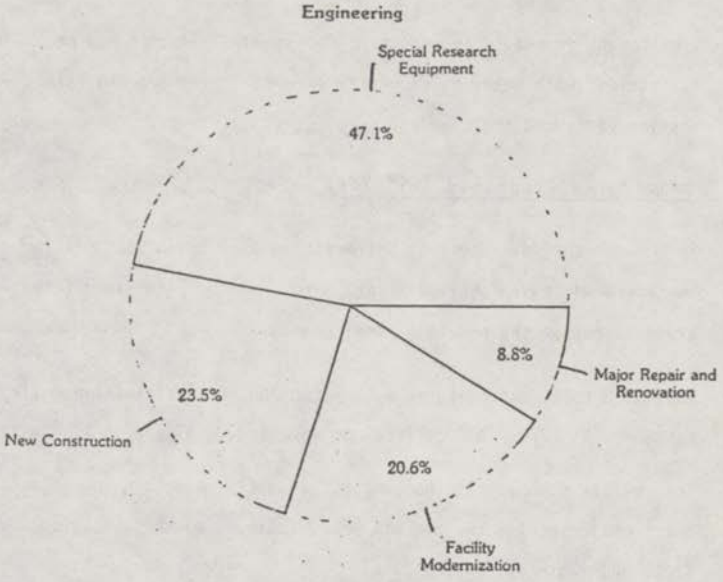
- Seven private universities accounted for about three-fourths of total expenditures for biological sciences (79%) and physics (74%) and over half for chemical sciences (59%) and engineering (56%). Eight public universities accounted for 80% of expenditures in earth sciences and 53% in medical schools.

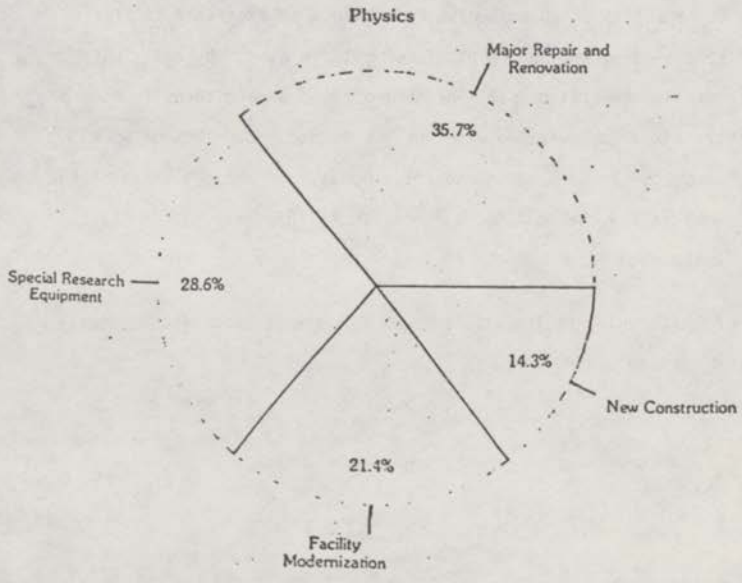
-New construction (38%) and facility modernization (35%) accounted for most of the expenditures across all fields. Private universities reported more than 70% of total expenditures for new construction and 85% of expenditures of the major repair and renovation. Almost 60% of funds spent for facility modernization and 58% for special research equipment expenditures were made by public universities.

-Federal, state and local government regulations added to costs in all areas. Precise measurement and reporting of these costs, however, is impossible because the costs quickly become part of overall facilities design, planning, budgeting and management. Expenditures attributed to the costs of meeting government requirements, therefore, are at best rough estimates. Although they are imprecise, they do indicate relative emphasis. More than one-third of the total expenditures in the chemical sciences, for example, are estimated to be the costs of bringing laboratories into compliance with government safety requirements. In addition perhaps 20% of total major repair and renovation costs are required by government building codes and safety regulations.

-The type of facilities work funded varied considerably by fields. New construction, for example, accounted for 24% of all expenditures for engineering, but only 14% for physics. Major repair and renovation accounted for

Total Expenditures Last 3 Years
for Research Facilities





repair and renovation accounted for 36% of expenditures for physics but only 9% in engineering.

- Significant expenditures were made for special research equipment in all fields, with needs particularly evident in engineering (37%), physics (29%) and the chemical sciences (33%).

B. Expenditures Projected This Year

- In the current year these 15 universities will spend $206 million to improve their research facilities, more than their combined total expenditures of the previous three years.

- Estimated total expenditures by the top 100 universities and colleges, ranked by FY 1979 R & D obligations received, will exceed $900 million.

- Ten medical schools will account for slightly more than 50% of total expenditures projected for the current year, followed by the biological sciences (16%) and engineering (14%).

- Universities often must make commitments to undertake facilities renewal programs before all funding is in hand. By early this year substantial proportions of projected expenditures in five of the six areas surveyed were not yet funded. Over 50% of work projected to be done in medical schools, and about a third of the work in the chemical and earth sciences this year, is in that category.

- Private universities will account for almost two-thirds of total projected expenditures this year.

Expenditures Projected This Fiscal Year for Research Facilities[a]

	New Construction	Facility Modernization	Major Repair and Renovation	Special Research Equipment	Total	% Not Yet Funded	% of Total	% Private	% Public	% Government Regulations
Biological Sciences	19,572	11,912	842	875	33,201	6.3	16.2	75.6	24.4	11.8
Chemical Sciences	11,070	2,085	934	4,767	18,856	35.0	9.2	44.5	55.5	6.5
Earth Sciences	3,802	3,803	2,192	1,919	11,716	31.3	5.7	42.9	57.1	13.1
Engineering	5,448	7,792	5,236	10,984	29,460	14.8	14.3	56.7	43.3	10.4
Physics	2,980	861	1,977	1,230	7,048	19.7	3.4	33.9	66.1	3.4
Medical Schools	84,695	17,563	1,330	2,012	105,600	53.2	51.3	67.0	33.0	0.9
Total	127,567	44,016	12,511	21,787	205,881		100.0	62.3	37.7	5.3
% of Total	62.0	21.4	6.1	10.6	100					
% Private	67.5	48.0	77.1	53.3	62.4					
% Public	32.5	52.0	22.9	47.7	37.6					
% Government Regulations	1.3	12.0	31.7	0.4	5.3					

[a] In thousands

National Estimate for top 100 Universities and Colleges = $905,876

- Over 3/4 of the work planned in the biological sciences, about two-thirds of the work in medical schools and over half of the expenditures for engineering facilities also will be made by private universities. Public universities will account for more than half of the effort in chemical sciences and earth sciences and two-thirds of the facilities expenditures for physics.

- New construction will account for over 60%, facility modernization slightly more than 20% and special research equipment about 10% of total planned expenditures.

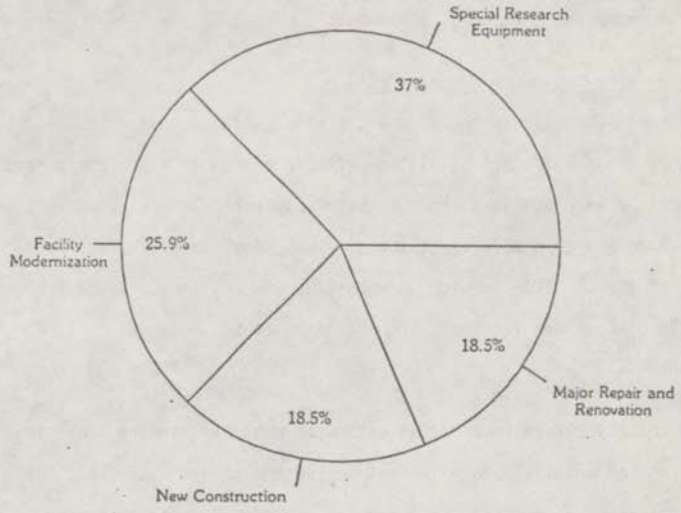
- Over 3/4 of major repair and renovation, more than two-thirds of the new construction, and over half of the expenditures for special research equipment will be made by private universities. Public universities will account for slightly more than 50% of the total facility modernization.

- The general impact of government regulations again is evident. Costs to comply with federal, state and local government building regulations are projected to be more than 10% of total expenditures in biological sciences, earth sciences, and engineering. Almost one-third of total expenditures for major repair and renovation is estimated to be required by government requlations.

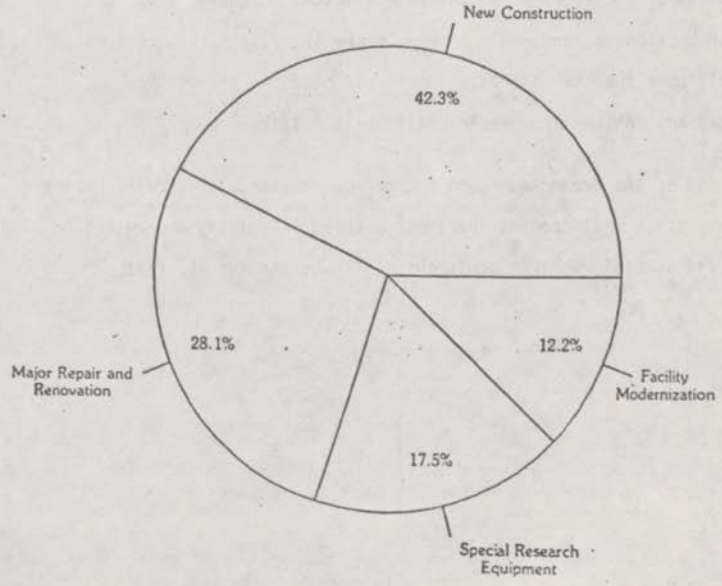
- As shown by the following figures the type of work needed varies considerably by field. For example, new construction will account for over 40% of expenditures projected this year in physics, but less than 20% of expenditures for engineering. (The biological sciences, chemical sciences, each report over 50% of total effort will be for new construction.)

Expenditures Projected This Fiscal Year
for Research Facilities

Engineering



Physics



- Facility modernization will account for 26% of work in engineering but less than 12% in physics.
- In engineering 37% of total expenditures (but only 2% in medical schools) will be for special research equipment.

C. Needs Projected Next Three Years

- In the next three years the 15 universities estimate that combined investments of more that $1 billion will be needed to allow their faculty who will be in place to carry out their research. This exceeds 250% of their combined expenditures of the previous four years. Total needs of the top 100 research universities and colleges, ranked by FY 1979 obligations received, are estimated to be in excess of $4.4 billion.

- Approximately one-third of total estimated needs are in the biological sciences and about 20% each in engineering and medical schools. The chemical sciences account for about 13%, physics 10% and the earth sciences 6%.

- Almost 90% of projected needs in the biological sciences, about 2/3 in the earth sciences, and medical schools are in private universities; slightly more than two-thirds of projected needs in the chemical sciences and engineering are in public universities.

- About 44% of the projected needs are for new construction; major repair and renovation will account for about a third. Facility modernization (15%) and special research equipment (10%) account for the rest.

NEEDS PROJECTED NEXT 3 YEARS FOR RESEARCH FACILITIES**

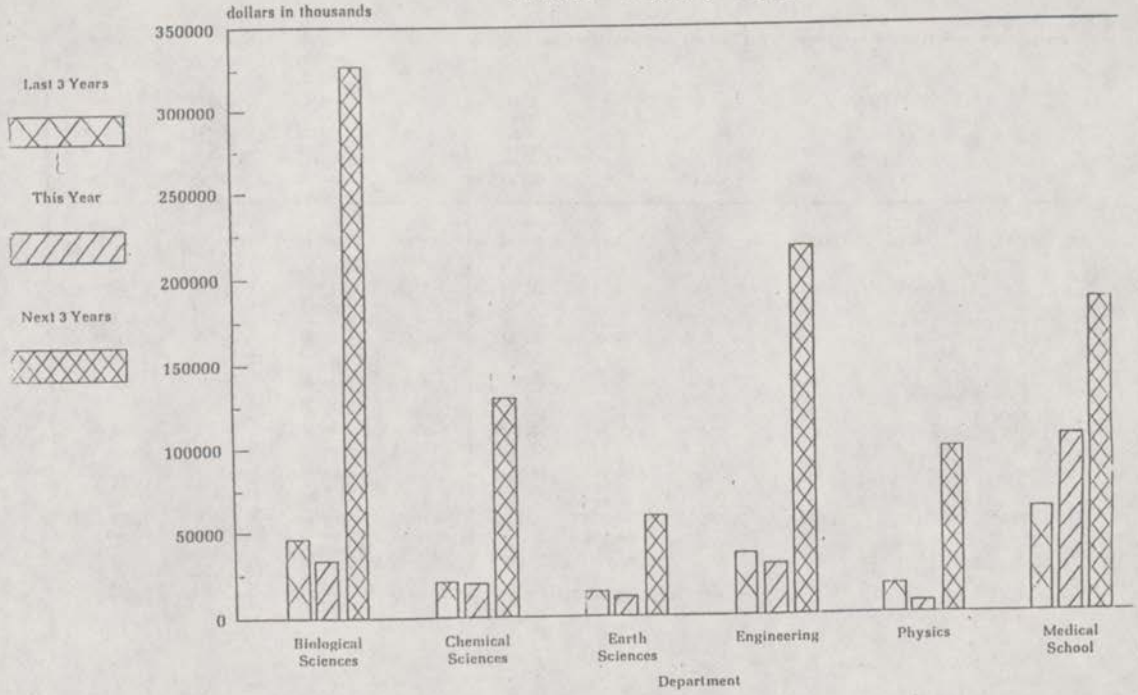
	New Construction	Facility Modernization	Major Repair and Renovation	Special Research Equipment	Total	% Not Yet Funded	% of Total	% Private	% Public	% Government Regulations
Biological Sciences	45,503	16,293	260,745	4,410	326,951	95.5	32.2	88.4	11.6	6.3
Chemical Sciences	69,950	25,765	19,317	14,688	129,720	98.3	12.8	31.7	68.3	37.3
Earth Sciences	34,733	7,409	6,603	10,604	59,349	88.3	5.9	65.4	34.6	4.1
Engineering	107,012	45,355	30,739	33,222	216,328	87.8	21.3	30.7	69.3	3.2
Physics	54,546	19,016	1,163	22,590	97,315	97.8	9.6	53.6	46.4	1.3
Medical School	133,470	33,447*	4,393	13,167	184,447	67.7	18.2	62.0	38.0	4.8
Total	445,214	147,285	322,960	98,681	1,014,140		100.0	59.3	40.7	8.8
% of Total	43.9	14.5	31.8	9.7	100.0					
% Private	46.6	48.8	87.2	41.5	59.3					
% Public	53.4	51.2	12.8	58.5	40.7					
% Government Regulations	8.0	23.3	3.3	.7	17.8					

*In thousands

National Estimate for top 100 Universities and Colleges = $4,462,216

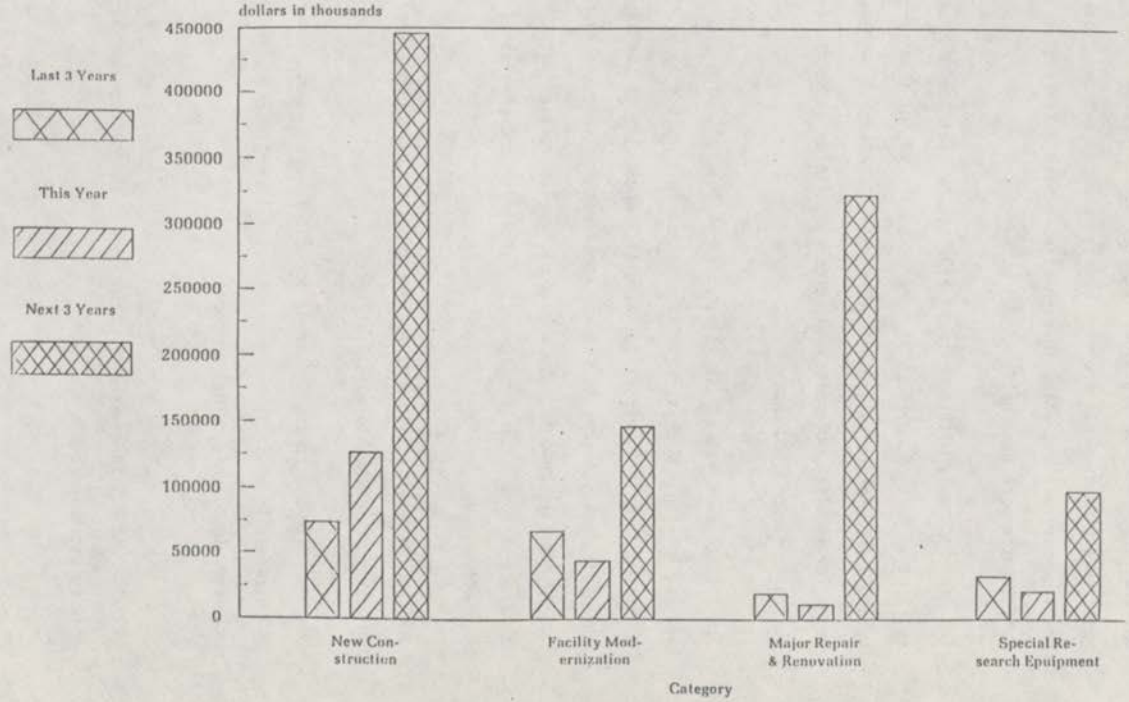
Research Facilities in 15 Universities

Expenditures—Last 3 Years, This Year,
Needs—Next 3 Years



Research Facilities in 15 Universities

Expenditures—Last 3 Years, This Year, Needs—Next 3 Years



- Amost 90% of the needs for major repair and renovation are in private universities. New construction, facility modernization and special research equipment needs are more evenly balanced between public and private universities, with, in each case, public universities accounting for slightly more than half.

- The need to comply with government regulations will account for a substantial portion, perhaps as much as one-third, of total projected needs in the chemical sciences. More than 25% of total projected needs for facility modernization across all fields is estimated to be due to these mandated costs.

- The type of work needed, as illustrated on the following charts for engineering and physics, will continue to vary widely by field. This holds true in other fields as well. About 14% of the needs in the biological sciences is for new construction; this contrasts with 73% in medical schools. About half of total projected needs in the chemical sciences, earth sciences, engineering and physics is for new construction.

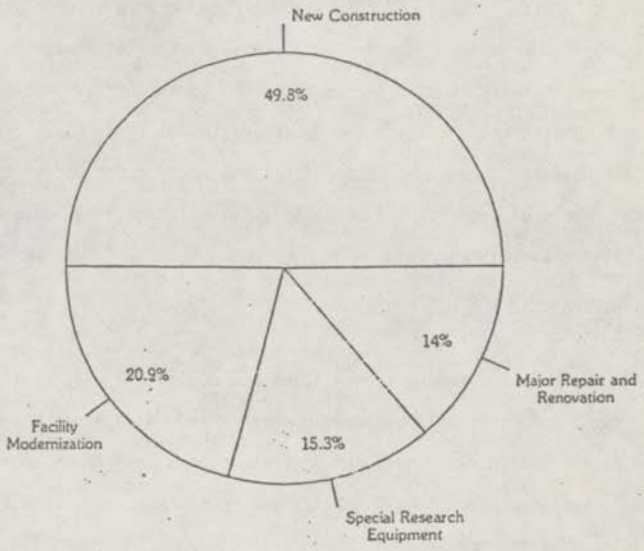
- Facility modernization needs account for over 20% in engineering, but only 5% in the biological sciences.

- Major repair and renovation needs account for only about 1% of total needs in physics, but more than 14% in engineering and over 80% of needs in the biological sciences.

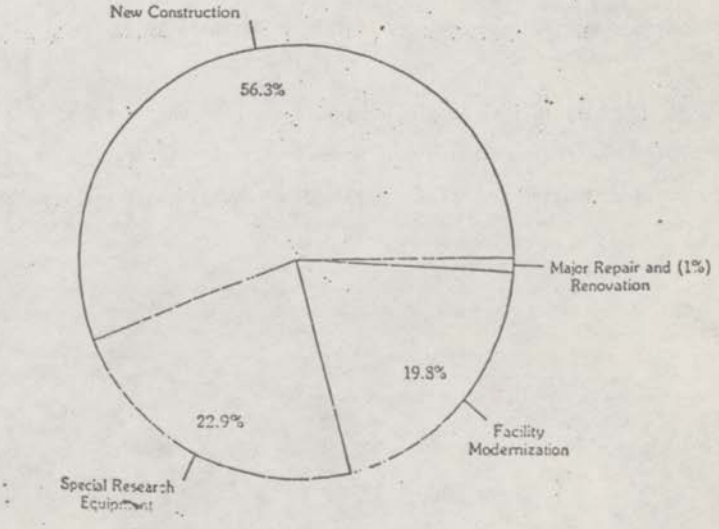
- Special research equipment accounts for almost 23% of the needs in physics and 15% in engineering, but less than 2% of total needs in the biological sciences.

Needs Projected for Next 3 Years
for Research Facilities

Engineering



Physics



D. CONSEQUENCES TO SCIENCE, INDUSTRY AND GOVERNMENT

The conclusion is inescapable. While the nation's universities remain generally strong, and many are world leaders in science and engineering, there is a serious, growing and diverse backlog of research facilities and equipment needs in many fields essential to the nation's economy, defense, health and welfare. The deterioration of these facilities poses serious negative consequences to science and engineering and to the nation's primary users of research and advanced training: industry, government and the universities themselves.

Consequences To Science

The erosion of research facilities and equipment poses negative consequences to the continued development of the disciplines. There is a growing conviction among many leading researchers that American science faces a serious threat to its quality and reputation. Our research and training programs are suffering from this steady erosion and the quality, productivity and competitiveness of basic research and education are being compromised. Many researchers share a deep concern about the serious negative consequences of this to our ability to compete in key fields.

Faculty in many leading departments report they are unable to keep abreast of the continuing developments of their fields. Promising lines of investigation are being foreclosed, productivity is falling, competitive-

ness is declining and the quality of training provided to advanced graduate students and undergraduates is being compromised. In order to sustain quality research programs many faculty, in fields such as engineering, are shifting away from costly experimental work to theoretical research.

The result of all of this is a growing inability among leading university departments to attract and hold in their faculties and classes the very best researchers and advanced graduate students. Increasingly, departments are experiencing almost insurmountable problems in attracting the best candidates to their institutions because they are unable to provide them with the research environments necessary to support the development of competitive research and training programs.

Several factors contribute to this general erosion of moral. Frequently researchers lack up-to-date analytical instrumentation and computer support. Old buildings, constructed for an earlier age, usually are difficult and costly to repair or modernize. They often are wholly inappropriate settings for modern instruments that require specialized environments in order to perform well. The lack of other support facilities, such as animal care space and greenhouses, and technical staff are also pressing problems. Many schools of engineering report a serious shortage of research and instructional facilities in important new areas such as computer-aided design and computer-aided manufacturing (CAD/CAM), fields directly related to increased productivity and industrial innovation. The situation poses serious negative consequences to the nation's ability to compete with vigorous foreign competition. The conviction that the

United States is threatened with second-class technological status in an increasingly competitive world is one frequently expressed by administrators and faculty most familiar with what the competition is doing.

Consequences
To Industry

Because university research facilities are the sources of the new knowledge which industry then translates into new products, processes and increased productivity, industry is dependent upon these facilities and the students train with these facilities. The pace of the industrial growth and innovation will be slowed, and the quantity and quality of the future technological leadership of industry will be compromised.

Consequences
To Government

The consequences to government, like those to industry, flow from the prospect of a weakened knowledge base and from the likelihood that, in key fields, we will have insufficient numbers of highly trained and educated people in government to address the problems of the 1980's and 1990's. Government also is responsible for the nation's defense. Our security rests upon a foundation of quality research and development carried out by highly qualified scientists and engineers. The ability of government successfully to address our defense needs and the other problems before us, including our energy, health, industrial productivity, education and environmental needs, will depend upon a continuing flow of new ideas, new knowledge and well educated people. If they have the tools to pursue fresh ideas the research universities will play an essential

role in finding answers to these problems, in training the people the nation will need and in determining whether we will remain a world leader in science and technology.

E. Recommendations

We recommend that a comprehensive federal investment strategy be adopted to provide for a coordinated and balanced approach toward meeting the nation's research facilities and equipment needs. As a start, we offer the following recommendations:

1. Restore to the National Science Foundation the $100 Million Proposed for Research Facilities and Instrumentation Needs.

   In response to the accumulated scientific instrumentation and facilities needs of universities, the initiatives earlier proposed by the National Science Foundation to begin the rehabilitation of research laboratories ($75 million) and to upgrade the instructional equipment of schools of engineering ($25 million) should be supported rather than eliminated as now proposed. As a first step toward meeting urgent national needs we urge the Committee's support for the restoration of those programs.

2. Establish in the Main Mission Agencies (Department of Defense, Department of Energy, the National Aeronautics and Space Administration, and the National Institutes of Health) Similar Facilities Rehabilitation Programs Targeted on the

Fields of Science and Engineering of Primary Significance to the Missions of Those Agencies.

If the National Science Foundation and the major mission agencies all play a similar and significant role in this effort, the Federal government then will have a comprehensive and balanced set of facilities and instrumentation initiatives. Together they will address the broad range of varied and specialized needs of the sciences and engineering while ensuring that those fields of particular importance to the missions of each agency receive the special attention they require. We urge the Committee to lead the effort toward adoption of a comprehensive and coordinated facilities investment strategy.

3. Provide Incentives to Industry and to the States to Encourage Them to Join with the Federal Government in a Shared effort to Renew the Nation's Research Laboratories.

Industry and the states have a vested interest in seeing to it that the nation retains our competitive edge in the sciences and engineering. They should be encouraged, therefore, to participate in the proposed investment plan. We recommend that the Congress consider providing special incentives to industry and to the states to attract their participation as active partners with the federal government and the universities.

V. The Behavioral and Social Sciences are Important to the Nation

A third major concern that I want to address only briefly is with respect to the cuts that are being proposed in the support for the behavioral and social sciences. The proposed cuts are very deep and severely damaging. Yet, there is widespread agreement that many of our major problems in this country stem from behavioral patterns and from behavioral abberations. Behavioral science is the youngest of our sciences; we have a longer way to go to solve some of the problems that have as their root cause behavior. A major program of truly basic research, behavioral sciences--i.e., without any clear or direct immediate application--if we are to make use of the very fruitful models that have worked in the other sciences is probably the best investment we can make at the present time for some of the long-term issues our country faces. To severely reduce the budget of the behavioral and social sciences now would truly truncate our future ability to prevent behavioral problems, to prevent costly custodial and rehabilitation efforts, to understand how to properly motivate our people to be productive, contributing citizens, and to provide a better life for all of us.

CONCLUSION

Mr. Chairman, I appreciate the opportunity to discuss these concerns and proposals with the Committee. I would be pleased to respond to any questions.

Attachment

Universities Participating in 1981 AAU Survey of Research Facilities Needs

Brown University

University of California - Los Angeles

Cornell University

University of Florida

Georgia Institute of Technology

University of Illinois

University of Maryland

Massachusetts Institute of Technology

Northwestern University

Pennsylvania State University

Princeton University

Stanford University

University of Utah

Washington University

University of Wisconsin

Mrs. BOGGS. Thank you very much.

Mr. Green?

Mr. GREEN. Again to get back to the economic climate we are operating in this year, the treatment of the National Science Foundation was rather more generous than many other non-defense aspects of the program. If you do want to put extra funding into the areas you specified, do you have any recommendations for us as to place within the NSF budget that it can be taken from?

Dr. ZDANIS. Certainly. It would be convenient to isolate some segments of the budget for support of instrumentation in order that the large pieces of instrumentation that you have heard spoken about heretofore can be purchased. The difficulty with the current funding mechanism is that it is impossible to put together some of the little pieces that are required over several projects. So even that isolation would be extremely beneficial.

Mr. GREEN. You are saying you would accept a cut in other specific project activities in order to isolate the funding for the large scale instrumentation you referred to?

Dr. ZDANIS. If we do not take care of the infrastructure, we will not be able to produce the quality projects that we should produce in this country. We have to be competitive with the activities of other nations.

I would like to make an analogy. If all of us were digging ditches with shovels, then there was a certain technology and brawn that would be developed and everybody would be equally competitive. However, if one invents a backhoe, then the technology that is used and the education that is required to operate that backhoe is very different from that of pushing a shovel. If some of the nations are using backhoes, we cannot afford to continue with shovels.

Mr. GREEN. Thank you.

Mrs. BOGGS. Thank you very much. The Association of American Universities is in good hands.

Dr. Zdanis. Thank you.

[CLERK'S NOTE.—The Association of American Universities submitted additional information, which is on file with the Committee.]

NATIONAL SCIENCE FOUNDATION

WITNESSES

JIM BACKSTROM, DIRECTOR, MARYLAND SCIENCE CENTER
SUSAN HESS, TRUSTEE, LOUISIANA NATURE CENTER
WILLIAM JOHNSON, TRUSTEE, SPRINGFIELD SCIENCE MUSEUM

Mrs. BOGGS. We are very pleased to have with us representing the American Association of Museums, Mr. Jim Backstrom, Director of the Maryland Science Center; my beautiful constituent, Ms. Susan Hess, Trustee of the Louisiana Nature Center; and Mr. William Johnson, Trustee of the Springfield Science Museum.

Mr. BACKSTROM. I am Jim Backstrom, Executive Director of the American Academy of Sciences in Baltimore. That is what I am paid for. My volunteer job is as President of the Association of Science Technology Centers.

We have submitted written testimony. I think as everyone else has done in the interests of time, if you can add that to the pile you have already received and peruse that, we will try to keep our remarks brief.

Mrs. BOGGS. It is very useful for us to have the testimony for the other Committee members who are not able to be at each of the meetings.

Mr. BACKSTROM. I would like to point out with respect to ASTC, we are an organization of science technology museums with some 100 members all around North America, primarily the United States, but including Canada and Mexico.

Thirty-eight million Americans, adults, children, family groups, school groups visit our museums each year. When you add in our affiliated groups like aquaria, zoos, planetariums, arboreta, you have some 160 million Americans who are participating in this sort of grass roots activity. We consider ourselves coming from the trenches. We are at the other end of the process that has been described heretofore.

You have been inundated with statistics but we don't have enough scientists, the Japanese are graduating more engineers. These things are serious and of great import to our nation. We are not here to argue for ourselves, because up to now, as institutions, we receive very little money from the National Science Foundation. We tend to benefit indirectly through some programs where NSF will fund something and we have the potential opportunity to take advantage of some of the things that they do.

We are here because we consider ourselves to be an important part of the critical process at the end of which there are engineers and scientists and technicians and a literate populace, people who are not put into shock when something has a transistor in it. We have had poker chips, buffalo chips, and all other kinds of chips.

Now we have computer chips. They are everywhere. People are intimidated and confused by them.

Our role in the whole education process—and if I had the power to sort of describe the organization chart for NSF, I would not have public understanding of science as part of Science and Engineering Education. You would have it the other way around. I would have the broader umbrella of public understanding of science with the formal aspects that relate to the education and work right on down to the average person in the street who, frankly, needs to understand it far more than a large part of the population.

We have to demystify science and technology and make it accessible to the public. I use the analogy when I go out and talk to people and am identified as being with a science foundation, there is a fairly standard reaction. I have come to refer to it as the dead snake reaction. I know I could get that same reaction if I had a dead snake back here, pull it out and put it on the table. People recoil. They back up and say, "Just a moment—Chemistry was the only course I ever failed, or I never understood, or was always a mystery to me." You get this standard litany not of rejection, but apprehension.

The problem with that is that the public at large tends to view science as something occult—something that is not for mere mortals. It is too easy for them to step back and assume if it is occult, if it is magic, there is white magic and black magic. They are equally dangerous to us. Black magic says that they believe this is dangerous to us, that science and technology, rather than being a tool for us to use, are a threat to us. They are worried about it. They try to find various ways to fight back, if you will, or resist. Equally dangerous, I think, is the white magic routine. The sense if we have a problem as a society, turn it over to science, which will solve it. Put enough money into the hopper, it will be solved. I think there is an equal flaw there.

So the point we are trying to make is that we are working out there with the so-called average person, the public. We are one of the few activities left in this world that families participate in. They come and spend some time. Our institutions are characerized by activity, hands on, cranks, buttons to push, cranks to turn, all the things that go with that.

We are missionaries. We have a missionary zeal. Regardless of what happens with the appropriation for the National Science Foundation, we are obviously supporting full dollar appropriation at the authorized level. But, whatever happens, we will continue to do what we are doing. That is, to try to aid the education process, to keep the children with their natural curiosity stimulated and motivated in the elementary grades.

You hear all this about the equipment up at the far end in the graduate laboratories. It is not a pole situation. The child in the fifth grade, the seventh grade, the ninth grade, is not going to be motivated to stay with science by what is happening—by the fact that he knows when he gets to Cornell or somewhere there will be a particular piece of equipment there. He is motivated by his interest and his excitement, his ability to be involved in these things and to see these things and think of the world when the child can come home and say we just started algebra, and not have

the parents say, or the father, the mother, algebra, oh, no, that was so hard.

Think about that. It is done every day. But here is a child who doesn't know. Maybe he has heard algebra might be hard. It is another subject. Everybody talks to him and says that is hard. It gives you the idea. The threshold keeps rising.

The schools have not done a good job of teaching science, particularly in the elementary grades. The teachers are generalists. They tend to be afraid of it. Every time something like the shuttle comes along, they are faced with a bunch of kids who know more about something than they do.

Nobody likes to be in a situation like that.

That is the role we are trying to fill in terms of science centers. We are going to continue to do that regardless of what you do. We sure hope you can find a way to continue to provide an appropriate level of funding in science and engineering education so that we don't feel like we are out there all alone.

Thank you.

[The statement follows:]

Mr. Chairman and Members of the Committee:

My name is Jim Backstrom. I am the director of the Maryland Science Center in Baltimore and President of the Board of the Association of Science-Technology Centers. ASTC is an organization of science-technology museums with some 100 members across the U.S. Thirty-eight million Americans--adults and children in family groups and school groups--visit ASTC member museums each year. Adding natural history museums, zoos, botanical gardens, planetariums, and aquariums, annual attendance comes to 160 million Americans. I am here on behalf of that audience, as much as for the educators, scientists, and volunteers who run this country's informal science education institutions.

Let me say a few words about the characteristics of informal science education. People come to science museums, and more often than not pay an admission charge, not just for recreation--one could just as easily stroll through a shopping center for its distractions. People come to learn something about science in a non-threatening hands-on environment, where they can pick and choose among aspects of science that are comprehensible and important to them. There is also nowhere else for them to turn for current science information, since access to the formal educational structure in science, engineering, and mathematics is naturally limited.

The importance of laboratory work for professional training in science is self-evident; but what about the nonprofessionals' need for some tangible, first-hand experience with the developing computer and energy technologies so important to the structure of our society? Lawyers, statesmen, and businessmen need a basic science literacy in order to do their jobs right. Over half of ASTC science museums currently provide microcomputers for public use--this is far ahead of financially-strapped school systems. And the ability of our entire field to explain computer functioning to the layman has been significantly advanced by a single grant to one institution from the NSF's program for the Public Understanding of Science in the Science Education Directorate.

ASTC and its members recognize the clear national need for research and innovation generally, and for support for the NSF's research programs in particular. And while I endorse the Administration's effort to fight inflation by reducing federal spending, I believe that eliminating NSF funds that support science education would be a terrible mistake. Without both leaders and a public literate in

science and technology, we will lose the economic fight.

Last year, the National Science Board affirmed the importance of science education and singled out the public understanding of science and museums as underrepresented in the national effort. The American Association for the Advancement of Science, speaking for America's scientists and engineers, has also made science education a priority issue in 1981. Like us, they are appalled at the statistics on America's lack of science learning and our poor position relative to Japan, West Germany, and the U.S.S.R.

Museums get very little NSF money (about $1 million a year in project grants, plus $4 million for research collections in the biological sciences.) This is also their main source of federal support, and it is modest, indeed. I am not here to plead a partisan cause, however, but to address the entire issue of public science literacy, of which museums are a part, and in which NSF can play a vital role.

My colleagues and I are here today to ask that you support science and engineering education as vital for the nation and as a priority function for the NSF. We recommend full-dollar appropriations as designated by the authorizing committee in the House of Representatives.

Mrs. BOGGS. Ms. Hess is the trustee of a very exciting, fairly new development in the city of New Orleans which was a long time in the making. She is a Trustee of the Louisiana Nature Center, which has proven to be enormously successful under her leadership and the leadership of some very remarkable volunteers who serve as Trustees of the Center.

Ms. HESS. All of that is music to my ears.

I am also the President of a small foundation of national scope and I am the mother of three children as well.

The Nature Center, the Foundation, and my children, have all brought me here to speak to you today.

I was going to cite all those fancy statistics and tell you things that you have heard, but I will scrap that.

One thing that does concern me very greatly, being a volunteer within my own community in informal education is how do we continue to pay for this informal education? We are out there struggling every moment trying to get people to pay. People don't like to pay for their own education. We go to the corporations, we go to the local foundations; we have fund raising events. We continue, all of these things and we are struggling all the time to make ends meet.

How does this relate to the National Science Foundation?

Basically what I am saying, is that a National Science Foundation grant, no matter how small it is, gives validity to the institution that receives it. Suddenly people turn around and say, "Gee, the Nature Center got a National Science Foundation grant; they must be something. They must really be doing what is necessary.

They must be where it is at." Our job is made tremendously easier. It really greases the skids for us a lot.

Another thing that is very important, something that I don't think many people recognize, is the leveraging of dollars. A small grant from the National Science Foundation can be used by the people of the local community to really step up their level of funding by leveraging. You go out and say, look what we have from the National Science Foundation—you have to match it; you have to match it; and you have to match it. This is a technique that is very effective as far as our ability to raise money to continue informal education.

The schools are important. Oh, I am dedicated to good schools, but the informal education reaches people after they have come out of schools, when their access to education is all but closed off. So we are filling the gap that is absolutely there. Make no mistake about that, but it is a struggle every day to get that money to meet that budget. The National Science Foundation, with its very small input, no doubt about it, still makes our job a great deal easier, facilitates things for us. It is very important. It really is.

Mrs. BOGGS. Thank you. You can understand why the Nature Center has become a success. We were also very fortunate to have some museum services grants for the Nature Center as well, which helped to put us into operation.

Ms. HESS. Very important.

[The statement follows:]

Mr. Chairman and Members of the Committee:

My name is Susan Hess. I am the immediate past-president of the Board of Trustees of the Louisiana Nature Center, as well as the president of a small foundation of national scope. I am also the mother of three small children. All of these identities have come together to impell me to appear before you today.

Our society has become increasingly technical and complicated over the last few decades. As a result, it appears alarmingly impersonal, with people in all segments of society feeling oddly disconnected with what is going on around them. The pace of change is accelerating all the time, and people who do not understand the technological world are further and further alienated.

How will we ever reclaim all these souls cast adrift: socially--due to increased mobility and the complexity of life, economically--due to lack of technical preparation for an increasingly technical job market, and psychologically--due to lack of identification with the changing world around them? A recent Harris poll shows that a majority of Americans expect the country's leadership in science and technology to help solve these problems. After all, any society that can get to the moon and launch a space shuttle could certainly wipe out inflation, unemployment, the energy crisis, and any other pressing problem if it really tried.

At the same time, however, officials are concerned that American leadership in science and technology is waning, due to sharp declines in advanced science studies and the comparative lack of science education for students of all levels in the United States. The NSF itself has spent less and less for science education in the decades since Sputnik, and the results of this diminishing effort are being felt in science-less high school classrooms, in meager engineering faculties, and in the home, when families misunderstand the increasingly technical evening news.

State and local education authorities do not have trained manpower, hardware, or funds to reverse this country-wide trend. A national effort is needed, and only the NSF has the Congressional mandate and scientific expertise to take it on.

Indeed, local and state authorities are so underequipped and lacking in direction on this subject that local citizenry have attempted to step in and fill this gap. Recognizing their own need, they have opened private nonprofit institutions,

such as the Louisiana Nature Center. The public sector should have been doing this job, but it did not. Now that such institutions exist, government at all levels should help support them, but it does not.

There are many resources to be mobilized within the local community to pay for science education and science awareness. The private sector will respond if it at least knows there is a beginning base of support from which to launch a campaign. The National Science Foundation science education programs can provide that nucleus and constitute the foundation for a national commitment to science education.

In sum, my colleagues and I ask that you affirm the importance of a science-literate public: as consumers, workers, soldiers, and parents of children who will become the research scientists and engineers needed by our technological society. We encourage you to make possible extensive public-private partnerships in the provision of science education through NSF programs with universities, museums, educational television, and others.

Mrs. BOGGS. Mr. Johnson, we are happy to have you with us. We will be pleased to hear your testimony.

Mr. JOHNSON. I am William Johnson, presently a practicing electrical engineer with Cole-Morgan Corporation in Northampton, Massachusetts. I serve in a volunteer capacity with the Science Museum. That commitment to serve as a volunteer to the Science Museum comes from my childhood—in going to the Science Museum and being sparked to pursue an education in science. I found that has been very rewarding and beneficial to me.

You have gotten some excellent testimony from a number of people, some facts and figures, some of which I think may be slightly off, but I expect that a number of people will be a little biased.

I have been fortunate to have a number of experiences that make me certainly committed enough to volunteer whatever time I have to see that science moves ahead and the Science Museum of Springfield moves ahead. In actuality, it has not received in the past four years any monies from the National Science Foundation, but it has been able to go along well in the programming and certainly gets some side benefits from the monies that are received from the National Science Foundation in that area.

My own work itself deals in defense products. I work with the weapons systems that we have worked on abroad, over both oceans, with many companies and countries. It is of a strong concern to me when I talk to engineers from other countries and talk about their educational background and the emphasis that is placed on science and technology there versus how it is placed on it in this country. It is very important to them when we sign a contract or work out selling them a piece of hardware, they are not just interested in the hardware. They want to know the technology in it, the ability to build it themselves, to understand it themselves. That technological gap is closing and it is closing fast. If you look at the natural

resources of our country and what we have available that has allowed us to be a power and a leader in this world, it has been technology, pure technology, and the sale of pure technology, and our technological institutions and products that have been sought out because of their highly technological advancements.

You take those away. You think of us without them. Our high productivity in agriculture, our high technolgoy schools, which is a product in itself, aerospace, machinery, that type of thing. We do not have anything with which to bargain with. It is just a strong component to pass on this science education and build that type of foundation as the actual defense budget itself.

I feel that we cannot afford in any way to weaken the strength of our science programs and our science funding internally, especially when we have such a high degree of competition externally to this country.

Thank you.

Mrs. BOGGS. Thank you very much, Mr. Johnson.

Mr. Green?

Mr. GREEN. I have no questions.

Mrs. BOGGS. We do thank you very much for your testimony. We look forward to reading the submission that you will furnish.

[The statement follows:]

Mr. Chairman and Members of the Committee:

My name is Bill Johnson. Presently, I am a practicing electrical engineer employed by Kollmorgen Corporation in Northampton, Massachusetts. Also, I serve in a voluntary position with the Springfield Science Museum. I see a close connection between these two occupations: I want to make sure that people in my community can understand and appreciate the practice of engineers and scientists. The museum promotes this understanding through community programs for which there is no substitute or alternative. Science museums receive and deserve support from all segments of society. This support, I believe, is very necessary to the development of our most important natural resource, U.S. citizens.

America's most valued export is technology or products resulting from our high technology. The list of our technological achievements is long in areas such as medicine, agriculture, machinery, communications, aerospace, and others. But this situation is being threatened by a decrease in support for our educational system resulting in a significant decline in the quality of science education that our youths receive. We are producing scientists and engineers at levels far below the Germans, Japanese, and Soviets. Industry must compete for competent engineers; as a result, the best graduates are being hired away at salaries that decimate the ranks of university engineering faculties. But if we don't have excellent teachers in the universities, how can we train the next generation of scientists and engineers who will maintain our technological advantage? Science and engineering education needs the kind of leadership and direction that NSF, working with educators in museums, universities, and other institutions, can supply.

Our science museums have served as a very important extension of our education system on all levels, both formally and informally. Think of the young people who have chosen to pursue careers in science and technology because of early experiences at science museums. I am not just concerned with motivating professionals, however. Earlier, Jim Backstrom said that lawyers and businessmen need to be literate in science to perform their duties responsibly. So do all other Americans. Our industries and defense will suffer if people do not understand the products of the microelectronics revolution enough to buy and use them; if they cannot thrive in an automated, computerized workplace, or operate sophisticated defense machinery; if they cannot evaluate in an informed, responsible manner the implications of research issues such as genetic engineering and nuclear power.

I want to join my colleagues here today in urging you to support funds for the NSF Science Education Directorate to the fullest extent possible. NSF needs to help American science education institutions help Americans stay knowledgeable and competitive.

Mr. BACKSTROM. I have just one comment, so no one is misled.

The Association of Science Technology centers has been receiving some funding from the National Science Foundation. This has benefited individual science centers and science museums through the mechanism of having a Washington office for exchange of information, ideas, planning, things of that sort. Individual institutions have not received that.

Mrs. BOGGS. But they have benefited from the association?

Mr. BACKSTROM. Yes. Greatly.

Mrs. BOGGS. Thank you very much.

The committee will stand in recess until 1:30.

AFTERNOON SESSION

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

JOHN BUSH, VICE PRESIDENT OF U.S. GYPSUM
WILLIAM D. KELLEHER, ASSOCIATE DIRECTOR, CONSTRUCTION, HOUSING AND COMMUNITY DEVELOPMENT

Mr. BOLAND. The Committee will come to order.

I see the first group is the Chamber of Commerce of the United States. Mr. John Bush?

Mr. BUSH. I am here, sir.

Mr. BOLAND. You are accompanied by Mr. William D. Kelleher. Is anyone else with you?

Mr. BUSH. That's it.

You have done the introductions for us. We can run on from there.

We appreciate very much this opportunity to testify on behalf of the 120,000 members of the U.S. Chamber of Commerce. I am going to excerpt from our statement, which is fairly lengthy.

Mr. BOLAND. Fine.

Here is Mr. Green from New York, the ranking Minority Member of this Committee. This is Mr. John Bush and Mr. William Kelleher.

Mr. BUSH. We are for the U.S. Chamber of Commerce.

Since the heady days of the Great Society, there have been considerable changes in our economy that necessitate a complete and thorough evaluation of government spending programs.

The issues confronting the American economy at present are radically different from those of the mid-sixties when much of the expansion of the public sector was undertaken. During the 1960s, a high real growth and comparative price stability made expansion of transfer payments and government service programs appear relatively costless. Currently, however, stagnant real growth and continued price volatility make the economic costs of additional government spending prohibitive. Instead, a period of retrenchment and consolidation is called for. This does not presuppose a dismantling of the welfare state so much as a systematic review of fiscal priorities designed to eliminate ineffective programs without sacrificing essential services for the truly needy.

The U.S. Chamber supports the Administration's proposed reductions and reforms in the HUD budget. We support the elimination of the Section 32 Rehabilitation Loan program, Section 701 Planning Assistance, the Solar Energy and Energy Conservation Bank and the Neighborhood Self-Help Development program. Substantial economic incentives already exist for investment in solar energy and other energy conservation measures as a result of rising energy prices.

The other programs scheduled for elimination can be continued at the discretion of local units of governent using Community Development Block Grant funds. The use of these funds for these activities will help eliminate duplication of effort and excessive federal involvement in local decision making, and will provide greater flexibility to localities.

Finally, the U.S. Chamber supports the proposed reduction in the number of units to be subsidized under the Section 8 program and the gradual increase in tenant contributions under the program from 25 percent to 30 percent of gross income as well as reform in the determination of tenant income.

We also support the phase-out of the Government National Mortgage Association Tandem programs. These cutback and reforms along with the other minor changes proposed for such programs as Housing Counseling Assistance and Research and Technology spending will improve the efficiency and effectiveness of HUD and its programs.

As the Reagan Administration moves to bring inflation under control, it will begin to create economic conditions that will reduce interest rates, stimulate private development, open jobs and make possible affordable housing for more Americans. With an improved economy, our cities and communities will experience a prosperity which Federal programs promised, but never realized.

Recently there has been serious debate about the share of capital funds allocated to housing. While it is clear that we are spending large amounts of money for residential mortgages, its share of the overall market remains relatively constant. This table is a Federal Reserve table. Treasury spending tripled from 6 percent to 19 percent. Federal agencies from two percent to 7 percent. It is excessive Federal borrowing that is the root cause of the trouble in this country. This is why all four parts of the President's program must be implemented.

Finally, on the last page, the conclusion, the Reagan program of spending restraint, tax restructuring and relief, regulatory reform and monetary control, is bold and sweeping; yet it is also imperative. If we are to restore many of our older cities to their past vitality, provide affordable housing for young families and assist the truly needy in obtaining adequate shelter, we must first return our Nation to economic health. The modest program reductions proposed for HUD will allow that one part of the Federal bureaucracy to make its contributions to this effort.

[The statement follows:]

STATEMENT
on
FISCAL 1982 APPROPRIATION FOR THE
U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
before the
SUBCOMMITTEE ON HUD-INDEPENDENT AGENCIES
of the
HOUSE COMMITTEE ON APPROPRIATIONS
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
John S. Bush, Jr.
May 7, 1981

I am John S. Bush, Jr., Vice President, Governmental Affairs for the United States Gypsum Company. My appearance today is on behalf of the Chamber of Commerce of the United States where I serve as a member of the Construction Action Council Executive Committee. I would also like to introduce William D. Kelleher, the Chamber's Associate Director for Construction, Housing and Community Development. The U.S. Chamber welcomes this opportunity to express its views on the fiscal 1982 Appropriations for the U.S. Department of Housing and Urban Development (HUD) on behalf of its over 120,000 members consisting of business firms, trade and professional associations and state and local chambers of commerce.

The U.S. Chamber totally supports the Reagan Administration's Program for Economic Recovery in its efforts to reduce federal taxing and spending, cut excess regulation and provide monetary stability.

The Administration's budget proposals are based on a belief in real economic growth which is a prerequsite for reducing inflation and unemployment. A strong expanding economy is the key to solving our housing and urban problems. Budget reductions in programs such as Section 8 Rental Assistance or 701 Planning assistance are proposed not because the Administration is mean-spirited or less compassionate, but because we must reduce the excessive claim the federal government has put on our scarce resources, resources needed for private investment to produce more goods and services and stimulate the creation of more jobs. Tax reductions are needed, not to redistribute income but as an incentive for creating more income.

The nation is in the midst of the greatest slump in the housing industry since World War II and an ever-increasing proportion of our cities are operating in deficits that are projected to grow even larger during the coming years. Both problems have a common cause--inflation. Inflation is the result of excessive government spending, taxing, regulating and borrowing that is robbing our economy of its vitality and ability to create wealth. To get inflation under control and return our economy to health, the Congress should adopt the spending and tax programs proposed in President Reagan's Program for Economic Recovery.

Need to Control Spending

Perhaps the most difficult task facing the new Administration and Congress will be to control federal spending. The federal government's share of the gross national product has increased steadily from around 18% in the early 1960's to a projected 23% in this fiscal year. Whether the budget growth is financed by taxes or borrowing, this increase adversely affects our economic performance by absorbing ever-increasing amounts of resources from a weakened private sector, resources that could better be used by individuals and businesses to meet the challenge that now confronts us.

For the past twenty years, this country has tended to view federal spending as a costless way of solving perceived problems or meeting newly devised national objectives. Unfortunately, however, the government has failed to consider what effect this shift in resources would have on the private sector's ability to compete in a more competitive world. Government also failed to realize how expensive these programs would become as benefits were expanded to a greater number of recipients.

Since the heady days of the Great Society, there have been considerable changes in our economy that necessitate a complete and thorough evaluation of government spending programs. The issues confronting the American economy at present are radically different from those of the mid-Sixties, when much of the expansion of the public sector was undertaken. During the 1960's, a high real growth and comparative price stability made expansion of transfer payments and government service programs appear relatively costless.

Currently, however, stagnant real growth and continued price volatility make the economic costs of additional government spending prohibitive. Instead, a period of retrenchment and consolidation is called for. This does not presuppose a dismantling of the welfare state so much as a systematic review of fiscal priorities designed to eliminate ineffective programs without sacrificing essential services for the truly needy.

Specific Reductions

The U. S. Chamber supports the Administration's proposed reductions and reforms in the HUD Budget. We support the elimination of the 312 Rehabilitation Loan Program, Section 701 Planning Assistance, the Solar Energy and Energy Conservation Bank and the Neighborhood Self-Help Development program. Substantial economic incentives already exist for investment in solar energy and other energy conservation measures as a result of rising energy prices. The other programs scheduled for elimination can be continued at the discretion of local units of government using Community Development Block Grant (CDBG) funds. The use of CDBG funds for these activities will help eliminate duplication of effort and excessive Federal involvement in local decision making, and will provide greater flexibility to localities.

The Chamber also supports the restructuring of the CDBG program and the decision to no longer maintain a separately funded Urban Development Action Grant (UDAG) program. As former HUD Secretary Carla Hills has pointed out, UDAG was developing all the worst characteristics of the Federal grant-in-aid system with its reliance on paper-pushing and grantsmanship and a lack of demonstrated national impact. As we pointed out in our statement on the FY 1981 HUD budget, while UDAG funds may benefit an isolated project, this program benefits a small number of communities at the expense of overall business development.

Finally the U. S. Chamber supports the proposed reduction in the number of units to be subsidized under the Section 8 Program and the gradual increase in tenant contributions under the program from 25% to 30% of gross income as well as reform in the determination of tenant income. We also support the phase-out of the Government National Mortgage Association "tandem" programs. These cutback and reforms along with the other minor changes proposed for such programs as Housing Counseling Assistance and Research and Technology spending will improve the efficiency and effectiveness of HUD and its programs.

As the Reagan Administration moves to bring inflation under control, it will begin to create economic conditions that will reduce interest rates, stimulate private development, open jobs and make possible affordable housing for more Americans. With an improved economy, our cities and communities will experience a prosperity which Federal programs promised, but never realized.

Distribution of Benefits

One of the most significant questions facing the President's Economic Recovery Program is whether the costs and benefits from the program will be fairly distributed across the country. While data limitations make a definitive answer difficult, based on an April 1981 Office of Management and Budget study, we can say that the President's program will have a positive impact on all parts of this land. Table 1 details the specific increases in personal income and reductions in taxes and reductions in government outlays.

Table 1

PER CAPITA INCREASE IN DISPOSABLE PERSONAL INCOME AND PER CAPITA OUTLAY REDUCTIONS, BY REGION
FISCAL YEAR 1982
(Dollars)

Region 1/	Increase in personal income	Personal income tax reduction	Increase in disposable personal income	Distributable outlay reductions
U. S. total	970	191	1,161	166
Northeast	1,000	211	1,211	170
Midwest	1,040	206	1,246	158
Subtotal	1,020	209	1,229	163
South	900	163	1,063	169
West	980	188	1,168	168
Subtotal	930	172	1,102	169

1/ Census Bureau Regions

The benefits from the President's program outweigh the loss in government programs by better than 5 to 1. In fact, with the exception of the South, tax reductions alone provide benefits in excess of the reductions in federal outlays.

Long Term Outlook for Housing

If the Congress supports President Reagan's efforts to return the nation to economic health, the long term outlook for the housing industry is good. Housing demand is currently at record levels. It is expected to swell even more dramatically in the 1980's. This is due to basic demographic trends now impacting the U. S. population. Declining household size will mean that a larger number of housing units than in the past will be needed to provide shelter for our population. Average household size was recorded at 3.33 in 1960. It declined to 3.14 in 1970. In 1979, the U. S. Census Bureau estimates household size at approximately 2.77. The Bureau has projected that by 1990,

household size may decline to as low as 2.41. Lower birth rates, more single-person households, changes in life-style resulting in delayed marriages and higher divorce rates all are reasons for this decline.

Shifting patterns in the age structure of the population will also be a major force shaping housing needs. The maturing of the "baby boom" generation into home buyers has already started to have a dramatic impact on the housing market. Households headed by individuals 25 to 34 years of age accounted for approximately half the single-family houses sold in 1977. In 1978, approximately 17 million households fell into this age group. This group is expected to grow by 6 million during the 1980's to 23 million households.

The increase in this age group will be matched by an overall increase in the number of households. The Census Bureau projects that by 1990 there may be as many as 107.5 million households in the United States, compared with 76 million in 1978.

Thus, an unprecedented demand for housing will face this country in the coming years. The Mortgage Bankers Association of America estimates that 2.2 to 2.4 million housing starts per year will be needed during the 1980's to provide housing for new households and replace losses to existing housing stock.

During the 1970's, the number of housing starts rose and fell in a dramatic fashion. George Christie, chief economist for McGraw-Hill Information Systems, noted in a recent construction forecast the housing market could have absorbed approximately 2 million housing starts per year during the 1970's. But, we consistently failed to sustain that level of production. Because of this production shortage, this country has seen a nationwide housing auction that has pushed housing prices to record levels.

The demographic trends producing this effect in the 1970's will continue to join over-regulation of the housing and construction industry to push home prices even higher. The National Association of Home Builders (NAHB) is forecasting an average new home price will be $112,200 by 1985. (see Table 2)

TABLE 2

MEDIAN SALES PRICE
AVERAGE NEW HOME

Year	Amount	
	New	Existing
1980	$ 64,600	$ 62,200
1985	112,200	105,000
1990	199,700	183,500

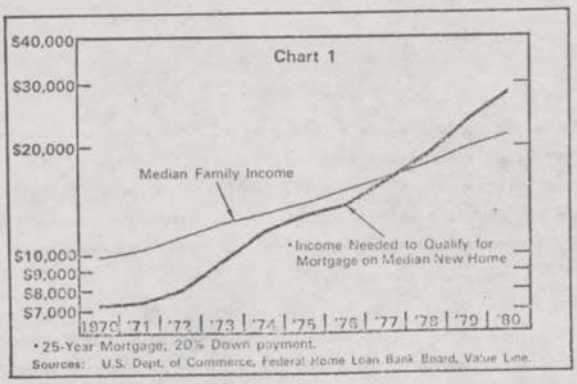
Source: National Association of Home Builders

Housing Affordability

The current crisis in housing is a crisis in affordability that has been with us throughout the 1970's and has been dramatically highlighted by the current high mortgage interest rates. Since 1972, the average sale price of a single-family home has almost doubled. The average new home now costs over $60,000. The family income required to qualify for the median-priced home was about $13,000 in 1973. Now, it's about $25,000.

An increasing number of families is being priced out of the market by housing costs that are increasing faster than their incomes. The families most affected by this trend are young ones, with incomes between $16,000 and $25,000. Demand for housing remained strong through much of 1979 because many families believed that inflation would push the price of housing even further out of their reach. However, when average interest rates for home mortgages range between 13 and 15 percent and the average monthly payment for principal and interest on a median home soars to over $650, effective housing demand is severely damaged if not destroyed. This escalation in housing prices and mortgage interest rates is specifically hard on first-time homebuyers. Between 1977 and 1979, homebuyers classified as first-time buyers declined from 36 percent to 18 percent.

The shrinkage in effective housing demand is part of a long term trend that has resulted in an ever decreasing portion of American families being able to purchase a new home. Bernard Frieden and Arthur Solomon of the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University conducted a 1977 study of the nation's housing needs. They concluded that 46 percent of America's families could afford to purchase a new median-priced home in 1970. They estimated that six years later, only 27 percent could afford a new median-priced home. NAHB currently estimates the home buying capability of the American public has been reduced even further. NAHB estimates that only 15 percent of American families presently have incomes sufficient to qualify them for the purchase of a median-priced, new single-family home. As shown in Chart 1, this is a marked decline from earlier housing markets.



There is a two-fold implication for the HUD budget from this trend. First, as housing prices continue to escalate faster than income, more and more potential homebuyers will be pushed from the new home market into other parts of the housing market. Because fewer new homes will be built, competition for existing housing will increase, driving up its price.

In many cases, rent control has limited the ability of multi-family housing to fill the gap created by reduced production of single-family housing. This overall increase in the cost of existing housing will reduce the amount of shelter HUD can expect to provide from its current subsidy program.

The impact of increased competition is already having a major adverse effect on low-income families. Hardship from excessive housing costs now equals poor housing quality as a problem for low-income families.

The second impact of this trend is the pressure that will be put on Congress and the Administration to expand direct Federal housing subsidies. Originally, the direct subsidy programs were aimed at low-income families, and gradually we have seen them expanded to those with moderate incomes. Now, inflation is creating pressure for the provision of direct subsidies to middle-income families to help them pay for housing. More subsidies are not the answer to this problem. Stopping inflation and increasing families' purchasing-power is the only real solution to this part of the housing crisis.

The Future of Rental Housing

No segment of the housing industry has suffered more from the effects of inflation than rental housing. Rental housing vacancies have reached a twenty-year low in the last year, and we have seen a change in the mix of new rental construction from a market dominated by the private sector to one that is increasingly dependent on public support.

The paradox of the rental housing market is that, while vacancy rates are low, an ever increasing number of multi-family structures are abandoned by their owners because of skyrocketing operating costs and the lack of re-investment capital. This continued abandonment of housing before its normal physical obsolesence adds to the shortage of housing and produces urban blight and economic decay.

Economic pressures and the erosion of the traditional property rights through such devices as rent control and restrictions on condominium conversion have turned rental housing from a readily available source of inexpensive shelter into an expensive form of housing.

There are approximately 26 million rental units in the country of which roughly 2 million are public housing. The average income of a household renting an apartment in this country is $8,800 per year or about one-half of the average income for homeowners. One of the major long-term problems facing the rental housing industry is the lack of effective demand because of the low incomes of many potential renters. The answer to this problem is not increasing subsidies to augment the income of renters, but rather a rebuilding of our economy to allow for economic growth and an increase in the real wages of all Americans to allow them to purchase the goods and services they desire. The key to economic growth is investment by the private sector to increase productivity.

Declining productivity and the lack of real economic growth are two major threats to the health and stability of all segments of the housing market. Currently, this is especially true for rental housing because inflation in operating costs and high interest rates are destroying the ability of both renters and landlords to finance this type of shelter.

Over time, the capacity of renters to pay higher rents must be developed, and inflation must be controlled so that the costs of building and maintaining rental units do not increase faster than tenants' incomes.

Another major factor discouraging the production of rental housing is rent control. Nearly 60 percent of all rental housing is in buildings with four units or less, which are typically owned by small entrepreneurs. Because of the small number of units involved in each instance, it is in the interest of the landlord to minimize vacancies and retain a stable group of renters. These factors, more than any rent control ordinance, work to minimize rent increases by this type of owner. Rent control forces this type of small scale provider of shelter out of the market because they cannot obtain rents that allow them to either maintain their buildings properly or offer them as attractive investment to new owners.

Government at all levels should work to provide incentives for the provision of rental housing and eliminate disincentives such as rent control which ultimately leads to destruction of rental housing.

Mortgage Money

The cost and availability of mortgage financing traditionally has had a major impact on the housing industry and homebuyers. The current housing slump was caused by a major escalation in mortgage interest rates. However, these rates have increased steadily for the past several years.

Prior to the present housing slump, various devices have been used to keep funds available to the housing market. Recently we have seen the use of money market certificates to help thrift institutions retain savings funds and the introduction of alternate mortgage instruments ranging from graduated payment mortgages to the new rollover mortgages. All these devices can help to smooth the curves in the housing cycle, but they are not and cannot be a replacement for stability in interest rates at a non-inflated level.

A recent new source for home mortgage money has been the secondary mortgage market based on mortgage-backed securities. This investment-oriented source of funds cannot operate efficiently because until recently there has been reduced investor interest in the long-term, fixed-rate market. The rise in long-term rates reflects the uncertainties generated by uncontrolled inflation resulting from excessive government spending. The key to obtaining a stable source of mortgage money through both the primary and secondary mortgage markets is to control inflation by eliminating government deficit spending so that there will be sufficient capital available for investment and a willingness on the part of investors to invest in long-term securities. A healthy secondary mortgage market is vital to the housing industry.

Fluctuations in the availability and cost of mortgage money have subjected housing construction to sharp, cyclical changes. During the 1970's, the number of housing starts ranged from a high of 2.38 million in 1972 to a low of 1.17 million in 1975. Housing prices at the peaks of the cycle must be increased to cover the cost of plant and equipment that stands idle during slack periods. During downturns in construction activity, the capacity for manufacturing materials and components used in housing construction is underutilized and many skilled managers and workers are forced out of the industry. When construction activity increases, workers demand higher wages to compensate them for periods of unemployment. And the return on plant and equipment used in manufacturing building materials must be adjusted to make up for losses during idle periods. The price of land and interest rates is also distorted by these fluctuations in the construction cycle.

Recently, there has been serious debate about the share of capital funds allocated to housing. While it is clear that we are spending large amounts of money for residential mortgages, its share of the overall market remains relatively constant. (See Table 3). The role of federal borrowing in the economy has grown more rapidly than any other source in recent history. It is excessive federal borrowing that is the root cause of monetary instability in the country. This is why all four parts of the President's program must be implemented if we are to have a healthy housing industry.

TABLE 3

COMPOSITION OF CREDIT DEMAND
SHARE OF TOTAL FUNDS RAISED BY SECTOR
1946-1978
(in billions)

	Average Annual Funds Raised	Business	Residential Mortgages	Consumer Credit	U. S. Treasury	Federal Agencies	State & Local	Other
1946-1949	$ 24.4*	48.2%	22.4%	12.0%	%	0.1%	6.4%	10.9
1950-1959	36.6	37.4	28.5	9.4	5.8	1.8	12.3	4.8
1960-1969	79.9	36.7	24.4	8.9	5.5	4.0	8.6	11.9
1970-1974	254.7	53.0	16.8	5.5	5.7	5.1	5.8	8.1
1975-1978	351.0	24.3	23.3	8.4	19.0	6.8	6.7	16.9
Average Share		39.9	23.1	8.8	7.2	3.6	8.0	

*During the 1946-1949 period the U. S. Treasury loaned funds of $8.63 million. Thus, the share of total funds raised by the other sectors does not take this amount into account.

Source: Federal Reserve Flow of Funds accounts, annual net flows.

Reducing the Cost of Housing

While higher mortgage interest rates are an obvious contribution to the rising costs of housing, there are other significant factors that have caused housing prices to rise.

Federal, state and local regulations have also increased the cost of housing. Housing experts such as George Sternlieb of Rutgers University, think that 20 percent of the current cost of housing can be traced to excess or antiquated government regulation.

Outdated building codes hinder the development and introduction of new cost-saving materials and techniques. The larger number of code-issuing jurisdictions--each with the authority to pass its own unique code requirements--retards the standardization of building products which would also help reduce costs. Even communities that adopt one of the major "model" codes often amend them, making revisions and deletions that are restrictive in nature.

The lack of coordination between various housing codes and code officials frequently causes delays and confusion. One builder in the Midwest noted that no less than six different inspectors had to approve a house before it could be occupied.

Local land use and development restrictions also add to the cost of housing by causing delays in the building process and needlessly restricting the supply of land available for housing. Restrictive zoning and subdivision regulation--such as large-lot zoning, moratoriums on water and sewer line hookups and slow growth and anti-growth development policies--are increasing housing costs in many communities. Moreover, such restrictions have the effect of not allowing homes to be built that can meet the needs and financial capabilities of young families.

The Urban Land Institute in a recent survey of 12 metropolitan areas found that improved lot prices increased an average of 109 percent and raw land increased at an average of 97 percent between 1975 and 1980. In certain parts of the country such as San Diego, the average single-family improved lot price is now approximately equal to the median sales price of a new home in 1975.

American homes are bigger and more complex than ever before, accounting in part for the increase in the cost of housing. However, these homes are costing more than they need to. More efficient building and development regulation could help keep homeownership part of the American dream.

Inflation and the Cities

The Joint Economic Committee of Congress recently released a study on trends in the fiscal condition of cities. In surveying approximately 300 cities of various sizes and in all parts of the country, it found that, for all cities, current expenditures are rising faster than current revenues and the number of cities operating at a deficit is growing. The study projected a growing number of cities experiencing severe fiscal stress as their expenses are pushed up by inflation and their revenues fall behind because of slow economic growth.

The economic well-being of our cities rests on two points--controlling inflation so that their costs can be managed, and stimulating economic growth to provide the jobs and revenues to meet the needs of their citizens.

HUD currently offers several programs to encourage reinvestment in our cities. These programs can help in individual cases. However, it must be recognized that these programs do not have the capacity to control the amount of resources needed to rebuild the cities. The most important steps in rebuilding our cities are establishing a vital and productive national economy and creating an atmosphere that encourages and rewards innovation and risk-taking. Efforts to reduce bureaucratic delays and eliminate hostility to business development can be more important than grants in attracting business back to the cities.

Tax Cuts, Small Business and Cities

Our nation's cities have traditionally been the birthplace of many small businesses, and it is small business that produces the vast majority of new jobs in our economy. Part of any effort to restore the economic vitality of cities must include efforts to improve the environment for small business. Traditionally, government has attempted to stimulate the growth of small business through various loan and grant programs. While no one doubts the good intentions of those advocating this approach, it simply does not reflect the realities of small business capital formation. Only 3% of all small businesses use government programs as part of their original capital. In fact, the overwhelming majority of small businesses are started from the savings of individuals, their families or friends. Tax reductions that put more money in the hands of individuals can have a major impact in helping small business and the cities in which they are located.

One of the most overlooked elements of the Administration's proposed 30% reduction in marginal personal income tax rates is the substantial benefit it would bring to small business.

Most of the attention to the individual rate cuts has been focused on consumer effects, and even small business executives themselves seem not to be fully aware of the benefits they could gain.

Yet, the so-called 10-10-10 program of individual tax rate cuts would directly lower business tax liabilities for almost 90% of all businesses and would indirectly make capital more readily available to small business by increasing savings at an estimated $90 to $120 billion annual rate.

The potential benefits of this type of tax relief for cities and small business dwarfs the efforts of various government subsidy programs that have been ineffective in the past.

Summary and Conclusion

In presenting his Program for Economic Recovery, President Reagan described a coordinated, comprehensive series of policies. As the President states, the purpose of his program is to ". . . break the cycle of negative expectations (and) revitalize economic growth, renew optimism and confidence, and rekindle the Nation's entrepreneurial instincts and creativity."

His program of spending restraint, tax restructuring and relief, regulatory reform and monetary control is bold and sweeping; yet it is also imperative. If we are to restore many of our older cities to their past vitality, provide affordable housing for young families and assist the truly needy in obtaining adequate shelter, we must first return our Nation to economic health.

The modest program reductions proposed for HUD will allow that one part of the federal bureaucracy to make its contribution to this effort.

Mr. BOLAND. Thank you very much. Do you have a statement, Mr. Kelleher?

Mr. KELLEHER. No.

Mr. BOLAND. That was a nice, pleasant statement—but I must tell you, its substance is predictable.

Mr. BUSH. With the uniform I am in, I know it is predictable.

Mr. BOLAND. The Committee would have some disagreements. I personally have some disagreements with some of the recommendations that you make here, particularly about the Section 312 Rehabilitation Loan program. I think the Rehab Loan program is a vital program which has contributed substantially to the rehabilitation of areas in rundown communities, bringing them in compliance with the Housing Codes in the various localities.

I might very well agree with some of your other recommendations. What is your position on the Assisted Housing program?

Mr. BUSH. Well, I am on the Construction Action Council Executive Committee of the U.S. Chamber, if that is what you mean.

Mr. KELLEHER. Are you speaking of the Section 8 program?

Mr. BOLAND. Yes.

Mr. KELLEHER. Well, our basic position is, we are supporting the cutback to 175,000 units. Traditionally, we have seen some real escalation in the cost of reconstruction under that program, and even the substantial rehabilitation program. Both prove in the long run to be too expensive and to be aiding too few people. The existing program, at least to date, has shown some cost containment aspects.

The problem, though, of how you are going to provide an operating subsidy to something that is experiencing rapid growth in its price mechanism, its cost mechanism remains. You have got some 40 percent of the stock existing that is pre-39. You really have a problem in terms of the quality of stock you have out there and how you are going to maintain some kind of economic viability for renters.

Our feeling is that the long-term solution for the renter market is going to have to be improving the economic condition of the tenant. Right now their incomes run roughly around $9,000 a year—if you take out from that what can be paid in an economic range. There is no way you can supply a rental unit to people on a market basis who are earning $9,000 a year. Therefore, our feeling is that you are going to have to do something about economic growth. You are also, in our opinion, going to have to look not so much at hundred unit style Section 8 projects, but to return more to the small landlord with three, four, five unit owner-occupied style projects. That in the long run is the only way you can get stable rents to deal with that class.

Mr. BOLAND. Do I understand that you support the fiscal year 1982 Reagan recommendation for 175,000 units of Assisted Housing?

Mr. KELLEHER. Yes.

Mr. BOLAND. Are you familiar with the recommendations that will be made by this Administration to the Legislative Committee in this area?

Mr. BUSH. 150,000? Yes, that is right.

Mr. BOLAND. The Reagan Administration is proposing 175,000 units. The Senate Committee has cut this back to 150,000 units. As I understand it, the House Committee is recommending 250,000 units for fiscal year 1982, split among new construction, substantial rehabilitation and also, existing housing.

What is the Chamber's attitude about existing housing? We have been pushing prior Administrations as well as this Administration to change the mix in the Assisted Housing program. This Administration is doing just that by recommending 55 percent of the units for existing housing and 45 percent for new and substantial rehabilitation in 1982.

What is your position on that?

Mr. BUSH. It is 55/45 under the percent?

Mr. BOLAND. The current 1981 estimate is 51 percent existing; 49 percent new. That changes to 55 percent existing and 45 percent new in the 1982 request.

Mr. BUSH. The rehab is more costly on the average, I believe, by about $10,000 a unit.

Mr. BOLAND. That hasn't been our understanding. Our figures show that it is less expensive to rehabilitate existing units than to construct new units.

Mr. BUSH. It seems to me the key thing is, where is the housing needed? If it is more practical or possible to rehab than it is to find a large tract of land to build new houses on, then rehabilitation should be favored. It is a matter of delivery to the people, with the least cost, in the areas where it is needed. That is the reason we feel local option without so much Federal imposition of quotas is a more realistic way of tailoring this to communities on the basis of need.

Mr. BOLAND. You are also aware that the Assisted Housing program, particularly the Section 8 program, is just about the only game in town for government assistance?

Mr. BUSH. Yes.

Mr. BOLAND. You do support Section 8?

Mr. BUSH. Some Section 8, but a reduction of most of these programs, yes.

Mr. BOLAND. Basically, you support almost every aspect of the Administration's recommendations?

Mr. BUSH. Yes.

Mr. BOLAND. Thank you very much.

Mr. Green?

Mr. GREEN. Just one thing. I noticed you relied on the OMB analysis, the regional impact of the President's budget proposals.

Our colleague, Carl Pursell of Michigan, has worked with a group at the University of Michigan that questions the Administration's analysis, principally I gather, because the Administration's analysis omits the impact of Defense spending on the regional impact.

They have done their own model, cranking in the Defense spending which produces a somewhat different result.

Mr. BUSH. We will get all of that. We will get hold of that and look at that.

Mr. KELLEHER. The only thing I would add on that is that at our annual meeting, the local chamber execs came together and started

talking about that issue. One of the difficulties in that analysis, or any type of analysis like that, is how then do you trace back from primary to secondary contracts? Everyone will tell you that aerospace is a sun belt activity. But the lunar module was tested on the sand banks of Long Island, so there are shifts there.

That analysis, the one done by Michigan, I think is limited. It is a consistent model. It showed if you do some cutting, it will be fairly well distributed. Forbes, by the way, had a recent article on the industrial price along the Great Lakes. They did some analysis as well. They found something very similar to what OMB did.

Mr. BOLAND. Mr. Bush and Mr. Kelleher, thank you very much.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

ROBERT L. WALDO, PRESIDENT, MORTGAGE INSURANCE COMPANIES OF AMERICA

JOHN WILLIAMSON, EXECUTIVE VICE PRESIDENT, MORTGAGE INSURANCE COMPANIES OF AMERICA

Mr. BOLAND. We are pleased to have Robert L. Waldo, President of the Mortgage Insurance Companies of America with us today. I understand you are interested in some of the HUD programs, particularly the Administration's FHA recommendations.

Mr. WALDO. Yes, I am. I have with me John Williamson, Executive Vice President of our Association.

Mr. BOLAND. You are in good shape this year. There are a number of top personnel in HUD who are sympathetic to the concerns of the Mortgage Insurance Companies.

Mr. WALDO. That is not clear at this point. It may be, but their position hasn't been all that consistent with the Administration's position.

Mr. BOLAND. Please proceed.

Mr. WALDO. Thank you.

In addition to being President of the Mortgage Insurance Companies of America, I am also President of one of the constituent companies, Verex in Madison, Wisconsin.

Our formal statement was submitted yesterday. Today I would like to summarize that briefly.

I would ask the full statement be entered into the record.

Mr. BOLAND. Without objection.

Mr. WALDO. We support the Administration's proposed cap of $35 billion on the commitment authority of the FHA and $84 billion with respect to GNMA. We believe inflation is the single greatest enemy of the prospectve homeowner. We believe inflation is exacerbated by the unrestrained use of Federal credit, directly or through guarantees.

With respect to the $35 billion cap recommended by the Administration, we concur in the statement of HUD Secretary Pierce that this is adequate for fiscal year 1982. HUD advises us that 80 percent of FHA's insurance authority is for the unsubsidized home mortgage insurance programs. In 1980, the FHA insured $1.48 billion of home mortgages and issued commitments of $20.8 billion.

The Congress approved a cap of $34.1 billion for the current fiscal year. The FHA, therefore, used only $10 billion of the $28 billion—80 percent of total—during 1980. These programs would have to sustain an increase of 34.6 percent over their 1980 record to hit this ceiling.

Yet in the first quarter 1981, the FHA's insurance volume of one to four-family home mortgages was 52 percent below the comparable quarter in 1980. There is no validity to the argument that a $35 billion cap would unduly restrict the FHA.

Reduced government involvement can best begin in areas where the private sector can fill the gap. Our statement demonstrates that the private mortgage insurance industry is now fully capable of picking up the mortgage insurance written by the FHA in its unsubsidized programs, and that no segment of that home-buying market need be unserved. In fact, in our statement we show a comparison between the homebuyers that are served by the FHA and the unsubsidized programs in our industry. We are certain upon examination of these facts which are taken from HUD's data and from our own data, that the subcommittee will conclude that these two programs do serve essentially the same market.

It is almost identical in every respect. Any borrower who qualifies for a loan insurable by the FHA and the unsubsidized program would likewise qualify for a conventional loan with private insurance, and the private mortgage insurance industry has the capital and insuring capacity to write this coverage.

Mr. BOLAND. Are they doing it?

Mr. WALDO. Yes, sir. We are doing as much as we can. We are doing as much as the lenders will send to us.

Mr. BOLAND. Why can't you do as much as you would like?

Mr. WALDO. Well, for one thing because the FHA program does have available to it GNMA. Along with the proposed caps on the FHA, we do advocate both a gradual phase-out of the FHA's GNMA—

Mr. BOLAND. You wouldn't want to phase out the FHA completely, would you?

Mr. WALDO. The unsubsidized programs, yes, sir. The unsubsidized programs, we are serving the identical market.

Mr. BOLAND. But I am not sure that you are serving it adequately.

Mr. WALDO. Sir, our data shows that we serve the same borrower with respect to down payment, with respect to average loan, with respect to monthly income, and even with respect to location of the property in the unsubsidized programs. We are not talking about the rental programs or the mobile home programs or any of the other programs which involve the special risk fund. We do believe that that is a very appropriate function of government.

Mr. BOLAND. Not only that, but you wouldn't handle the risk areas anyway.

Mr. WALDO. It is not economically feasible.

Mr. BOLAND. No.

Mr. WALDO. That is right. In the unsubsidized programs, this is where the FHA is competing directly with us by serving exactly the same kind of borrowers. One thing that goes with this, Mr. Chairman, is the fact that GNMA is a vehicle through which the

FHA loans can be brought to the secondary market. Since the flow of capital to the housing market through the thrift institutions has been disrupted, this has become of increasing importance, and one of the things that is happening now is that a number of vehicles for marketing conventional loans with the same ease and same facility as you can market GNMA is being worked on. We refer to this in our statement. We believe Congress should signal the marketplace that eventually more emphasis is going to have to be placed on the conventional loan market and on these conventional securities and that will encourage the development of these instruments. Not only will it encourage that development, but it will also strengthen the flow of capital to the housing market overall, which we think is very important.

We do not think that building a bigger and better GNMA is the answer because that does not disengage the government from credit programs, but the encouragement of the conventional program will.

Mr. BOLAND. Are you satisfied that the $9 billion reduction to $35 billion in the commitment limitation the FHA recommended by the Reagan Administration will not seriously impact the market?

Mr. WALDO. We don't think that should have any disruptive effect on the housing market at this time because last year the FHA only insured about $15 billion worth of loans which would be just about half of the authority they had for insuring loans.

Mr. BOLAND. Mr. Green?

Mr. GREEN. Again would you say that when you consider all of the special risk funds essentially a subsidized program, even though there is no formal subsidy?

Mr. WILLIAMSON. Let me comment on that. You mentioned the special risk funds. We are not addressing ourselves to those programs. That represents a valid and a proper exercise of governmental function.

Mr. BOLAND. And a necessary one?

Mr. WILLIAMSON. Yes. We are talking only about the four programs that compete for the same market with us. There will always be a reservoir of capital in this country that prefers the hundred percent guarantee.

FNMA and FHLMC buy our mortgages with only the top twenty percent insured, but as long as you have the hundred percent federal guarantee, a great bulk of the capital market will prefer it.

We contend that there should be a quid pro quo for the hundred per cent Federal guarantee, some compelling social objective ought to be achieved. It isn't. Not with that part of the FHA that competes with our business.

Mr. BOLAND. What part of the housing industry—the building of homes—is actually supplied by conventional now?

Mr. WILLIAMSON. I think you have in your statement, Bob, that with respect to insurance in 1980, the FHA contributed to about 6.3 percent of new construction and we more than doubled that of the new construction insured by the private mortgage industry.

Those figures are in the statement.

Mr. WALDO. Both the FHA unsubsidized programs and the private insurers generally insure loans that exceed 80 percent of the

loan-to-value ratio. Overall that will constitute about a 32 percent—32 to 35 percent of all mortgage loan originations. Of that in 1980 we got—we took approximately about 50 percent, did we not, Jack?

The FHA, about 25.

Mr. WILLIAMSON. Actually the FHA's market, new and existing, represents eleven percent of the market.

Mr. BOLAND. Thank you very much, Mr. Waldo. We appreciate your presence here.

[The statement follows:]

May 7, 1981

Mr. Chairman and Members of the Subcommittee:

My name is Robert L. Waldo, and I appear here today as President of the Mortgage Insurance Companies of America* (MICA).

At the heart of this association's testimony is support for our nation's attempt to reverse the spiraling growth in Federal expenditures and the growing role of the Federal government in the private sector. A prerequisite to a healthier, less inflationary, economy is the removal of unnecessary government involvement, wherever it may occur.

MICA will take second place to no other industry as champion of making homeownership affordable and we support a government policy recognizing housing as an important social priority. In our opinion, one element of the government's housing effort that is no longer indispensable is the unsubsidized FHA insurance programs designed for middle income homebuyers and our testimony focuses upon only that part of the role of the FHA. The housing marketplace has changed. The private mortgage insurance industry has matured. Today, the unsubsidized programs can do nothing for middle income or first-time homebuyers - including during periods of restricted mortgage credit - that cannot be done by the private marketplace. We urge the Subcommittee to evaluate the facts.

The aim of public policy underlying a guarantee program is to influence the allocation of private credit. Unbounded by realistic limits, guarantee programs add to the inflationary pressures on the economy. The Federal Housing Administration programs, from inception, were designed to strengthen private sector lending so home loans would be made. When it was accepted, in battling inflation, that there was no alternative but to set caps on all guarantee programs, it was logical to question the role of FHA programs, especially with regard to the characteristic of those families who are the recipients of such government assistance. If a homebuyer has access to housing credit provided by the private sector without needing government backing on his loan, then that homebuyer should go the route of the private sector. We believe this is the appropriate Federal policy.

In every area where it is possible to reduce the government's impact on the credit markets, there exists the potential to reduce inflationary pressures. Such actions will help reduce the interest rates generally and

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* The Mortgage Insurance Companies of America is a trade association consisting of thirteen domestic private mortgage insurance companies whose insurance-in-force on February 28, 1981, was $106 billion. The national officers of the Association are: Robert L. Waldo (President, Verex Assurance, Inc.), Madison, Wisconsin, President; Leon T. Kendall (President, Mortgage Guaranty Insurance Corporation), Milwaukee, Wisconsin, Vice President; William A. Simpson (President, Republic Mortgage Insurance Company), Winston-Salem, North Carolina, Secretary; Jackson W. Goss (President, Investors Mortgage Insurance Company), Boston, Massachusetts, Treasurer; and John C. Williamson, Washington, D.C., Executive Vice President.

in turn increase savings inflows to depository institutions which continue to play the most significant role in providing long term credit for housing.

We believe a review and evaluation of the facts presented in this testimony will demonstrate that a gradual phase-out of the FHA's unsubsidized home mortgage insurance programs is warranted and feasible. The homebuyers served by the unsubsidized FHA programs now have ample access to conventional financing, so the gradual replacement of the unsubsidized FHA loan programs by insured conventional loans will have no adverse impact on the ability of moderate income families to acquire homeownership - and all American taxpayers will benefit.

Concern that the Administration's recommendations will have a negative impact on housing is groundless. The Administration's proposed level for the insuring authority for FY 82 of $35 billion will be more than adequate for FHA operations. According to a HUD release dated March 20, 1981, the FHA insured $14.8 billion of mortgages on 1- to 4-family homes during calendar year 1980. Further, the FHA's volume in January 1981 was 62.9% below that for January 1980, and February 1981 was 48.9% below February 1980. We find it very difficult to understand the anxiety expressed by some over a cap that is 136% higher than the actual mortgages insured in 1980. Even if an upsurge in housing activity were to occur, we are confident that mortgage originators will not find the proposed limit restrictive. In fact, the contrary will be true. If Congress were to endorse the fostering of greater private sector involvement in meeting our housing needs, then this signal, if a housing upsurge were to occur, would undoubtedly spur a response from private lending institutions to place greater reliance upon conventional rather than FHA loans. Since every borrower who qualifies for an FHA unsubsidized loan can now qualify for a privately insured loan, and at less cost to the borrower, the signal need only say that government support for the unsubsidized programs will not be permanent. This will cause mortgage originators to accelerate the trend toward qualifying the unsubsidized FHA borrower for conventional financing. The recent experience of many forward-looking mortgage banking firms is evidence to demonstrate this point.

Our testimony will suggest a future role of the FHA with respect to home financing. First, a few facts about our industry. There are presently fifteen private mortgage insurance companies in all fifty states actively engaged in business, and private mortgage insurance is also written in the District of Columbia, Puerto Rico, and Guam. (See appendix 1 for data re these MICs) These companies function through approximately 270 regional underwriting offices. No state is served by less than four companies and thirty states are served by eight or more. We are a state-regulated industry, and FNMA and FHLMC, which purchase low downpayment loans on the strength of our insurance, exercise a layer of supervision over our financial and underwriting operations.

Ours is a highly competitive industry. Our assets aggregate in excess of $1.7 billion, and financial solidity is based on a contingency

reserve which, on an aggregated basis at December 31, 1980, equalled $834 million. These reserves are accumulated by contributions of 50% of every earned premium dollar into a ten year reserve which cannot be withdrawn without the approval of the state regulator and then only if losses exceed 35% of earned premiums.

The risk characteristics of loans insured under the FHA unsubsidized program and loans insured by an MIC are very similar. However, unlike the FHA, we do not insure 100% of a loan. Instead, we insure the risk portion; that is, the top 20% of a 90% mortgage and 25% of a 95% mortgage. Our experience over the past two decades proves that this level of insurance is adequate for protection of both the originator and the secondary market investor.

While premium plans vary among the companies, a popular premium plan involves ½ of 1% for the first year of a 90% loan and 1% on a 95% loan, with the premium on all loans for the second and subsequent years being ¼ of 1% on the declining balance, whether the loan is 90% or 95%. While mortgage insurers are bound to renew these policies annually, the lender may cancel the insurance at any time. Generally, the insurance is cancelled when the principal balance reaches 80% of original appraised value. The FHA mortgage insurance premium is ½ of 1% for each year and the insurance must be maintained over the life of the loan.

However, I am certain that the Subcommittee wants to look behind this record to ascertain the market which we serve and how it compares with that served by the FHA's unsubsidized programs. A comparison follows, based upon 1980 data, to show current performance between the insuring activities of private mortgage insurers and the basic FHA 203(b) program.

During 1980, 35.5% of our insurance involved 95% loans. The FHA 203 program in that year involved 15% of loans with a 5% downpayment and 22% of loans with 4% to 3% down. The average downpayment for our industry was 12%; for FHA section 203, 11%.

In the fourth quarter 1980, 56% of the mortgages we insured were less than $50,000. FHA statistics break at the $51,000 level. In that quarter, 67.5% of section 203(b) mortgages were less than this amount. Our average mortgage in 1980 was $48,560; the FHA's, $42,083. In comparing averages, the Subcommittee should bear in mind that in 1980 the FHA was subject to a $67,500 mortgage ceiling, while private insurers were subject to no ceiling. If we were to eliminate all privately insured mortgages in excess of $67,500, we would discover that our average mortgage is less than that of the FHA.

For example, my company, Verex Assurance, Inc., processed 61,928 loans in 1980 and 85%, a full 52,946, of these were less than the FHA limit of $67,500. The average of these mortgages was $40,708, 3% less than the average FHA 203 mortgage. While comparing averages is meaningful, the Subcommittee can see the entire statistical distribution of borrowers served by FHA and private insurers by income levels in appendix 2.

Approximately 70% of our industry's mortgages are on existing homes. With respect to new construction, in 1980 the FHA 203 and 245 GPM programs contributed to 57,985 new starts, 6.8% of the total single family starts for that year. Our industry contributed to 121,520 new starts or 14.26% of the total.

With respect to credit underwriting standards, ours are not materially different from those the FHA applies to its unsubsidized programs, which are claimed to be actuarially sound. For example, we qualify a family if housing expenses do not exceed 33% of gross income; the FHA uses 35% of net effective income, or income after taxes. While the results of applying a pretax or after tax formula might be significant in individual cases, generally, there is little, if any, difference in the family income requirements to purchase a home under either program.

Invariably, in the dialogue on the issues raised by a probable phase-out of the FHA's unsubsidized home mortgage insurance programs, the question emerges as to the extent private insurers serve the urban areas. In 1980, 35% of privately insured mortgages involved homes located in urban areas, 57% in the suburbs and the balance in either rural or resort areas. Under the FHA section 203 program, using HUD's own statistics, in 1980, 56% were located in the urban areas, 42% in suburbs, and 2% rural. However, definition of "urban areas" are not consistent and "urban areas" can be so diverse economically that it is difficult to draw a valid comparison.

We noted that HUD breaks the urban statistics into "core city" and "other urban". In the core city, we note that the FHA's volume here was 2% of total insurance. Unfortunately, I cannot at this time give you comparable statistics from the private industry. I can tell you, however, that the private industry has been active in assisting neighborhood housing service corporations. For example, our industry insured 6,857 mortgages in the revitalization of the Philadelphia urban areas where the loans averaged $17,500 in 1976 to $22,500 in 1980. We were advised by lenders of this Philadelphia Plan that the FHA was only minimally involved.

Private insurers have not penetrated the low income market to any appreciable degree, but neither has the FHA. For example, in 1980, 2.22% of the mortgages we insured involved families earning less than $12,000 a year. The FHA 203 program, which breaks at $11,000, shows 4/5 of 1% penetration of this low income group using the mortgagor's claimed income which is closest to the "gross income" which we use. These figures, I submit, are not an indictment of either the FHA's unsubsidized program or the private mortgage insurance business. Rather, it is an indication that, due to today's home affordability problem, loans to borrowers below certain income levels cannot be prudently insured in an actuarially sound program. Insured loans for these borrowers can only realistically be provided through a subsidy program which reflects Congressional policy as to application of resources to be devoted to subsidies. However, these facts rebut arguments that the FHA unsubsidized programs, not private mortgage insurers, serve low income families.

All available data demonstrate that the private mortgage insurance industry and the FHA unsubsidized programs serve essentially the same market. We believe, therefore, based on the capacity we have built since the inception of the industry twenty-four years ago, there is now ample justification for consideration of a phase-out of FHA's unsubsidized role. Our industry was created on the experience of the FHA, and our success is a testimonial to the contribution made by this agency since its inception 47 years ago.

It is particularly necessary that the coming phase-out be signaled at this time, because in recent years the FHA has been overly protective of its share of the market. Its missionary work among our traditional customers - the savings and loan associations and banks - is a case in point. The FHA coinsurance program was created in 1974. In recent years, HUD has sponsored clinics with S&Ls and banks to encourage their use of FHA, even though there is no demand for insurance by these groups which is not met by private mortgage insurers.

In addition, the FHA offers a premium rebate to the lender based on default experience. This rebate need not be passed on to the borrower who pays the insurance premium. If a private mortgage insurance company offered such a rebate to the lender, it would risk losing its insurance license as well as losing its "qualified" status with FNMA and FHLMC. In late 1980, to overcome lender inhibitions to the use of the coinsurance program, HUD proposed two regulatory changes: (1) permitting the lender to insure its 10% exposure, presumably with a private mortgage insurance company; and (2) permitting the lender to pocket 10% of the premium as collected instead of crediting this to a five year reserve with disbursement after determining losses on the coinsurance portfolio. These regulations were shelved by the HUD Secretary because they involved policy matters requiring further study.

The competitive thrust of the FHA coinsurance program has not been successful. In 1980, the program represented only 1.7% of FHA's total unsubsidized home mortgage insurance activity. However, the FHA coinsurance program and the efforts of HUD to promote it with our traditional customers are ample evidence that HUD deems the FHA to be more than a demand oriented program.

Earlier I stated that our industry has the capacity to absorb the unsubsidized FHA market, and I would like to expand on that point with specific data. In 1979, this industry's unused insurance capacity was $36.8 billion. If the FHA had insured no mortgages that year in its unsubsidized mortgage programs, our industry could have absorbed this market and had $16 billion of unused authority remaining. As of December 31, 1980, our unused insurance capacity was $47 billion. I am attaching, as an appendix 3 to this statement, a table showing how the industry insuring capacity is computed.

Finally, we want to address ourselves to the role of our industry vis-a'-vis the FHA in the secondary market. It is asserted that only through FHA and GNMA can non-traditional sources of mortgage money be tapped for the homebuying market.

GNMA is unquestionably tapping non-traditional capital sources, however, several points should be noted. First, GNMA certificates can be publicly offered to investors with no SEC registration. If conventional loans could be packaged and marketed with the same regulatory ease as GNMA pools, it would enhance their penetration of the capital market. Remember that there have been approximately $38 billion of conventional loans purchased in the secondary mortgage market, demonstrating that investors have accepted the conventional loan as an investment. This suggests a tremendous potential for conventional loans if their liquidity is improved.

Both FNMA and FHLMC are readying proposals for guaranteeing conventional pass-throughs, each of which could surpass GNMA's volume of government guaranteed pass-throughs. FNMA is expected to come on stream before the end of the year, while FHLMC's will probably require amendments to its charter. The securities of FNMA and FHLMC have already gained investors acceptance; and they can produce conventional pass-throughs that will be marketable without the utilization of a 200% full faith backing for which the government is liable in the GNMA program. Also, these secondary agencies encourage access by all types of financial institutions, so all mortgage originators will obtain the market assistance that has been available through GNMA. Private conduits also will become more active. What is needed for a viable secondary market to tap new sources of capital is not government insurance; but simply the right conventional vehicle.

It is also argued that the FHA is available throughout the business cycle and therefore must be maintained without any cap, as a contracyclical device. This is not a valid argument. Every month for several years, with the exception of the first two months of 1980 when FHA reaped the benefit of its exemption from state usury laws, private mortgage insurers have insured more mortgages than the FHA. Even during the 1974 recession our industry insured more home mortgages than the FHA; and in recent months, when all mortgage markets have been in disarray, our industry each month insured almost double the mortgages insured by the FHA's unsubsidized home mortgage program. In January and February, 1981, for example, we insured 56,395 loans while the FHA insured 32,542 loans. Comparing the volume for these same two months in 1980, the FHA volume decreased by about 57%, while our volume actually increased by about 4%. When you look at individuals who obtain loans during periods of high interest rates, lower income groups are affected whether they attempt to obtain borrowing through an unsubsidized FHA loan or an insured conventional loan. Housing and homeownership suffers across the board during adverse economic cycles.

It is alleged that as the residential mortgage market deteriorates, lenders pull back and reduce their volumes of high-ratio loans suggesting FHA is able to serve more first time homebuyers and others needing low downpayment terms in such periods. Yet in 1980, we continued to insure

15% or more of all mortgage originations, consistent with our experience of the past five years, and significantly, 35.5% of the mortgages we insured represented 5% downpayments, the highest percentage of such 5% downpayment loans in the entire decade of the '70s.

In closing, I want to assure the Subcommittee that the private mortgage insurance industry, while barely 25 years old, is financially sound and reliable. It achieved its financial strength despite economic adversities which affected the housing and home finance industries -- and, therefore, the private mortgage insurance industry -- in 7 of its 25 years; and it has done so while providing a public service to over 3 million home buyers at a cost less than that required in the comparable government program. We attribute much of our success to the FHA which paved the way for our industry. We are now in essence, fifteen private state-regulated FHAs. We serve substantially the same market. We are tax paying entities, and if we sustain catastrophic losses, our stockholders, no the Federal taxpayers, will assume the loss. We will concede that so long as we have no economic catastrophe, the FHA unsubsidized programs do not cost the taxpayers any money, but that does not justify a government competing with private enterprise for the same market with essentially the same product.

We also concede that loans with a 100% Federal guarantee will remain preferable to some investors over privately insured loans where only the risk portion - the top 20% or 25% - is covered. However, we believe that 100% Federal guarantee should be used sparingly, to serve areas of the market which private enterprise, for economic reasons, cannot serve adequately. There ought to be quid pro quo for 100% Federal guarantee. This was the situation in 1934 when the FHA was created and it justifies FHA's role in the '40s, '50s, and the '60s. However, the situation is vastly different in 1981. What compelling social objective is being accomplished today by the FHA which is not performed by private enterprise, to justify the continued intervention of the Federal government with a 100% guarantee? We are now doing the job and we ask only that the FHA redirect or limit its activities to other needy areas such as rental housing, subsidy programs, and programs such as section 223(e) and 237 which are obligations of the Special Risk Insurance Fund.

We believe that a gradual phase-out of FHA's competitive activity with a simultaneous reduction in GNMA authority will avoid the crowding-out phenomenon when government and non-government securities seek to tap the same reservoir of capital. Again, this phase-out would not be reflected until the fiscal year beginning October 1, 1982. We have no reason to doubt the HUD Secretary's statement that the $35 billion cap for FHA for fiscal year 1982 is adequate to meet the agency's projected needs.

There is substantial support for actions which affect all economic sectors and slow inflation by restoring monetary and fiscal stability. Financial institutions which provide housing funds, as well as the bulk of those firms building and selling homes, understand that a slowing of inflation and a drop in interest rates will bring the greatest benefits

to housing. As an industry whose business is directly dependent upon the health of the housing industry and the growth of housing credit for all consumers, MICA believes it imperative to substantially dampen inflation in order to restore our nation's economic health.

We thank the Subcommittee for this opportunity to present our views and will be happy to respond to any questions that the Subcommittee may have.

APPENDIX 1

Tabulation of Private Mortgage Insurance Companies

December 31, 1980

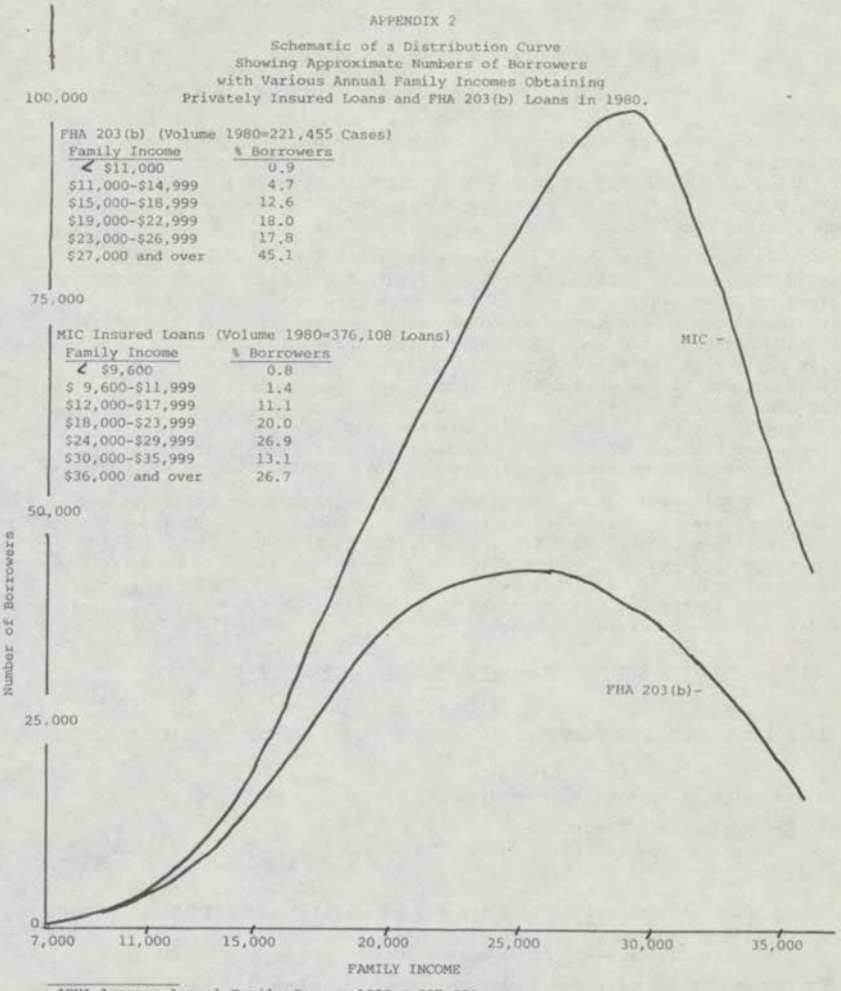
Name	Assets	Continency Reserve[1]	Number of States Licensed and Writing Insurance	Year of Initial State Certification	Holding Company Parent
American Mortgage Insurance Company	$110,750,793	$ 59,425,901	45	1961	Merrill Lynch
Commercial Credit Mortgage Insurance Co.	$ 12,562,567	$ 1,832,813	35	1974	Commercial Credit
Commonwealth Mortgage Assurance Company	$ 12,177,167	$ 1,239,554	35	1976	Commonwealth Title Co.
Foremost Guaranty Corporation	$ 29,245,542	$ 7,782,452	47	1972	Foremost Insurance Co.
General Electric Mortgage Insurance Company	$ 25,997,773	$ 3,069	24	1980	General Electric
Home Guaranty Insurance Corporation	$ 8,177,954	$ 2,141,761	10	1972	
Integon Mortgage Guaranty Corporation	$ 6,848,606	$ 1,137,171	25	1972	Ashland Oil
Investors Mortgage Insurance Company	$ 97,548,560	$ 60,962,879	50	1968	Continental Financial Services, Inc.
Mortgage Guaranty Insurance Corporation	$734,272,523	$396,354,145	50	1956	
PMI Mortgage Insurance Co.	$121,548,778	$ 46,294,845	50	1972	All-State Insurance Co.
Pennsylvania Mortgage Insurance Company	$ 10,287,103	$ 1,467,604	28	1974	Pennsylvania Thrift Services Corporation
Republic Mortgage Insurance Company	$ 37,792,888	$ 12,402,374	28	1972	Old Republic International Corp.
Ticor Mortgage Insurance Company	$147,013,610	$ 54,700,268	50	1972	Southern Pacific
United Guaranty Corporation	$157,930,859	$ 89,549,662	50	1962	
Verex Assurance Inc.[2]	$180,073,647	$ 99,754,579	50	1961	Greyhound

1/ Contingency Reserve: an additional premium reserve established to protect policyholders against the effect of adverse economic cycles.

2/ Liberty Mortgage Insurance Company was acquired by Verex in 1976 (3/31)

APPENDIX 2

Schematic of a Distribution Curve
Showing Approximate Numbers of Borrowers
with Various Annual Family Incomes Obtaining
Privately Insured Loans and FHA 203(b) Loans in 1980.



FHA 203(b) (Volume 1980=221,455 Cases)

Family Income	% Borrowers
< $11,000	0.9
$11,000-$14,999	4.7
$15,000-$18,999	12.6
$19,000-$22,999	18.0
$23,000-$26,999	17.8
$27,000 and over	45.1

MIC Insured Loans (Volume 1980=376,108 Loans)

Family Income	% Borrowers
< $9,600	0.8
$ 9,600-$11,999	1.4
$12,000-$17,999	11.1
$18,000-$23,999	20.0
$24,000-$29,999	26.9
$30,000-$35,999	13.1
$36,000 and over	26.7

*FHA Average Annual Family Income 1980 = $27,296.

**The sources for the distribution are MICA and FHA Trends Reports. The schematic for the graphs are based on representative samples.

APPENDIX 3

Capacity of the Private Mortgage Insurance Industry to Write Additional Insurance

Capacity to write additional insurance determines the amount of new insurance that can be written at that point in time without adding to existing policyholders reserves. Policyholders reserves are a key estimate and using state insurance commission definitions, are made up of uncommitted contingency reserves and policyholders surplus.

State mortgage guaranty insurance laws prohibit exposure (risk) from exceeding 25 times total policyholders reserves (capital). Using this limit of 25 and multiplying it by total policyholders reserves will provide an accurate estimate of the industry's total risk writing capacity. Private mortgage insurance, however, is used where needed to insure the risk portion of the loan. Typically, policies will cover the top 20 to 25 percent of the principal balance of the loan at origination. Based on industry data, the average risk portion of all loans is approximately 22 percent. Thus, to estimate the loan insuring capacity (expressed in terms of the face amount of the loans) one would multiply the industry risk writing capacity by 4.55 (1 ÷ 0.22).

In the following table, row (1) is the aggregate Policyholders reserves. Row (2) is row (1) multiplied by the statutory limit of 25 and shows total risk writing capacity. Row (3) is the actual risk in force measured for the respective years. To obtain row (4), the excess insuring capacity at that year end point, subtract row (3) from row (2) and then multiply by 4.55. The excess insuring capacity is expressed in terms of the aggregate dollar volume of insured mortgages.

Industry Insuring Capacity (dollars in billions)

	1975	1976	1977	1978	1979	1980[3]
(1) Policyholders Reserves $	.468	.583	.753	.952	1.132	1.313
(2) Risk Writing Capacity $	11.7	14.6	18.8	23.8	28.3	32.8
(3) Actual Risk in Force[1] $	8.8	10.6	13.9	17.0	20.2	22.5
(4) Excess (Unused) Insuring Insuring Capacity $	12.6	18.0	22.4	30.9	36.8[2]	47.0

1/ Although statutory limit for the risk-to-capital ratio is 25 to 1, MICs operate more conservatively. The actual risk-to-capital ratio over the past 5 years has been approximately 18 to 1.

2/ For comparison purposes, total volume of mortgages insured by the FHA during fiscal year 1980 was $21.6 billion including single and multifamily, subsidized and unsubsidized.

3/ Based on preliminary unpublished industry data.

Although the above table shows a significant growth rate of excess capacity, it is important to note that this estimate is unbounded. The industry has substantial ability to create new insurance capacity. Capacity can be created not only by increments from operations (premium and investment income) and from the prepayment and repayment of insured loans, but importantly, can come from the infusion of new capital. This last source is especially revealing when one considers the assets of the holding company, parents of most individual mortgage insurance companies. (See appendix 1)

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESS

AUSTIN MILLER, EXECUTIVE DIRECTOR, BRIGHTWOOD DEVELOPMENT CORPORATION

Mr. BOLAND. We welcome Mr. Austin Miller, representing the National Congress for Community Economic Development.

Mr. MILLER. Thank you, Mr. Chairman.

Mr. BOLAND. He is also Executive Director of the Brightwood Development Corporation, which in my judgment does a superb job in that particular area. It is an area that needs the expertise, knowledge, and leadership that the Brightwood Development Corporation has given it. I think the North End Project indicates how successful you have been in that area. It is not an easy job either, of course.

Mr. MILLER. Mr. Chairman, I would like to thank you for the opportunity to testify before the Subcommittee to present the views of the National Congress for Community Economic Development, a national membership association for community development corporations pertaining to the continuation of the Neighborhood Self-Help Development program.

I am Executive Director of the Brightwood Development Corporation located in Springfield, Massachusetts. The community which I represent is predominantly Hispanic. The area's unemployment rate is in excess of 40 percent and has a very severe housing condition. The Brightwood Development Corporation has undertaken a comprehensive physical revitalization and economic development effort in the North End section of Springfield with the help of the Neighborhood Self-Help Development program. The project involves a number of different funding sources from the private sector, the State and the City of Springfield as well as the Federal government. The purposes of the project are to make an impact upon the housing and physical conditions of the neighborhood and to maintain an economic and racial mix in the neighborhood.

An Urban Development Action Grant made up a major portion of the project that has resulted in the substantial rehab of 76 units of market rate housing in nine apartment buildings, nine businesses along the major commercial strip in the neighborhood—all Hispanic—and the expansion of three industrial businesses at industrial sites in the neighborhood.

Another element of the project involved the substantial rehabilitation of 60 units of housing within four apartment buildings, using HUD Section 312 Rehab funds and Community Development Block Grant CDBG funds. The buildings are to be turned into a cooperative owned by the low and moderate income residents of those buildings.

Also included in the project is the committing of 110 units of section 8 housing within a ten-block area of the major commercial corridor in the neighborhood to help stabilize the area. Finally the Brightwood Development Corporation has worked with the Massachusetts Housing Finance Agency to provide below market rate mortgages for housing rehab to structures of one-four units within the same ten block area around the neighborhood's commercial

center. In total dollars invested the project comes to nearly 15 million; however, without the assistance from the Neighborhood Self-Help Development Program, I doubt a project of this complexity and magnitude would have gotten off the ground. We needed the front end costs to pull all of these elements together and package them. The Neighborhood Self-Help Development program was the source. It came in at the important point in time and provided the funding and assistance we needed in order to pull the project off.

In my travels during the past two years, meeting other neighborhood groups, I frequently found neighborhood groups that a major key to their continuing success as they were beginning to get better, has been Neighborhood Self-Help Development funds.

I am here today basically to strongly urge the Committee to support funding for the Neighborhood Self-Help program. I believe the authorization is for $9 million. Relatively speaking, it is not a huge amount of money nationwide. I think its impact for the amount of money is fairly large and that it is a cost effective program, especially since the majority of our programs work in hard inner city neighborhoods, neighborhoods which are difficult to deal with and that a strong development group within the neighborhood assists the State and Federal government and the city in redeveloping or revitalizing these neighborhoods.

Thank you, Mr. Chairman.

[The statement follows:]

Mr. Chairman, I would like to thank you for the opportunity to testify before the subcommittee to present the views of the National Congress for Community Economic Development (NCCED), a national membership association for community development corporations pertaining to the continuation of the Neighborhood Self-Help Development (NSHD) program.

I am Austin Miller, Executive Director of the Brightwood Development Corporation located in Springfield, Massachusetts. The community which I represent is predominantly Hispanic, located within Springfield's North End section. The area's unemployment rate is in excess of 40 percent and has severe housing and infrastructure conditions. The Brightwood Development Corporation has undertaken a comprehensive physical revitalization and economic development effort in the North End section of Springfield with the help of the Neighborhood Self-Help Development program. The project involves a number of different funding sources from the private sector, the state and the City of Springfield as well as the federal government. The purposes of the project are to make an impact upon the housing and physical conditions of the neighborhood and to maintain the economic and racial mix in the neighborhood.

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There are of course many other neighborhood groups across the country that have done admirable jobs at significantly improving the conditions of their neighborhoods with the assistance of the Neighborhood Self-Help program.

Neighborhood Self-Help is one of the strongest forces in America today and a major factor in turning rubble into gardens, slums into livable homes, unemployed youth into work crews, and poverty into money-making ventures.

Neighborhood Self-Help is happening in rural and urban settings, with groups composed of American Indians, Blacks, Hispanics, Whites and every possible ethnic and racial mixture.

Its leaders, strong personalities with folk-hero histories, use their know-how and carefully cultivated connections to push and direct the growth of their neighborhoods like ward healers did in the past.

The Self-Help groups have taken the physical and economic development of their communities into their own hands.

Ruby Duncan was a welfare mother, struggling to bring up seven children in the devastated west side of Las Vegas. In the 60's, she organized the women throughout the city who couldn't make ends meet into a welfare rights force and, in a march of thousands one day, shut down the gambling strip -- an action that a union leader had tried and been murdered for earlier. When she discovered that welfare didn't stop poverty, she turned to harder tactics, and founded a community development corporation. Staffed by women, Operation Life now renovates housing, runs State-wide social service programs, and is in the midst of repairing an enormous abandoned market to rent as commercial space and to house their health care center.

In the rural community of Saticoy, California, the 40year old farmworker camp known as Cabrillo Village was declared substandard by the State. Rather than repair the camp, the growers issued eviction notices to the nearly 100 village families. Protesting the eviction, the families finally pulled their resources together, bought the village, and organized it into a corporative housing corporation. This unique Self-Help group is now attacking poverty from all sides -- through housing rehabilitation, new construction, and economic ventures including a ceramic tile factory.

Orthodox Jews and Hispanics are working together in Brooklyn's Boro Park, through two neighborhood groups that joined forces to renovate and manage 177 units of housing in a two-block area, raising substantial amounts of money from the community for their work.

Borough Park represents another aspect of neighborhood ingenuity, the ability to take a specific pot of administrative money and parlay it many times over as project seed money. The Southern Brooklyn Community Organization was able to use its Self-Help Development grant to make itself eligible to receive almost $6 million in public and private housing funds. The $150,000 grant from Self Help pays about half of the money the organization needs to package loan and grant applications for over 120 units of substantially rehabilitated housing.

The United Front (once known as the Black United Front), in Cairo, Illinois, is building a granary as a joint venture with local farmers and residents and with local bank financing, because the area's low-income farmers were spending too much transporting their grain to distant storage facilities.

In Passaic, New Jersey, where rubble once filled vacant lots, a set of prefabricated, manufactured houses are being lifted into place at the remarkably low cost of $30,000 for a 3-bedroom unit, by the church-backed neighborhood group, Neighborhood Resources. This Self-Help group seems to have solved the pre-fab housing problem that large developers have not yet conquered.

In the historic Barrio of Tucson, Arizona, a small Chicano neighborhood group, only one year old, has established a factory

to manufacture adobe brick. This project creates jobs for the residents of this low-income community, bricks to renovate their houses, and a salable product that will bring money into the community. It uses historic preservation to save a community, not just a pretty building.

The Riverside/Cambridgeport Community Corporation of Cambridge, Massachusetts provides a good example of neighborhood initiative in fund-raising. The group has used a $145,000 grant from the Self Help program to buy technical advice and financial support from a coalition of area banks (a coalition that the community group convened). They attracted $666,000 and then went to their state and local governments and secured almost $100,000 more. The result will be 60 rehabilitated apartments owned and controlled by the neighborhood's low-and moderate-income residents making up the corporation.

In South Portland, Maine, and Vieques, Puerto Rico, neighborhood associations are reconstructing fishing piers, to bolster the fishing economies of their communities.

Another group has moved houses, from the path of airport expansion and highway construction, and turned them into handsome homes at low-income prices and have set up a solar manufacturing plant. Another is creating a food processing center in Georgia. In West Harlem, a community group is buying city-owned apartment houses and converting them into coop ownership. In Boston, a historic brewery is under conversion, as a commercial and industrial site.

So as you can see we feel that the Neighborhood Self-Help Development program is an essential element in the continuing effort to improve the conditions of America's declining urban and rural areas, and as such helps to improve the working relationships between neighborhood groups and the communities in which they operate.

Mr. Chairman, we thank you and the subcommittee on HUD and Independent Agencies for the opportunity to testify before you today.

SUMMARY

The $9 million Neighborhood Self-Help Development Program provides grants, technical assistance, training and information assistance to neighborhood groups. The program is targeted by the Reagan Administration for rescission of its Fiscal Year 1981 appropriation and then termination in Fiscal Year 1982.

The Neighborhood Self-Help Development Program is the one of the nation's most effective, efficient and finely targeted ways of getting low- and moderate-income people to turn their own distressed neighborhoods into better places to live and to turn these neighborhoods back into tax and business generating sources that bolster the entire nation's economy.

In Fiscal Year 1980 there were two national competitions based on strict project selection criteria. Close to 1300 self-help organizations applied and 125 groups won grants totalling $14.16 million. These grants leveraged over $206 million, including more that $106 million in private sector resources and over $100 million in other federal, state and local public sector funding. With a total project value of over $220 million, the Neighborhood Self-Help Development Program had a leverage ratio of 1:14.

These 125 groups, representing the racial and ethnic diversity of the nation, serve neighborhoods of almost 3,000,000 people. The groups will renovate 5,290 units of existing housing and build 872 new units. All these houses and apartments will use energy-saving technology. Through their economic development and commercial revitalization projects, the groups will assist 217 neighborhood businesses and either renovate or build 503,364 square feet of commercial space. The groups' projects will create 4,506 jobs, in construction and permanent positions.

Neighborhood Self-Help Development grants more than pay for themselves in money returned to the neighborhood group, to the city's tax base, and to the U.S. Treasury in income taxes paid by people previously unemployed or businesses formerly foundering. For example in Passaic, New Jersey, on a once-vacant rubble-strewn lot, Neighborhood Resoruces is putting up 22 modular housing units for sale to moderate-income families as low-cost condominiums. The project will have a total value of over $1 million and will return more than $30,000 per year to the city in property taxes. The Neighborhood Self-Help Development grant was $129,000.

To make these self-help organizations and thousands of others across the country more skilled and efficient in running self-sustaining revitalization projects, the Neighborhood Self-Help Program provides technical assistance, training, information and networking services. Close to 5,000 representatives of neighborhood organizations and 22 State Departments of Community Affairs received training in areas including fiscal management, housing rehabilitation, commercial revitalization, historic preservation and neighborhood-based technologies. Two thousand groups signed on as members of the Neighborhood Information Sharing Exchange, which provides a nationwide exchange of information, problem-solving techniques and local self-help expertise. Six thousand neighborhood groups received dozens of full-length books and Alert letters on neighborhood revitalization topics.

The Community Development Block Grant Program, proposed by the Administration as a replacement source of funding for activities now supported by the Neighborhood Self-Help Development Program, will not serve the same purpose as the national Self-Help program and will not stimulate the same leverage of private sector resources. Grants to neighborhood groups have been an eligible activity under Community Development Block Grants (CDBG) since the inception of that program in 1974. In 1977, Congress amended the Block Grant legislation to make grants to neighborhood groups a more explicit use of those funds. Notwithstanding that eligibility, the addition of a small amount (one third of one percent of the total CDBG appropriation) of federal funds for a national program to compliment the Block Grant triggered a higher quality of neighborhood revitalization projects and a higher financial leverage than locally-generated Block Grant activity. This improvement was the direct result of a national competition using strict selection criteria and of the quality control possible only through a specialized office at the national level.

The national competition also revealed that there were many neighborhood projects that had the support of mayors and city administators but which were restrained due to other restrictions in the local administartion of the Block Grant program or due to the unavailability of the type of flexible seed money provided by the Neighborhood Self-Help Grants. In addition, as a national effort, the Self-Help program was able to attract financial commitments from the insurance and banking industries which were not previously available at the local level.

Finally, the Administration proposal ignores the many rural communities served by the Neighborhood Self-Help Grants which are not eligible for CDBG assistance. 21% of the Self-Help Grants went to such rural areas.

Part A: Impact of the Neighborhood Self-Help Development Program

1. Grants Awarded:

- 1285 groups applied for assistnce, demonstrating the large number of neighborhood development organizations around the country.
- 125 grants totalling $14.16 million were awarded to neighborhood self-help development organizations in 37 states, the District of Columbia and Puerto Rico.
- The program provided grants for projects which help the truly needy: low- and moderate-income persons in distressed neighborhoods.
- Grants assisted rural (21%) as well as urban (79%) self-help development projects.

NEIGHBORHOOD SELF-HELP DEVELOPMENT PROGRAM:
Project Types and Distribution

Number of Grants	(125)		
• Urban	103	• Cycle I	70
• Rural	22	• Cycle II	55
Types of Projects			
• Housing Rehabilitation	65	• Economic Development	12
• New Housing Construction	8	• Energy	6
• Mixed Rehab and New Construction	5	• Community Development	3
• Commercial Revitalization	10	• Mixed Housing, Commercial & Economic Development	16

Regional Distribution

I - 16	IV - 14	VII - 8	X - 3
II - 26	V - 20	VIII - 0	
III - 16	VI - 8	IX - 18	

2. Leverage

One of the most signficiant aspects of the Self-Help Program has been its ability to leverage large amounts of private and other public investment for each of the projects assisted. Although the leverage ratio varies from project to project, the program has maintained a average leverage ratio of 1:14; i.e., every dollar of Self-Help funds has generated $14 of private and other public investment. Total figures for the program are as follows:

NEIGHBORHOOD SELF-HELP DEVELOPMENT PROGRAM:
Aggregate Financial Profile and Leverage Data

Total Neighborhood Self-Help Development Grants		$ 14,161,545
Private Resources:		
Self-Help Component	$ 7,802,149	
Lending Institutions	65,411,457	
Insurance Companies	509,800	
Foundations	2,441,117	
Religious Institutions	556,252	
Other	29,276,789	
Total Private Resources		$106,097,564
Public Resources:		
HUD	30,674,387	
Other Federal	32,511,407	
State	7,069,898	
Local (city and county)	30,215,525	
Total Public Resources		100,471,217
Total Project Value		220,730,326
Leverage Ratio (Neighborhood Self-Help Grants to Private and other Public funds)		1:14

3. Housing

More than 60% of the groups receiving assistance through the Self-Help Program are involved in housing rehabilitation, new housing construction, or both. The impact of the program in these areas can be summarized as follows:

• Housing units being rehabilitated	5,290
• New housing units being constructed	872
• Total housing units	6,162
• Persons expected to directly benefit from new or rehabilitated housing	30,000 (approx.)

4. Energy Conservation

All houses being constructed or rehabilitated with assistance from the Self-Help Program employ energy-saving technology, both in design and construction. Six of the funded projects focus specifically on energy conservation and will be responsible for the installation of partial or complete solar heating systems in and the total weatherization of 326 homes.

5. Commercial Revitalization

More than 10% of the Self-Help grantees are engaged in projects to revitalize their neighborhoods commercial aras. Such projects include loans and technical assistance for existing and new neighborhood businesses and the direct rehabilitation of neighborhood commerical retial, office and industrial space. Through the Self-Help Program, neighborhood groups are assisting 217 existing and new businesses and are building or renovating over 500,000 square feet of commercial space.

6. Economic Development

Through the Neighborhood Self-Help Development Program, neighborhood groups are initiating a wide range of economic development activities. These are projects which create permanent jobs, strengthen the economy of the neighborhood and expand the local tax base. A sampling of economic development projects includes:

- Rehabilitation of several fishing piers, formation of a fishing cooperative and development of facilities for the processing, storage and sale of fish.
- Renovation of a vacant historic brewery as a neighborhood-owned and managed office, commercial and light industrial complex.
- Building a facility for the packing and storage of produce for a farmers cooperative.
- Constructing a factory to manufacture kits for constructing low-cost houses utilizing passive solar design.
- Building a granary.
- Establishment and capitalization of several community-based housing construction and rehabilitation contracting companies.
- Creation of a park and playground equipment manufacturing venture.

7. Community Development

To supplement their activities in the areas of housing, commercial revitalization, energy and economic development, funded neighborhood groups are initiating a wide variety of development projects to make their neighborhoods more livable. Examples of such community development projects include:

- Development of waste-water treatment facilities for low-income rural area residents.
- Restoration and adaptive reuse of a large vacant Victorian house as a neighborhood center.
- Renovation of a vacant warehouse as a rehabilitation job training facility and social services center for neighborhood youth.
- Development of a vacant hillside as a terraced community garden for low-income neighborhood residents.
- Renovation and adaptive reuse of a vacant school building as a community center and housing for the elderly.
- Restoration of a group of historic brownstone townhouses for use as a community mental health center.

8. Jobs

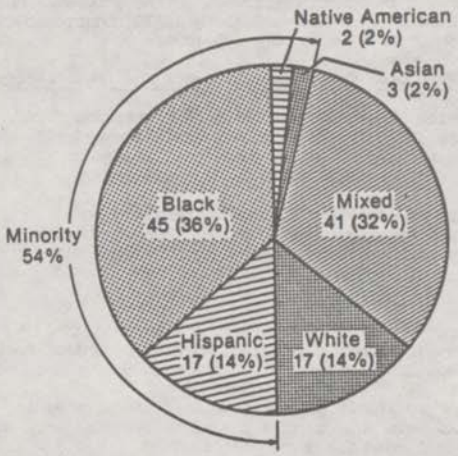
Although the Neighborhood Self-Help Development Program was not designed to be a "jobs program," a signficant amount of short-term and long-term employment has been an important by-product of the program. Projects assisted with Self-Help funds are generating 3,372 construction jobs and 1,134 permanent jobs, for a total of 4,506 jobs.

9. Focus on Locally-Initiated Development Projects and Organizations

- All projects which received grants were initiated and developed at the local level, without restrictive federal intervention or the imposition of specific formulas or participation restrictions.
- Recipient groups are locally-initiated, organized and supported, unlike organizations funded by the Neighborhood Reinvestment Corporation or the Community Services Administration which must conform to federally-designed models.
- All grants support specific development projects at the neighborhood level, rather than paying ongoing organizational operating costs.
- By carrying out profitable projects, organizations receiving Self-Help grants were able to move toward self-sufficiency and away from constant need for government funding.
- All funded projects support local government housing and community development objectives, as evidenced by backing of all projects by local mayors and other elected officials.
- Self-Help grant funds are recycled within the neighborhoods since the majority of funded projects are designed to generate income which will provide ongoing support as well as equity capital for future projects.

10. Racial/Ethnic Mix

Neighborhood Self-Help Development Grants assisted projects in a wide diversity of neighborhood types, as illustrated by the following chart:



Part B: Questions and Answers About the Neighborhood Self-Help Development Program

1. What is the Neighborhood Self-Help Development Program?

The Neighborhood Self-Help Development Program provides direct grants to neighborhoods self-help organizations in the nation's poorest urban and rural communities for use as investment capital to seed specific, self-sustaining neighborhood revitalization projects. The Self-Help Program was created by the Congress in 1978 and is administered by the U.S. Department of Housing and Urban Development.

> "We all know the importance of preserving strong urban neighborhoods. For millions of city residents their neighborhood is far more than just a location of a home or apartment. The neighborhood scale is a human scale - a place where the real spirit of community can develop ... What America's neighborhoods need is not a massive delivery of service from government, but a massive rebirth of opportunity." Excerpt from speech by Ronald Reagan during 1980 Presidential campaign.

The Neighborhood Self-Help Development Program is not a maintenance program but an opportunity program. The program provides one-time funding for concrete physical and economic development opportunities. It does not pay for the ongoing operation and maintenance for neighborhood organizations. Though the size of the program is small, its impact is great because:

- it assists at the point that makes or breaks neighborhood development projects;
- it yields the maximum leverage of private and other public sector resources; and
- it generates income for the neighborhood and puts dollars back into the city's tax base.

As an essential part of its support of self-help activities, the program gives technical assistance, training, information and networking services to neighborhood groups around the country to increase their skills and abilities to carry on revitalization projects.

2. What is the concept behind the Neighborhood Self-Help Development Program? Why is it critical to neighborhood revitalization?

The Neighborhood Self-Help Development Program is based on the concept that neighborhood self-help organizations are in an excellent position to stimulate neighborhood revitalization by preparing and implementing revitalization projects in partnership with local government and private businesses.

Grants to neighborhood self-help groups under this program are th magnet that attracts and makes possible the other components of the revitalization project. Given the small size of the appropriation for Neighborhood Self-Help Development, the program was designed to:

1) target flexible, front-end dollars to the most critical, yet difficult to support stage of project development; and

2) encourage neighborhood groups to use grant funds as equity capital and in other ways which will yield maximum leverage or private sector investment.

Neighborhood Self-Help Development grants only support the preparation stage of project development, and where necessary, a portion of the cost of project implementation. Project preparation or "packaging" includes, for example, preparation of architectural drawings, specifications and detailed cost estimates; performance of engineering studies and soil tests; and retention of legal assistance to prepare and review contracts, secure financial commitments, etc. The costs of securing these services have historically posed serious financial obstacles to neighborhood organizations. Although there are a variety of resources, both public and private, that can be used for either construction or mortgage financing once a project has been "packaged," there are seldom sources of funds available to neighborhood organizations for these front-end costs.

The Neighborhood Self-Help Development Program has also tried to address this need for front-end funding with long-range measures. Self-Help grant agreements are structures so that the grant recipient recaptures preparation costs by including them in the permanent mortgage or sale of a rehabilitated housing unit or other development projects. NSHD projects therefore become income generators and provide resources for the preparation and implementation of future development projects.

3. What is the purpose of the Neighborhood Self-Help Development Program?

With the passage of the Neighborhood Self-Help Development Act of 1978, Congress formalized its recognition that effective neighborhood revitalization activities must involve the support and active participation of neighborhood and community-based organizations. The Neighborhood Self-help Development Act of 1978 (Title VII of P.L. 95-557) has two purposes: (1) to provide grants and other forms of assistance to neighborhood organizations enabling them to undertake specific neighborhood housing, community or economic development projects which are supportive of revitalization in low- and moderate-income neighborhoods; and (2) to increase the capacity of neighborhood organizations to utilize and coordinate resources available from the public and private sectors, as well as from the neighborhood residents, in revitalizing such neighborhoods.

Because Congress sought to encourage local creativity, there are no strict definitions of what constitutes a neighborhood revitalization project. In fact, the legislation provides only a few examples of what such projects might be: neighborhood-based housing rehabilitation, creative reuse or improvements of existing housing, neighborhood commercial revitalization, recycling of vacant or underutilized facilities or business, neighborhood economic devlopment particularly as it expands employment opportunities, and energy conservation and weatherization projects.

4. What kinds of organizations are eligible for assistance?

The Act states that eligible applicants under the Neighborhood Self-Help Development Act must be voluntary nonprofit neighborhood organizations which meet the following criteria:

- The organization is broadly representative of the neighborhood in which the project will be located. This may include representation from local business, financial, governmental and nongovernmental entities;
- The organization is accountable to neighborhood residents with respect to the proposed project;
- The organization must have as one of its objectives the revitalization of the neighborhood which it represents;
- The organization must have either a proven record or demonstrable capacity to prepare and effectively implement neighborhood revitalization prjects.

5. How are projects selected for funding?

Competitive grant cycles are announced in the Federal Register and through direct notification of approximately 6000 neighbohrood organizations as well as national and regional organizations which serve neighborhood groups. Following these announcements, grant application kits are made available on request. Applications must be submitted by a fixed deadline. Applications are carefully reviewed by reading teams composed of Office of Neighborhood Self-Help Development staff, other HUD staff and representatives of other federal agencies and national organizations interested in neighborhood revitalization. Applications are scored according to the project selection criteria listed below.

6. What are the criteria used to select projects for funding?

The following criteria, articulated in the Neighborhood Self-Help Development Act, are used to determine eligibility, and to score grant applications. The competitive ranking of the highest-scoring proposals is the basis used in selecting projects for funding.

- The projects must be supportive of a conservation or revitalizations strategy for the neighborhood in which the project is located;
- the project must contain a self-help component which may include the contributed time and resources of neighbohood residents;
- the project must include a leveraging strategy involving the private sector resources which are available for support of the project;
- the project must show coordination of other possible public resources available through State, local or Federal Government;
- the project must indicate the level of involvement and active support of the neighborhood residents for the specific project, including how such support will be maintained and monitored during the development and implementaiton of the project.

7. Why is a national program needed?

A national program, as distinguished from state and local programs that support neighborhood revitalization, has the following advantages:

- A national program has the ability to attract a national support system, which supplements what neighborhood organizations are able to attract locally.
- This national support includes the use of the Office of Neighborhood Self-Help Development as a vehicle to attract resources from the private sector, including support recruited from Aetna, the Ford Foundation, and other foundations and nonprofit financial and technical assistance sources.
- The Self-Help program has directly assisted in attracting support for neighborhood projects from federal programs in the Departments of Agriculture, Labor, Commerce, Transportation, and the Community Services Administration, as well as HUD.

8. Does the program by-pass local government?

In its justification for terminating the Neighborhood Self-Help Development Program, the Administration argues that the program, in providing direct support for neighborhood groups, bypasses local units of government. In fact, the program requires the approval and encourages the involvement of local governments.

- All projects must have a letter of support from the local Mayor or other chief local elected official before they are considered for funding.

- All projects must have "certification by the unit of general local government within which the neighborhood to be assisted is located that such assistance is consistent with, and supportive of the specific objectives of that unit of government including housing and community development, economic development, and neighborhood conservation or revitalization activities being carried out by such unit." (Sec. 704(d), P.L. 95-557)

- Numerous Mayors have voiced strong support for this kind of program of one-time infusion of federal funds as a way of supporting neighborhood initiatives which complement their local housing and community development strategies.

- Mayors also support the program because it offers national support and recognition for local groups.

- Local private and public sector financial support is very strong, as demonstrated by the high leverage ratio (1:14) of Self-Help grants.

9. What has been the legislative, administrative and regulatory history of the program?

In October of 1978, the Congress authorized the Department of Housing and Urban Development to make grants and provide other forms of assistance to neighborhood organizations for the purpose of preparing and implementing neighborhood revitalization projects. The authorizing legislation was the Neighborhood Self-Help Development Act of 1978 which was passed as one of the Housing and Community Development Amendments of 1978 (P.L. 95-557). Appropriations for the program were made available in 1979.

In order to ensure that the Neighborhood Self-Help Development Program would retain the needed flexibility to serve the neighborhood revitalization needs of organizations in a variety of urban and rural settings across the country, the Department of Housing and Urban Development undertook an extensive process of soliciting formal public comments on the proposed Interim Regulations for the program. This process included the sponsoring of a series of public meetings and pre-application conferences in various cities across the country in November of 1979 with a total attendance of over 2500 participants from nonprofit organizations and local, state and federal governments.

The Department of Housing and Urban Development conducted two cycles of grant competition in FY 1980, supported by a program appropriation of $15 million. During that fiscal year HUD distributed over 13,000 application kits, received close to 1,300 completed applications, and made 125 grant awards totalling $14,161,545.

As a result of the lessons learned in the first year of grant competition, HUD prepared and published Final Regulations for the Neighborhood Self-Help Development Program in order to streamline application procedures and decrease the amount of resources required to prepare an application for funding. The effective date of the Final Regulations was to coincide with the announcement of a third cycle of grant competition. However, both the Final Regulations and grant announcement were suspended along with President Reagan's suspension of all regulations and his proposed rescission of the Neighborhood Self-Help Development Program's unobligated FY 1981 funds.

10. Will Corporate and Foundation Funding Fill the Gap Left by the Termination of the Grants Under the Neighborhood Self-Help Development Program?

Interview with Tim Saasta, Assistant Director, National Committee on Responsive Philanthropy, 810 18th Street, N.W., Washington, D.C. 20006 (Phone: 202-347-5340).

Question: Will foundations, corporations, and the United Way fund the number and types of self-help organizations which have commonly relied upon federal funding to capitalize their neighborhood revitalization efforts?

Answer : "NCRP will be pushing them to do this, but I belive that very few of them will be interested in supporting self-help, community controlled efforts to revitalize neighborhoods.

"This is because foundation funding does not change a great deal from year to year, and in the past these resources have generally gone to established, well connected organizations, rather than to newer, grass-roots self-help groups.

"The Boards of Trustees of foundations are largely conservative, white men (0.3% minorities) from the business and professional community who have very little contact with or inclination towards grass-roots self-help organizations.

"While corporation funding should make up the gap that will be left, corporate contributions don't begin to approach the amounts being cut back, and the overall total for corporate giving does not grow quickly. The total amount given last year was just over $2 billion, which is approximately one sixth of the food stamp program.

"The percentage of profits which corporations give is 1%. It has not increased in the recent past and it probably will not increase in the future.

"The United Way raised 7% more in its annual campaign last year than in the previous year, while inflation was 13%. They funded very few new organizations, and especially few grass-roots organizations.

Part C: How the Neighborhood Self-Help Development Program Works at the Local Level

1. Who are the people and what are they doing: The stories behind the groups which received FY'80 grants.

Neighborhood Self-Help is one of the strongest forces in America today and a major factor in turning rubble into gardens, slums into livable homes, unemployed youth into work crews, and poverty into money-making ventures.

Neighborhood Self-Help is happening in rural and urban settings, with groups composed of American Indians, Blacks, Hispanics, Whites and every possible ethnic and racial mixture. Its leaders, strong personalities with folk-hero histories, use their know-how and carefully cultivated connections to push and direct the growth of their neighborhoods.

The Self-Help groups have taken the physical and economic development of their communities into their own hands.

Ruby Duncan was a welfare mother, struggling to bring up seven children in the devastated west side of Las Vegas. In the 60's, she organized the women throughout the city who couldn't make ends meet into a welfare rights force and, in a march of thousands one day, shut down the gambling strip — an action that a union leader had tried and been murdered for earlier. When she discovered that welfare didn't stop poverty, she turned to harder tactics, and founded a community development corporation. Staffed by women, Operation Life now renovates housing, runs State-wide social service programs, and is in the midst of repairing an enormous abandoned market to rent as commercial space and to house their health care center.

In the rural community of Saticoy, California, the 40-year old farmworker camp known as Cabrillo Village was declared substandard by the State. Rather than repair the camp, the growers issued eviction notices to the nearly 100 village families. Protesting the eviction, the families finally pulled their resources together, bought the village, and organized it into a cooperative housing corporation. This unique Self-Help group is now attacking poverty from all sides — through housing rehabilitation, new construction, and economic ventures including a ceramic tile factory.

Orthodox Jews and Hispanics are working together in Brooklyn's Borough Park, through two neighborhood groups that joined forces to renovate and manage 177 units of housing in a two-block area, raising substantial amounts of money from the community for their work.

Borough Park represents another aspect of neighborhood ingenuity, the ability to take a specific pot of administrative money and parlay it many times over as project seed money. The Southern Brooklyn Community Organization was able to use its Self-Help Development grant to make itself eligible to receive almost $6 million in public and private housing funds. The $150,000 grant from Self-Help pays about half of the money the organization needs to package loan and grant applications for over 120 units of substantially rehabilitated housing.

The United Front (once known as the Black United Front), in Cairo, Illinois, is building a granary as a joint venture with local farmers and residents and with local bank financing, because the area's low-income farmers were spending too much transporting their grain to distant storage facilities.

In Passaic, New Jersey, where rubble once filled vacant lots, a set of prefabricated, manufactured houses are being lifted into place at the remarkably low cost of $30,000 for a 3-bedroom unit, by the church-backed neighborhood group, Neighborhood Resources. This Self-Help group seems to have solved the pre-fab housing problem that large developers have not yet conquered.

In the historic Barrio of Tucson, Arizona, a small Chicano neighborhood group, only one year old, has established a factory to manufacture adobe brick. This project creates jobs for the residents of this low-income community, bricks to renovate their houses, and a salable product that will bring money into the community. It uses historic preservation to save a community, not just a pretty building.

The Riverside/Cambridgeport Community Corporation of Cambridge, Massachusetts provides a good example of neighborhood initiative in fund-raising. The group has used a $145,000 grant from the Self-Help program to buy technical advice and financial support from a coalition of area banks (a coalition that the community group convened). They attracted $666,000 and then went to their state and local governments and secured almost $100,000 more. The result will be 60 rehabilitated apartments owned and controlled by the neighborhood's low- and moderate-income residents making up the corporation.

In South Portland, Maine, and Vieques, Puerto Rico, neighborhood associations are reconstructing fishing piers, to bolster the fishing economies of their communities.

Another group has moved houses, from the path of airport expansion and highway construction, and turned them into handsome homes at low-income prices and has set up a solar manufacturing plant. Another is creating a food processing center in Georgia. In West Harlem, a community group is buying city-owned apartment houses and converting them into coop ownership. In Boston, a historic brewery is under conversion, as a commercial and industrial site.

2. Why is the Neighborhood Self-Help Development grant critical for neighborhood revitalization projects?

The Neighborhood Self-Help Development grant is either the magnet that draws the other public and private sector money into the project, or it bridges the gap between project planning and project implementation.

Neighborhood Resources of Passaic, New Jersey is constructing 22 low-cost modular homes on vacant lots with its Self-Help grant. "There was no conceivable way we could have done the preparation and administrative part of the project without it. It was the first piece upon which everything else was dependent. The City said, we'll give you $55,000 if HUD will give you the Self-Help grant. The lenders said, we'll give you the mortgage commitments if you can develop a buildable project. Everything fell into place because of the grant." (Interview with Joseph Deming, project coordinator and attorney).

Youth, Education and Health in Soulard, St. Louis has acquired five mixed-use buildings to repair as neighborhood-owned businesses on the ground level with residential units for low-income families in the upper stories. "There was just no money around for this kind of commercial activity, and the lenders were not willing to come in first. Even with SBA money, we could not have done it." (Interview with Karen Jarvis)

Bayfront Neighborhood Action Team, in Erie, Pennsylvania is building a "Mini-Mall" for small neighborhood-owned retail shops. "It was the key thing to getting CD, State and private sector funding. For six years people in this neighborhood, a low-income neighborhood, have complained because they had no place to buy essential goods. It's an area of about 10 city blocks with 10,000 people. The Self-Help grant enabled us to get other monies to get some small businesses to locate in the area. Originally, there were 37 small businesses here but they all left several years ago and there were only a few neighborhood stores that closed at 5:00 p.m."

Tucson Barrio Association in Tucson, Arizona is establishing a factory to produce adobe bricks for housing rehabilitation and construction. "Without the Self-Help grant we would not have been able to undertake our adobe brick plant project which produces bricks and jobs, and is the basis for our economic development plan. There was no other resource available, public or private, to support the production of bricks with which we will build or restore buildings in this National Historic District." (Interview with Elena Anderson, Executive Director).

3. What money has been generated for the neighborhood and for the city's tax base by these self-help projects?

The Neighborhood Self-Help Development grants more than pay for themselves in tax dollars.

The money spent through grants to Self-Help groups under this program will make money many times over to return to the neighborhood organization, to return to the city's tax base and to return to the U.S. Treasury in income taxes paid by people previously unemployed who now have jobs. In fact, one of the factors by which organizations were selected to win a Self-Help grant, was their ability to mount a self-sustaining or income-generating project.

The exact total amount of the money generated by these grants will not be known until the evaluation of the FY 1980 program is completed.* In the meantime, a sampling of the groups indicates the money-making potential of these projects.

Housing

The housing that the Self-Help groups have rehabilitated were mostly vacant, abandoned homes or apartments that of course paid no or very little property taxes. The new housing constructed by the groups is located on once rubble-strewn vacant lots. Therefore the improvements generate housing that in some cases pays a "profit" to the groups (some groups choose to break even as part of their plan to provide low-income housing) and in all cases pays property taxes to the city.

Greater Birmingham Ministries (Alabama): This group will end up with about $10,000 profit from its housing development and $233,000 in taxable property.

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*The Urban Institute, Washington, D.C., is evaluating the FY '80 Neighborhood Self-Help Development Program.

Neighborhood Resources (Passaic, N.J): The 22 units of modular housing will be sold as condominiums to low-income people; the money returned through the sale of the units will be rolled over for another set of buildings. The assessment on the 12 units will be $270,000, so that with a tax rate of $61 per $1,000, the units will return $16,500 per year to the city.

Better Homes (Bristol, Pa.): Its project, which involves acquiring, repairing and selling 11 homes and establishing a revolving acquisition fund using the recaptured resources, will create properties worth $176,000. These properties will then pay $7,150 in county and other taxes.

Brightwood Development Corp. (Springfield, Mass.): It will syndicate its 240 units of rehab in 20 multi-family buildings, for a total price of $2,300,000, of which the organization itself will receive 25%, or $575,000 for future housing projects.

Economic Development/Commercial Revitalization.

St. Nicholas Neighborhood Preservation Corp. (Brooklyn, N.Y): Its project, the building of a commercial center on an unimproved lot, will generate $6,000 annual "profit" for the organization and $69,120 in annual taxes ($11,814 in improvements; $2,506 in property taxes; $46,800 in sales tax; and $8,000 in income taxes).

Claiborne County Resource Development Committee (Tazewell, Tenn.): Its project, the building and management of a vegetable packing and storage facility, will generate $20,320.50 in its first year and $1,200 to $2,400 in taxes per year.

Guadalupe Organization (Guadalupe, Ariz): Its construction and operation of a "Mercado" for 30 resident-owned Mexican/Indian arts and handicraft outlets will generate $1,258,440 over a five-year period, an estimate $2 or $3 million in gross annual sales; thereby providing 1% or $20,000 to $30,000 per year for the town in taxes.

Ferry Village (South Portland, Maine): Their reconstruction of a fishing pier will produce an income of $128,750 over a five-year period.

Part D. How Does the Neighborhood Self-Help Development Program Compare with the Community development Block Grant Program?

The Administration proposes to terminate the Neighborhood Self-Help Development program, and offers as one rationale the statement that activities previously supported by the Self-Help program are eligible activities under the Community Development Block Grant (CDBG) program.

The CDBG program has provided the means for a wealth of sorely needed development throughout the nation and an effective tool for exercising local control over the development process. Research shows, however, that the CDBG has limitations for neighborhood-based self-help projects, in a number of ways:

- various City and State regulations stand as obstacles
- city governments are using their block grants for public improvements and operating expenses
- rural projects will not receive funding
- CDBG does not require nor generally stimulate leveraging
- CDBG does not target its funds so directly to lower income neighborhoods.

City and State Restrictions. Among some of the restrictions found by recent research are the following:

---Cities in Pennsylvania and other states are under restrictions concerning the disposition of property. If self-helpgroups were working with CDBG funds, they would thus be limited in their ability to target the sale of their renovated housing to low-income neighborhood residents.

---Some states prohibit cities from using public funds, including CDBG, for income generating projects or "private use."

---Oklahoma's attorney general has ruled that localities cannot offer below-market-rate loans to citizens or corporations. This includes rehab loans.

---Washington State prohibits, through its constitution, the cities from lending any money to private citizens, thereby negating the use of CDBG as rehab loan money.

---New York State has ambiguous restrictions on the use of public funds as loans. Their Attorney General has ruled that cities can use CDBG as loan money, but New York City has not accepted that ruling and does not lend to individuals for housing repair purposes. Yet a common neighborhood self-help activity is the establishment of a revolving loan fund for home repairs.

---In Philadelphia there is a policy of funding only housing projects, so that economic development projects would not receive CDBG funds.

---According to an interview with Greg Bostick, project director of the Voice of the People, in Chicago:

> "For many years we were stymied because we could get money for our organization and money for rehab, but we couldn't get any money actually to acquire buildings. As administered in Chicago, the CDBG program had some funds available to acquire single-family buildings, but there are no single-family buildings in our community, they're all multi-family.
>
> "With the Neighborhood Self-Help Development grant, we have directly bought vacant abandoned buildings, ones headed for the wrecking ball, and renovated them. We've especially focused on units for large families which are otherwise in short supply in the city.
>
> "We have returned these previously worthless buildings to the tax rolls. Property taxes for an average 6-unit building run $2,000 each in Chicago now, and our renovated buildings have 40 years of useful life now.
>
> "When the rehab is finished, we refinance the buildings and roll over the money into the purchase of additional buildings."

Prevailing Uses of CDBG. CDBG money is often used for public improvements and operating expenses.

---The Community Development Director of Chesapeake City, Virginia, in advocating for a Neighborhood Self-Help Development grant for a neighborhood group in his town, said that "there is no place else for these people to be served." His town's CDBG pot had too many capital intensive capital improvement projects to even think about increasing competitors to that fund.

---Neighborhood Resources of Passaic, New Jersey explained tht "Passaic has a 150-unit project called Chestnut Street which, along with salaries for the city CD staff, eats up most of the City's allocation so that about only 10-15% of it is left for anything else."

---Baltimore's CD Director explained that only $1 million is set aside annually for innovative neighborhood projects, to be competitively applied for; most of the money goes for rehab and general support of neighborhood centers and cultural facilities.

Rural Projects.

---CDBG and other Federal dollars go only to incorporated towns in most rural areas. Mountain Womens Exchange, an Applachian neighborhood self-help group spanning Kentucky and Tennessee, states that their research shows that though 80% of the population lives outside incorporated towns, their county and the Appalachian Regional Commission fund only development within the towns.

---CDBG does not fund multi-jurisdictional rural projects in housing rehab and development.

---To obtain the Neighborhood Self-Help grant for Opportunity Center in New Hampshire, the small towns of Canaan, Enfield and Grafton all cooperated together. But they would not cooperate in applying for CDBG monies, nor would one town allow others to tap funds it received for the other towns' use.

Leveraging and Other Differences Between CDBG and Neighborhood Self-Help Program Requirements.

---The Neighborhood Self-Help program requires and accomplishes leveraging.

---There seems to be a gap between the CDBG eligible activities of planning and of implementation --that of packaging. This is the gap that the Neighborhood Self-Help grant fills so effectively.

---Purchase of equipment for construction is not CDBG eligible. But many neighborhood based construction companies are buying equipment under the Neighborhood Self-Help Development grants, to make themselves economically self-sufficient.

Technical Assistance and Brokering.

---Cities have limited experience in development projects and cannot efficiently analyze and assist neighborhood based projects of this type.

---Cities cannot spur national brokering and technical assistance. The Neighborhood Self-Help program is in business to do just that. For exapmple, it has developed multi-city demonstrations with private sector money, such as with Aetna Life Insurance Company and the Ford Foundation.

CDBG and Neighborhood Self-Help Benefits to Low- and Moderate-Income People.

HUD's analysis of the first four years of the CDBG program as contained in the report, Targeting Community Development, published by HUD in January 1980, finds that:

(p. 160-161) "...the intended benefits to the lower income groups increased from ...54 percent of allocable benefits in the first year to 62 percent in the fourth year."

(p. 155) "Since the program begain in 1974, there has been a dispute over provisions of the law that seek to direct program benefits principally to low- and moderate-income persons and families."

Another analysis of the CDBG program has been made by the Working Group for Community Development Reform. Their publication, Monitoring Community Development: A Summary of the Citizen's Evaluation of the Community Development Block Grant Program, states that:

"Benefit to Low- and Moderate-Income Residents

(p. 3) Findings reveal that in seven of the twelve cases studied, the project is in no way targeted to benefit low- and moderate-income residents. In the remaining cases, evidence of specific targeting is available but weak at best. A distinct problem in measuring benefit to low- and moderate-income residents is that HUD in practice frequently assumes that a project located in an area with low- and moderate-income residents will benefit those residents. This clearly is not often the case.

(p. 10) "After analyzing each activity, monitors frequently challenged the characterization of a number of activities as beneficial to low- and moderate-income people. Twenty-seven (75 percent) of the monitors disagreed with the assertions of their local governments. Monitors pointed out over 250 identifiable activities or projects ranging from tree planting to entire NSA projects to massive downtown projects on which they challenged the validity of local government claims.

"Three types of program activities were frequently challenged. Fifty-six percent of the monitors questioned the benefit of particular public facilities to low-income people. Likewise, 37 percent challenged certain housing rehabilitation activities, and 27 percent queried certain public service activities on the basis of benefit.

"These findings reinforce the lessons from the case studies on housing rehabilitation and economic development. They show that programs seldom are of real benefit to low- and moderate-income people unless they are carefully designed to respond to the needs of such people, and unless there are very specific and effective measures to target benefit. They also demonstrate pattern of neglect of low-income people and severely blighted neighborhoods. This raises serious legal and public policy questions. There is little evidence that local governments or HUD are meeting their obligation to respond to the needs of truly low-income people on the basis of "the nature and relative severity of their needs."

(p. 14) "Triage:

Findings: There are indications that many jurisdictions are writing off their most severely blighted and low-income neighborhoods as inappropriate areas for housing and economic development projects. HUD's regulations tend to reinforce this pattern, as they deter spending which will not produce substantial long-term impact within a "reasonable period," while they fail to stress the obligation to meet the needs of very low-income areas. The Department's site and neighborhood standards for housing have a similar effect, in that they restrict the development and rehabilitation of housing in minority neighborhoods.

(p. 14) "Displacement:

Findings: CD-funded projects contribute to the involuntary displacement of lower-income people, but local governments frequently fail to prepare anti-displacement strategies, and HUD has not been effective in requiring local governments to take measures which would prevent or minimize displacement."

In contrast to the conclusions reached in this independent evalution of the CDBG program, in the area of benefit to low- and moderate-income persons, 100% of the grants made by HUD's Neighborhood Self-Help Development Program benefit low- and moderate-income persons directly.

From the regulations governing the Office of Neighborhood Self-Help Development grant program:

3610.102 Definitions.

(a) "Low and Moderate" refers to neighborhoods in which family income does not exceed 80% of the median income for the area, as determined by HUD, with adjustments for the size of the family.

3610.104 Eligible projects and activities.

(a) Eligible projects. Any specific housing, community and economic development project which is not excluded under 3610.105 (Ineligible Activities) and which contributes to the revitalization of low- and moderate-income neighborhoods and directly benefits the residents of those neighborhoods is eligible under this program.

How Do CDBG and the Neighborhood Self-Help Development Program Compare in Administrative costs?

Additional quotes from the evaluation by the Working Group:

(p. 6) "Fifteen of the twenty housing rehabilitation programs studied were reported by the monitors to have administrative problems. In seven of these instances, HUD also reported in some way on poor performance or inadequate administration. The following issues stand out as those which are most often cited by monitors:

(p. 6) "In six of the programs, specific complaints were cited about high administrative costs. In one program, an auditor-general's report indicated that for every $3.00 spent on rehabilitation, $2.00 was spent on administration (not including overall central administrative costs). In another instance, a program was criticized early in its development for having $2.64 of administrative costs for every $1.00 of rehabilitation costs. Changes were made in the program, but the monitor estimates a current ratio of $5.46 of administrative costs for every $1.00 of rehabilitation."

The neighborhood development organizations funded by the Neighborhood Self-Help Development grant program typically have very low administrative costs, and the Neighborhood Self-Help grant pays only those administrative costs which are directly related to the implementation of the funded projects.

From the regulations governing the Neighborhood Self-Help Development grant program:

3610.105 Ineligible activities.

The following activities are ineligible for funding under this program:

(e) Operating and/or administrative costs of a community group which are not directly associated with the specific project being proposed.

How Do CDBG and the Neighborhood Self-Help Development Program Compare in Stimulating Employement?

From the Working Group evaluation of CDBG:

(p. 3) "Findings in this area show that job creation and retention are low priorities for most jurisdictions. Job creation and retention is a stated goal in only five of the twelve cases, and only one site targeted jobs to residents of low- and moderate-income. Monitors found no examples of projects where the jurisdiction included specific numbers of new or retained jobs projected for low- and moderate-income residents. Monitors found no evidence of contractual requirements upon developers, retailers, or industries who would benefit from the project concerning the hiring of unemployed or underemployed or other low- and moderate-income persons for jobs likely to result from the project. Finally, none of the projects were linked with specific employment and training efforts (such as CETA) which could help ensure the identification, hiring, training, and advancement of local unemployed and lower income people in the projects."

Although the Neighborhood Self-Help Development program was not designed to be a "jobs program," a significant amount of short-term and long-term employment has been an important by-product of the program. Projects assisted with Self-Help funds are generating 3,327 construction jobs and 1,134 permanent jobs, for a total of 4,506 jobs targeted in low- and moderate-income neighborhoods.

Part E: Capacity Building for Neighborhood Self-Help Development

> "Critical to any neighborhood revitalization program is the availability of essential information, expertise, and know-how. The federal government should play an important role in making that information available on a useful basis to neighborhood organizations throughout the country...It is especially important that neighborhood improvement groups achieve the knowledge necessary to act effectively in their neighborhood's interest when public decisions are made at the local level."
>
> —Neighborhood Policy Recommendation No. 16, Report of the Neighborhood Advisory Group to President-elect Ronald Reagan, 11/16/80.

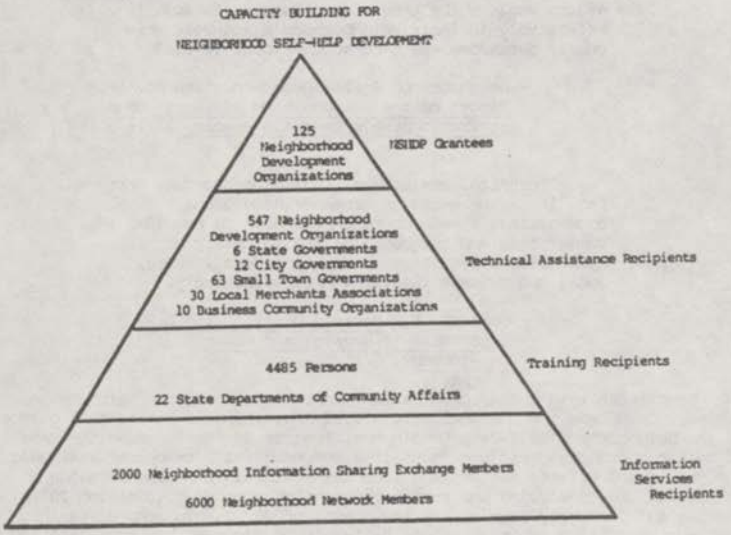
> "Technical assistance, including programs that facilitate the exchange of experience among communities, should be made available to provide communities and neighborhood and voluntary associations assistance in using federal, state, local and private resources more effectively."
>
> —Goal IV. F., Revised Goals of the U.S. Department of Housing and Urban Development, 5/15/80.

Consistent with the recommendation of President Reagan's Neighborhood Advisory Group and the HUD Goal articulated above, one of the central purposes of the Neighborhood Self-Help Development Program is "to increase the capacity of neighborhood organizations to utilize and coordinate resources available from the public and private sectors and from the residents and neighborhoods themselves, in conserving and revitalizing neighborhoods." (Section 702(b)(2), Housing and Community Development Amendments of 1978). To accomplish this purpose, the Office of Neighborhood Self-Help Development has mobilized and made available to neighborhood groups a vast array of technical assistance and training resources, has created a national Neighborhood Information Sharing Exchange, and has published and disseminated practical "how-to" publications covering a wide range of neighborhood revitalization techniques.

Thus, from its inception, the Neighborhood Self-Help Development Program has been much more than a grant program, and its impact has extended far beyond the 125 projects which have received direct funding. Over 500 neighborhood organizations, in addition to the grantees, have received direct intensive technical assistance with project and organizational development. To expand their capacity to work effectively with neighborhood organizations on revitalization projects, technical assistance was also given to state and local governments and to local merchants associations and business community

organizations. Over 4,300 persons participated in training workshops sponsored by the Office of Neighborhood Self-Help Development, and representatives of 22 State Departments of Community Affairs received training on ways to set up neighborhood revitalization support programs at the state level. The Office's broadest outreach has been through its information and networking services: over 2000 neighborhood organizations have joined the Neighborhood Information Sharing Exchange and over 6000 neighborhood orgnizations and individuals receive periodic "Alert Letters" and technical publications.

The extent and impact of the capacity building activities of the Office of Neighborhood Self-Help Development is illustrated by the chart below:



A complete listing of the technical assistance, training, information and networking services is provided in Appendix II. Most of these activities were funded directly by the Office of Neighborhood Self-Help Development. However, many of the technical assistance and training activities, once initiated by ONSHD have received substantial funding from other sources, including the Secretary of HUD's Discretionary Fund; other federal agencies, such as the Departments of Commerce, Agriculture, Transportation, and Interior; and the private sector, such as the Ford and C.S. Mott Foundations, Aetna Life and Casualty Company and the Local Initiatives Service Corporation (LISC). Thus, in its capacity building activities, as in its grant program, the Office of Neighborhoood Self-Help Development has succeeded in multiplying and extending the effectiveness of the limited resources available from the Neighborhood Self-Help Development Program.

This "multiplier effect" has also been manifested at the local level where neighborhood groups, by virtue of the revitalization skills and expertise secured through ONSHD-funded information, training and technical assistance services, have initiated, secured funding for and implemented projects which previously would have been beyond their capacity.

1. Technical Assistance Services

The Office of Neighborhood Self-Help Development, through its own staff and a wide variety of national, regional and local contractors, provides direct intensive assistance to neighborhood development organizations and other entities engaged in neighborhood revitalization to help them:

A) plan and package revitalization programs and projects;

B) identify and secure appropriate private and public funding resources; and

C) improve their organizations' financial, staff and program management capacity.

The following examples illustrate how the technical assistance component of the Neighborhood Self-Help Develoment Program has worked:

- The Pratt Center for Community and Environmental Development in Brooklyn, New York is providing direct architectural assistance to 15 neighborhood groups in New York City involved in housing rehabilitation. These services include the development of plans and specifications for 54 buildings comprising 710 units. As a direct result of this assistance, 8 buildings with 212 dwelling units are currently under construction.

- A $100,000 cooperative agreement with the National Training and Information Center in Chicago to provide technical assistance to six neighborhood organizations in New York, Philadelphia, Cleveland and Chicago has leveraged a $250,000 grant from Aetna Life and Casualty Company to supplement the HUD funds. The housing rehabilitation projects which this cooperative agreement will assist will have a total value of $4.6 million. Aetna has also agreed to finance most of the permanent mortgages for the rehabilitated houses.

- The Mexican American Research Center (MARC) in Austin, Texas is providing technical assistance, as well as training and information services, to groups and communities involved in rural housing and economic development. For example, MARC provided packaging assistance to the Azteca Economic Development Corporation in Dimmit, Texas, which was instrumental in helping that organization secure a $1,850,000 loan/grant commitment from the Farmers Home Administration for the rehabilitation of 192 units of farmworker housing.

- The Support Center in Washington, D.C. is helping 15 neighborhood development organizations improve their bookkeeping, accounting and financial management capabilities. This assistance will enable these neighborhood groups to be more effective in securing and managing grants and private sector financial resources for their revitalization projects.

2. Training Services

Training includes workshops, seminars, conferences and other activities designed to expand the knowlege and skills of neighborhood development organizations and thereby improve their abilities to plan and implement revitalization projects. Training activities funded through the Self-Help Program have involved more than 4,300 persons, representing almost as many neighborhood organizations. The following examples illustrate how this training has worked:

- The Pennsylvania Department of Community Affairs, which administers a model state-wide neighborhood development support and technical assistance program, trained representatives of 22 other State Community Affairs and Community Development Departments on how to set up similar programs in their own states.

- The National Trust for Historic Preservation is training 150 neighborhood and city-wide organizations on how to use historic preservation techniques to conserve and revitalize neighborhoods. The Trust is making a special effort to reach communities which are not currently benefitting from the programs of HUD or the Trust and to show how neighborhoods can be revitalized without displacing low- and moderate-income residents.

- The Civic Action Institute has trained over 700 persons from all parts of the country on how to use "appropriate technology" at the neighborhood level. This training has included waste recycling, solar heating installation, community land banking and land trusts, neighborhood food programs, housing rehabilitation, and forming housing cooperatives.

3. Information and Networking Services

The information and networking services of the Office of Neighborhood Self-Help Development reach the greatest number of neighborhood organizations. These services, generally geared to the information needs of new and evolving neighborhood groups, include the creation of the national Neighborhood Information Sharing Exchange and the publication of periodic "Alert Letters" and technical books on neighborhood revitalization topics. The following is a summary of ONSHD's information and networking services and examples of how these have met the needs of neighborhood organizations.

A. Neighborhood Information Sharing Exchange (NISE)

NISE was established in 1979 to link neighborhood development organizations with one another to share their expertise and experiences. NISE staff systematically collects models of effective community-based self-help revitalization techniques from neighborhood groups and technical assistance providers in rural as well as urban settings. When any one of the more than 2,000 member neighborhood organizations contacts NISE with a specific or technical question about project planning, packaging or implementation, NISE draws upon its data base to put that group in touch with other neighborhood groups which have successfully completed comparable projects. NISE staff is responsible for follow-up to ensure that the information exchange among member groups is continuous and effective.

- NUV-1, a neighborhood development group working in Washington, D.C.'s Bloomingdale, Eckington and Edgewood neighborhoods, called NISE with questions about how to use "sweat equity" for housing rehabilitation. Through NISE, the group was put in touch with Interfaith Adopt-a-Building, an organization with a solid track record in multi-unit sweat-equity rehab in New York City's Lower East Side. NUV-1 subsequently visited Interfaith, learned their techniques and is now applying these principles in the rehabilitation and adaptive reuse of a vacant surplus elementary school.

B. Alert Letters

Periodic "Alert Letters" cover topice of vital and timely interest to neighborhood self-help organizations. Topics of recent "Alert Letters" include: Urban Homesteading; Energy Conservation; Urban Development Action Grants; Neighborhood Revitalization through the Community Development Block Grant Program; Anti-Displacement Strategies; and Programs of the National Science Foundation, the National Center for Appropriate Technology and the Campaign for Human Development. "Alert Letters" are sent to more than 6,000 neighborhood organizations, city governments and individuals who have asked to be put on the ONSHD mailing list.

- One "Alert Letter" informed neighborhood organizations about the Neighborhood Statistics Program of the U.S. Bureau of the Census. Many neighborhood organizations used this information to persuade their local governments to participate in this program, which will provide participating cities important demographic data by neighborhoods, in addition to the data traditionally reported by Census Tract. This new data will be extremely useful for neighborhood planning and project development.

C. Technical Publications

Publications of the Office of Neighborhood Self-Help Development cover a wide range of self-help strategies. The majority of these publications are "how-to" manuals and technical guidebooks, containing practical information which neighborhood organizations can use for designing and

managing programs and projects at the local level. The topics for most of these publications were chosen as the basis of a national survey of the information needs of neighborhood organizations. Publications of general interest are sent to all organizations on the neighborhood network mailing list; more specialized publications are sent on request and/or are available for sale from the Government Printing Office.

- The Neighborhood Planning Primer was published to lay out in a clear and straightforward manner for neighborhood groups the essential steps involved in neighborhood planning. The Primer shows how to identify and research issues; how to formulate goals, objectives and strategies; how to collect, analyze and graphically present data; and how to create and implement neighborhood plans. In addition to being used by neighborhood organizations in all parts of the country, this book is being used extensively by the New York State Office of Urban Revitalization, the Hamilton County (Ohio) Regional Planning Commission and the City of Allentown, Pennsylvania in their neighborhood planning work and technical assistance to neighborhood organizations.

Mr. BOLAND. Thank you very much.

Approximately $24 million has been appropriated in this program, of which about $2 million had already been spent by the end of fiscal year 1980. Those funds assisted 116 neighborhoods throughout the United States.

The Subcommittee considered the proposed rescission in the Self-Help program along with many other rescissions and deferrals—the Bill will be on the floor next week. As you know better than I, the Administration is recommending the elimination of the Neighborhood Self-Help Development program.

The Committee accepted the President's proposal for this program. The problem, Austin, is that we had to make some very serious tradeoffs in this Subcommittee. One of them, of course, was the National Consumer Cooperative Bank that was targeted for a rescission in 1981 and elimination in 1982. The Members of this Committee placed a high priority on the Bank, and did not approve the rescissions proposed for 1981, in order to continue the National Consumer Cooperative Bank.

Another area which you know well is the Section 312 Rehabilitation Loan program that is going to be wrapped into the Community Development Block Grant program in 1982. The Committee did accept the proposed rescission of $110 million in this program, but unlike the Administration, decided to keep the program alive in 1981 through repayments.

With all of the HUD programs which potentially may provide you with support, why can't you get along without the Self-Help Program? If a particular neighborhood council is doing as well as the Brightwood Development Corporation, why couldn't you be assured of funding by the local people, especially since your track record is so good?

Mr. MILLER. Well, it is very difficult.

We do, in fact, enjoy some support by the Community Development Block Grant funds. We have enjoyed from 20 to 35 thousand dollars a year in support from the city. I think what we find is that the demands upon City Hall between all of its neighborhoods and downtown are very, very strong, and that it has to, because of the political requirements and so forth, hand out pieces of money everywhere and that there is no piece anywhere large enough to see a development through.

I think it was the Neighborhood Self-Help money. They gave us $123,000 for a year and a half period that enabled us to bring the pieces together.

I think, for instance, to do development in the South End, $20,000 wouldn't do it because you have to create a development corporation with the capability to identify the resources, deal with the various agencies, and private institutions, and that takes some effort.

City Hall, because of its limited sources of funds, decreasing sorts of funds——

Mr. BOLAND. Then perhaps City Hall should develop clear priorities with its CDBG monies. I can understand your concern—there is going to be great competition if everything is to be thrown into CDBG as the Administration proposes. I think that the local people

will have to make some judgments on the merits of the local programs.

The problem is that the average grant in this area runs about $126,000. Since there are thousands of neighborhoods across the United States, if you tried to provide funds to each of them, you would end up with a very sizable amount of money.

Again it would seem to me that local communities should have a great inclination to maintain programs which benefit neighborhoods, such as yours with CDBG monies.

Mr. MILLER. We would hope so.

Mr. BOLAND. Mr. Green?

Mr. GREEN. Just to follow up on that, I think the Administration made a decision which we went along with in favor of the Neighborhood Reinvestment Corporation as the vehicle for neighborhood level activity.

I guess it does have the attraction of having the lending institutions as part of the team. The Administration did ask for an increase. I don't know if you have had any dealings with them.

Mr. MILLER. Yes, I have had some.

Mr. BOLAND. What is your interface with them? I know it hasn't done much in that area, but it has up in the McKnight Avenue area.

Mr. MILLER. We had some dealings with them basically. I guess my dealings have indicated that they have a project currently under way in Springfield and they didn't wish to broaden that base, for instance, to our neighborhood. It is understandable, given the number of neighborhoods in the country that need assistance.

Mr. BOLAND. Thank you very much. We do understand your concern.

As Mr. Green said, there are other programs where there is a possibility of future funding, although the competition for those funds will be severe. I am sure that will present a problem for the local people.

Again, may I say that programs which have earned a good track record deserve the close scrutiny of the local people to be eligible for much sought after CDBG and other funds.

As you know, I am familiar with the North End project. I don't believe the job could have been done in that area without the leadership of the Brightwood Development Corporation.

Mr. MILLER. And the involvement by the neighborhood. I think that is extremely important.

Mr. BOLAND. That's true. Thank you very much. We are glad to have had you with us.

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. BROOKE HINDLE, PRESIDENT, SOCIETY FOR THE HISTORY OF TECHNOLOGY

Mr. BOLAND. Dr. Brooke Hindle, President of the Society for the History of Technology.

Dr. HINDLE. Thank you.

Mr. BOLAND. You are concerned with the National Science Foundation?

Dr. HINDLE. Yes, sir.

Mr. Chairman, Mr. Green, I thank the Committee for this opportunity to speak to the importance of the support extended to the field of the history of technology by the National Science Foundation.

I would like first to correct an error in one of the figures at the bottom of the first page which I believe you have. I reduced more than I intended to. The fiscal year 1982 budget projected figure for this program is $500,000, not $400,000.

Mr. BOLAND. That is nice—you won't need as much money then.

Dr. HINDLE. It is not quite as bad as I made it appear.

The history of technology offers the perspective of time upon our understanding of engineering, industrialization, and even military defense today. This dimension of wisdom is fundamental in seeking to comprehend our present world which depends so heavily upon technology. Those especially who make policy decisions require some sense of the technological process and how technological change has taken place in history, bringing us to the man-made world in which we presently live.

Today the history of technology is a growing academic field; many colleges and universities offer instruction and at least eighteen offer advanced degree work. The primary institution serving the entire field is the Society for the History of Technology, founded in 1958, which publishes the quarterly journal, Technology and Culture. The history of technology has many and overlapping concerns with its sister and older field, the history of science. NSF support was fundamental in bringing that field to its present maturity. NSF is currently playing the same role in aiding the development of effectiveness and rigor in the history of technology.

Fiscal year 1980 grants by NSF supported studies in several areas that are just beginning to yield to serious historical inquiry. Among them was research in the history of computers, of the rise of concrete construction, of coal hydrogenation, and of a case study in technology and social change.

Particular attention might be called to the support extended by NSF to the publication of fundamental sources which will extend greatly the varieties of effective research. These include, in science, the Charles Darwin papers; in mathematics and philosophy, the Charles S. Peirce papers; and in technology, the Benjamin Henry Latrobe papers, the William Thornton papers, and Technical Americana, a checklist of 6,000 early American publications on technology.

Let me cite a case of expected support from NSF that may now be in jeopardy. The papers of Thomas A. Edison are far more numerous than any of the above and far more important to our comprehension of the technical world than any other papers project. This effort was launched without asking help from the national foundations, but with some reason to hope that NSF would help—once it had been set on its own feet. If this proves impossible, the project will at the least be slowed and crippled.

Mr. BOLAND. Why don't you get support from the Edison Institute?

Dr. HINDLE. We have appealed to them. We have had continuing promises from them. We have nothing in hand.

Mr. BOLAND. That happens all the time.

Dr. HINDLE. A sharp reduction of NSF aid will similarly slow and cripple other efforts in the history of technology and, parenthetically, in the history of science as well. The justification for NSF support is the belief that the improved general understanding offered by these fields is important to the Nation. Only very occasionally is historically-derived information directly applicable to new technologies, although it does happen. For example, a newly designed, coal-burning steam locomotive is based in significant measure upon the careful study of long past successes and failures.

History, in the largest sense, though, is exceedingly important to our country. It is nothing less than the memory of society, which a great Nation requires.

Even in the present context of reducing government expenditures not related to economic health and industrial productivity, I believe that the history of technology calls for support. Only with this perspective can we move into the future with that grasp of continuity that helps us to identify the most promising courses ahead.

[The information follows:]

Grants in the History of Technology
(FY 1980)
in the History and Philosophy of Science Program
of the Division of Social and Economic Science, NSF

Proposal Number	Principal Investigator, Institution, State	Project Title	Effective Date	Duration (months)	Total Award
SES-7927125	Billington, David P. Princeton University New Jersey	Robert Maillart and the Origin of Modern Concrete Structures	7/1/80	36	$32,000
SES-8040729 7912933 01	Constant, Edward W. Carnegie-Mellon Univ. Pennsylvania	Science, Ideology, and Oil: The Evolution of Public Policy in Texas, 1919-1956	9/1/80	12	27,655
SES-8007899	Ferguson, Eugene S. Univ. of Delaware Delaware	Doctoral Dissertation Research in History of Science	4/1/80	12	5,750
SES-7926740	Harris, Charles M. American Institute of Architects Foundation District of Columbia	Scientific and Technological Aspects of the Papers of William Thornton	2/1/80	16	9.693
SES-8002005	Layton, Edwin T. Univ. of Minnesota Minnesota	Doctoral Dissertation Research in History and Philosophy of Science	2/15/80	12	5,000
SES-8009535	Mazzaoui, Maureen F. Univ. of Wisconsin, Madison Wisconsin	Technology and Social Change: The Response of the Woolen Industry to Social, Cultural, and Economic Developments	7/1/80	14	9,688
SES-8040725 7906589 01	Needham, Joseph East Asian History of Science, Inc. Illinois	Science and Civilization in China	9/1/80	12	42,500
SES-7919675	Rink, Evald; Gilchrist, David T.; Williams, Richmond D. Eleutherian Mills-Hagley Foundation Delaware	Publication: Technical Americana	5/1/80	12	9,500

Proposal Number	Principal Investigator, Institution, State	Project Title	Effective Date	Duration (months)	Total Award
SES-7918525	Stern, Nancy Hofstra University New York	John Von Neumann and IAS Computers	6/15/80	12	$23,269
SES-7926748	Stranges, Anthony N. Texas A+M University Texas	A History of High-Pressure Coal Hydrogenation in Germany: 1910-1945	6/15/80	24	17,200
SES-7921473	Zupko, Ronald E. Marquette University Wisconsin	Historical Metrology: The Evolution of the Science of Weights and Measures	6/1/80	12	12,190

Mr. BOLAND. Thank you very much.

I think your statement that history is in the largest sense exceedingly important to our country is true—it is nothing less than the memory of our society.

The Smithsonian fulfills that function pretty well. I know you work with the Smithsonian.

Dr. HINDLE. Yes, sir.

Mr. BOLAND. Mr. Green?

Mr. GREEN. No questions. Thank you, Mr. Chairman.

Mr. BOLAND. Thank you, Dr. Hindle.

[CLERK'S NOTE.—Dr. Hindle submitted additional information, which is on file with the Committee.]

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESS

CHARLES L. EDSON, COUNSEL TO NATIONAL LEASED HOUSING ASSOCIATION

Mr. BOLAND. Mr. Charles L. Edson, Counsel to the National Leased Housing Association.

You wish to testify on the HUD budget?

Mr. EDSON. Yes, sir.

Mr. Chairman, Mr. Green, it is a pleasure to make our annual appearance here today on behalf of the Section 8 program.

Mr. BOLAND. Have your visits here been helpful?

Mr. EDSON. The reception is getting better every year.

Mr. BOLAND. Of course it is.

Mr. EDSON. It is more pleasant every year.

Mr. BOLAND. This year presents different fiscal conditions anyway.

Mr. EDSON. We have a different pitch. It is a very, very rough year this year, as we know.

As our statement says—and I would like the right to include the statement in full in the record and just talk briefly, if I may, from it.

Mr. BOLAND. Don't tell me you are going to ask us to lift the restriction against limited dividends sponsored under the Section 202 programs—that is one of our favorites. You can skip that issue and proceed with the others.

Mr. EDSON. I will go on to other matters, more pleasant. I will touch on that.

Maybe you would like to do $3.6 billion in tandem which is the request of the Administration that we support. Our only problem with that is the authorizing committee has only requested $2.0 billion. I believe there is room for only $2 billion in the budget resolutions.

The theory of the $2 billion level advocated by the Budget Committee and the Banking Committee is that tandem will be an ongoing program and not end in fiscal year 1982, as the Administration would want. Probably the worst of all possible worlds is to authorize only $2 billion in tandem for 1982 and have it end there

because you have a huge amount of pipeline projects which we cannot see being funded in any other way besides tandem.

In other words, we have the Section 8 authorizations out no matter what happens to the program in the future. I think that we owe a commitment to those who have gone this far to get those financed.

Mr. BOLAND. Is that the Administration's intention—to buy out the pipeline?

Mr. EDSON. Yes, sir. Buy out the pipeline. Yet that has been reduced from $3.6 to $2 billion. I think we have good-intentioned people really getting a bad deal. They are dropping it to $2 billion on the theory you will have tandem around in 1983 or 1984. I am not so sure of that.

Really, to buy out the pipeline, somewhere you would need at least $3.6 billion. What year it comes in, I don't know. Just so it comes collectively over the next couple of years. That is, I think, a major problem. As I say, the Section 8 program, we think, has been a good program, a proud program. With all the bad things being said about it, I think the record should be clear the amount of units it has done. What your own survey staff found last year, that good housing is being built for a reasonable price, and, as I say, it is a strong program that needs a kind word said about it because it is receiving very, very few these days.

There is a matter that I think was Appropriation Act language last year. That was to prevent the bunching up of funding in the last quarter of the year. You limit to 30 percent the amount of units that can be funded in the last quarter.

Mr. BOLAND. Is that bad?

Mr. EDSON. It is not generally bad. Indeed—generally I think it is salutary.

Your report pointed out the need for it. This year, with the change in Administration, with the rescission, with maybe the adoption of a financing adjustment factor which will take dollars otherwise needed for new programs, HUD literally does not know where it is and really needs a waiver which OMB can give and maybe language in the report could be very, very helpful.

On the Section 202 program, maybe if I can just say a word for any Member of the Committee who was not here for the previous discussion. We would limit it to nonprofits. The limited dividend would not be applicable. You would have to have a limited partnership where the nonprofit is an active general partner under the language we suggest so it is not opening it up to profit making at all. Only if a nonprofit wants to bring in a partner. We have been requesting this not from our syndicator members, but from our nonprofit members, including—I know—some in New York who can't make 202 work without the proceeds of syndication. They have been the ones compelling us to do it. Nonprofits, as I say, not the syndicators.

I know you are open-minded and at least would take a look at our very narrow modest proposal and some suggested language we attached this year. If nothing else, I have kept my promise to be brief. That is the sum of our presentation.

[The statement follows:]

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TESTIMONY OF

CHARLES L. EDSON, LANE AND EDSON, P.C.
COUNSEL
NATIONAL LEASED HOUSING ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON HUD-INDEPENDENT AGENCIES
HOUSE APPROPRIATIONS COMMITTEE

May 7, 1981

Mr. Chairman and Members of the Committee:

My name is Charles L. Edson of the Washington, D.C. law firm of Lane and Edson, P.C. Our firm serves as General Counsel for the National Leased Housing Association. The National Leased Housing Association has nearly 700 member organizations representing all facets of the public and private sector involved in the Section 8 program. As broad as we are in membership, we are as narrow in focus -- strictly on the Section 8 program.

I am here today to urge this Committee to act on three specific concerns: first, to support and maintain a level of funding for assisted housing in fiscal year 1982 equal to that recommended by the House Banking Committee; second, to ask for your support in obtaining a waiver of the year-end spending limitations; and third, to remove the present restrictions against limited dividends as sponsors under the Section 202 program.

Adequate Funding

We are here today to praise Section 8 -- not to bury it. The program has had a proud record in its seven years of existence. At the end of this fiscal year, nearly 1.3 million American families will be living in Section 8 assisted housing. Accordingly, Section 8 will have housed in seven years as many families as have the public housing programs in forty-four.

Section 8 is more than mere numbers, it represents quality housing as well. As stated by the General Accounting Office in its recent report on the Section 8 program:

> "Housing being built for the needy under the Section 8 New Construction Program is of very good quality and, considering the quality, costs are reasonable."

Generally, similar conclusions were reached in the excellent Surveys and Investigations Staff report commissioned by this Committee last year.

Accordingly, we urge that Congress move with caution before abandoning what has proven to be a very effective housing program. We urge this Committee to support the recommendation of the House Banking Committee to the House Budget Committee -- to provide a $28.627 billion budget authority figure for assisted housing to fund approximately 250,000 units in FY '82 assuming latitude is available for this funding level in the budget resolution. In addition, we strongly support the Administration's request of $3.6 billion in tandem funding -- as a minimum. All indications are that more funding is needed to meet the goal of "buying out the pipeline."

According to HUD figures, the 1982 Tandem program is expected to finance about 92,000 units, of which approximately 34,000 will be subsidized under Section 8. The Tandem buy out however will hardly make a dent in the total pipeline of Section 8 reservations. 147,117 Section 8 new construction and substantial rehabilitation reservations were outstanding as of March 31. Excluding the units expected to be financed through the 1982 Tandem funding, along with those financed through Section 515 and Section 202, 74,000 units are left, many of which do not have financing commitments. This figure includes almost 25,000 state agency units.

We face a problem due to the end-of-the-year spending limits imposed on HUD in the fiscal 1981 Appropriations Act. The Act limits obligations to no more than 30 percent of total funding in the fourth quarter of the fiscal year and to no more than 15 percent during any one month in the last quarter. As of March 31, HUD has reserved fiscal 1981 contract authority for only 19,520 units on a gross basis and 10,055 units on a net basis (reflecting cancellations of prior reservations.)

With the fourth quarter beginning on July 1, and assuming that the Reagan Administration's proposed rescission of $5.1 billion is approved, the budget will still call for 210,000 unit reservations.

Although the 30 percent rule may be salutary policy generally, its imposition this year would cause certain hardships. Because of the change in administration, and the proposed rescission, HUD has been making virtually no program reservations and thus would not be in a position to reserve 70 percent of its authority by June 30.

For this reason, it is important that the Office of Management and Budget waive the prohibition against utilizing more than 30 percent of the Section 8 funds in the last quarter. We request that this Committee in its report suggest to OMB the appropriateness of such a waiver at this time.

Section 202 Program

Under Section 202, limited dividend entities are eligible sponsors. However, each year, by appropriations act language, participation has been limited to non-profit entities receiving 100 percent financing under Section 202. The National Leased Housing Association urges that this restriction be eliminated to permit sponsorship of a Section 202 project by a limited dividend when a non-profit entity participates as a general partner. Broadening the category of sponsors will mean better housing sooner for the beneficiaries of the program and will also provide new opportunities for non-profit entities to enhance their participation in the program.

There are many reasons why the present restriction against limited dividends should be removed. The advantages of such partnerships are many to the non-profit:

First, opening up the program to limited dividend entities would permit non-profits to combine with profit-motivated developers to form limited partnerships to own the projects. This combination is quite frequent under other federal housing programs but is precluded under Section 202. Many federal and state housing projects began with non-profit sponsors and are now being "converted" to limited dividend sponsorship. Such arrangements take many forms; in some cases, the profit-motivated entity serves as a co-general partner along with the non-profit entity; together they sell limited partnership interests in the project to outside investors and divide the proceeds of sale. In other cases, the non-profit's share of the sales proceeds varies by project; however, it is not unusual for a non-profit to receive from 2-3% of the mortgage, e.g. $60,000 to $90,000 on a project with a $3,000,000 mortgage. Sometimes the non-profit becomes the project manager and/or receives fees for various services rendered through the project's life. The parties also agree as to who will receive what on the sale or refinancing of the project - the residual value.

This arrangement is highly advantageous to the non-profit by producing needed cash for the many expenses involved in planning and operating a low and moderate income housing project. Often, non-profits need such seed money in excess of that available through Section 106 loans. Further the non-profit might desire facilities included in the project that are not financable out of the Section 202 loan; its share of equity proceeds could be used as an equity escrow to fund increased operating expenses in the early years of the project.

Second, the expertise of the private partner can often be very helpful to the nonprofit in assuring that the project gets off to an expeditious start. Many strong supporters of the Section 202 program are concerned about the long time it takes to get a Section 202 project off the ground. In some cases, this has been due to difficulties encountered by nonprofits in locating a site, putting together the development team and the like. Participation by a private partner in the venture might be very helpful in expediting these steps. Thus, the net result could be that the intended beneficiaries of the program - needy elderly tenants - will receive housing sooner.

The National Leased Housing Association includes in its membership non-profit Section 202 sponsors who strongly favor the proposed change which would permit them to combine with profit-motivated entities in a limited dividend venture. It should be pointed out that HUD would designate a non-profit sponsor for each project as it does now. The designated non-profit would then choose or not choose to become involved in the partnership arrangement described above. Thus, in no way do we seek to eliminate or lessen the involvement of concerned non-profit organizations in providing needed elderly housing.

We append to our testimony a suggested change to the language contained in the FY 1981 appropriations bill to make this joint venture possible.

Thank you very much for your time today.

Attachment

Urban Development Act of 1965 (12 U.S.C. 1701s), is reduced in fiscal year 1981 by not more than $30,000,000 in uncommitted balances of authorizations provided for this purpose in Appropriation Acts.

HOUSING PAYMENTS

For the payment of annual contributions, not otherwise provided for, in accordance with section 5 of the United States Housing Act of 1937, as amended (42 U.S.C. 1437c); for payments authorized by title IV of the Housing Act of 1950, as amended (12 U.S.C. 1749 et seq.); for rent supplement payments authorized by section 101 of the Housing and Urban Development Act of 1965, as amended (12 U.S.C. 1701s); and for payments as authorized by sections 235 and 236 of the National Housing Act, as amended (12 U.S.C. 1715z, 1715z–1), $7,127,000,000.

HOUSING FOR THE ELDERLY OR HANDICAPPED FUND

In 1981, (2) ~~$830,000,000~~ *$880,000,000* of gross loan commitments may be made under section 202 of the Housing Act of 1959, as amended (12 U.S.C. 1701q), utilizing collections and other resources of the fund authorized by subsection (a)(4) of such section, in accordance with paragraph (C) of such subsection, and up to $65,000,000 of additional gross 1981 loan commitments may be made from prior year commitments canceled in 1981: *Provided*, That such commitments shall be available only to qualified nonprofit

sponsors for the purpose of providing 100 per centum loans for the development of housing for the elderly or handicapped, with any cash equity or other financial commitments imposed as a condition of loan approval to be returned to the sponsor if sustaining occupancy is achieved in a reasonable period of time: *Provided further*, That the full amount shall be available for permanent financing (including construction financing) for housing projects for the elderly or handicapped: *Provided further*, That the Secretary may borrow from the Secretary of the Treasury in such amounts as are necessary to provide the loans authorized herein: *Provided further*, That, notwithstanding any other provision of law, the receipts and disbursements of the aforesaid fund shall be included in the totals of the Budget of the United States Government.

or to limited partnerships which qualify as limited profit sponsors, provided that a qualified nonprofit sponsor shall serve as a general or limited partner of any such limited partnership, for the purpose of providing 90 per centum loans for such purpose

PAYMENTS FOR OPERATION OF LOW-INCOME HOUSING PROJECTS

For payments to public housing agencies for operating subsidies for low-income housing projects as authorized by section 9 of the United States Housing Act of 1937, as amended (42 U.S.C. 1437g), (3) ~~$862,000,000~~ *$975,800,000*.

TROUBLED PROJECTS OPERATING SUBSIDY

For assistance payments to owners of eligible multifamily housing projects insured, or formerly insured, under the

Mr. BOLAND. Thank you very much.

Mr. Green?

Mr. GREEN. You are certainly correct. In New York I have heard about this, not from the syndicators, but from the nonprofit sponsors.

Let me ask you this: In New York, for example, I am told it will cost $11,000 of subsidy per year to make the Section 8 go. Doesn't that trouble you?

Mr. EDSON. It troubles me immensely.

Mr. GREEN. That is before the tax shelter and GNMA?

Mr. EDSON. It is not because everyone is stealing or everyone is charging exorbitant prices.

You are not going to get rid of that cost problem until we change our concept and don't subsidize the lowest income people in the highest-priced housing. We need a production program. We need that moderate income program your House Committee approved last year and I hope will approve again. That is the only way to bring down costs.

Mr. GREEN. Let me raise one other issue.

You mentioned the quality of housing that has been built under Section 8. The GAO, in its study of the Section 8 costs, has complained about that. They say when they go to an area office and ask to see the Section 8 project, they say you will have no trouble telling which one it is; it is by far the best housing in the neighborhood. Their claim is it is being built to excessive standards. Would you comment on that?

Mr. EDSON. A number of responses. It is ironic. In the olden days when you wanted to know where the public housing was, you went to the worst looking housing, barracks-like housing in town. I can go into small towns to this day and pick out a Public Housing project without any problem.

Now Section 8 has gone—I won't even say the other way. I looked through the Appendix to the Report. I don't know if you have, Congressman. The 550-square feet efficiencies did not look like Taj Mahals. They looked nice, but not palatial. I think the GAO's report didn't even bear them out on that score.

In my family there is a saying that no good deed goes unpunished. I think to paraphrase it, no good program goes unpunished. I think that is what Section 8 is now.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. BOLAND. Mr. Edson, thank you very much. Too bad you don't have an "i" in your name. You could have helped Dr. Hindle.

Mr. EDSON. Believe me, it would not have been the first time I was so confused on that score.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESS

RAYMOND S. OLSEN, EXECUTIVE VICE PRESIDENT, NATIONAL APARTMENT ASSOCIATION

Mr. BOLAND. Mr. Raymond S. Olsen, Executive Vice President of the National Apartment Association.

Where are you based, Mr. Olsen?

Mr. OLSEN. Washington, D.C.

Mr. BOLAND. You are familiar with condominiums and cooperatives, aren't you?

Mr. OLSON. Indeed I am.

Mr. Chairman, in the interest of time, I will highlight a few of the issues.

Mr. BOLAND. We will insert the entire statement in the record.

Mr. OLSON. I am Raymond Olson, Executive Vice President of the National Apartment Association. We are a trade association representing 105 local and State-affiliated organizations whose combined membership is over 45,000 owners, managers, builders and developers of over two million units of multi-family housing.

Before I get to the very heart of my testimony, it is important that I bring to your attention a very important consideration that we feel must be integral to any decisions regarding housing. It relates to the rental housing shortage. According to a 1978 study prepared for the Joint Economic Committee, there will be a demand for approximately six million additional rental unit buildings in the next ten years. That is 600,000 units per year. This is compared with the projection of less than 300,000 multi-family rental starts in 1981. The potential shortfall, gentlemen, is staggering. In addition, in the last few years, over 50 to 60 percent of these starts have been Federally subsidized or insured.

Since 1972 the percentage of rental housing which is subsidized has increased from 22 percent in 1972 to 50 to 60 percent in 1980. Despite massive Federal subsidies, rental housing is not satisfying demand. The vacancy rate has dropped from 6.2 percent in 1974 to 5.2 percent in 1980. In fact, the latest data released by the Department of Commerce indicates that the vacancy rate in the fourth quarter of 1980 dropped to 4.8 percent compared to 5.2 in the fourth quarter of 1979. This rate is the lowest rate in the 24 years this data has been recorded. The FHA and other housing experts generally use five percent as the minimum vacancy rate for an appropriate balance between supply and demand.

In April 1979, former HUD Secretary Patricia Harris estimated that 10.1 million rental households were in need of housing assistance.

According to HUD, approximately 2.5 million families are presently receiving Federal housing assistance or merely 20 percent of the total of families in need. Consequently, our industry requires efficient use of scarce Federal housing funds. The efficient use of scarce Federal housing funds, gentlemen, is the main theme of our testimony.

In the interests of brevity, I would like to move through the testimony to address the other topic of major importance certainly to our industry. That involves the denial of Federal housing funds to communities with rent control. We recommend that Federal housing assistance, such as the Section 8 housing programs, should be denied to communities that have adopted rent control ordinances. There is no need to recite the studies that have shown repeatedly that rent control inhibits new rental construction and aids in the deterioration of rental housing. Yet Federal financial assistance is provided to local communities to rectify conditions

which are to a great extent caused by their own actions in enacting rent control laws.

This Subcommittee too, certainly has a responsibility to insure that tax dollars are not wasted. I know that is paramount in your consideration. To supply U.S. tax dollars to aid communities which have adopted rent control policies which insures further demands for Federal funds is, in effect, pouring billions of tax dollars down the drain. Those are certainly scarce Federal dollars.

The Administration's Urban Task Force issues a report calling for the denial of Federal funds to communities which control rents.

In 1980, the House of Representative's version of the Housing and Community Development Act included a provision denying a proposed Federal housing program to communities with rent control.

I strongly urge this Committee to take an admittedly controversial, but certainly courageous step, of denying funds appropriated in fiscal year 1982 to communities that have adopted rent control ordinances.

Gentlemen, I would be happy to answer any questions you may have.

[The statement follows:]

SUMMARY OF STATEMENT

1) The NAA supports cuts in the section 8 housing program if the federal housing program is not subject to the Davis-Bacon Act.

2) The NAA recommends denial of section 8 housing funds to communities that have adopted rent control.

3) The NAA recommends a) greater reliance on the section 8 existing housing programs to a housing mix of 40% new construction - substantial rehabilitation/ 60% existing housing, b) increasing the tenants' rent contribution from 25% to 30%, and c) lowering income eligibility for the section 8 program from 80% to 65%.

4) The NAA recommends funding for the Solar and Energy Conservation Bank of $125 million in budget authority in fiscal year 1982.

STATEMENT OF RAYMOND S. OLSEN, EXECUTIVE VICE PRESIDENT OF THE NATIONAL APARTMENT ASSOCIATION* BEFORE THE HOUSE SUBCOMMITTEE ON HUD - INDEPENDENT AGENCIES

May 7, 1981

Mr. Chairman and Members of the Subcommittee:

My name is Raymond S. Olsen, and I am the Executive Vice President of the National Apartment Association. The NAA is a trade association of 105 local and state affiliates whose combined membership includes over 45,000 owners, managers, builders, and developers of over 2,000,000 units of multifamily housing.

THE RENTAL HOUSING SHORTAGE

Before I discuss the HUD appropriations bill, I would like to address the issue of the serious shortage of rental housing facing this nation. According to a 1978 study prepared for the Joint Economic Committee, there will be a demand for approximately 6,149,000 additional rental units in buildings of two or more units from 1980 through 1989, or 614,900 additional untis per year.[1] Compared to the projection of less than 300,000 multifamily rental starts in 1981, this potential shortfall is staggering. In addition, in the last few years over 50-60% of these starts have been federally subsidized or insured. Since 1972, the percentage of rental housing which is subsidized has increased from 22% in 1972 to 50-60% in 1980.

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[1] Multifamily Housing Demand, 1975-2000, study prepared for the Joint Economic Committee by George Sternlieb and Robert W. Burchell, Center for Urban Policy Research, Rutgers University, November 14, 1978.

*The National Apartment Association is an association of 105 state and local apartment associations whose combined membership includes over 45,000 developers, owners, and managers of multifamily housing. Its headquarters are located at 1825 K Street, NW, Suite 604, Washington, D.C. 20006 and its national officers are: President Stanley M. Taube of Minneapolis, Minnesota; President-Elect Robert E. Esrey of Kansas City, Missouri; Vice President James L. Reeder, Jr. of Fremont, California; Treasurer S. Cody Engle of Chicago, Illinois; Secretary Roland Freeman of Dallas, Texas; and, National Apartment Council Chairman Marvin Isgur of Houston, Texas.

Despite massive federal subsidies, rental housing production is still not satisfying demand. The vacancy rate has dropped from 6.2% in 1974 to 5.2% in 1980. In fact, the latest data released by the Department of Commerce indicates that the vacancy rate in the fourth quarter of 1980 dropped to 4.8% compared to 5.2% in the fourth quarter of 1979. This rate is the lowest in the 24 years that the data has been collected. The FHA and other housing experts generally use 5% as the minimum vacancy rate for an appropriate balance between supply and demand.

In April 1979, former HUD Secretary Patricia Harris estimated that 10.1 million rental households were in need of housing assistance.[2] According to HUD, approximately 2½ million families are presently receiving federal housing assistance, or merely 20% of the total of families in need. Consequently, our industry requires efficient use of scarce federal housing funds.

SECTION 8 HOUSING PROGRAM

On March 10, the NAA Board of Directors passed a resolution supporting budget cuts in housing and community development funds if other domestic spending programs were similarly cut.

In particular we support cuts in the section 8 housing program, GNMA tandem funds, community development block grant funds, urban development block grant funds, and the elimination of the section 312 low interest loan program and the HUD planning assistance program. However, our support of these reductions was based on three assumptions:

1) All domestic spending programs will face similar spending cuts,

2) Tax incentives for the production and preservation of rental housing will be adopted by Congress, and

3) Unnecessary federal regulations will be deleted or amended.

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[2] Rental Housing: A National Problem That Needs Immediate Attention, General Accounting Office, CED-80-11, November 8, 1979 at page 26.

We feel that a reduction in government spending would help reduce inflation and interest rates. Reduced interest rates in combination with reduced regulation and increased tax incentives for investment in rental housing will result in an increased production of new rental housing and greater investments in the preservation of existing rental housing solving the rental housing crisis without the need for massive federal subsidies.

However, our members are faced with a dilemma. How can we support budget cuts in housing programs when the possibility exists that the three assumptions in which we based our position may be wrong?

1) It appears that some domestic programs will not face any cuts in fiscal year 1982.

2) The Administration's tax cut proposals will provide fewer tax incentives for investment in rental housing compared to existing tax code provisions, and

3) The burdens of overregulation of the rental housing industry still face our industry.

The Administration proposes to cut production of rental units under the section 8 new construction program by 19% compared to FY 1981 and cut the section 8 substantial rehabilitation program by 32% compared to FY 1981. We urge this Subcommittee to approve cuts in the section 8 program only if the rental housing industry is relieved of unnecessary government regulations such as the Davis-Bacon Act.

The Davis-Bacon Act requires the payment of prevailing wages as set by the Department of Labor to employees working on federally financed construction projects. However, according to the General Accounting Office,[3] the rates set by the Department of Labor in many cases are higher than the actual prevailing wages, increasing the cost of federal housing programs. A recent GAO report

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[3] The Davis-Bacon Act Should Be Repealed, General Accounting Office, HRD-79-18, April 27, 1979.

entitled How to House More People at Lower Costs Under the New Construction Program,[4] stated that many developers feel that production costs in section 8 projects can be increased by as much as 25% due to the Davis-Bacon Act.

At a time when there is a serious shortage of rental housing, it is unconscionable to waste precious federal resources by applying the Davis-Bacon Act to federal housing programs. By repealing Davis-Bacon, at least as it applies to federal housing, it may be possible to produce as many section 8 rental units as last year, despite cuts in appropriations.

DENIAL OF FEDERAL HOUSING FUNDS TO COMMUNITIES WITH RENT CONTROL

We recommend that federal housing assistance such as the section 8 housing program should be denied to communities that have adopted rent control ordinances. There is no need to recite the studies that have shown that rent control inhibits new rental construction and aids in the deterioration of rental housing. Yet federal financial assistance is provided to local communities to help rectify conditions which are to a great extent caused by their own actions in enacting rent control laws.

This Subcommittee has the responsibility to insure that tax dollars are not wasted. To supply U.S. tax dollars to aid communities which have adopted rent control policies which insures further demands for federal funds, is in effect pouring billions of tax dollars down the drain.

The Administration's Urban Affairs Task Force issued a report calling for the denial of federal funds to communities which control rents. In 1980 the House of Representatives' version of the Housing and Community Development Act included a provision denying a proposed federal housing program to communities with rent control.

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[4]How to House More People at Lower Costs Under the New Construction Program, CED-81-54, March 6, 1981.

I urge this Committee to take an admittedly controversial, but courageous step of denying funds appropriated in fiscal year 1982 to communities that have adopted rent control ordinances.

GREATER RELIANCE ON SECTION 8 EXISTING HOUSING

The NAA recognizes that in order to use scarce federal housing funds to provide more housing for the poor, there will need to be a greater reliance on the less costly section 8 existing housing program. We support a mix of 40% section 8 new construction versus 60% existing units compared to the present 50/50 mix.

In order to provide federal assistance to more families, we support increasing the tenants' rent contribution from 25% to 30%.

Finally, we feel that income eligibility for the section 8 program should be lowered from 80% to 65%. With limited funds available to house the poor, we feel that the most needy should be provided with assistance.

THE SOLAR AND ENERGY CONSERVATION BANK

We recommend the continuation of the Solar and Energy Conservation Bank and appropriations in FY 82 of $125 million in budget authority.

The Administration supports elimination of the Bank because they feel there are already sufficient incentives for energy conservation, including a 15% tax credit for residential energy conservation improvements and a 40% tax credit for solar energy equipment under section 44C of the Internal Revenue Code.

However, owners of rental housing are not eligible for these tax credits. In addition, except for solar equipment, owners of rental housing are not eligible for the energy investment tax credit under section 48 of the Internal Revenue Code. The residential rental housing industry is the only sector of the economy which is not provided with a tax incentive for energy conservation expenditures.

Studies by the Department of Energy indicate that energy consumption in existing apartment buildings could be reduced by as much as 30% with the application of established energy conservation measures.[5]

By providing low interest loans to owners of rental housing, easing the cash flow burdens caused by energy conservation expenditures, energy conservation in rental housing will be encouraged, reducing energy costs to the owners, residents, and the nation.

This concludes my statement. Thank you for the opportunity to express the views of the National Apartment Association.

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[5] Achieving Energy Conservation In Existing Apartment Buildings, U.S. Department of Energy, May 1979.

Mr. BOLAND. This is a matter that is now before the legislative committee. As you know, the Senate has already acted upon it: the House has not approved it. We try our best not to legislate in the Appropriations bill.

This, of course, will have to be addressed by the authorization committee and then by the full House. We don't know whether or not the House will accept their recommendation.

Mr. Green?

Mr. GREEN. I am a little puzzled by your statement that people won't build with rent control since every FHA multi-family program has rent control.

Mr. OLSEN. Well, it seems that subsidized housing has been the only game in town for most of our members. They have been using the Federal dollars even with that proviso.

Mr. GREEN. Even going back to the 107s. They all have the provision that you have an overall limitation on the rents that can be charged in a building and you have to go to the FHA to justify any increase based upon increases in costs.

Yet people cheerily build under those programs.

Mr. OLSEN. They did because they were Federally subsidized programs.

Mr. GREEN. I am talking about the unsubsidized 107s, unsubsidized to 221(d)(4)s. Half of Queens, New York was built under that.

Mr. OLSEN. Our members have responded by building under those programs that were available that provided them with an opportunity to build housing. They didn't feel necessarily building under those programs was in the best interests of the industry or certainly the economy, but they were again the only available options for construction and I think our point is that very few units are being built now with unsubsidized funds.

Mr. GREEN. Isn't the real cause of that the fact that with interest rates where they are, both your construction loans and your permanent financing where they are, your costs per unit can really be afforded by only a very small segment of the population because of the simple economics of the thing?

Mr. OLSEN. Well, the places that construction is taking place are typically in the Sun Belt or in areas where there is no rent control. In areas where there is rent control, find nationally that few buildings are being constructed because the threat of rent control certainly prevents anyone from being interested in investing dollars in multi-family housing, and the majority of the money that has traditionally been available for multi-family housing construction is being used for commercial buildings and other investments.

Mr. GREEN. Last year's Wiley amendment—to which the Chairman referred—was limited to denying the rental housing aid to those communities which imposed rent control on newly constructed housing. I think the Senate amendment goes one step further and covers not only newly constructed housing, but vacancy—the vacancy decontrol feature.

Is your proposal limited to that or would you require total abolition?

Mr. OLSEN. Ideally we support total abolition. In the realities of our current economy and the sentiments of Members of Congress, I think that our hope is that that might at least be a provision in

Section 8 housing so that no Section 8 housing can be built in communities where there is rent control.

Mr. GREEN. I am puzzled by that. The Section 8 limitation is a percentage of family income.

Mr. OLSEN. In our testimony we suggest that we should change ratios so the percent of family income establishes the base.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. BOLAND. Mr. Olsen, thank you very much. We appreciate having you here.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

PAUL JAMESON, ESQUIRE, VICE PRESIDENT, MASSACHUSETTS ASSOCIATION FOR RETARDED CITIZENS

DR. CLARKE ROSS, DIRECTOR, UNITED CEREBRAL PALSY ASSOCIATIONS, INC.

Mr. BOLAND. Now we turn to the Consortium Concerned with the Developmentally Disabled, the Task Force on Housing. Mr. Paul Jameson, Vice President of the Massachusetts Association for Retarded Citizens. Where are you based in Massachusetts?

Mr. JAMESON. I live in the town of Wellesley, Mr. Chairman.

Mr. BOLAND. Welcome, Dr. Clarke Ross, Director, United Cerebral Palsy Associations. I understand you are here about the Section 202 housing for the handicapped and retarded and the Congregate Housing program.

Mr. JAMESON. Thank you, Mr. Chairman.

I recognize that time is pressing and so we would like to submit a prepared statement. I thought I would just try to highlight some of the items in the statement.

Mr. BOLAND. We will include the statement as you present it.

Mr. JAMISON. Thank you, Mr. Chairman.

First I would like to start by noting two of our recommendations which are contained on page ten of the statement in which we ask that you appropriate funds to support the House budget recommendation level of 250,000 new units which we understand has also been approved by the Housing Subcommittee in authorization at that level.

We also ask that there be some HUD research dollars to develop national housing data on the disabled. The reason that it is very important, I think, to the Congress in this particular period of time, is that we are really talking about the opportunity to realize substantial cost savings in the way in which people who are developmentally disabled are housed. I would like to highlight the experience in the State of Kansas in which, if you look at page six, you will note that the average cost for a residence in public institutions in Kansas is $80 per day, whereas the per diem support service under a report that has been done for the Timbers program in the State of Kansas indicates a cost factor of $35.60, with an extra $10 daily rent supplement.

The important thing to note is that the individuals who are able to come out of institutions and live in their own communities are given the opportunity to be gainfully employed. In the room today

there are two friends from the State of Delaware, Mr. Lou Hanken and Mr. Larry Henderson, one of whom occupies a unit that is subsidized under the programs. He is able to go out and be gainfully employed and pay both local and Federal taxes.

In addition, I would call your attention to the experience in the State of Georgia where, if you look again, beginning on page five, that the program costs on community residential programs average $6,970 on the residential costs and the costs to the Federal government is $2,117, but the Georgia Retardation Center, the institutional cost is at $32,547, of which the Federal government bears the share of $13,000 each year.

It is clear to us—and I hope it is clear to the Committee—that this wide cost discrepancy makes an economic reason why the Section 8 program should be continued, but even more important than that, is the human element that is involved.

In my State of Massachusetts, we are and have been engaged for a number of years now in developing a community-based service system, and our community-based service system will be only possible if there is a continuation of these programs. Without the continuation, without the investment, that community-based system of necessity must fail because the idea of having people live in the most appropriate setting cannot be achieved without the opportunity for them to live in the kind of units that are described here in our report.

At this point, Mr. Chairman, I would like to answer any questions you may have.

[The statement follows:]

WITNESSES

Representating the Consortium Concerned with the Developmentally Disabled (CCDD) Task Force on Housing is Paul Jamieson, Esq., Vice President, Massachusetts Association for Retarded Citizens and Chairman, Massachusetts Planning Council on Developmental Disabilities. Mr. Jamieson is accompanied by Dr. E. Clarke Ross, Director, Governmental Activities Office, United Cerebral Palsy Associations, Inc. and Chairman, CCDD Task Force on Housing.

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INTRODUCTION

• A Focus on Cost Comparison

Thomas Sullivan, Senate Budget Committee staff member, in a soon to be published manuscript, has observed that "successful advocacy for domestic programs in the future will be based not on the humanity of our position but on their comparative cost..." A recent Health Care Financing Administration (HCFA) report on long-term care has documented circumstances when cost-related issues or cost-related policies determine the nature of residential programs for the developmentally disabled. Examples of this are staff patterns, number of residents in a facility, administrative structure, and opportunities or lack thereof for capital improvements. The report's author, Heather Menninger, concludes that "given the influence of fiscal matters in shaping program parameters, it is incumbent upon policymakers to identify the various incentives

and disincentives of their reimbursement structures so that implementation of programs may proceed in a rational manner with attention to client-care concerns..."

For purposes of this statement, "residential programs" are used to describe a full array of living arrangements for the developmentally disabled. The term "public residential facility" means a state hospital, a publicly operated institution for the mentally retarded and developmentally disabled. It must also be stated that cost studies generally suffer from non-identical client populations being compared.

The Consoritum Concerned with the Developmentally Disabled (CCDD) Task Force on Housing wishes to share some perspectives with the House Subcommittee on HUD Appropriations on the important roles HUD programs perform in financing this nation's community residential services for the developmentally disabled. It is important to stress that HUD programs are a cost beneficial approach to housing for this population. HUD program costs should be compared with those more costly federal support programs such as Medicaid.

- Policy Assumptions

This statement is based on a number of policy assumptions:

(1) Housing assistance for the developmentally disabled person is a legitimate responsibility of both the federal government and the Department of Housing and Urban Development (HUD).

(2) Without guaranteed federal subsidy programs, the possibility of institutionalization is greatly enhanced.

(3) HUD should promote and reinforce the role of the nonprofit sector as a cost beneficial approach to providing appropriate community housing.

- Recommendations with HUD Programs

(1) We applaud both the Administration and Congress for retaining a strong and viable HUD Section 202 program.

(2) We hope to demonstrate that the reduction in the number of Section 8 subsidized units will increase pressure for institutionalizing disabled persons.

(3) We wish to bring to the attention of Congress HUD's failure to implement a cost effective alternative to housing construction which Congress enacted last year. P.L. 96-399 allowed sponsors of housing for the nonelderly handicapped the option of purchasing existing housing under the Section 202 program. It was believed that such purchases can significantly lower the costs of the Section 202 program. Unfortunately, to our dismay, HUD has refused to implement this program in calendar year 1981.

(4) We maintain that the decision of both the past and present Administrations, as well as this subcommittee, to terminate the Congregate Housing Services program is both short sighted and "penny wise, pound foolish."

HOUSING DEMAND FACTORS

The demand for housing for persons with disabilities can probably best be understood by documenting the following items: (1) rate of deinstitutionalization, (2) growth in community residential programs, (3) number of Section 202 applications declined because of inadequate funding, (4) number of disabled persons currently receiving Section 8 subsidies, (5) number of disabled persons on waiting lists for Section 8 assistance and (6) number of existing barrier free housing units compared to the need for such units. Unfortunately, this testimony answers few of these questions for national data on housing for the handicapped is abysmally inadequate, particularly those items described above as related to HUD.

(1) Rate of Deinstitutionalization

Dr. Richard C. Scheerenberger, president, National Association of Superintendents of Public Residential Facilities, has estimated the rate of deinstitutionalization for the mentally retarded and developmentally disabled between 1972-1978 at 9.4%. This rate, which involves roughly 11,000 people annually, held constant at about 9% for each of the six years involved. He estimates that 50% of these persons have been placed in skilled nursing facilities or smaller institutions, 30% in group homes or intermediate care facilities, and 20% in foster homes, natural homes, or apartment programs.

(2) Growth in Community Residential Programs

A December, 1979 University of Minnesota study documented 4,427 community residential facilities for the developmentally disabled in 1977. These facilities, with a licensed bed capacity of 83,688 were serving 76,250 persons of whom 62,397 were mentally retarded. While the average daily population of public residential facilities for the mentally retarded has gradually declined from a peak of 193,200 in 1967 to 139,410 in 1978-1979, community living arrangements have significantly increased since 1970.

(3) HUD Section 202 Applications and Awards

Comparison Criteria	1979	1980
1) Applications for nonelderly handicapped sponsors	201	200
2) Number of approved applications	116	103
3) Requested number of units for the nonelderly handicapped	4,423	7,407
4) Number of approved units	2,217	1,900
5) Approved units of nonelderly handicapped housing as a percent of total Section 202 approved units	11%	10.5%

(4) Disabled Recipients of Section 8 Subsidies

HUD has consistently refused all requests from the disability field to build this item into the Housing Assistance Plan (HAP). Consequently, we can not tell the Congress about the utilization of this program by disabled persons.

(5) Number of Section 8 Waiting List Individuals

HUD has also consistently refused to collect this data.

(6) Barrier Free Housing Units

As with the two items just discussed, the disability field has been unable to convince any agency of the federal government to even consider addressing this area of concern.

COST COMPARISONS

Late last year, Colleen Wieck and Robert Bruininks at the University of Minnesota published the first national analysis of differential costs by type of residential program for the developmentally disabled. They analyzed the costs of 75 public residential facilities and 161 community residential facilities. These programs had a total revenue of $3.11 billion with government sources accounting for 98%. The public facilities budget was $2.735 billion, the community facilities budget was $518 million. Of the public facility support, $1.9 billion was state support and $642.2 million was federal; however, the authors emphasized that "federal and family support may be underestimated due to the inability of respondents to separate and identify those sources from state appropriations." Of the community facility support, $125 million was federal, $120 million was state, and $26 million was county. The study documented domains essential to determining the cost of residential services, but demonstrated the problems of comparing costs on a national basis because of so many variables in data collection. As a result, this statement focuses on samples from a few state cost studies.

The National Association of Private Residential Facilities for the Mentally Retarded obtained cost information from 67 member facilities in 30 states. These agencies provide privately sponsored residential services in a variety of community living alternatives. The services provided range from those which offer room, board, supervision and training in independent living for people who are largely self-dependent, to full programming for profoundly mentally retarded and multiply handicapped children and adults.

Services at these agencies are funded by a variety of resources including SSI, Medicaid and Section 8 rent subsidies, as well as through family and public contributions. The monthly cost of services at the 67 facilities which responded to the survey ranges from $227 per month for an agency which provides few services, to $2400 per month for an ICF/MR which provides a full range of residential and day services for multiply disabled individuals. The average cost of services provided by these 67 agencies is $1187 per month. The average cost of services in state institutions in the same 30 states is reportedly about ~~$1851~~ per month. All but 18 of the 67 agencies serve people who are severely retarded. Thirty-three serve people who are profoundly retarded and multiply handicapped.

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California

UCPA of Los Angeles/Spastic Childrens Foundation operates a continuum of living arrangements from supervised and assisted independent single apartments to intermediate care facilities. The type of living arrangement and costs follow:

Type of Living Arrangement	Costs Per Client Per Month
1) Two ICF/MR-DD (one serving 146 persons, the other serving 54 persons)	$1,900 per month (all residents have ongoing medical needs)
2) Licensed group homes (facilities for 6 persons or under; persons with judgment problems)	$1,000 per month (includes $250 for medical and $200 for day services)
3) Unlicensed congregate living (4-to-8 persons sharing a 4 bedroom, 3 bath house). These residents pool their Section 8 rent subsidies and are direct recipients of Title XX funds. They purchase their attendant care, on a one-to-one homemaker basis for up to 4 hours per day, from UCPA.	$800 - $1,000 per month (amount differs depending on the neighborhood)
4) Supervised clusters of 3-to-4 apartments (which operate as the congregate houses)	$800 - $1,000 per month (almost always more than the congregate houses).

These three levels of congregate living support 140 developmentally disabled persons. With the assistance of four approved HUD Section 202 loans, as well as the resources of a newly incorporated limited partnership Housing Corporation, UCPA hopes to be able to serve the 200 persons now on its waiting list.

These living arrangement costs now compare to a California state hospital for the mentally retarded and developmentally disabled rate of $2,819 per month. California estimates a fy 1981-1982 monthly hospital rate of $3,256.

Georgia

A recent study compared 33 mentally retarded persons in residential, case management, and day training programs administered by the Athens Community Mental Retardation Service Delivery System to 449 persons residing in the Georgia Retardation Center, a state institution in Atlanta. The cost comparisons follow:

Type of Program	Total Program Costs	Cost to the Federal Government
	(Costs Per Client Per Year)	
Community Residential Programs - residential costs only	$6,970	$2,117

Community Residential Programs - residential, case management, and day training	$10,444	$3,590
Total Georgia Retardation Center (but does not include building costs, depreciation, and opportunity costs)	$32,547	$13,029

The study further cited expenditures statewide for three classifications of living arrangements.

Type of Program	Costs Per Client Per Year
All state operated institutions for the mentally retarded	$22,000
All group homes	$ 9,538
All apartment clusters	$ 4,840

Kansas

The average per diem cost for residents of public institutions for the mentally retarded and developmentally disabled in Kansas is $80.00. UCP of Kansas operates a HUD Section 202 project, the Timbers, in Wichita. The Kansas UCP is also one of eight nationally funded rehabilitation engineering centers in the nation.

The average per diem supportive service rate for the current 90 residents at the Timbers is $35.60 with an extra $10.00 daily rent supplement. Sixty-five of the 90 residents are employed or participate in a vocational education program associated with the Centers Industry program. Attendant care ($15.00 per day, included in the above $35.60 figure) is financed by Medicaid for the unemployed residents and from Centers Industry profits for those employed. Last year, those Timbers' residents who were employed paid $179,000 in federal and state income tax. Prior to coming to Centers Industry, most of these persons had never been gainfully employed and most had resided in institutional settings.

Maryland

The four public institutions serving mentally retarded children and adults cited below range in size from 400 to 900 persons. The cost of day programming is not included.

• Per Client Costs By Institution

	Daily	Monthly	Yearly
Rosewood	$75.09	$2,283.99	$27,407.85
Henryton	55.18	1,678.39	20,140.70
Great Oaks	64.52	1,962.48	23,549.80
Holly Center	92.22	2,805.03	33,660.30

The Chimes, Inc. of Baltimore, Maryland provides a variety of residential options for approximately 100 people with mental retardation. Living arrangements range in size from 2 to 36 persons. The cost of these programs, again excluding day services, are cited below:

• Per Client Costs By Community Living Arrangement

	Daily	Monthly	Yearly
8 resident group home	$26.94	$819.43	$9,833.10
12 resident group home	24.23	737.00	8,844.00
Apartments	15.32	466.07	5,592.90
Small residence	27.39	833.20	9,998.45

Minnesota

As a result of a decade of progressive policies and a September 15, 1980 Consent Decree in Welsch vs Nest, Minnesota is committed to a systematic reduction of the number of mentally retarded persons residing in state institutions. By June 30, 1987 the state hopes there are not more than 1,850 persons in institutions. Of the state's 4,100 community residential facility residents, 3,000 reside in Medicaid ICF/MRs.

The chargeable per diem at state hospitals has increased from $4.68 in fy 1965 to $52.20 in fy 1977. In the last 3 years (1978-1980), per diems have been increasing at approximately 12% per year. In August, 1980, the per diem for Minnesota's 8 institutions serving 2,650 people was $74.41. In 1962 there were 5,532 state hospital residents. This $74.41 per diem greatly exceeds the per diems of Minnesota's various community settings as indicated below:

- All community residential programs with roughly equivalent populations to those in state hospitals. $38.42
- The same community residential programs as above including day services and transportation. $56.33
- Apartment training with 24 hour supervision (20 persons each, 8 facilities). $24.26

- Semi-independent living services, less than 24 hour supervision (18 people each, 10 facilities). $16.81
- ICF/MRs $39.00
- Skilled nursing facilities serving the mentally retarded $38.37

Of 206 community residential facilities, the lowest per diem was $19.79 while the highest was $68.03. Total residential expenditures have increased from $29 million in fy 1965 to over $77 million in fy 1977. Net state cost has increased from $25 million to $40 million; the major federal reimbursement program is Medicaid.

COSTS OF RESIDENTIAL SERVICES FOR PERSONS WITH AUTISM

The majority of autistic adults served nationwide are institutionalized. According to a survey of institutions in the northeastern United States in 1979, the cost of institutionalization ranges between $30,000 - $90,000 per individual per year, (Blatt 1979). Presently, there are only 25 community based group homes for autistic adults (Ingraham 1980). Of group homes serving these individuals the cost ranges between $12,000 - $25,000 per individual per year. Most of these programs include both residential and day program costs. These group home programs in total serve only 150 individuals, whereas statistics indicate that 200,000 individuals are in need (Warren 1979).

For instance, in Maryland where there are over 1,000 autistic adults, there are only nine community based residential placements for these individuals. The Maryland Society for Autistic Adults and Children has demonstrated that persons with this severe handicapping condition can learn to live successfully in community based placements. The cost of providing community based services to autistic adults in Maryland is far less than the cost of institutionalization. The long-term benefits of community based services are enumerable, since autistic individuals can then have the opportunity to become tax paying citizens.

Nationwide Costs By Community Living Arrangements

	Daily	Monthly	Yearly
Small group homes (six and under)			
High Range	$69.00	$2,070.00	$25,000.00
Low Range	$33.00	$ 990.00	$12,000.00
Institutions			
High Range	$250.00	$7,500.00	$90,000.00
Low Range	$ 83.00	$2,490.00	$30,000.00

The Section 8 Rent Subsidy program often is the backbone of community programs for disabled persons. Low income disabled people seeking living accomodations in the community turn to the Section 8 program, due to its tremendous flexibility. Section 8 can be used to help fund both small group homes (up to 12 people) and independent, semi-independent or supervised living situations for disabled persons. In November 1979, HUD published Section 8 rules for existing housing which specifically recognized Independent Group Residences for handicapped people.

Persons utilizing the Section 8 rental program find that it can be used to subsidize rents in single-family homes, townhouses, apartments or mobile homes. Section 8 certified individuals are free to "shop" for the housing of their choice within the community. Section 8, in addition to being linked to HUD's Section 202 Direct Loan program, can be combined with other means for new construction, substantial rehabilitation or moderate rehabilitation projects or used in the existing housing market. This flexibility makes the Section 8 program invaluable to persons and organizations seeking to establish community settings for disabled people. Consequently, Section 8 plays a major role in efforts to deinstitutionalize disabled individuals. Without the availability of Section 8 rental assistance many of these efforts will fail and disabled persons capable of living in the community will find themselves living in institutions, obviously at much greater cost to the government.

Our organizations are dismayed that President Reagan has targeted the Section 8 program for substantial reductions, including the rescission of approximately 45,000 units this fiscal year. The tables below indicate the severity of the reductions supported by the Administration:

1981 Appropriation	255,000 units
1981 Reagan Administration Rescission Request	210,000 units
1982 Carter Administration Request	260,000 units
1982 Reagan Administration Request	175,000 units

Section 8 rent subsidy annual contributions follow:

1980 Appropriation	$23.7 billion
1981 Appropriation	$25.1 billion
1981 Reagan Administration Rescission Request	$700 million
1982 Carter Administration Request	$25.2 billion
1982 Reagan Administration Request	$19.8 billion

While the figures provided above are disheartening, it is even more disturbing that this Committee has already chosen to support the proposed rescission of 45,000 Section 8 units during the current fiscal year. We urge the Committee to reassess the impact of so drastic a cutback. Without the federal government's support, special populations with special housing needs will not be adequately or equitably served. Though the federal government might save money in the line item of housing assistance, someone will pay--either the federal government through SSI and Medicaid, state government, or the individual with the quality and expectancy of his or her life.

CONCLUSIONS AND RECOMMENDATIONS

The HCFA study previously cited quoted a 1975 national survey of housing advocates and sponsors in the developmental disabilities field, which concluded that "the problem of inadequate funding was ranked as the most serious problem of establishing community facilities." The Wieck/Bruininks 1980 study likewise concluded, "one of the most prominent obstacles in development of community residential alternatives has been funding." This statement has attempted to demonstrate the cost benefits of community residential programs which need HUD financial support. Given these facts, the CCDD Task Force on Housing makes the following recommendations:

(1) Continue to maintain the national commitment to the Section 202 Program;

(2) Keep the Congregate Housing Services Program alive by appropriating at the fy 1979, 1980, and 1981 levels of $10 million;

(3) Appropriate funds to support the House Budget Committee recommended level of 250,000 new units of federally assisted housing; and

(4) Earmark HUD research dollars to develop national housing data on the disabled, including at a minimum, a) number of disabled Section 8 recipients, b) number of disabled Section 8 waiting list persons, and c) number of and need for barrier free housing units. Hopefully, this data collection can be specifically built into the Housing Assistance Plan mechanism.

Mr. TRAXLER. [presiding]. Mr. Green?

Mr. GREEN. I would like to raise an issue that was raised with me by the United Cerebral Palsy group in New York City. That is, the question of exclusively handicapped projects versus the exclusion HUD has in the Section 202 program, which I believe is no more than 22 persons in a unit. This concerned the New York UCP people because for economic reasons, you have to develop 150 units to have an economically viable project. It seemed this was requiring them to carry a lot of elderly units in order to service 24 handicapped persons. Apparently there had either been a project for the blind that sneaked in just before that HUD rule was adopted—I made inquiry as to whether it was possible to get a waiver for UCP New York. I was told, well, it is the national UCP that urged us to adopt this policy.

I was just wondering what your views are on that and whether you think there should be some flexibility?

Dr. Ross. We wrote the office about a week ago on that, detailing that. I think it is important to talk about the history of housing for the handicapped, to keep the New York City experience in mind. What we are talking about are alternatives to large public institutions. Willow Brook in the New York City area once had almost 7,000 residents congregated together. The philosophy that is accepted by most in the field is to develop smaller, scattered site community-based housing.

When the 202 program awards were first made for the handicapped in 1976, all the projects were large, hundred unit high-rise apartment complexes based on the elderly model, and here we had Sioux Falls, South Dakota; Wichita, Kansas; St. Petersburg, Florida, with high-rises for all the handicapped in multi-county areas to come and live. So a group of us worked with HUD to change their policies. The policy is to promote small, scattered site housing and arbitrary limits were drawn at a maximum of 24.

A waiver authority has always been proposed by those of us working with HUD. HUD would rather, because of political reasons, not have a formalized waiver process, but to deal on a case by case situation with projects.

I can supply you with recommendations for the waiver process so that all sponsors can deal with it. New York City is a good example. If it is a typical housing arrangement in Lower Manhattan, or Midtown, they have a large high-rise. That is where people live. Then that is a much more acceptable mode.

Mr. GREEN. I guess the problem you run into is if there is no formal provision in the regulation for a waiver, then the Secretary is bound by his own regulation?

Dr. Ross. Well, the regulation does not spell out the provisions and procedures to be used in the waiver. We have strongly recommended that the waiver process be formalized, and the former Assistant Secretary for Housing and current Assistant Secretary for Housing prefer to deal with it on an ad hoc, case-by-case situation.

Overall, it is correct that the National United Cerebral Palsy promotes scattered sites, small community-based housing. We have always recommended in situations where there are waivers, and

Manhattan is a good example of where such waiver authority should be used.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. TRAXLER. Thank you, Mr. Jameson. We appreciate your testimony.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESS

CARL A. S. COAN, JR., LEGISLATIVE COUNSEL, NATIONAL HOUSING CONFERENCE

Mr. TRAXLER. Mr. Carl Coan?

Mr. COAN. Thank you, Mr. Chairman. I think I will read my statement.

I am Carl Coan, Jr. I appear as Legislative Counsel for the National Housing Conference. I thank you for this opportunity to testify today.

The National Housing Conference last month held its annual meeting, marking 50 years of efforts on behalf of decent and adequate housing and good communities for all Americans, regardless of income. In preparing for the meeting we reviewed the circumstances which led to NHC's creation back in 1931, in order to see what progress we had made since that time.

While there is no question that we have made great progress in reducing the incidence of substandard housing and are much more conscious now of the problems that confront our urban and rural communities and how to deal with these problems, the problems that confronted the Nation in 1931 were disturbingly similar to those confronting us today.

In 1931, the country was confronted with depressed housing production; an inadequate system of housing finance; the inability of many Americans to achieve the goal of home ownership; large numbers of citizens unable to afford decent housing even if there had been an adequate supply; widespread slums and blight and inadequate cmmunity facilities; and a felt need to reduce the cost of new housing through new technologies and the modernization and simplification of building regulations. These are the problems confronting us today; maybe of a different degree in some instances or in a different context, but nevertheless still there.

It is in this context that I should like to address my remarks today to the job that this Subcommittee and the Congress have before them this year.

Unlike 1931, there is a vast array of statutes on the books aimed at making a reality of the commitment contained in the Housing Act of 1949 of a "decent home and suitable living environment for every American."

The mortgage insurance programs of the Federal Housing Administration; the mortgage-backed securities program of the Government National Mortgage Association; the Section 8 and Public Housing programs to provide housing for the lower income; and the Community Development Block Grant and UDAG Programs to

assist communities in rejuvenating themselves, both physically and economically, were all designed and enacted to help us make that commitment of 1949 a reality. They are not perfect programs and they have been revised and modified as circumstances have warranted over the years. Nevertheless, they are essential to meeting that commitment.

The appropriations for these programs for fiscal year 1982 are now before you. The decisions that you make will be extremely important ones, for they may well portend the future direction which the Nation will take in dealing with the housing needs of its citizens and with the needs of its urban communities.

Because of economic and budgetary conditions, there have been major restraints placed on these programs over the last several years. On many occasions NHC has felt that these restraints were unnecessary or too severe, even though we recognized the problems in attempting to allocate resources which never seem to be quite enough for all competing and valid claims. Pending before the Congress now, however, and even partially acted on in some cases, are proposals that would, in the name of the economy, drastically reduce already inadequate program levels.

We feel strongly that the further cuts proposed by the Administration in HUD appropriations levels from those levels recommended by the previous Administration in January are unwarranted. In some instances, these cuts would achieve no budgetary savings at all. In other instances, they would require the housing and community development programs to shoulder a disproportionate share of the effort to reduce the Budget.

The basic message I should like to present to you today is that the National Housing Conference supports the HUD budget recommendations contained in the budget submitted to the Congress in January by President Carter. It does this reluctantly, because it feels in several instances, especially in the case of Assisted Housing, that the requested levels are too low. However, it recognizes the reality now confronting the Congress and the Nation, and accedes to the need for restraint.

Therefore, we support the 260,000 unit level for Section 8 and public housing, rather than the one-third reduction to 175,000 units proposed by the present Administration. We also urge that the majority of these units be provided through new construction and substantial rehabilitation.

In making its decisions, the Subcommittee should take into consideration the present state of the housing industry and the general housing situation in the Nation today. Housing production is down substantially below the minimum start level of two million units per year that almost all agree is needed at this time, and we are confronted right now with the tightest rental market we have seen in at least 20 years. Inflation and high mortgage interest rates, at the very time that housing needs are increasing, have brought about this set of circumstances. In the increasingly fierce competition for decent affordable housing that will result from these circumstances, the losers will be lower income families and elderly. Their plight will be made even worse, if the 175,000 unit level recommended by the Administration is adopted and a disproportionate reliance is placed on existing housing.

It is also important that there be financing available for the Section 8 Program. Units under that program can neither be built nor added to the stock through substantial rehabilitation at today's mortgage interests rate levels. It is, therefore, imperative that sufficient tandem funding be made available. The Administration has requested $3.6 billion for fiscal year 1982, in order to clear out the pipeline. We believe that the Tandem program for Section 8 projects should be retained and we also believe that it is cost ineffective to wait until next fiscal year to make financing available for those Section 8 projects now ready to proceed. We urge the Subcommittee to make further Tandem funds available this fiscal year, with perhaps $1.6 billion for this year and $2 billion for next year.

Other housing programs that we believe should continue to be funded next year are the 312 Rehabilitation Loan program, the 202 Loan program for the Elderly and the 235 Home Ownership program. We recommend that the Subcommittee disregard the Carter budget proposal and provide funding for the 235 program for fiscal year 1982. We also recommend that the Subcommittee seriously consider allowing 235 contract and budget authority recaptured from the many mortgages paid off in the past to be used to support continuation of that program.

We support the full, authorized level of appropriations for the Community Development Block Grant and UDAG programs. The amounts authorized for these programs have not realy kept up with inflation. To reduce them even further, as recommended by the Administration, while at the same time calling upon these programs to take on responsibilities under the 701, 312 and Weatherization programs, will just exacerbate the problems of our cities.

One of the most inexplicable proposals by the Administration is to reduce the level of commitment authority for the FHA mortgage insurance and GNMA mortgage-backed securities programs. These programs have no negative budgetary impact and in fact probably have a positive impact. The programs are also mainstays in the ongoing effort to make a reality of the 1949 goal of a decent home for every American. While we believe that there is no real justification for putting any cap on commitments under these programs, we feel, as a minimum, that these caps should be high enough to permit these programs to be able to continue to function in response to market demand without artificial restraint.

At its Annual Meeting last month, NHC adopted a broad range of resolutions on meeting the Nation's housing and community development needs. I have attached to my statement a summarization of the principal points set out in those resolutions.

These resolutions call for a continued, substantial Federal role in meeting the housing and community development needs of the Nation. They also urge that the proposed abolition of existing programs or sharp reductions in their funding be resisted.

While we recognize that this is a time of restraint, it is also NHC's strong belief that this is not a time to back away from the commitments and programs developed over the past 50 years. We urge the Subcommittee, in acting on HUD appropriations for fiscal year 1982, to recognize the need to move forward and not backward.

Thank you.

[The attachments follow:]

PREAMBLE

NHC STATEMENT ON MAJOR ISSUES AFFECTING

HOUSING AND COMMUNITY DEVELOPMENT

The impact of the present tight money and high interest rate policy of the Federal Reserve, coupled with the impact of inflation on housing construction and operation costs, have caused a sharp drop in the number of new housing units produced. There is an unquestioned demand for over two million additional units each year, including 600,000 units for the low and moderate income. Yet, in 1980 less than 1.3 million new units were started and the outlook for 1981 is for only 1.4-1.5 million units.

Housing has already been sharply curtailed and should not be asked to shoulder a further, disproportionate share of the burden of fighting inflation. The failure to provide an adequate level of housing to meet demand is inflationary in itself, driving up the cost of the housing that is available and contributing to higher unemployment and, therefore, higher government costs. To meet the nation's housing needs, there should be made available an adequate level of mortgage funds in both urban and rural areas and the present minimal level of assistance to low and moderate income housing should be maintained.

A. Section 8 and Public Housing Funding Levels.

Support the funding of the Section 8 and Public Housing programs at the levels approved in the Appropriations Act for FY 1981 (254,500 units) and as proposed in the January Budget submission to the Congress (260,000 units).

B. Mortgage Financing for HUD Multifamily Projects.

Support a program of GNMA Tandem funding and tax-exempt finance which will be adequate to meet the permanent mortgage financing needs for those many thousands of housing units, approved for Section 8 assistance or in contemplation of Tandem financing and on which construction has not been able to proceed because of a lack of permanent mortgage funds at an affordable interest rate. This program should also be adequate to meet the permanent financing needs of those Section 8 projects for which funds are committed during the remainder of FY 1981 and during FY 1982.

C. Section 235.

Immediately implement the increased mortgage limits as provided for in the 1980 Housing Act and/or redistribute the present allocation of funds to areas where the program is financially feasible.

Immediately implement the recapture provisions of the 1980 Housing Act and permit the reuse of the recaptured funds in order to permit the program to become self-supporting.

D. Credit Budget Limits on FHA and GNMA.

Support the removal of the annual limits on commitments under the FHA Mortgage Insurance and GNMA Mortgage-Backed Securities Programs as an unnecessary imposition of government regulation upon the private credit markets for housing.

E. Tax-Exempt Bond Finance.

Support the prompt issuance by the IRS of workable regulations implementing the 1980 Mortgage Revenue Bond Legislation and the enactment of such statutory amendments as are necessary to assure that such financing will be available for both ownership and rental housing, including rehabilitation, for the low and moderate income.

F. Farmers Home Administration Housing Programs.

Support funding of the FmHA housing programs at the levels approved in the Appropriations Act for FY 1981 (122,000 units) and as proposed in the January Budget submission to the Congress (116,700 units).

Support a revision to the Section 502 interest credit program which would permit the use of recaptured funds for new mortgage loans. Oppose the effort to prohibit FmHA from borrowing through the Federal Financing Bank, in order to prevent a significant increase in the cost of borrowing.

G. Public Housing.

Modernization Program. Support full funding of the public housing modernization program in FY 1981 and FY 1982.

Operating Subsidies. Support the provision of adequate operating subsidies to keep the public housing program viable.

H. Rent-to-Income Ratios.

Oppose any effort to require low-income residents in public housing, and Section 8 and other assisted housing programs to pay a higher income percentage than 25% of income.

I. Section 312 Rehabilitation Loan Program.

Support the continuance and effective use of this program and oppose any effort for its discontinuance.

J. Urban Development Action Grant Program.

Support the continuance and effective use of this program. Oppose any effort to disband the program and fold it into the Community Development Block Grant Program.

K. Tax Incentives.

Because we support a continuance of more favorable treatment for rental housing and especially low and moderate income rental housing, we oppose the Administration's tax proposals which would provide much shorter depreciation periods for both residential and nonresidential real property used for business purposes. These proposals would reverse the more favorable tax treatment now provided for investment in rental housing, and especially in low and moderate income rental housing, in contrast to office buildings and other nonresidential real property. We support a continuance of more favorable treatment for rental housing, and especially low and moderate income rental housing.

L. Call for a White House Conference

NHC requests the President to call a White House conference on housing and community development to formulate a national housing policy suitable to deal with the impending housing crisis which, according to all demographic data, will afflict the Nation throughout the Eighties.

Mr. TRAXLER. Thank you, Mr. Coan.

Mr. Green?

Mr. GREEN. When HUD was testifying on the Tandem situation, one of its suggestions would be to permit some increase in the contract rents in order to have them high enough to absorb the additional financing costs that would come from going conventional mortgage without the Tandem subsidy.

Do you think that is a practical approach?

Mr. COAN. I don't think it is today, Mr. Green, because the level of interest rates are so high. If we were talking about rates of 12 or 13 percent, that might make some sense, but not when we are talking about 15 and 16 percent.

Mr. GREEN. What would that do to the contract rents?

Mr. COAN. Well, it would increase them in your city to even higher levels and make them more subject to attack because of the need to carry those mortgages. It would just erode away the level of units that can be produced with the available contracts, probably. Very substantially, I believe.

Mr. GREEN. The other proposal they have was not to supply the Tandem subsidy but to continue to use Mortgage-Backed Securities as a vehicle.

Mr. COAN. One of the problems that is there is there are two basic ways of doing it today: tax-exempt financing and Tandem. Tax-exempt financing can come through the State housing agencies or through the 11(b) approach or through the so-called straight 103 approach of the Internal Revenue Code. In that case, with respect to tax-exempt financing, you have what they call a financing adjustment concept—which I understand is now pending before both Congress and OMB for approval.

I think it makes some sense, in those instances. We are only talking about increases of one to two or three percentage points as opposed to a doubling of the interest rate that would otherwise apply.

Using mortgage-backed securities is really only viable with tax-exempt financing, the 11(b) approach. Certainly that—there are further things that I understand could be done to facilitate it.

We have also had a problem—and this isn't a partisan matter—of both Treasury and OMB opposing tax-exempt financing. That was in the previous Administration and I have been no encouraging signs in this Administration.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. TRAXLER. Thank you, Mr. Coan.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

JOHN BLAKE, JR., EXECUTIVE DIRECTOR, MASSACHUSETTS HOUSING FINANCE AGENCY, ON BEHALF OF THE COUNCIL OF STATE HOUSING AGENCIES

THOMAS W. WHITE, EXECUTIVE VICE PRESIDENT, COUNCIL OF STATE HOUSING AGENCIES

Mr. TRAXLER. Mr. John Blake and Mr. Tom White. I think this fearless duo is double-teaming us. The Chairman left before he knew you were coming. Maybe he left because he knew you were coming.

Mr. BLAKE. Thank you, Mr. Chairman.

Mr. Chairman, thank you for the opportunity to testify today. I am John Blake, Jr., Executive Director of the Massachusetts Housing Finance Agency. I am here today representing the Council of State Housing Agencies. The Council currently has 47 member State Housing Finance Agencies, as well as 150 organizations affiliated with us including builders, developers, investment bankers and others involved in State financing.

I have submitted written testimony and would greatly appreciate it being included as part of the record.

Today, I will touch on what we consider to be the primary issues related to State Housing Finance Agencies.

Mr. Chairman, low and moderate income housing production is in trouble. We believe that the last year's Mortgage Subsidy Bond Act, this year's proposed reduction of Section 8 subsidy, and contemplated tax changes all combine to cripple substantially the ability of financing institutions to meet low income housing needs.

We support the intent of the President's tax and budget proposals to bring down interest rates so that additional housing may be constructed. Even if rates were to fall, however, we foresee a continued problem in that housing is now competing without special privilege in the national money market. Interest rates will reflect that competition. We see a continued need to make special provisions for housing those of low and moderate income who are priced out of the private marketplace.

Much of what we see necessary to meet lower income housing needs will have to be accomplished through the tax committees of Congress, however, this Committee can do a great deal to ensure the production of much needed low income housing. We submit for your consideration the following recommendations:

(1) Support a fair share budget for housing.

The Reagan Administration originally requested 225,000 assisted housing units for fiscal year 1982. In March, they further reduced their request to 175,000 units. The Senate Budget Committee cut even deeper and has adopted a 150,000 unit level. We feel Assisted Housing has been unfairly singled out and is taking more than fair share proportion of budget reductions. To offset these drastic cuts, we encourage this Committee to support the original Reagan level to ensure that housing is not over-penalized in the final appropriation process.

(2) Support implementation of a Financing Adjustment Factor.

Granting we will have less Section 8 units in the future, the production and utilization of the units now allocated is critical. Presently, with Tandem exhausted and tax exempt financing not working due to high interest rates, it is extremely important that the Congress implement a Financing Adjustment Factor. The Financing adjustment factor [FAF], is necessary to fund the current Section 8 pipeline which, if allowed to go to closing, could reemploy thousands of workers putting them on the work roles and off the welfare roles. The FAF has proven its merits and has functioned

well in the past to allow for financing in times of high interest rates. The FAF compensates for today's difficult market conditions by loosening the interest rate to enable financing while maintaining adequate cost controls. We ask you to implement the FAF as soon as possible.

(3) Support State Housing Finance Agency units.

We urge the Committee to include directions instructing HUD to make a share of Section 8 funds available for utilization by State agencies. This assurance is necessary as our staffing, overhead and production planning are predicated on a given activity and consistent funding level. The State agencies are financial institutions which must know their allocations in advance in order to plan effectively and efficiently.

(4) Encourage OMB to waive end-of-year spending limits.

We urge the Committee to instruct OMB to waive the prohibition against utilization of more than 30 percent of the Section 8 funds in the last quarter of the fiscal year. Although we recognize that this provision is statutory, end-of-the-year spending limits would cause unwarranted hardships right now. Processing on a substantial number of projects has been delayed due to uncertainties associated with the rescission process. Suspension of this provision with a FAF would enable financing and thus new construction.

Additionally, I would like to comment on two other Section 8 related activities. The GAO has issued two reports in the last year on Section 8. The one report entitled Evaluation of Financing Alternatives for Section 8 Housing labeled State agency housing as the most expensive of the financing options. We have completed and submitted to the Committee our response to this report.

After factoring for errors in the report and after making more reasonable assumptions on tax exempt financing, we find that State agency financing is less expensive than the Tandem program although still somewhat more expensive than Public Housing. However, if we then factor for the cost resulting from time lag in the production of public housing, we find that State financing produces more units for the same dollars. We pay somewhat more for the involvement of the private sector in the Section 8 program, whereas in the Public Housing program we pay somewhat less up front because of public management responsibility. This public management, however, has not always worked well, and we are of the strong opinion that a slightly higher cost to bring in private ownership is appropriate.

I am sure we will be discussing this report with your staff and with the Committee independent of these hearings, but I state for the record that our position on the GAO report of last September is that the report draws misleading conclusions from inaccurate and outdated data.

More recently, GAO also issued a new report on Section 8 entitled How to House More People at Lower Cost Under the Section 8 New Construction Program. We believe this report was a more sensible review of the program. Although we don't agree with all of the conclusions, and will be suggesting additional perspectives ourselves, we were encouraged that, based upon the fee appraisers findings, HUD and the State agencies' procedures for controlling development cost appear to be adequate. We have been saying this

for some time. We may differ with GAO as to what constitutes modest housing and we take issue with some of the cost-benefit implications of housing the elderly in efficiency units, but most of our concerns center on the report recommendation to increase HUD management of the program. We have found that HUD management generally slows up the process and delay is expensive. Based on conservative estimates on housing inflation, a year's delay will cost 12 to 15 percent in additional development cost. Thus, our recommendation is for HUD to free up processing so that units may be produced efficiently and in the shortest possible time frame. Overall cost controls can be contained through their market rent limits.

All we ask is the opportunity to responsibly produce the much needed low income housing within the shortest time frame.

Thank you, Mr. Chairman, for the opportunity to testify here today.

[The statement follows:]

Mr. Chairman and members of the Committee, I am John Blake, Executive Director of the Massachusetts Housing Finance Agency and am here today representing the Council of State Housing Agencies. The Council currently has 47 member State Housing Finance Agencies (HFAs) as well as 150 organizations affiliated with the Council, including builders, developers, investment bankers and others involved with state housing finance agencies.

Before proceeding, a brief overview of our testimony is appropriate. We will be addressing the current housing crisis in terms of the limited availability of financing resources, reductions in the Section 8 program and the Administration's tax policy as it relates to housing. Although much of what we see necessary to meet lower income housing needs must be accomplished through the tax committees of Congress, this committee can do a great deal to ensure the production of much needed lower income housing by adopting a fair share appropriation for Section 8 housing.

Housing at Tremendous Disadvantage

Increases in construction costs in conjunction with high interest rates and a shortage of mortgage credit have made conventionally financed rental housing infeasible. Thus there has been little incentive to produce low and moderate income housing. Today to further compound the problem we see a three-fold attack on what little incentive has been available.

Strike one: The Mortgage Subsidy Bond Act of 1980. Last year, Congress saw fit to limit the availability of tax exempt mortgage revenue bonds to a degree which we believe went far beyond reasonable controls. In fact, not a single bond issue has come to market under the new law since the legislation became effective. The Council of State Housing Agencies supported legislation to curb abuses, but, we believe the legislation, adopted in the reconciliation process contains fatal and unintended flaws.

The legitimate public purpose served by these bonds been demonstrated in the past. State agencies have used proceeds from such bonds to finance housing for lower income young families otherwise priced out of the market as well as for the elderly and the handicapped. Average incomes served were well below state wide median incomes. Many of the programs were also urban related and provided a needed impetus to the solution of urban problems. According to a 1979 survey the average sales price was $33,642, the average purchaser's income was $14,399 and the average mortgage amount was $30,583 (10 percent down payment).

Strike two: The President's budget package. In the recommended budget, we see accelerated reductions in the Section 8 subsidy program, particularly for new construction and substantial rehabilitation. The budget submitted by the President contains a 20% reduction in subsidies for 1981, and a 33% reduction in 1982. The Senate Budget Committee

has increased the cut in 1982 to 41%. Although we favor the President's goals of curbing inflation and lowering interest rates and are willing to take our industry's fair share of the national belt-tightening effort, the latest cuts unfairly single out housing. Thus we see yet another avenue of relief for housing low and moderate families being severely curtailed.

We understand the Administration's and Congress' concern about the impact of increased federal expenditures upon inflation. State agencies are directly impacted by inflation as our bond financing programs have come to a halt due to virtually unworkable interest rates in the long-term bond market. We do believe, however, that responsible low and moderate income rental and homeownership programs should continue.

Strike three: The President's tax package. Although we agree with the Administration's broad economic objectives of lowering taxes and reducing interest costs, the fact that housing is no longer a priviledged competitor in the national credit market must be considered. Even if the overall economic program is successful, housing interest rates will not drop to the low levels which have been enjoyed for years and which have allowed most of our citizens to be the best housed in the world. Thus, even granting optimistic conclusions regarding interest rates, there will be additional families priced out of the housing market because of competition for capital.

The President's tax recommendations change depreciation schedules, and may severely impact on the rental housing industry by placing rental housing investment in a secondary position behind investment in commercial and retail real estate. We particularly emphasize the need for greater tax incentive for low and moderate income housing. There is enough trouble attracting equity capital to low income housing with its attendant risks.

CSHA Recommendations to the Committee

Overall, we believe that the overly restrictive mortgage revenue bond legislation, the proposed reduction in the subsidized housing budget, and the secondary place for low and moderate income housing in the tax package, combined produce an unintended and unacceptable negative impact on housing for lower income persons. We believe this Committee can do something about the negative impact.

1. Support a fair share budget for housing.

The Reagan Administration originally requested 225,000 assisted housing units for FY '82. In March, they further reduced their request to 175,000 units. The Senate Budget Committee cut even deeper and has adopted a 150,000 unit level. We feel assisted housing has been unfairly singled

out and is taking more than a fair share proportion of budget reductions. To offset these drastic cuts, we encourage this Committee to support the original Reagan level to ensure that housing is not over penalized in the final appropriation process.

2. Support implementation of a Financing Adjustment Factor.

Granting we will have less Section 8 units in the future, the production and utilization of the units now allocated are critical. Presently, with Tandem exhausted and tax exempt financing not working due to high interest rates, it is extremely important that Congress implement a financing adjustment factor. The financing adjustment factor, (FAF), is necessary to fund the current Section 8 pipeline which, if allowed to go to closing, could reemploy thousands of workers putting them on the work roles and off the welfare roles. The FAF has proven its merits and has functioned well in the past to allow for financing in times of high interest rates. The FAF compensates for today's difficult market conditions by loosening the interest rate to enable financing while maintaining adequate cost controls. We ask you to implement the FAF as soon as possible.

3. Support state housing finance agency units.

We urge the Committee to include directions instructing HUD to make a share of Section 8 funds available for utilization by state agencies. This assurance is necessary as our staffing, overhead and production planning are predicated on a given activity and consistent funding level. The state agencies are financial institutions which must know their allocations in advance in order to plan effectively and efficiently.

4. Encourage OMB to waive end-of-year spending limits.

We urge the committee to instruct OMB to waive the prohibition against utilization of more than 30 percent of the Section 8 funds in the last quarter of the fiscal year. Although we recognize that this provision is statuatory, end-of-the-year spending limits would cause unwarranted hardships right now. Processing on a substantial number of projects has been delay due to uncertainties associated with the rescission process. Suspension of this provision would enable financing and thus new construction.

5. We urge the Committee to support efforts by the Ways and Means Committee to:

(a) Amend last year's mortgage revenue bond act to make it workable by providing for technical amendments; by defining the 1% yield limitation so issues can pay for themselves;and by providing for increased use of rental housing by eliminating or reducing the Section 8 20 year equivalency requirement. At a minimum the requirement should be reduced to 15 years to meet the Section 8 mod rehab requirement.

(b) Amend the President's tax policy to achieve parity for rental housing with office and commercial space, and to recognize the need for tax advantages for low and moderate income housing by providing for 12 year accelerated depreciation for such housing.

GAO Report

Additionally, I would like to comment on two other Section 8 related activities.

The GAO has issued two reports in the last year on Section 8. The one report entitled Evaluation of Financing Alternatives for Section 8 Housing labeled state agency housing as the most expensive of the financing options. We have completed and submitted to the Committee our response to this report. After factoring for errors in the report and after making more reasonable assumptions on tax exempt financing, we find that state agency financing is less expensive than the Tandem program although still somewhat more expensive than public housing. However, if we then factor for the cost resulting from time lag in the production of public housing, we find that state financing produces more units for the same dollars. We pay somewhat more for the involvement of the private sector's in the Section 8 program, whereas in the public housing program we pay somewhat less up front because of public management responsibility. This public management, however, has not always worked well, and we are of the strong opinion that a slightly higher cost to bring in private ownership is appropriate. I'm sure we'll be discussing this report with your staff and with the Committee independent of these hearings, but I state for the record that our position on the GAO report of last September is that the report draws misleading conclusions from inaccurate and outdated data.

More recently, GAO also issued a new report on Section 8 entitled How to House More People at Lower Cost Under the Section 8 New Construction Program. We believe this report was a more sensible review of the program. Although we don't agree with all of the conclusions, and will be suggesting additional perspectives ourselves, we were encouraged that, based upon the fee appraisers findings, HUD and the state agencies' procedures for controlling development cost appear to be adequate. We've been saying this for some time. We may differ with GAO as to what constitutes modest housing and take issue with some of the cost/ benefit implications of housing the elderly in efficiency units, but most of our concerns center on the report recommendation to increase HUD management of the program. We have found that HUD management generally slows up the process and delay is expensive.

Conclusion

In summary, state housing finance agencies have proven to be effective tools in meeting the enourmous housing needs of

this country. They are not a panacea, nor do they replace conventional financing or federal programs. They provide for financing of housing where private efforts cannot do the job. To remain viable institutions we need your help.

By ensuring that assisted housing is not over penalized in the appropriation process, and instructing HUD to make a share of Section 8 funds available for utilization by state agencies, and supporting the financing adjustment factor, the Committee will enable state agencies to continue to meet the needs of low and moderate income families across the country.

Thank you for this opportunity to submit written testimony.

Attachment 1

NOTES ON HOUSING NEED

- High rates of household formation among the baby boom cohort and a steadily growing elderly population will contribute to a large demand for additional housing units.

- To meet demand, rental unit production must average between 500,000 to 600,000 units, for the next five years; of that total the subsidized housing sector must contribute 250,000 to 300,000 units per year to house those who can not afford adequate housing at market rates.

- According to the U.S. General Accounting Office, the median income of renter households is nearly half that of owner households and nearly half of all renters are paying more than 25% of gross income to rent.

- The National Low Income Housing Coalition states that in 1977 (most current available data) there were 4.6 million renters who paid more than 50% of their earnings for shelter and some 4 million who were forced to reside in physically inadequate units.

- According to the U.S. General Accounting Office, the approximately 2.5 million units of Section 8 and public housing provided to date will still leave over 12 million eligible lower income households without assistance.

- Rental housing production dropped from 541,000 new units in 1979 to 397,000 units for 1980 of which 50% of the 1980 units were government subsidized.

- According to a Joint Economic Committee report....sophisticated investors view the multi-family structure, except under circumstances and unique locations, as a relatively riskful non-inflation proof investment.

- Both rental and ownership costs will continue to rise through the eighties. New mortgage financing techniques and double wage earner housholds will keep home ownership within reach of many middle income households. However, most moderate and all low income households will be priced out of the market. Rents in many areas already have risen to the limits of tenants' capacity to pay; rising operating and maintenance costs will spur the depletion of the existing rental stock and discourage conventional new construction.

Attachment 2 ATTRITION IN SECTION 8 PROGRAM

Since 1976 the Section 8 program has been reduced from 516,721 units to 175,000. The following table illustrates the attrition of publicly assisted housing units over the past 5 years.

Year	Section 8 Units Reserved
1976	516,721
1977	388,413
1978	326,026
1979	325,075
1980	205,892
*1981	210,000
*1982	175,000

*Estimated

Mr. TRAXLER. Thank you. We appreciate your appearance here today.

Mr. Green?

Mr. GREEN. No questions, Mr. Chairman.

Mr. TRAXLER. We commend you on your fine choice of directors. We look forward to visiting with you.

Mr. WHITE. The boat is in the water.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESSES

DR. JOHN LOGSDON, PUBLIC POLICY COMMITTEE, AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

DR. JERRY GREY, ADMINISTRATOR FOR PUBLIC POLICY, AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

Mr. TRAXLER. We are pleased to hear from Dr. John Logsdon, a member of the Public Policy Committee of the American Institute of Aeronautics and Astronautics and, of course, Dr. Jerry Grey, the Administrator for Public Policy of the AIAA.

We will be pleased to put your statement in the record and you are welcome to paraphrase it or read it to us in any fashion you wish.

Dr. LOGSDON. Thank you, Mr. Chairman and Mr. Green.

We appreciate the opportunity to appear before you this afternoon. I am John Logsdon. I am testifying for the AIAA—American Institute of Aeronautics and Astronautics—a professional society of 30,000 engineers, scientists, and students.

I am somewhat of a ringer. I am a political scientist by training with a long-time interest in public policy and direct inquiries with the program of science and public policy here at George Washington University. To make sure I am technically honest and valid, Jerry Grey is with me this afternoon. Jerry is an engineer of high

accomplishment and long experience. He can provide the kind of input that you need.

The AIAA, as you might expect, is deeply concerned by the proposed fiscal year 1982 NASA budget, which curtails a number of key areas in both aeronautics and space technology. Whereas we recognize the urgent need for fiscal constraints, these technologies represent investments in the Nation's economic future, and their curtailment will prejudice the growth of the new and innovative industrial capabilities which are needed to provide revenues for the future. Their curtailment, we believe, will prejudice the growth of new, innovative, valuable industrial capabilities which are needed to provide the quality of life, the economic growth, the tax revenues of the future.

Specifically, in aeronautics we believe the pitifully small investment of NASA funds in aeronautics technology which seeds a $50 billion to $150 billion aviation industry, one of the Nation's really few vigorous growth businesses and export successes as compared with decaying industrial areas such as autos, steel, shipbuilding, and electronics is a deplorable level of investment. Even including the $11.2 million supplement recommended by the Legislative Committee, the proposed aeronautics R&D budget represents a drop of over 30 percent in constant dollars over the past two years. We feel that the current Administration, by cutting off anything where there is a private sector involvement, is discriminating between unwarranted government intervention and productive government partnership with the private sector.

Among the many important efforts which have been cut back and which should be reinstated in our judgment, indeed perhaps expended, we have singled out two small but important ones which we believe will have particular significance in the future—avionics and alternative fuel utilization—but most particularly the numerical Aerodynamic Simulator, whose deletion could seriously threaten the entire U.S. computer industry as well as constrain essential U.S. developments in aeronautics.

Mr. TRAXLER. What does that do?

Dr. GREY. It is a high-speed computer. Its basic function is to simulate the entire design process of an airplane. Generally what you have to do in airplane design is change the wing structure. That, of course, changes everything else. You have to go back and redesign the whole airplane. The computer in a sense does that for you in a single process.

Mr. TRAXLER. General Motors uses those in the design of autos.

Dr. GREY. Airplanes are much more complex.

Dr. LOGSDON. This is a main frame computer of substantially larger size.

Dr. GREY. It has fallout not only in the aeronautics field but also a step forward in computer technology. The Japanese are really beginning to threaten us in that field.

This would represent the way the U.S. could not only in aeronautics but also in overall computer technology maintain a presence in that field in which we are seriously being threatened overseas.

Mr. TRAXLER. Today automobiles, tomorrow computers.

Dr. GREY. Computers.

Mr. TRAXLER. Next week the world. And we are going to rearm them.

Dr. LOGSDON. It would be interesting to see where General Motors got that computer capability they are using for automobile design. I think it came out of precisely this kind of seed investment.

In space, we suggest the Subcommittee support the Legislative Committee's reinstatement of a number of the programs proposed to be delayed or deleted from the fiscal year 1981-1985 NASA budgets by the new Administration, and that you urge the Administration to restore the 840 NASA personnel slots they have eliminated. The total dollars involved represent only a tiny fraction of the increase in defense budgets, for example, and yet constitute what we believe to be an irreplaceable investment in the future from both economic and national security viewpoints. Indeed, it seems to us that we are backing away from reaping payoffs from investments already made.

Specifically, we urge that full funding for the fifth Shuttle orbiter option be restored, that the current fleet of expandable launch vehicles be maintained until the Shuttle has proved itself capable in terms of availability and routine operation of assuming the launch demand burden, that a high-performance (cryogenic) orbital transfer vehicle development be initiated as soon as possible, and that the Advanced Space Transportation Capabilities Segment of Advanced Programs [in the Office of Space Transportation], which offers the flexibility for evaluating new and imaginative ways to utilize our new space transportation system, be reinstated and expanded.

We believe the relatively small programs in space applications such as the Geological Applications program, the Agristars Project, and the Upper Atmosphere Research Satellite are all wise investments, and should not be deleted or delayed. Reducing space materials processing support seems economically inexplicable in the face of the recent General Accounting Office report, for example, which calls for a doubling or tripling of such efforts to meet foreign competition. And the almost miniscule NASA investments in technology transfer and utilization would appear to us to be the very last that an Administration dedicated to private sector investment would want to eliminate. The Science and Technology Committee has recommended that these efforts continue to be supported, and we hope that you will agree.

Our major concern, however, is the implication of the proposed budget cuts in space science. Here we feel most strongly the lack of evidence of an overall long-term Federal space policy. Fortunately, the Space Telescope program has remained intact, but it is virtually the only one. The Explorer Program, which provides involvement for the broader scientific community, must be sustained. Delaying the Gamma Ray Observatory, the unanimous top priority of the Space Science Board when it was initiated, introduces serious inefficiencies and, ultimately, greater costs. We are truly dismayed by the proposed cancellation of the joint U.S.-European International Solar Polar Mission, not only because of its considerable scientific value, but also because it effectively undermines and kills future cooperative ventures with our friends and allies over-

seas, and we urge you to support the Science and Technology Committee's reinstatement of that program.

Other programs in solar terrestrial research (in the Physics and Astronomy budget), a key area for eventual application of scientific knowledge, are endangered by the proposed cuts. It is interesting, for example, that we have theories to predict the radiation frequency from Jupiter, but we have no quantitative theory to explain why droughts in the Western Great Plains correlate with changes in the solar magnetic field.

Shuttle/Spacelab Science Payload Development, an important use of the new systems on which we have spent so much this past decade, should certainly not have been cut. Life sciences, critical to the manned space operations we have just resumed, suffers from budgetary starvation. And in planetary exploration, only Galileo remains [and even it has had to be delayed]—a far cry from the days when the U.S. led the world in space exploration and reaped the accompanying benefits in national prestige and pride of accomplishment. Deleting the Solar Electric Propulsion Stage and the joint NASA/Air Force Ion Auxiliary Propulsion System Program (for a savings of only $1 million) would prejudice not only our future space science efforts, but also potential defense-related orbital transfer capabilities. The Science and Technology Committee has wisely asked that these efforts be reinstated; again, we hope you will support them.

In summary, the NASA budget is precisely the wrong place to demonstrate parsimony, depsite the need for reducing Federal expenditures, since it represents one of the very few Federal investments in our future. It will return many times its cost in tax revenues, balance of payments, and employment, as has already been demonstrated by the aviation and satellite communications industries.

I think if you look, for example, at what is going on in other industrial countries, the United Kingdom has under consideration a top level report saying it should set up a NASA-type organization to explore the potentials of space.

The Japan MTSI has recently received a report with urgent recommendations for an accelerated space program aimed at export sales of ten times their current magnitude within the next ten to 15 years.

We have attached and brought along a number of supporting documents to our statement to amplify further some of the points we have made in this brief presentation.

Dr. Grey has those. We hope they will be useful to the Subcommittee and its staff. We appreciate the opportunity to appear before you today.

[CLERK'S NOTE.—The supporting documents have been received and are on file with the Committee.]

Mr. TRAXLER. Would you briefly refresh my memory as to what the IM electric propulsion unit is?

Dr. GREY. It is a mercury thruster which is a joint effort by the Air Force and NASA basically, to test an existing level thruster in space. It had a total cost of $7 million. Six has already been spent. All that is necessary is an additional million to fly it and verify its performance. At this stage it really seems ridiculous not to do so.

Mr. TRAXLER. Well, I have to confess that you are our favorite agency. We are rather euphoric in view of the successes of the last two weeks or so.

Dr. LOGSDON. It seems to us very ironic to, right at the time that you reach that success, to begin to back away, not to invest in the full use of the shuttle system, to not have the money in the budget for the external tanks that are required to launch the missions for which the demand already exists.

Dr. GREY. One of the documents we have here is a summary of a study we did for the Carter White House just in January which projected the commercial demand for space transportation operations, whether they be shuttles or expendables. That demand is growing by leaps and bounds. Our conclusions were basically that not only is there a need for a fifth and maybe a sixth and seventh orbiter and better facilities, but also more for maintaining a stable of launch vehicles through the rest of this decade. Not because of NASA demands or military demands but because of commercial demands. This comes from the rental of transponders in orbit which is a good commercial business today. Even since we did our report there has been an expansion.

The recent decision to approve direct broadcast satellites has immediately opened up another six or seven new satellite projected requirements over the next three to four years. That demand is there.

Just as John said, it seems at this point to be turning back and cutting in an area which is providing us with additional revenues which will produce tax money for all of your other associations that are here talking to you today.

It just seems like the wrong way to go.

Mr. TRAXLER. Mr. Green.

Mr. GREEN. Again from the testimony we have had, though, that this is a little way off, that in fact the pricing on the early Shuttle flights is such that we lose money on each trip and that the commercial payoff where we start seeing a profit comes later out, mainly because inflation has been underestimated in setting the price.

Dr. GREY. That is true. What you say is correct, certainly. I think that is a very small fraction. What we are generating is business. You are generating business opportunities and new business revenues. That is where the payoff is. It is not in the two or three million dollar profit that you make on these flights. It is in the fact that each transponder that goes into orbit rents for a million dollars a year. That has enormous influence into the overall economy.

Dr. LOGSDON. The fixed price for the Shuttle launch is really just for the first three years. After that, the commercial customers are going to pay the cost of the launch. They are willing to pay the cost of the launch, as long as they know they are going to get one. They do not want the satellites sitting on the ground because of the lack of a launch vehicle, for example, Intelsat has turned to a European launcher, to Ariian, precisely because they were not sure there would be a U.S. launch vehicle available to them. That is hard cash lost in return for the investment on the shuttle because of delays,

because of the backing off of the commitments to make the system available.

Dr. GREY. The overall development of the Shuttle, I believe, is comparable to that of NASA's investment in satellite communications technology during the decade of the 1960s. NASA invested about $1 billion, roughly, and is now pretty much out of the game. There is only a tiny NASA investment remaining. Last year alone the gross revenues from the satellite communications industry was a billion dollars. We are talking about a return to the taxpayer in the form of revenues, taxes, and ultimately of employment, which is growing by leaps and bounds.

Mr. TRAXLER. Just one question, if you have the answer.

In conclusion, what was the NASA request, if you know, for the computer that got scrubbed?

Dr. GREY. Sixteen million dollars.

Mr. TRAXLER. Thank you very much.

Dr. GREY. The total requirement for that will be more.

Dr. LOGSDON. That was a new start this year.

Dr. GREY. It was scrubbed because it was a new start.

Mr. TRAXLER. Not on merits?

Dr. GREY. Not at all.

Mr. TRAXLER. Thank you.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESS

ROBERT A. RICHARDSON, EXECUTIVE DIRECTOR, HELICOPTER ASSOCIATION INTERNATIONAL

Mr. TRAXLER. Mr. Robert Richardson, Executive Director of Helicopter Association International.

Mr. RICHARDSON. Mr. Chairman, thank you.

I would like to summarize my statement, if I may.

Thank you for the opportunity to be here. The HAI, which is an organization of helicopter operators and also represents the manufacturing side of the industry worldwide, feels that NASA should undertake on a high priority basis the high risk research and technology development which industry cannot afford to do within its own resources. Such high risk R&T development many times leads to big payoffs which can move one country or the other ahead competitively.

For an example, what has happened in the past decade in this industry, Mr. Chairman, in 1970 the United States produced about 70 percent of the free world rotorcraft dollar volume. Today, its share is approaching 50 percent. A projection of this trend shows that the United States percentage will be about 35 percent by the end of this decade, 20 percent by the year 2000. To prevent this from happening, a dynamic NASA R&T augmentation program in coordination with industry is urgently needed. In the national interests, it must commence in earnest in fiscal year 1982.

Mr. TRAXLER. What foreign countries currently are in the forefront of helicopter sales?

Mr. RICHARDSON. France, Germany, Italy and, to a limited degree on the civil side, Great Britain and Japan. They are coming on like gangbusters.

In anticipating the possibility of the United States losing a leadership role in rotorcraft, if no new R&T initiatives are undertaken, a special task force was created by NASA's Office of Aeronautics and Space Technology under the auspices of the National Research Council's Astronautics and Space Engineering Board. The task force, composed of leading rotorcraft industry experts, including several members of this Association, developed a ten-year "Advanced Rotorcraft Technology Program". This program was envisaged to be a long-term new initiative research effort by NASA which was to begin in fiscal year 1980. Its estimated cost over the ten-year period was about $400 million (in 1978 dollars), or at an average annual rate in the order of $40 million. We have spelled that out in Appendix A of our written statement. Today, however, the same program would cost in the order of $600 million at an annual average rate of some $60 million.

Unfortunately, this new initiative program for advanced rotorcraft technology development did not surface in NASA's official fiscal year 1980 budget request to Congress.

Therefore, with the support of the helicopter industry through this Association, the Congress appropriated a $5 million add-on to NASA's fiscal year 1980 budget which permitted the commencement of the advanced rotorcraft technology new initiative program, albeit on a much more modest scale than was propose by the 1978 Task Force.

However, even that limited state on the urgently needed advanced rotorcraft technology new initiative program has not been sustained so far in the fiscal year 1982 NASA budgetary process. Appendix B outlines our understanding of the status of the NASA fiscal year 1982 request for rotorcraft funding which this subcommittee is now considering as part of NASA's Aeronautics budget. We consider the $38 million submittal for the NASA rotorcraft program is woefully inadequate in light of the national interests outlined previously in this statement.

Therefore, in Appendix C we have presented the scope which this Association, on behalf of the U.S. helicopter (rotorcraft) industry, believes the NASA rotorcraft funding program should be for fiscal year 1982. This program totals $70 million, an increase of $32 million over the amount currently under consideration. This is roughly one-half of the amount industry considers is needed by NASA for "new initiatives" in fiscal year 1982 as discussed earlier, reduced only because of the current policy of austere budgetary constraints of this Administration, with which this industry concurs. However, we feel that this increase is a sound investment in the national interest for the reasons outlined in this statement.

Thus, we urge that NASA's Aeronautics funding be increased by an amount sufficient to specifically earmark not less than $70 million for its fiscal year 1982 rotorcraft program, consisting of $38 million for continuation of its existing program and $32 million add-on as a minimum for its new initiative research effort which should get underway in a dynamic manner in fiscal year 1982.

We consider that a commitment to authorize NASA an average expenditure of some $70 to $100 million annually over the rest of this decade for the research needed for advanced rotorcraft technology development would be more than cost effective, considering the $20 billion (plus National Security) annual benefits which may be expected to result.

We will be most pleased to cooperate fully with the Subcommittee and staff in elaborating further our views on the foregoing as may be desired.

Mr. TRAXLER. I have one question. That is, to your knowledge, what were the reasons that the United States Coast Guard purchased some 150 French helicopters as replacements for the Sikorsky?

Mr. RICHARDSON. My conception of the reasons, Mr. Traxler, is that the French machine was indeed superior for the mission that the Coast Guard envisioned.

Mr. TRAXLER. What were they using those for—rescue?

Mr. RICHARDSON. They are using it to replace an outdated fleet of rescue and patrol helicopters; not only rescue, but also they do an extraordinary amount of patrolling of the coast. The French machine has the range and apparently the ruggedness that they wanted and the payload, lift capability.

Mr. TRAXLER. So it is a large aircraft then?

Mr. RICHARDSON. A fairly sizable aircraft. I don't have the gross weight right at my fingertips, but the kind of thing if you were to put seats in would probably carry about a dozen persons.

Mr. TRAXLER. Thank you.

We didn't have a comparable craft available?

Mr. RICHARDSON. Our craft came in second—it was close, but the general feeling, apparently—obviously—by those technical people who had to make the final decision was that it didn't quite measure up in many of the parameters they were looking for: ruggedness, range, payload capability.

Mr. TRAXLER. Are you aware of any foreign policy considerations that came into play in this purchase?

Mr. RICHARDSON. We had an interesting parallel about two years earlier when the Coast Guard selected a French jet aircraft for its longer range patrol mission. The general feeling was that perhaps rather than go outside the United States a second time for that type of aircraft that it would be likely that the contract would be given to a U.S. manufacturer and there was some pretty strong feelings in that area. However, perhaps that is even more indicative of the fact that the French equipment clearly had to have some superior capability.

Mr. TRAXLER. Thank you very much.

Mrs. BOGGS [presiding]. There is no way that the United States could meet those capability requirements?

Mr. RICHARDSON. Well, it was a fair and square competition, Mrs. Boggs. In the early going, we had two American companies that were competing with the French. One was Bell Helicopter, which went to the final selection. The other was United Technology, Sikorsky Aircraft Division.

They dropped out about three months before the final selection was made. I believe the reason was that they had a considerable

number of other contracts that they had to fulfill, both civil and military. It really would have been very difficult for them, had they won the contract, to produce in a timely manner.

In answer to your question, it was a fair and square competition. We didn't have the technology that was needed by our own government agency, the U.S. Coast Guard. This is indicative of my message—that we are falling behind drastically.

Mrs. BOGGS. We do thank you very much for your testimony. I am sorry I wasn't here for its entirety.

Mr. RICHARDSON. Thank you very, very much.

[The attachments follow:]

Appendix "A"

NATIONAL RESEARCH COUNCIL TASK FORCE

ADVANCED ROTORCRAFT TECHNOLOGY

PROGRAM FUNDING ESTIMATES

(In FY78 Dollars)

TOTAL PROGRAMS	$398.1
Aerodynamics and Structures	132.5
Aero/Acoustics I	26.0
II	17.5
Vibration Reduction I	20.5
II	15.0
III	15.5
Composite Airframe I	13.0
II	25.0
Flight Control and Avionic Systems	85.1
All-Weather Systems	45.0
Active Control Systems	40.1
Propulsion	104.5
Engine Component Design Methodology	54.5
Power Transfer Technology	26.0
Systems Integration I	24.0
Vehicle Configurations	76.0
High Speed I	20.5
II	25.0
Large Rotorcraft I	12.5
II	18.0

Appendix "B"

FY-1982 SCOPE OF WORK

NASA ROTORCRAFT FUNDING PROGRAM

(in $ millions)

1.	Low-Speed Aircraft R&T Base		10.3
2.	Low-Speed Systems Technology		27.3
	Rotorcraft Operating Systems	1.4	
	Advanced Rotorcraft Technology	10.8	
	Advanced Rotor Systems/RSRA	6.4	
	Tilt Rotor Flight Investigations	2.0	
	Low-Speed Simulation and Flight Systems Support	6.7	
3.	Aeronautical Systems Studies		0.4
		Total	38.0

Appendix "C"

FY-1982 SCOPE OF WORK

NASA ROTORCRAFT FUNDING PROGRAM

Helicopter Association International Recommended FY 82 Budget

(Refer to Appendix "A")

(In $ millions)

1. Current NASA Programming - Proposed Funding 38.0

2. HAI Recommended Augmentations 32.0

Note: In recognition of the need for austere budgetary control for FY82, the HAI recommendations are based on an increased R&T effort by NASA considered to be needed in the national interest to initiate the goals outlined in this testimony. Therefore, only a limited number of high priority items are included in these recommended augmentations (specific distribution of appropriated funds to be decided by NASA in coordination with industry.)

a) Improved Rotorcraft Productivity through speed and payload increases.

b) Reduction of Rotorcraft External and Internal noise (includes vibration reduction).

c) Development of advanced composite materials and cost effective applications.

d) Development of all-weather rotorcraft capability, including concept validation of Navstar GPS applications, zero-zero approach and landing technology and low/zero speed instrumentation/displays.

e) Development of technology for operationally feasible and economically viable anti-deicing technology; also icing detection technology.

f) Development of technology needed for fuel efficient, minimum pollution, light weight and high power propulsion systems designed to meet the special needs of advanced rotorcraft.

g) Expansion of heavy lift helicopter (HLH) developments, taking maximum advantage of work done previously in this field.

TOTAL 70.0

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESS

RONALD S. KOKINDA, NATIONAL DEMOCRATIC POLICY COMMITTEE

Mrs. BOGGS. Mr. Ronald S. Kokinda?

Mr. KOKINDA. Thank you.

Mrs. BOGGS. Welcome. So nice to have you with us.

Mr. KOKINDA. Thank you. I appreciate the opportunity to appear before the Committee this afternoon. Let me just say that the organization I represent, the National Democratic Policy Committee, is an independent organization. We have both a PAC function, as well as a policy formulating type of function. It was born with the idea in mind of getting a lot of the traditional constituencies of the Democratic Party, farm, labor, and business active in politics once again.

Since my statement, I assume, will be put in the record in full, I would just like to comment on a couple of general points this afternoon. One is that there is an argument going around that the best thing for the economy is that the NASA budget should face the same cuts everyone else is faced with in the current climate of the Administration's economic program.

Our feeling is very strong that the truth lies about 180 degrees in the opposite direction, and that if we were to look at economics from the standpoint of a scientific basis, that the NASA program is the best example of the real science of economics. Economics in a scientific sense, is a science of technology, where in any given mode of production that we face, if we are not making the sort of technological innovations in our productive process and we are not investing in the economy in such a way that basic fundamental theoretical advances in science and the laws of the universe are coming into lay and technology is spinning off of them, then the economy is going to be in real trouble. In other words, those two processes, basic scientific advance and techological advances are the key, absolute, motor force for any economy.

In the area of technology, any number of studies, Chase Econometrics, others, have pointed out rate of return for every dollar invested is something like the rate of 14 to 1. If you look at the productivity rises in the U.S. economy in the post World War II period, the only significant rises were from where NASA was starting to when NASA began to decline after reaching its peak. As productivity rose, a high level of NASA activity was basically coincidental. That is not accidental. That is a very lawful type of phenomena.

If we have commitment to the manned space programs that we did back in the sixties, there would be a tremendous amount of research that would be going on that would be beneficial to our investigation of advanced energy sources.

MHD, fusion, in terms of propulsion questions, if we looked at the programs that are looking at the sun, the benefits from such programs in terms of plasma physics, the mastery of which is going to be crucial in the development of fusion energy. Anywhere you turn, the benefits are going to be absolutely tremendous.

We would like to see a situation where NASA would be put on the level of commitment that it had in 1965, if we had a comparable dollar investment commitment, we would be on the order of something like $14 billion. The importance of that for skilled manpower, getting the U.S. scientific and engineering capability back on track is an important consideration.

The question of international cooperation—our European allies are saying that we are an unreliable partner in these projects. The bitter irony in the international cooperative area is that just at the point that these other nations are reaching a capability of being able to participate with us where they can share the costs, they are developing grave reservations because of our failure to live up to these sorts of commitments. I think that is a harbinger of ill-boding to the U.S. economy.

I want to draw my informal remarks to a close there, just to say that from a political standpoint, there are many today who are advocating a post-industrial society in the United States. My feeling is that a very heavily funded NASA program is the best rejection that we can give to that argument; that the failure to maintain the U.S. lead in these programs is going to have extreme economic, scientific and national security implications; so we would certainly feel very strongly that the Committee should give as much funding as possible to the NASA effort.

[The statement follows:]

National
Democratic
Policy
Committee

Lyndon H. LaRouche, Jr.
Chairman
Advisory Council
Warren Hamerman
Chairman
Ken Dalto
Executive Director
Barbara Boyd
Treasurer

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Statement of Ronald Kokinda
For the National Democratic Policy Committee
Before the Subcommittee on HUD, Independent Agencies
House Appropriations Committee
May 7, 1981

Thank you Mr. Chairman. I appreciate the opportunity to appear before this Committee to testify on the FY 1982 National Aeronautics and Space Administration budget.

The National Democratic Policy Committee was formed in August, 1980, at the urging of Lyndon LaRouche, who today chairs our advisory council. We are a multi-candidate political action committee, and also a policy formulating body. We provide an alternative to think tanks like the RAND Corp., Brookings Institution, Heritage Foundation, etc., in terms of policy and program development, and put forward policies which we believe will bring the traditional farm, labor and business base of the Democratic Party back into politics once again. We are open to working with the Reagan Administration on a bi-partisan basis wherever their program fulfills the election mandate they have received for a policy of economic growth.

Unfortunately, the proposals prepared by David Stockman for the Administration's FY 1982 NASA budget, if not changed by the Congress, will be a disaster for the Nation. The delay, deferral or cancellation of crucial scientific and technology programs will set back the U.S. space effort in a way that will be difficult if not impossible to recover from. The policy implications of such cuts for the U.S. economy are even more monstrous.

A scientifically based economics, as opposed to the mere opinion passing for economics today, is essentially the science of technological advance. The resource base of an economy and its ability to increase its potential for expansion is infinite. The arguments of the neo-malthusians and the proponents of the "Global 2000" perspective that population reduction must become a national security concern because resources are "finite," are only the case where an economy becomes trapped in a given technological mode, exhausts the resources for that given mode of production, and undergoes "thermodynamic death," i.e. is a doomed economy. A viable economy is one whose technological advances enable it to redefine and expand its notion of resources. These technological advances necessarily are predicated upon fundamental advances in the mastery of the laws of the universe which allow man's increasing mastery over and ability to command nature. The NASA program is an outstanding example of an investment that provides both a several-fold return in technological advances to the economy, and an essential contribution to man's knowledge of basic science and fundamental laws of nature.

Let me say at this time that what Mr. Stockman proposes as a return to "free market economy," as programs which are no longer "weighted" by government intervention, and which will supposedly return the economy to health, is a total fraud and a hoax. Mr. Stockman's proposals are weighted. He is an advocate of a "post industrial economy" outlook, an outlook embodied in a number of reports developed by the Carter Administration such as the "Global 2000" and the "Agenda for the '80's" reports. His proposals and cuts are not "across the board," are not "neutral." They are weighted to bring about the Post Industrial Society which he advocates. Mr. Stockman is deliberately intent of dismantling the necessary protective mechanisms of the productive sector, those crucial programs involving infrastructure, R and D, and credit programs essential to a healthy, growing economy.

To point out what the intentions of Mr. Stockman are, let me quote from one of his mentors, Professor Daniel Bell, who was a professor of Mr. Stockman's and author of the 1973 book, "The Coming of the Post-Industrial Society:" "Stockman," said Bell, "has maintained a consistent outlook dating from his student days...as a believer in the post-industrial thesis. Stockman's idea is to remove all government impediment to the post-industrial society, and let market forces take care of the rest.... Unfortunately, David Stockman cannot talk openly about his post-industrial ideas in his current environment. But we have done pretty well....A particular post-industrial barometer is Stockman's cuts in internal improvements and related programs...." I have attached an addendum to my testimony, an article on Stockman and the "Global 2000" policy by Christopher White in the Executive Intelligence Review March 17, 1981, which I would call to the Committee's attention.

It has been conservatively estimated by economic analysis firms such as Chase Econometrics that for every dollar invested in NASA R and D, fourteen dollars was returned to the civilian economy. The government can make no better investment in the Nation's future. To cut $ 604 million dollars from this avenue of advanced R and D funding means the government is making the conscious decision to stifle the development of the technologies this Nation will need in the next decade to compete internationally economically, and every other way.

There has been only one significant period of productivity rise in the U.S. economy in the post-World War II period, from 1959 into the mid 1960's, which was due to the NASA program in combination with the investment tax credit policy adopted by the Kennedy Administration. It has been due in large part to the stifling of the NASA program over the last ten to 15 years that productivity in our economy is a disaster today.

To cite just one of numerous examples, the NASA cuts will virtually gut the Agristars project to develop accurate and timely crop monitoring capabilities by satellite. The Agristars project's demise will mean the loss of a capability essential to continued productivity rise in this area.

The United States is also on the verge of losing its international

cooperation agreements with the European Space Agency. During testimony before this committee on March 11, Mr. E. Quistgaard stated to the Members that the United States has become an "unreliable partner" in international space cooperation due to its cancellation of joint projects already underway.

This international cooperation, which saves NASA and the American taxpayer hundreds of millions of dollars, is critical for future commercial and industrial space ventures as well as scientific discovery.

The national security implications of a constricted space effort is clear. Even though some NASA programs that are directly tied to important Defense Department requirements, such as the Space Shuttle, have been saved from cancellation because of their national security implications, the phase-out of basic scientific research work and technology development will cripple our ability to develop the next generation of weapons systems that will spin off of a mastery of advanced plasma physics.

If NASA had the same capability that it did in 1965, the budget would be about $14 billion. This constriction of NASA over the years has meant that precious teams of scientists at NASAs laboratories are working on non-space and non-critical research for other Federal agencies because laboratory directors have correctly hoped to keep them employed so as not to lose this important resource. We must start re-building our scientifically trained manpower base in the country, not allowing futher skills to be lost.

Many admit that if the Apollo moon landing had to be done today, NASA would not be able to replicate it in the nine years it took in the 1960's. Most also realize that we are not alone in space. The Soviets, French, Japanese, Indians, and the European Community as a whole, will push ahead whether we do so or not. The advocates of "Global 2000" and the "Post-Industrial Society" propose to turn the United States into a "lesser developed" Nation. An adequately funded, aggressive NASA program is the best rejection of that outlook, and one that will maintain the U.S. at the forefront in science, technology and space.

Mrs. BOGGS. Thank you very much.

Mr. Green?

Mr. GREEN. No questions.

Mrs. BOGGS. It was very nice of you to come and share your views with us. They will be helpful to us.

SELECTIVE SERVICE SYSTEM

WITNESSES

REV. JAMES C. LONGACRE, CHAIRMAN, PEACE SECTION, MENNONITE CENTRAL COMMITTEE, UNITED STATES

EDGAR METZLER, WASHINGTON OFFICE, MENNONITE CENTRAL COMMITTEE

Mrs. BOGGS. We welcome Reverend James Longacre, Chairman of the Peace Section of the Mennonite Central Committee.

If you would like to summarize, we will place your full statement in the record.

Reverend LONGACRE. Thank you very much.

Members of the Committee, I have a written statement to present to the Committee for the record, and would be pleased to answer any questions that you might have.

I am James Longacre, Moderator of the Franconia Conference—that is in southeastern Pennsylvania—and Chairman of the Peace Section of the Mennonite Central Committee of the United States. With me is Mr. Edgar Metzler of our MCC Washington Office.

The Mennonite Central Committee is a representative agency of Mennonite churches. Although we cannot speak for all individuals within our denominational groups, the concerns we raise about conscription reflect a 450-year understanding that our faith requires us to reject war and violence completely. My testimony is in reference to conscription.

In the 16th century in Europe, over 2,000 of our forefathers gave their lives as martyrs because they chose to obey God rather than a government which commanded them to take up arms against their fellow human beings. This action was modeled after the witness of the church in the first three centuries after Christ when all Christians believed that participation in the military was contrary to the will of God.

Our conscientious objection to war is an expression of our faith in Jesus Christ. That same faith bears witness to the biblical teaching that security is in God and not in military might, and the wisdom of Jesus that "they that take the sword shall perish by the sword."

This teaching becomes more relevant with each new weapon developed and deployed. The consequences of a nuclear outbreak are such that those religious groups who once talked of a "just war" are now questioning whether any moral sanctification can support war in the nuclear age.

When this Committee met in February, 1980, the question was whether to approve registration and a revitalization of the Selective Service System. Registration was approved, but not without serious questions. A statement presented to your Committee at

that time by Representative Ron Paul concluded that "the draft is wrong constitutionally, morally, economically, militarily, and politically." President Reagan, as a candidate, said in a letter to Senator Hatfield on May 5, 1980:

> Perhaps the most fundamental objection to draft registration is moral. Only in the most severe national emergency does the government have a claim to the mandatory service of its young people. In any other time, a draft or draft registration destroys the very values that our society is committed to defending.

We are concerned that allowing the first step toward draft registration to continue will contribute to the illusion being actively promoted by this Administration that the answer to our problems in the world is more military might. Less than a year after the Carter Administration had contended there was no need for registration, the President in 1980 asked for a resumption of registration. The reason was Afghanistan. Another signal at the time was the grain embargo. Now the grain embargo has been lifted. Will the registration requirement be lifted also? Or is registration only the foot in the door for the draft?

Registration and the revitalization of Selective Service have been presented as only a contingency plan in case of mobilization. Officials at Selective Service have repeatedly claimed that they are not planning for a peacetime draft. However, Dr. Rostker, Director of Selective Service, said in reply to a question from Senator Huddleston in connection with hearings by the Senate Appropriations Subcommittee on HUD-Independent Agencies on April 1, 1981:

> The present registration system is designed to interface with any draft system that may be instituted in the future. No modifications would be expected.

What has been happening this past year is that the government has again begun to intrude into the lives of millions of young men; and Selective Service, without explicit instructions from Congress, has begun to gear up for a draft in some yet to be defined future contingency. We believe there was no justification for registration a year ago—there is none now; and Congress, therefore, should not appropriate money to continue the system.

The second part of my testimony refers to the alternative service aspect, the Alternative Service Concept Paper. I would like to raise a few concerns of our people about that.

As part of the revitalization of Selective Service, an entirely new plan for alternative service for conscientious objectors is being developed. The shape of this plan is contained in the Alternative Service Concept Paper published in the Federal Register, January 22, 1981.

The program proposed is a highly centralized system of allocating conscientious objectors to areas of national workforce need as determined by the Federal Emergency Management Agency. It envisions establishing a new Alternative Service bureaucracy with a chain of command from the national headquarters to regional offices to area offices with these Alternative Service Program officers having control of the assignment and supervision of conscientious objectors during their alternative service.

This proposed new system seems to us a reversal rather than a progression of the experience of the conscientious objector community. Over 15,000 of our young men were conscripted into alternative service in the draft that operated from 1952 to 1975. Our

experience with that service, and the experience of thousands of conscientious objectors during World War II, is the background of our specific concerns about these proposals.

(1) Selective Service is planning for a tightly controlled system in order to accommodate a large number of conscientious objectors. We also believe that religious groups should have the possibility of operating their own programs, as in the past, as long as they conform to the statutory requirements for alternative service. Recognition for church-operated programs will enable those churches who desire to do so to provide closer supervision and pastoral care to their members while they are performing work of national importance.

(2) We believe that many church agencies are engaged in service activities that fall within the legal definition of alternative service. Many of these agencies will be willing to have conscientious objectors assigned to them, but are concerned that their usual personnel requirements not be violated by Selective Service assignment decisions.

(3) Appeal procedures for decisions regarding alternative service assignments should be provided. As presently proposed, the conscientious objector may be assigned from a computer job bank. The role of the Federal Emergency Management Agency to allocate jobs according to national emergency needs suggests the possibility that these jobs could be in areas the conscientious objector would consider war-related and little different from non-combatant service.

(4) We assume that civilian service will be supervised by civilians. This principle appears compromised in the plan to have the 434 area offices headed by military officers and by the role of FEMA, which is subject to oversight by the Secretary of Defense and the National Security Council.

(5) The proposed Alternative Service Program does not allow conscientious objectors to serve overseas. We strongly believe that service in relief, disaster aid and reconstruction, and economic development in other parts of the world is in the national interest. Thousands of conscientious objectors have made significant contributions in projects in developing countries. The Mennonite Central Committee currently has 800 workers in 45 countries and believes such assignments should be allowed, indeed, encouraged.

As part of this statement we include, for the record, a "List of Principles" and a copy of a letter sent to Selective Service on March 17, 1981, expressing some of these same concerns. For the convenience of the Committee, we also include a copy of the Alternative Service Concept Paper.

One of our concerns about the present registration system is the assumption that this procedure has nothing to do with classification, enlistment, and service. That would come only at the time of mobilization. This is the justification for not providing a means of indicating conscientious objection in the registration procedure. However, a check place is provided for those who want more information about military service. We suggest that a similar check place be provided for those who want more information about the other legal option—conscientious objection and alternative service. Selective Service recently sent information about all the options to 22,000 high schools, and we seen no reason why a check for such

information should not be included on the registration card or made available at the post offices at the time of registration. The need for such information becomes apparent when one considers the plan for induction notices in case of mobilization. These will be sent by mailgram and the young registrant will be informed for the first time of his rights of appeal and the possibility for a conscientious objector claim. We believe it would be more equitable to provide that information earlier in the process, ideally at the time of registration.

In conclusion, we urge the Committee to scrutinize the plans and regulations being developed by Selective Service for conscientious objectors and not to appropriate further funds for registration and other preparations now under way for conscription.

[The attachments follow:]

March 17, 1981

Dr. Bernard Rostker, Director
Selective Service System
1023 31st Street, N.W.
Washington, D.C. 20435

Dear Dr. Rostker:

Re: Alternative Service Concept Paper

The Alternative Service Concept Paper, published in the Federal Register January 22, 1981, appears to us as a reversal rather than a progression of the experience of the conscientious objector community and the government throughout our history. We appreciate the problems Selective Service might encounter with unprecedented large numbers of conscientious objectors in any future draft. But we also want you to understand the perspective of a community with over 450 years of testimony against war and for service in the name of Christ to all people in need regardless of political or ideological orientation.

1. Our basic reservation about the concept paper is the overall assumption that the management of alternative service is a cog in the massive machinery of government gearing up for war. Conscientous objectors are not simply looking for a way to avoid being part of the military. We refuse to serve in the military because of our understanding of what it means to be a disciple of Jesus and our belief that war is sin, that war is the most destructive and counterproductive means of resolving conflict, and, in the nuclear age, that it is potentially suicidal for the human race.

2. We are also concerned that the proposed alternative service system is an aspect of preparation for war which is part of a strategy for war itself. The recent revisions of nuclear strategy which assume a nuclear war can be "won" would require a massive workforce conscripted for the purpose of relief, medical assistance and rehabilitation for the nation to survive an initial nuclear attack and carry on a conflict. We do not want to be a part of such preparedness.

3. The basis for our conscientious objector beliefs includes a decisive "no" to the use of military force, but equally important includes a positive response to the true needs of the nation which arms can never fulfill. We believe we can contribute to global security through programs of service that contribute to the healing, preservation, and development of the earth on which God has placed us and of all its peoples.

In that context, the concept paper raises several concerns:

a. The role of FEMA (Federal Emergency Management Agency) in determining job priorities and workforce allocations seems to leave no room for religious organizations moving in directions that might differ from FEMA's assessment of the immediate national workforce needs. How will the goals and values of service by religious groups be evaluated in that assessment?

b. The use of conscientious objectors for civil defense or defense preparedness would raise serious questions of cooperation for many conscientious objectors.

c. The power of Selective Service to transfer conscientious objectors at will appears to be another example of considering the conscientious objector a cog in the very machine the conscientious objector must conscientiously reject.

d. What types of emergency needs would warrant the transfer of conscientious objectors?

4. From the viewpoint of the individual conscientious objector, there seems to be no opportunity for him to exercise his conscience in any way in the alternative service program. Once the claim for classification is granted, he then appears to be subject to the dictates of the highly centralized, computerized placement process.

5. For both the individual conscientious objector and the employers, there must be due process procedures established to allow for equitable and expeditious settlement of differences, especially in relation to the job assignment process.

6. The prospect of an alternative service system operating under the direction of active reserve or regular military officers housed in military recruiting quarters appears to compromise a longstanding concern of the churches that alternative service be conducted under civilian direction. This concern is increased greatly by the role of FEMA, which is subject to oversight by the Secretary of Defense and the National Security Council.

7. A serious reversal of position from the last draft is that no provision is made for foreign service. Thousands of conscientious objectors served overseas in projects of relief, disaster service, and economic development in ways which made a significant contribution to world peace. We strongly believe such service would be in the national interest.

8. The proposal to pay conscientious objectors with federal funds raises serious questions of possible control which we will want to examine carefully when and if legislation is considered to enact such a proposal.

9. If government subsidy is provided for alternative service workers, provision should also be made to allow groups to refuse that subsidy and financy their own programs with whatever personnel requirements they consider appropriate.

10. In view of our historic objection to conscription of any kind, we question the appropriateness of serving on the advisory panel whose purpose is to advise the government how to administer conscription.

11. We are concerned with the assumption that in the case of conscription, conscientious objectors will be content to allow their deeply held beliefs to be channeled through a bureaucratic placement process into whatever job national emergency priorities determine important. The concept paper might be viewed as a proposal designed to discourage registrants from claiming the conscientious objector position. It will likely encourage noncooperation on the grounds of conscience.

These comments on the concept paper should be seen in the context of our belief that conscription does not serve national needs or contribute to global security, but places the government in the position of violating the rights of citizens. As President Reagan has stated, the ultimate objection to the draft is moral.

We would respectfully remind you of the statement of principles submitted to you June 16, 1980, by the Mennonite Central Committee. A copy is attached, and we believe Nos. 3, 4, and 5 are especially relevant in considering the concept paper. For your information, we also attach a statement from 1951 which indicates that some of the concerns stated above are of longstanding conviction.

We will continue to seek ways to express our Christian discipleship in ways that respond to the needs of all the peoples of our nation and all nations.

Sincerely,

James C. Longacre, Chairman
MCC U.S. Peace Section

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Enclosures

LIST OF PRINCIPLES
Adopted by Committee on the Draft
MCC U.S.
May 22, 1980

The Committee on the Draft is a committee of MCC U.S. and U.S. Peace Section with additional members appointed directly by several Mennonite conferences. It is a widely representative group with about 25 members. The following principles were adopted by common consent to guide MCC in making representations to government on draft related matters.

1. CONSCIENTIOUS OBJECTOR RECOGNITION

—that the government should be encouraged to grant conscientious objector recognition to all persons who by reason of sincere conscience oppose participation in military training and war.

2. APPEAL PROCEDURE

—that the right of the registrant to appeal decisions regarding classification should be stated along with provision for an appellant's right to counsel, transcripts of hearings and procedural rights.

3. CIVILIAN SUPERVISION OF ALTERNATIVE SERVICE

—that provision should be made for the alternative service of conscientious objectors to be carried out under civilian supervision.

4. CHURCH-SPONSORED ALTERNATIVE SERVICE

—that service programs of church denominations and agencies should be recognized employment to fulfill the alternative service requirement.

5. PERSONNEL POLICIES OF CHURCH PROGRAM

—that the personnel policies of church-sponsored voluntary service programs should be permitted to function without change where those programs are used to meet alternative service requirements.

6. JUSTICE IN THE OPERATION OF THE DRAFT

—that affirmative action should be taken by the Selective Service System to insure that a disproportionate number of minority and poorly educated youth are not included, and that information on conscientious objection and alternative service provisions should be made available by the Selective Service System to the entire public.

7. NONCOOPERATION

—that persons whose consciences forbid them to register should be dealt with in a manner that is appropriate for individuals of high principle, such as a period of probationary service instead of prison terms.

SELECTIVE SERVICE SYSTEM

32 CFR Ch. XVI

Alternative Service; Proposed Concept

AGENCY: Selective Service System.

ACTION: Proposed Concept of Alternative Service.

Federal Register

Vol. 46, No. 14

Thursday, January 22, 1981 6999

SUMMARY: The Selective Service System is considering revising its concept of alternative service in accord with the document reproduced below.

Alternative service could be required only after the induction of persons into the armed forces has been authorized. That authority does not exist at the present time. Should the Congress in the future authorize the resumption of inductions, the Selective Service System must be prepared also to implement a program of Alternative Service.

DATE: Comments that are received on or before March 31, 1981 will be considered.

ADDRESS: Selective Service System, ATTN: Manager, Alternative Service, 600 E Street, NW., Washington, D.C. 20435.

FOR FURTHER INFORMATION CONTACT: William D. McCann, Manager, Alternative Service, 600 E Street, NW, Washington, D.C. 20435. Phone (202) 724–0003.

SUPPLEMENTARY INFORMATION: Alternative service is administered under authority of section 6(j) of the Military Selective Service Act (50 U.S.C. App. 456 (j)). Present regulations governing alternative service appear in 32 CFR Part 1660.

Bernard Rostker

Director of Selective Service.

January 16, 1981.

The proposed concept is:

Alternative Service Concept Paper; Selective Service System

January 1981.

Introduction

Following a long tradition in U.S. History, the Military Selective Service Act imposes a general citizen obligation for military service. All men, aged 18 to 26, are subject to be called for training and service in the Armed Forces. Within the general citizen obligation, the Act recognizes that there are individuals whose religious or moral beliefs prohibit them from participating in any type of warfare. Thus, under the Act, Conscientious Objectors are exempted from military service, but must, in lieu of induction, fulfill their citizen obligation by performing "such civilian work contributing to the maintenance of the national health, safety or interest as the Director may deem appropriate". The Director of Selective Service is specifically charged with the responsibility "for the placement of such persons (Conscientious Objectors) in appropriate civilian work". (50 U.S.C. App. 456(j) Supp.)

This paper presents a concept for an Alternative Service Program whereby the Director of Selective Service can insure that Conscientious Objectors will meet their obligation through their placement in non-military jobs contributing to the national health, safety or interest. The concept embraces a confluence of civilian work force priorities, specific job openings appropriate for alternative service and individual skills in an efficient and systematic way which will treat Conscientious Objectors fairly and with dignity.

Program Structure

The Alternative Service Program for Conscientious Objectors would operate under a structure which would provide for the interaction of three primary program components. These are:

1. *Priorities.* The Alternative Service Program must identify areas of crucial civilian work force shortages and set placement priorities.

2. *Jobs.* Within the priority areas, the Alternative Service Program must identify specific job openings.

3. *People.* The Alternative Service Program must be able to determine the aptitudes and abilities of participating Conscientious Objectors and match them with jobs contributing to the national health, safety or interest.

Priorities

Alternative service would be performed by Conscientious Objectors in lieu of induction into the Armed Forces, therefore, the program would be activated only during a national emergency and mobilization. In such an emergency, it is expected that shortages in the civilian work force would develop as large numbers of young people enter military service, and industrial needs place new stresses on the labor market. These circumstances would create a need for national and regional resource and work force management. As the agency within the Federal Government designated to serve as the focal point for emergency activities, the Federal Emergency Management Agency (FEMA) has a direct concern in matters of policy which affect the distribution of, or powers to control, the distribution of work force between military and civilian users in a mobilization.

FEMA's responsibilities relate to Selective Service because Conscientious Objectors placed in work in the national health, safety or interest would constitute a workforce pool which could be used to fill shortages in essential civilian areas. Selective Service would obtain from FEMA, the Department of Labor and other Federal agencies, information pertinent to prioritizing civilian work gaps. Selective Service would make every attempt to place Conscientious Objectors in accordance with the priorities so long as the jobs were in conformity with the legal requirements for alternative service.

There would also be an important corollary to the process of determining priorities: public and private agencies would become aware of their respective work force shortages. This awareness would presumably lead them to take the initiative in filling work force shortages. To the extent that their needs could be met by Conscientious Objectors, they would be as eager to enlist them as Selective Service would be to place them. This would facilitate the placement process and permit all agencies concerned to move expeditiously toward the accomplishment of their objectives.

Selective Service National Headquarters would be responsible for overall management and coordination with FEMA and the other agencies. On the regional level, the Selective Service System would review employment priorities as they are channeled down from the national headquarters. An evaluation of job descriptions submitted to the regional offices would be conducted based on the employment priorities. In addition, the Regional Alternative Service office would conduct operational evaluations of the Alternative Service work programs within the region.

As a program designed in part to help alleviate civilian work force shortages in a national mobilization, it is crucial that the Alternative Service Program be designed to insure a rapid and efficient placement of workers to priority areas. The Alternative Service Program must be able to stimulate employers to participate. Moreover, the Alternative Service Program must be able to guarantee the timely placement of Conscientious Objectors. For these reasons, it is anticipated that the Federal Government fund alternative service work through a system of stipends or employer tax incentives.

Jobs

The work force placement priorities determined through the efforts of FEMA, the Selective Service System and the Department of Labor, would be applied to job openings identified as suitable for alternative service placements. The listing of approved job openings would be derived from job openings submitted to the regional offices. Job openings submitted to the regional offices for evaluation would come from several different sources. Liaison activities between local Selected Service System offices and State Employment Security Agency offices could provide a broad source of job openings. Local Alternative Service office contacts with state and local governments, community health and service organizations would also provide a source of available jobs. Additionally, job openings in Federal agencies could be identified through the Office of Personnel Management and the respective agencies. Following the

evaluation for appropriateness to alternative service, a job description would either be deemed acceptable, and subsequently entered into the data files established for approved job descriptions, or unacceptable, in which case it would be dropped from the program.

Job openings submitted for evaluation by the various sources would be entered into the data banks through terminals located at designated Alternative Service offices. The data system, established to maintain the Alternative Service Program information files, would consist of a data bank at the national level with input coming from and output flowing to the designated area and regional Alternative Service offices. The data system would provide two types of output: output about all Conscientious Objectors who are or were involved in the program and data about the jobs available and unfilled, and those jobs already filled in the program.

The job identification and development function would require assistance from FEMA, the Office of Personnel Management, Department of Labor and Selective Service System National Headquarters to encourage employers experiencing work force shortages to submit their job openings. Additionally, the Department of Labor would serve the Alternative Service Program by facilitating a cooperative effort between the Alternative Service area offices and the State Employment Security Agency offices in identifying potential job placements. Personnel from State Employment Security Agency offices, serving in a liaison capacity, could assist these offices in identifying potential job placements.

In order to identify public agencies, private and religious organizations which would be prepared to sponsor Conscientious Objectors, the Alternative Service Program staff will undertake a series of discussions with such potential sponsors in advance of mobilization. These organizations would be encouraged to develop employment programs for Conscientious Objectors. The programs would have to meet guidelines established by Selective Service to insure that they would contribute to the national health, safety or interest and be appropriate for alternative service. Selective Service would develop agreements, which would include provisions for compensation, placement, and monitoring with the sponsoring organizations, so that the employment programs would be ready to operate and accept Conscientious Objectors shortly after a mobilization.

People

A viable and successful Alternative Service Program must seek to match the skills and abilities of Conscientious Objectors with the priority job openings. Skill and aptitude tests could be administered to incoming Conscientious Objectors. Additionally, Conscientious Objectors could be interviewed by alternative service personnel at the local Selective Service office. Potential job placements would be made from the job bank. Conscientious Objectors could be placed in individual job openings or in approved group work projects.

Unlike virtually all other placement agencies, alternative service would perform no recruitment functions whatsoever. It would not be the function of the Alternative Service Program to find Conscientious Objectors for all the work force shortages that may exist in an emergency. Rather, it would be the job of the Alternative Service Program to place everyone who was classified as a Conscientious Objector in an alternative service job which contributed to the maintenance of the national health, safety or interest. This calls for a placement process oriented to the Conscientious Objectors rather than to the jobs to be filled.

Alternative service personnel would be responsible for giving to persons entering alternative service (1) information concerning citizenship obligations and alternative service as a concept and (2) information about the Alternative Service Program, including pay, leave, duration of service and medical coverage. Depending on the nature of the emergency, it is also possible that alternative service entrants would receive training in areas such as first aid. Although alternative service placements are expected to be quite varied, this common training would equip them, regardless of their alternative service job, to render a much needed humanitarian service in an emergency.

Alternative Service would seek to maximize the Conscientious Objector's job retention. It is anticipated that most Conscientious Objectors would remain with their employers throughout their terms of service. In case emergencies arise, it may be necessary to transfer temporarily some Conscientious Objectors to meet such emergencies. The job training and day-to-day supervision of Conscientious Objectors in the program would be the responsibility of the employer. Both the employer and the Conscientious Objector would have reporting requirements to Alternative Service and be subject to audits.

In the placement and oversight of alternative service work projects, Alternative Service would seek ways to insure that both the participants and the public were aware that alternative service is a necessary and legitimate fulfillment of the Conscientious Objector's obligation as a citizen. Alternative Service Program representatives would visit work sites to maintain close contact with Conscientious Objectors. Employers and beneficiaries of alternative service work would be encouraged to publicly recognize the contribution of the program.

The proposed function and responsibilities of each agency are summarized in Chart I. It depicts the responsibilities of the national, regional and local branches of Federal agencies, state and local governments and private employers participating in the Alternative Service Program.

Administration

As the Alternative Service Program is a necessary component to Selective Service's mission of providing an untrained work force in a national emergency, Selective Service must retain all administrative and programmatic control over the Alternative Service Program. To promote efficiency and accountability, the structure of the Alternative Service Program would parallel the Selective Service structure as closely as feasible. Like inductees, Conscientious Objectors would be processed completely at the local level by alternative service personnel stationed in designated area offices.

In order to meet its responsibility in a timely fashion, Selective Service will explore possibilities for the rapid processing and placement of Conscientious Objectors. Discussions will be held with educational institutions and other organizations that may be interested in hosting a number of Conscientious Objectors. It is anticipated that a number of pre-emergency agreements will be made between Selective Service and sponsoring organizations.

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CHART I

FUNCTIONS OF COOPERATING AGENCIES IN ALTERNATIVE SERVICE

	SELECTIVE SERVICE SYSTEM	DEPARTMENT OF LABOR	FEDERAL EMERGENCY MANAGEMENT AGENCY	OPM AND FEDERAL AGENCIES	STATE AND LOCAL GOVERNMENT/PUBLIC SERVICE EMPLOYERS
NATIONAL	•Policy Development •Program Guidance •Maintains Job Bank •National Job Development and Priorities •Administration •Coordination with Other Federal Agencies •Chairs Alternative Service Interagency Committee	•Supplies Manpower Data to FEMA and SSS •Participates in Priority Setting •Directs SESA in SSS/SESA Coordination •Member of Alternative Service Interagency Committee	•Coordinate with SSS in Planning to Include Alternative Service in National Emergency Preparedness Plan •Member of Alternative Service Interagency Committee	•Develop and Submit Manpower Shortages to FEMA •Organize Existing Programs for Possible Employment of CO's •Member of ASP Committee	•Participation on Alternative Service Advisory Committee
REGIONAL	•Administrative Support for Local Offices •Determines Acceptability of Job Openings for ASP •Review and Interpret Employment Priorities •Operational Evaluating of ASP Work Program in Region •Receives Job Listings	•Supplies Manpower Data		•Submit Manpower Needs to Agency's National Headquarters	
LOCAL	•Administrative Responsibility for CO's •Interviews and Places CO's •Oversight of Local ASP Work Projects •Review Job Listings •Coordinate with SESA Office •Local Job Development	•SESA Offices Establish Liaison with Alternative Service Local Office •Submits Job Listings to Alternative Service •Assists in Local Job Development		•Submit Specific Job Openings •Day-to-Day Job Supervision of CO's •Training of CO's •Reporting to Local ASP Offices	•Submit Specific Job Openings •Day-to-Day Job Supervision of CO's •Training of CO's •Reporting to Local ASP Offices

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In addition to their job placement function, alternative service personnel would be the primary administrative contact for both participating employers and working Conscientious Objectors within the area of jurisdiction. The alternative service personnel would continue to be the contact points for Conscientious Objectors throughout their service. Alternative service personnel would be responsible for initiating and maintaining the files of Conscientious Objectors involved in the program. They would handle travel arrangements and payments to Conscientious Objectors. Additionally, alternative service personnel would be responsible for receiving reports from and auditing participating employers. Selective Service regional offices would provide administrative and logistical support to alternative service personnel. Operational evaluation of the Alternative Service Program placements within the regions would be conducted by alternative service officials.

At the national level, the Selective Service System would initiate all administrative policy and establish the necessary guidelines to enable individual employers to supervise the Conscientious Objectors under their authority. The Alternative Service Program National Headquarters would provide overall management and monitoring of the program.

Advisory and Coordinating Committee

The participation of a number of federal agencies on a standing coordinating committee is a viable means of providing the coordination and input needed in implementing the Alternative Service Program. Policy and guidance established by the Selective Service System would be presented to the committee agencies for dissemination. The committee would also provide the agencies with a contact point for expressing both work force needs and input for priority determinations in meeting those needs. The agencies involved would include, but not be limited to, Selective Service System, FEMA, OPM and the Department of Labor. The Selective Service System would form and chair the coordinating committee.

In addition to a federal coordinating committee, it would be advantageous to have an advisory committee on alternative service. Organizations or individuals interested in Conscientious Objectors and alternative service and employers participating in the program could be represented on the committee. If the plan for a broader Selective Service Advisory Committee is carried out, a panel of that committee could be devoted to alternative service.

Summary

The Director of Selective Service is required by law to place Conscientious Objectors in appropriate civilian work. This paper sets forth a conceptual framework within which Conscientious Objectors can meet their alternative service obligation with fairness and dignity.

The framework is constructed from a tripod consisting of priorities, jobs and people. Conscientious Objectors would make a civilian contribution by working in areas of national priority. Most of the actual jobs in alternative service would be generated locally a result of extensive contacts between area alternative service officers and a host of private, public service organizations, such as hospitals, and with public agencies, such as the State Employment Security Agency.

Finally, Conscientious Objectors would be placed in priority jobs appropriate to their abilities. The placement process would be assisted by a job data bank which would also maintain a continuing profile of alternative service jobs and people.

Such an Alternative Service Program would fulfill the Selective Service Director's responsibility under the law; would contribute to the nation's health, safety and interest in a critical time; would render humanitarian assistance that would otherwise be neglected; and would sustain the faith of those who defend the nation.

[FR Doc. 81-2257 Filed 1-21-81; 8:45 am]
BILLING CODE 8015-01-M

DEPARTMENT OF EDUCATION

34 CFR Part 84

Museum Services Program

AGENCY: Department of Education.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Institute of Museum Services proposes an amendment to its regulations governing a program of Federal financial assistance to museums under the Museum Services Act. The proposed amendment expands the types of assistance offered under the program to include assistance for institutional assessment.

DATES: Comments must be received on or before February 23, 1981.

ADDRESSES: Comments should be addressed to Mrs. Lee Kimche (Room 4110, Switzer Building), 400 Maryland Ave., SW, Washington, D.C. 20202.

FOR FURTHER INFORMATION CONTACT: Mrs. Lee Kimche, telephone (202) 245-0413.

SUPPLEMENTARY INFORMATION:

Nature of Program

The Museum Services Program is aughorized by the Museum Services Act, which is Title II of the Arts, humanities, and Cultural Affairs Act of 1976. The Museum Services Act ("the Act") was enacted on October 8, 1976. The purpose of the Act is stated in section 202, 20 U.S.C. 961, as follows:

> It is the purpose of this (Act) to encourage and assist museums in their educational role, in conjunction with formal systems of elementary, secondary, and post-secondary education and with programs of nonformal education for all age groups; to assist museums in modernizing their methods and facilities so that they may be better able to conserve our cultural, historic, and scientific heritage; and to ease the financial burden borne by museums as a result of their increasing use by the public.

The Act establishes an Institute of Museum Services (IMS) consisting of a National Museum Services Board (NMSB) and a Director. A more detailed description of the structure of the Institute and the provisions of the Act may be found in 43 FR 45166 (September 29, 1978).

Current Program Regulations

Current program regulations for IMS were issued on August 11, 1980 by the Secretary. These regulations were published at 45 FR 53414. The current regulations provide rules for the definition of "museum" (under the program); the eligibility of museums for assistance; the types of assistance available; the requirements which applicants must meet; and the criteria used to judge applications. The program regulations provide for assistance to museums for one year general operational support (GOS) and for project support. The Secretary has also issued regulations under the Government in the Sunshine Act governing the conduct of NMSB meetings in 45 FR 53412 (Aug. 11, 1980).

Proposed Change; Museum Assessment

The Secretary proposes to amend the program regulations by adding a new Subpart B which would provide rules for the award of grants to museums to assist and encourage them to obtain institutional assessment. The assessment process generally involves review of a museum's overall programs and operations; diagnosis of their strengths and weaknesses; recommendations for long range planning; and suggestions for further

Mrs. BOGGS. Mr. Green?

Mr. GREEN. No questions.

Mrs. BOGGS. We do thank you very much. We appreciate the work that you do and the wonderful feelings that you possess.

Reverend LONGACRE. Thank you.

SELECTIVE SERVICE SYSTEM

WITNESS

DAVID LANDAU, LEGISLATIVE COUNSEL, AMERICAN CIVIL LIBERTIES UNION

Mrs. BOGGS. Next we will hear from Mr. David Landau, Legislative Counsel of the American Civil Liberties Union.

Mr. LANDAU. Thank you.

Mrs. BOGGS. If you will excuse me, I must vote. I am sure Mr. Green will be happy to preside in his excellent fashion. You may submit your testimony for the record, and summarize as you wish.

Mr. LANDAU. I am David Landau, Legislative Counsel of the ACLU. It is a pleasure to be here to present our views.

I think our views are pretty well known. We very much oppose registration. We ask this Committee not to fund that portion of the Selective Service budget—approximately $4 million—which would be for active registration as well as the funds for programs which SSS is instituting which go beyond registration which is the establishment of local draft boards and training local draft board members.

I think my statement is pretty complete as to what our views are. I would like to summarize a few brief points, basically two points. One is enforcement. According to Selective Service statistics, there are approximately 500,000 young men who have not registered for the draft at this time. It is a good registration rate, in percentages it is 95 percent. It slightly dropped off to 87 percent this winter. When you look at the millions of people in the pool and calculate it, it comes out to 500,000 young men. Selective Service doesn't acknowledge that. They say it will increase, or we need Social Security numbers or some other kinds of mechanisms, then we will start to enforce it. It is a larger problem than that. I think it is a problem that reflects the hidden costs of draft registration both in terms of civil liberties and increased resources to criminal prosecutions which are best devoted elsewhere in these times as well as to the hidden costs that have to go to the Department of Justice budget, millions of dollars to investigate and prosecute 500,000 felonies. We are very concerned about that. We urge the Congress to look at that problem very closely before they fund draft registration again this year.

We asked the question, what is really the savings that draft registration brings in terms of our national defense? We know anyone would say that it saves some time over what we call the post-mobilization plan last year. The question is: Is that militarily significant? As we all know, the famous Rostker report from last year said it really wasn't significant. Now we hear it is significant because the Defense Department somehow needs the first inductee

within 13 days, whereas, last year they only needed them within 30 days of mobilization.

We tried to figure out when this changed, our mobilization requirement came about? Was it a change in war strategy, casualty rates, whatever? We couldn't come up with anything until we read the testimony of Robert Stone, Assistant Secretary of Defense, before the Armed Services Committee. In other words, this is sort of a post hoc rationalization for registration. It can provide them within 13 days. We will upgrade the Defense Department mobilization requirements. There hasn't been any kind of examination of what this is all about.

Why do we need people this soon? What is the role of the reserves in this interim period? People say the reserves are low. Well, what are they supposed to do? In the interim period we are going to rely on draftees. Of course, the whole system still assumes no volunteers in the first phase of the mobilization. History shows that is an absurd assumption. After Pearl Harbor we had 300,000 volunteers after the first two months. So we question really the need for registration still and would urge an evaluation of this change in mobilization requirements which appear to us to be only to justify registration after the fact.

Finally, a brief word about draft boards and training of local draft board members. The Selective Service expects about 10,000 to be trained this year. Of course, we have always heard that registration is just registration, it is not the first step towards the draft.

Yet, we continue to see progressive steps being taken, the training and selection of draft board members nationwide. Dr. Rostker testified before this very Subcommittee about a month ago that he thinks some limited form of classification should go forward even though it would only affect two percent of the poor. That is the permanent and physically disabled which is not a significant number. It should go forward. We asked why. Why should it go forward? That is in spite of the fact that no one has even begun talking with reforming the Military Selective Service Act which we all know in the past had a number of inequities. They are talking about classification.

Before Selective Service gets too far along moving down the road in the face of strong presidential opposition to the draft, it seems to be going off on its own on a tangent, we would ask Congress not to fund draft registration and not to fund the line items in the budget which deal with items beyond registration such as local draft board members.

That is about all I have to say.

[The statement follows:]

Mr. Chairman and Members of the Subcommittee:

The American Civil Liberties Union appreciates the opportunity to present its views on FY 82 funding for the Selective Service System (SSS). We strongly oppose continued funding for draft registration and urge this Subcommittee to delete $ million in FY 82 SSS appropriation earmarked for registration. Moreover, we urge the Subcommittee to eliminate all funds for SSS programs beyond registration such as training and selection of local draft board members.

The draft and its system have no place in a peacetime democracy. The violations of civil rights and liberties systemic in an active SSS necessitate its confinement to situations where the nation is faced with an imminent threat. Today, when the United States is at peace, the draft and draft registration cannot be justified. In the near future, the federal government will have to confront the first domestic civil liberties crisis precipitated by peacetime draft registration: the investigation and prosecution of over half a million of the nation's youth for failure to register. The issue of enforcement of registration is worthy of further examination because it typifies the repressive nature of the draft.

When we testified before this Committee last year, we predicted, based on past official registration data, that between 5% and 10% of the eligible registrant pool would fail to register. While a 95% rate of registration sounds successful in the abstract, we noted that when the percentage was translated into actual numbers, a compliance problem would be apparent. In testimony before this Committee and other committees of the Congress both last year and this year, SSS has refused to acknowledge this problem. Instead, they have heralded draft registration as a great success even when their own figures reveal a compliance problem. Moreover, SSS explains the significant drop-off in the rate of the current registration (87% compared with 95% from last summer) by stating that the registration rate will increase.

In support of these contentions, SSS cites a recent GAO study on the July registration which concluded that registration is successful. This GAO study, however, is seriously flawed and raises more questions than it answers. First, its methodology was illogical. GAO selected only 406 cards out of 3.6 million at random and then tried to reach the registrants by telelphone to verify the information on the card. Only 309 could actually be reached directly, 95% of which had registered accurately. GAO then seemed to assume the accuracy of the nearly 25% of the sample which could not be reached. One could equally draw the opposite conclusion: people who could not be reached provided inaccurate data or had changed address. Further, why use a telephone sample when SSS will use a mailed, written induction order during an actual draft?

use a telephone sample when SSS will use a mailed, written induction order during an actual draft.

Second, even if GAO's methodology was satisfactory, its report figures mean 300,000 persons did not register during the July registration. Extrapolation from a sample of 7,896 other cards revealed that 28,000 "registrants" were not even aware they had registered: 9,500 registrants had "obviously fictitious" or "non-verifiable" names; 55,000 had provided an inaccurate or clearly fictitious address. Finally, GAO did not study whether registrants were maintaining current addresses. Since the Census Bureau estimates that 20% of this age group moves every year, presumably 20% of the pool would have at this point updated their addresses. Selective Service System however has provided data only on address updates during the verification process last fall and has not produced data on continuous address updating. If there is little continuous updating, then the registration data will be of little use.

Rather than probing into the possible reasons for non-compliance and the problems with registration revealed by the loopholes in the GAO study, and the attempting to address them in a manner which is non-confrontational, SSS has proposed a massive computer surveillance system through the use of Social Security and Internal Revenue data. In other words, the enforcement of compulsory registration entails further violation of civil liberties. Selective Service System could have proposed, for example, a substantial increase in its public informational budget so that it could adequately notify people of their obligations. It has chosen instead to propose a drastic solution involving serious social costs not to mention the millions of dollars which will be required by the Department of Justice to investigate and prosecute 500,000 non-registrants. We urge this Committee to evaluate whether the continued growth of SSS and the concomitant high fiscal and social costs contribute significantly to our national defense. A close examination of the facts about the mobilization process reveals that it does not.

Much of the 1980 congressional debate on draft registration focused on the time saved by pre-mobilization registration. A study conducted by SSS Director Bernard Rostker prior to President Carter's decision to renew registration concluded that registration gained only seven days over a post-mobilization system using advanced computer technology. Both the pre- and post-mobilization plans would be able to deliver inductees with the Department of Defense timetable. After President Carter ordered draft registration to begin, Dr. Rostker repudiated his report.

We concede that at least some time is saved by pre-mobilization registration. The question is whether this savings is significant. Based on the Department of Defense's timetable of last year, clearly it is not. Dr. Rostker testified recently that with a fully operational post-mobilization system he might be able to provide the first inductees within the 30 days as required by the DoD. However, this plan is now inadequate because DoD changed its timetable. It now requires the first inductees within thirteen days and this requirement can only be met with pre-mobilization registration.

We were surprised by the change in DoD's mobilization requirement because, to our knowledge, DoD's war strategy, casualty projections, and manpower needs had not been changed. Former Acting Assistant Secretary of Defense Robert Stone recently provided an explanation in congressional testimony before the Armed Services Committee: ". . . since peacetime registration makes earlier induction possible, we have imposed a more demanding delivery schedule upon the SSS. . .

There has been no change in the war strategy. The change in mobilization requirements is merely a post hoc rationalization for the existence of peacetime registration. Moreover, the schedule is still apparently based on the patently illogical assumption of no volunteers entering the system. (There were 300,000 volunteers in the two months after Pearl Harbor and 20,000 true volunteers each month during the unpopular Vietnam War.) The unjustified change in DoD's mobilization schedule calls into question the need for peacetime registration. When the hidden enforcement costs are added to the equation, we conclude that a post-mobilization registration program could be engineered to provide adequately for the nation's defense. This program would be cheaper and would of course avoid the adverse consequences of an active registration.

The inadequate factual justification of draft registration lends substantial support to our view that registration is the first step in the reestablishment of the peacetime draft. Proponents of registration disagree with this and respond that registration is an issue separate from the draft and will not lead to inductions. Recent actions by SSS indicate otherwise. SSS Fy 81 budget included funds for the training and selection of local draft boards. The FY 82 budget contains similar items. Pilot training programs have occurred in Maryland and Kentucky and now the program is nationwide. SSS expects to have about 10,000 Board members recruited this year, although Dr. Rostker has stated SSS is having difficulty recruiting minorities, a mandate of the Military Selective Service Act.

Moreover, Dr. Rostker testified before this Subcommittee that SSS is prepared to and indeed believes it is necessary to classify those persons with permanent mental and physical disabilities. Although this will only affect 2% of the registrant pool, Dr. Rostker believes this will enhance the mobilization process. At the same time SSS is training draft boards and planning limited classifications, it denies that the government has moved beyond registration. All of this has taken place in the face of strong Presidential opposition to draft registration and the draft and without any congressional review of the inequitable Military Selective Service Act. In short, SSS appears to be a classic example of a bureaucratic government agency run amok. (It has even moved into new headquarters on the Georgetown waterfront!)

Before SSS moves too far down the road to a peacetime draft, Congress should stop it. If the current policy of the Congress and the Executive is that there should be no peacetime draft, then why classify and why reestablish draft boards. Fy 82 funding for these programs should be eliminated.

During the early years of our nation, the great patriot Daniel Webster described the draft as a "fabric of despotism." He said: "[T]he question is nothing less than whether the most essential rights of personal liberty shall be surrendered and despotism embraced in its worst form." His words should be considered when deciding the FY 82 funding of SSS. In particular, the impending prosecution of 500,000 of our citizens for nonregistration will mark another chapter in the "despotism" of the draft. This Committee can prevent this be eliminating funds for draft registration and thus ensure that our civil liberties enjoy the maximum protection during peacetime.

Thank you for the opportunity to present our views.

Mr. GREEN [presiding]. Do you have any position on the question of the volunteer local draft board as opposed to the paid part of the Federal bureaucracy?

Mr. LANDAU. I think we probably prefer a cross-section of the community on a volunteer basis. Why set up a bureaucracy if there is no draft? I always come back to the point: if there is no draft, it is only for a war, then we are taking all these steps. Sure, we have to plan, but, for example, we strongly believe it should be civilians and reflect a cross-section of the community.

Dr. Rostker recently said he has had some trouble recruiting minorities into his draft board system. That is of concern to us. The statute does mandate a cross-section. We know that in the first 90 days of a mobilization the draft board offices and Selective Service System will be run by reservists. Civilians wouldn't even be there yet. That is also of concern to us in the early days of mobilization, the military would run the Selective Service System.

Mr. GREEN. I have no further questions. Thank you very much for your appearance today.

Mr. LANDAU. Thank you.

CONSUMER PRODUCT SAFETY COMMISSION

WITNESS

JAMES BOYLE, DIRECTOR OF GOVERNMENTAL AFFAIRS, CONSUMER FEDERATION OF AMERICA

Mr. GREEN. Mr. Jim Boyle?

We have a full Committee meeting which was suddenly called for four o'clock. So, we request that you summarize your statement.

Mr. BOYLE. Good afternoon, Mr. Chairman and Members of the Subcommittee. On behalf of the Consumer Federation of America, let me thank you for this opportunity to testify regarding the fiscal year 1982 appropriations for the Consumer Product Safety Commission.

As you know, the Administration had proposed a 30 percent cut in the CPSC budget for fiscal year 1982 to a level of $33 million. It is our belief that forcing the CPSC to operate at this level will severely reduce its ability to protect American consumers from the hazards of unsafe products.

The CPSC was created by Congress in 1973 in response to a recognized national problem: 30,000 deaths, 20 million injuries and 110,000 permanent disfigurements resulting each year from unsafe and hazardous consumer products.

Since 1973, the actions of the CPSC, through recalls, standard-setting, product bans, and warnings have averted hundreds of thousands of injuries, and thousands of deaths.

While controversial during its initial years, the Commission has grown, to the praise of friends and foe alike. The U.S. Chamber of Commerce recently lauded the Commission for its contribution to increasing industry and public awareness of health and safety matters.

But this is 1981, not 1973. Our economy is in disarray. We must be more judicial in paying for government programs now than we were then. As you act to adopt a new appropriations for the CPSC, we urge you to be mindful of several factors:

First, the Commission has already voluntarily accepted a ten percent cut to comply with the President's call for economic sacrifice. This is on top of a 26 percent reduction in budget in light of inflation over the past four years.

Second, the cuts are not cost-beneficial. Preventive medicine is always less expensive than reactive, curative medicine. Acting to prevent deaths and injuries by identifying and keeping from the marketplace unsafe products results in lower costs to consumers in reduced medical services, and to industry in reduced product liability litigation. CPSC's actions in the chronics area alone have prevented nearly 2,000 cancers each year, at an average cost to the government of $3,000 per cancer. A small price to pay to avoid such magnitudes of human suffering.

Third, the impact of the requested cuts will be to drastically curtail the Commission's safety program. The results would be a disaster for consumer safety:

(a) Under the Administration request, a personnel ceiling of 697 slots would require a staff reduction of 25 percent, with an additional administrative expense for severance pay of nearly $4 million. That leaves just $29 million to operate the Agency.

(b) The Chronic Hazards program would be reduced. The health threats posed by potentially cancerous chemicals have just begun to surface. Genetic disorders, birth defects, and a range of other biological and neurological diseases are being discovered each day. The Commission has just begun its work in this area. Already it has identified 22 chemicals posing health threats in some 2,000 different consumer products.

(c) The Commission's ability to identify hazards in the marketplace, and before products reach the marketplace, would be greatly reduced. Further cuts in the NEISS, the Agency's primary source of injury data nationwide, will hamper the identification process as well.

(d) Much of the Commission's enforcement capacity will be undermined. Several programs, including compliance checks on previous violators, will be eliminated. Oversight of product recalls will be reduced.

(e) Information and Education: public service announcements will be eliminated. Efforts to educate consumers particularly those at highest risk of injury—the elderly, handicapped, children—will be greatly curtailed.

In closing, we are currently working with reauthorization committees in the House to promote a funding authorization level of $37 million for fiscal year 1982, and a comparable level beyond that date.

This will permit the Commission to cover its administrative costs of severance pay while complying with the Administration's budgetary request. Any level of funding below that level will cripple the Commission's capability to protect American consumers.

Thank you very much for this opportunity to present our views to you this afternoon. I will be glad to answer any further questions you might have.

Mr. GREEN. Thank you very much. I am sorry you had to appear under such rushed circumstances. We appreciate your being here.

Mr. BOYLE. Thank you.

SELECTIVE SERVICE SYSTEM

WITNESS

JAMES E. BRISTOL, DIRECTOR, ANTI-DRAFT PROGRAM, AMERICAN FRIENDS SERVICE COMMITTEE

Mr. BOLAND. Mr. Bristol, Director of the Anti-Draft Program, American Friends Service Committee. We will be pleased to hear you.

Mr. BRISTOL. I appreciate very much your willingness to hear from our organizations. My name is James Bristol. I appear here today on behalf of the American Friends Service Committee with national headquarters in Philadelphia and the Friends Committee on National Legislation based in Washington, D.C. to express our opposition to appropriations for draft registration and other preparations for war. Although Friends are generally opposed to the reinstatement of the draft, neither I nor the two agencies I represent purport to speak for all Quakers.

In 1980, the Selective Service System was asked by the Administration to register all males of a certain age group. In spite of serious nationwide opposition, Congress voted to give Selective Service funds for that limited purpose. The Nation was assured at that time, by the Administration and by Congress, that these funds were appropriated for registration only, not for a reinstatement of the draft.

This year, Selective Service has already reported to you that it has moved far beyond its original mandate. Local draft boards are being established and trained. A centralized computer-run job bank is being devised to handle conscientious objectors. A rudimentary classification procedure is being considered for implementation. Practice "call-ups" are being stated.

The Selective Service System, in consultation with the Office of Management and Budget and the Department of Defense has taken all these steps without discussion or debate in Congress. These new developments amount to steps in preparation for war and involve policy decisions that should be reserved to Congress. The budget process presents a singular opportunity for Congress to reappropriate the making of these important policy decisions to itself.

The original purpose of draft registration was to "send a signal" to the Soviets that the U.S. could mobilize troops rapidly. Draft registration was to be "a symbolic gesture" only. Now, having seen that initial green light, Selective Service is moving ahead step by step toward the actual induction of men into the armed forces, an act of mobilization that we were promised would not happen. Congress has stated no purpose or focus for such mobilization. Indeed,

Congress has been completely left out of the decisionmaking process.

What unannounced purposes could there be for a mobilization draft in the near future? Draftees could be used to intervene in nations that supply us with oil and important minerals; their role would be to quash liberation movements and to support the government in power, however repressive. Draftees could be used in a confrontation with the Soviet Union, if conventional warfare between superpowers were still possible. However, President Carter pointed out in his farewell address in January that war with the Soviet Union meant a "long afternoon" of indescribable horror and destruction that would totally decimate both nations. Such a holocaust would be over long before the first wave of potential inductees could receive their induction notices. The third possibility is that we might use inductees against our own citizens, to quell the domestic turmoil that may indeed result from the Reagan Administration's economic program. All of these purposes argue against moving toward a mobilization draft at this time.

We disagree fundamentally with the idea that "military preparedness makes for peace." Because inductees would be used, not to protect the United States, but to intervene in the affairs of other nations, the mobilization of inductees will be seen as a threat to those other nations. Placing our national focus on the development of this threat not only takes our attention away from arriving at peaceful trade arrangements with supplier nations, but also sows suspicion and distrust between ourselves and potentially hostile nations.

The hawks in one nation always strengthen the hawks in the enemy nation. Thus, the threat expressed by reinstituting the draft increases the need for a heightened military response from the Soviet Union. The Russians react to our "signals" as we react to theirs, and our "symbolic gesture" becomes an actual instigator of war.

Our organizations ask the Members of this Committee to consider carefully the purpose of continuing draft registration and other war mobilization activities at this time. Do we know what these inductees would be fighting and dying for? Are there no other avenues to the goals that we would define here with their lives? Is there no other way to apportion this "ultimate tax" that we are imposing on the young?

The Friends Committee on National Legislation and the American Friends Service Committee ask you to reject all funding for continued draft registration and other steps designed to reactivate the Selective Service System. We ask Congress to engage in careful study of what constitutes a viable national defense today.

Mr. BOLAND. Thank you, Mr. Bristol. You have a statement that was well prepared and very well delivered.

Mr. Green?

Mr. GREEN. I have no questions, Mr. Chairman.

Mr. BOLAND. Thank you very much. I am sorry we are in such a hurry. We will be voting in a few moments on one of the President's economic policy programs.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NATIONAL SCIENCE FOUNDATION

ENVIRONMENTAL PROTECTION AGENCY

FEDERAL EMERGENCY MANAGEMENT AGENCY

WITNESSES

HON. DON FUQUA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA
DR. PAUL C. MAXWELL, SCIENCE CONSULTANT, COMMITTEE ON SCIENCE AND TECHNOLOGY

Mr. BOLAND. The Committee is honored to welcome the distinguished Chairman of the Science and Technology Committee, Mr. Don Fuqua.

On behalf of the whole Committee and indeed the American people, I wish to thank you and your predecessors our beloved, departed friend, Olin Teague; and his predecessor, George Miller of California, for the leadership that you have shown in the area of the Space Transportation System.

The start of the Space Shuttle goes back around ten years, during your tenure and those of Mr. Miller and Olin Teague—particularly the last few years. They were very difficult years, which needed the kind of support that you and the Members of your Committee have provided.

I had the opportunity to watch the Shuttle launch in Florida, and was absolutely thrilled. I saw the Shuttle landing, and heard your comments on television. Your words then, and the leadership you have exhibited over the past years, make me proud.

Mr. FUQUA. Thank you, Mr. Chairman.

Let me also thank you for your support and the support of this Subcommittee over the years in our space program. Had it not been for your confidence and dedication during many trying times, the success of that Space Shuttle wouldn't have been possible.

Mr. BOLAND. I think that the ability of the Authorization Committee and the Appropriations Committee to work together—particularly in this area—was tremendously helpful to the National Aeronautics and Space Administration. Although we have differed on other programs—which is only natural—and probably will have our differences in the future, we have followed the leadership of the Science and Technology Committee for the vast majority of programs. I think that is a clear indication of the rapport that exists between the Committees, particularly between the Committee staffs. I want to express our appreciation to your staff. Clearly, good communication enhances the ability of our Committees to do the job that should be done.

Thank you, Mr. Chairman.

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Mr. Green?

Mr. GREEN. I very much appreciate your taking the time to come here today. This is a new agency for me. I am sure your counsel on its ins and outs will be most helpful to me as I learn my way through it.

Mr. FUQUA. Thank you, Mr. Green.

Mr. Chairman, I want to echo your comments about the staff. They have worked very closely together. We are very appreciative of the cooperativeness we have had over the years. I hope it will continue. I have every reason to believe that it will.

I think as long as you and I are in our respective positions of responsibility, we are going to see that every effort is made that it does happen. We do have a very competent staff to rely on.

Mr. Chairman, I do have a longer statement I would like to submit for the record. I will try to briefly go through my condensed version.

Mr. BOLAND. Fine. We will include the entire statement in the record. You may highlight it.

Mr. FUQUA. We have completed action on the NASA, NSF, and nearly completed action on FEMA and EPA. The aggregate budget level for these agencies is $7.7 billion or $180 million above the Administration's revised budget. The largest increase is $127 million for the National Science Foundation, followed by $40 million for EPA and $11 million for NASA and $1.8 million for FEMA.

NATIONAL SCIENCE FOUNDATION

As you are aware, the Federal responsibility for basic R&D resides with the National Science Foundation. In looking at the Federal budget overall, we note the Administration is suggesting a $5.6 billion increase in defense R&D spending while non-defense R&D spending will decrease by $0.4 billion.

The Foundation in particular is being asked to sustain an overall decrease of six percent in current dollars from its fiscal year 1981 appropriated level. After considerable analysis and testimony, the Committee voted to restore $127.1 million for an overall figure of $1,160,700,000.

Let me go through some of the actions that we took.

Science and Engineering Education: As testimony we heard indicates, the country now faces immense problems in many areas of Science and Engineering Education. With respect to engineering, there are some 40 percent more students enrolled in engineering today than ten years ago while there is correspondingly six percent fewer faculty. What faculty we have is being attracted away from academia with limited resources and obsolete research equipment to higher salaries and better facilities in industry. Both the majority and minority Members of the Committee were alarmed by the President's proposal to eliminate the education function in NSF.

Given these and other concerns, the Committee voted to restore to the Science and Engineering Education Directorate to $75 million for fiscal year 1982. This still represents a decrease of $5.7 million below the amount appropriated last year.

Research Instrumentation: As I noted above there has been a growing decline in research equipment and facilities at our universities. We have restored $29.7 million for cross-directorate pro-

grams, $16.5 million of which is for a special instrumentation initiative with the remainder for other essential Cross-Directorate programs.

Social/Behavioral Sciences, Innovation and International Cooperative Activities: The Committee was also concerned with targeted reductions and in some cases entire elimination of programs in the Social and Behavioral Sciences, Innovation, and International Cooperative Activities; $26.1 million in funds were restored to the Biological, Behavioral and Social Sciences specifically for the Behavioral and Social Sciences programs; $18.7 million was restored to the Scientific, Technological and International Affairs Directorates. This brings them even with the fiscal year 1981 current spending levels.

Physical Sciences Directorates/Others: No changes were made in the amounts requested for the Mathematical and Physical Sciences; Engineering; Astronomical, Atmospheric, Earth and Ocean Sciences Directorates or in the Program Development and Management and the Special Foreign Currency Accounts.

Ocean Drilling and Antarctic Research: Finally, the Ocean Drilling and Antarctic Research Programs activities were reduced by $12.5 million reflecting a view that the Ocean Margin Drilling program could be deferred. Though I am not personally pleased with terminating the Ocean Margin Drilling program, the Committee as a whole felt budgetary constraint limited our continuation of this program.

I would note the overall number for the Foundation is still $193 million below the original request and represents an increase of only six percent over last year's appropriation level. With an estimated ten percent inflation, we will actually see a reduction in the Foundation's overall budget. We are not pleased to impose such a constraint, but believe that the current need for budgetary restraint dictates this elimination.

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

We authorized $6,133,300,000 for the Agency compared to a total budget request of $6,122,200,000 in the revised budget, an increase of $11.1 million.

As you know, the NASA budget includes both space and aeronautics programs. The $11 million increase over budget is in the aeronautics program. I understand that Mr. Glickman has already testified on that part of NASA's program, so I will confine my testimony to space programs.

We did feel that some changes should be made in order to have a more balanced program. We felt that the budget had cut too much from the applications and sciences programs. Consequently, our bill would shift some funds from the Shuttle and Tracking and Data activities into the areas that had been cut.

Let me mention the major areas of increase here.

In Physics and Astronomy we added $15 million to reinstate a U.S. spacecraft for the International Solar Polar Mission. I might point out that is a joint measure with the Europeans and has international implications.

We did not significantly change the requests for Planetary Exploration funding but we kept open the option of a Halley Intercept

Mission by saying that up to $5 million could be used for that purpose, if requested by the Administrator. The Halley mission had not been in either the original or revised budget and so represents an addition.

We increased the Life Sciences request to the prerevision level (an increase of $5.7 million). We felt that as the Shuttle puts man back into space we would continue a vigorous program to develop support systems and understand the effects of zero gravity.

The technology Utilization program was scheduled to be phased out, along with Technology Transfer mentioned above. As you know, Mr. Chairman, both these activities have been supported vigorously by our Committee for many years. They ensure that the techniques and knowledge developed by NASA with dollars you appropriate are made available to all of our citizens and businesses. We added $8 million for this very important program.

We added $8 million to the revised budget to continue development of the Solar Electric Propulsion System. Other small additions would be for advanced programs, chemical propulsion information systems, and energy technology.

Now the areas that we would reduce: In Space Shuttle, we reduced the Changes/System upgrading request by $60 million. This just balances a proposed $60 million reprogramming into this category in 1981.

We reduced the request for new Upper Stage Development by $20 million.

Finally, we reduced the funds available for operations of the Tracking and Data Acquisition program by $15 million.

Mr. Chairman, I hope you will agree that these relatively minor changes will result in a NASA program that is more balanced, that meets our international commitments, and that preserves the President's budget goals.

ENVIRONMENTAL PROTECTION AGENCY

With regard to environmental research and development, the Committee on Science and Technology is now considering H.R. 3115 to authorize fiscal year 1982 appropriations for the research programs of the Environmental Protection Agency. This bill provides an authorization of $345.5 million for EPA research, $40.0 million above the President's request, yet $40.1 million below the amount authorized for fiscal year 1981.

Mr. Chairman, if we expect to improve the validity and appropriateness of environmental standards and regulations, and relatedly the state of our environmental quality and public health, then we must act to strengthen our efforts in environmental research. In particular we are concerned with the areas of air, water quality, and energy research as reflected in our recommendation. I certainly believe full funding of these programs essential for accomplishing such a strengthening.

FEDERAL EMERGENCY MANAGEMENT AGENCY

The Committee has reported out a program total of $92.9 million for the reauthorization of the Earthquake Hazards Reduction Act of 1977 and the Federal Fire Prevention and Control Act of 1974,

which are coordinated by the Federal Emergency Management Agency.

The program total includes the following: $65.5 million to carry out the National Earthquake program; $22.5 million to carry out the Federal Fire Prevention and Control program, and $4.9 million to carry out multihazard research, planning and mitigation activities.

The program total represents an increase to an already small budget of only two percent above President Reagan's fiscal year 1982 budget. Regarding the increase: $1.5 million would be devoted to an operational earthquake prediction network in southern California. $300,000 would be added to the U.S. Fire Administration budget to improve outreach and dissemination activities of the U.S. Fire Academy to the two million fire fighters across the country.

Mr. Chairman, as I believe my statement illustrates, our Committee has made only modest changes in the overall budgets of these four agencies. The levels we are recommending are only 2.4 percent above that being requested. We have, moreover, made a serious effort to evaluate and reallocate program priorities properly to reflect our concerns in specific areas.

I believe the final results are fair and equitable. I strongly urge your Subcommittee to appropriate the funds for these programs at the levels as recommended by our Committee.

[The statement and attachments follow:]

Mr. Chairman, I am thankful for this opportunity to testify before your Subcommittee concerning the authorization of appropriations for fiscal year 1982 of the National Aeronautics and Space Administration, National Science Foundation, Environmental Protection Agency and Federal Emergency Management Agency. Our Committee has completed action on NASA and NSF and nearly completed action on FEMA and EPA. The aggregate recommended budget level for these four agencies is just over $7.7 billion or $180 million above the Administration's revised request. The largest increase is $127 million for the National Science Foundation, followed by $40 million for EPA and $11 million for NASA and $1.8 million for FEMA. Let me turn to the individual agency actions.

NATIONAL SCIENCE FOUNDATION

Mr. Chairman, our Committee has been especially concerned this year with the overall health of our basic science and engineering research programs. As you are aware, Federal responsibility for basic R&D resides with the National Science Foundation. In looking at the Federal budget overall we note that the Administration is suggesting a $5.6 billion increase in defense R&D spending while non-defense R&D spending will decrease by $0.4 billion. The Foundation in particular is being asked to sustain an overall decrease of 6 percent in current dollars from its FY '81 appropriated level. In constant dollars this represents a decrease of more than 16 percent. More importantly, specific areas were targeted for elimination or severe reductions. This includes important areas such as science and engineering education, research instrumentation and international cooperation.

Mr. Chairman, after careful consideration and analysis of testimony presented, the Committee voted to restore $127.1 million for an overall figure of $1,160.7 million. Included in the material submitted as part of my testimony is a table outlining the various actions taken by the Committee. Let me briefly underscore the major actions we are recommending:

Science and Engineering Education: The country now faces immense problems in many areas of science and engineering education. Only one-sixth of secondary school students take science or math beyond the tenth grade, while only one-third of our nation's school districts require more than a year of

mathematics or science. Meanwhile admission standards to college have declined. There are 40 percent more students enrolled in engineering today than ten years ago while there is correspondingly 10 percent fewer faculty. What faculty we have is being attracted away from an academia with limited resources and obsolete research equipment to the higher salaries and better facilities of industry. We can expect a further decline in the number of engineers with estimates of shortfalls ranging as high as 10- to 20,000 annually by the end of the decade. Japan, a country with half our population, is now producing more engineers than the U.S. Without appearing to be excessively alarmist, I would also note that the Soviets are accelerating all of their science and engineering education programs, turning out over a million technical specialists annually. Both Majority and Minority Members of the Subcommittee were alarmed by the President's proposal to eliminate the education function of NSF.

Given these and other concerns, the Committee voted to restore the Science and Engineering Education Directorate to $75 million for FY '82. This still represents a decrease of $5.7 million below the amount appropriated last year.

Research Instrumentation: As I noted above there has been a growing decline in research equipment and facilities at our universities. Estimates indicate that $2 to $4 billion is needed over the next several years to begin the process of replacing worn and obsolete instrumentation and facilities. The original Administration request called for special instrumentation initiatives adding to $100 million and then eliminated in the amended request. We have restored $29.7 million for cross-directorate programs, $16.5 million of which is for a special instrumentation initiative with the remainder for other essential cross-directorate programs. These include continued funding for 2- and 4-year College Instrumentation, Women and Minorities in Science, the Experimental Program to Stimulate Competitive Research and the 5-Year Outlook Analysis and Planning activities.

Social/Behavioral Sciences; Innovation and International Cooperative Activities: The Committee was also concerned with targeted reductions and in some cases entire elimination of programs in the Social and Behavioral Sciences, Innovation, and International Cooperative Activities. $26.1 million in funds were restored to the Biological, Behavioral and Social Sciences specifically for the Behavioral and Social Sciences programs. $18.7 million was restored to the Scientific, Technological and International Affairs Directorates. This brings them even with the FY '81 current spending levels, though much below the original '82 request for NSF of $219.0 million and $80 million respectively. As noted in testimony before our Committee this year and a view supported by the Administration, without a more thorough understanding of social and behavioral effects, we will not be able to accomplish the task of revitalizing our society, no matter

what technological innovations may be found. It seems inconsistent that while embarking on one of the most drastic economic policy changes in the past few decades that we should severely curtail our ability to understand and analyze that process. Regarding the International Cooperation programs, it is certain that our competitiveness in the international marketplace will depend substantially on the full flow of information and research supported by these programs.

Physical Sciences Directorates; Others: No changes were made in the amounts requested for the Mathematical and Physical Sciences; Engineering; Astronomical, Atmospheric, Earth and Ocean Sciences Directorates or in the Program Development and Management and the Special Foreign Currency Accounts. In looking at the Administration's request for the Mathematical and Physical Sciences we see a 15% increase over FY '81 while Engineering programs will increase by 18%. These levels will thus maintain a strong growth in these areas.

Ocean Drilling and Antarctic Research: Finally the Ocean Drilling and Antarctic Research Programs activities were reduced by $12.5 million reflecting a view that the Ocean Margin Drilling program could be deferred. Though I am not personally pleased with terminating the Ocean Margin Drilling program, the Committee as a whole felt budgetary constraint limited our continuation of this program.

Mr. Chairman, I believe the budget numbers we are recommending represent a balanced and fair level of funding with respect to the important priorities developed on the basis of our hearings this year. I would note that the overall number for the Foundation is still $193 million below the original request and represents an increase of only 6 percent over last year's appropriated level. With an estimated 10 percent inflation we will actually see a reduction in the Foundation's overall budget. We are not pleased to impose such a constraint but believe that the current need for budgetary restraint dictates this limitation. However, we believe that to go further would deeply mortgage our nation's technological and economic future.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Mr. Chairman, I would next like to describe the recommendations our Committee has made with respect to the NASA budget. We authorized $6,133.3 million for the Agency, compared to a total request of $6,122.2 million in the revised budget, an increase of $11.1 million.

As you know, the NASA budget includes both space and aeronautics programs. The $11 million increase over budget is in the aeronautics program. I understand that Mr. Glickman has already testified on that part of NASA's program, so I will confine my testimony to space programs.

We did feel that some changes should be made in order to have a more balanced program. We felt that the budget had cut too much from the applications and sciences programs. Consequently, our bill would shift some funds from the Shuttle and Tracking and Data activities into the areas that had been cut.

The effect of the budget revision on NASA's program was not only to throw it out of balance. The revision would also cause NASA to renege on several agreements with our allies. Our actions would restore enough funding to these programs to enable NASA to meet its commitments. Here I am referring to the International Solar Polar Mission and Space Lab.

The details of our actions are contained in our Committee report accompanying the authorization bill, H.R. 1257, so I will only mention the major changes which we made.

Let me first describe the main areas we felt needed more funding:

In Physics and Astronomy we added $15 million to reinstate a U.S. spacecraft for the International Solar Polar Mission. Our preference would be for NASA to continue with the full mission, that is to fly the coronagraph and a 3-axis-stabilized spacecraft, but in any case there definitely should be two spacecraft so that stereoscopic observations can be made. In this category we also added $10 million to keep spacelabs 1 and 2 on their original schedule, the schedule we had promised our European allies, for the 1983 launch of both.

We did not significantly change the request for Planetary Exploration funding but we kept open the option of a Halley Intercept Mission by saying that up to $5 million could be used for that purpose, if requested by the Administrator. The Halley mission had not been in either the original or revised budget and so represents an addition.

We increased the Life Sciences request to the prerevision level (an increase of $5.7 million). We felt that as the shuttle puts man back into space we would continue a vigorous program to develop support systems and understand the effects of zero gravity.

We made several restorations in the Space Applications area. We feel that this is an area of certain payoff and that the cuts proposed would be unwise. Thus we made the following additions:

- for a Geological Applications Program, +$10 million;
- for instruments for the Upper Atmosphere Research Satellite, +$10 million;
- to continue technology transfer activities, +$9 million;
- for materials processing in space, +$4 million; and
- to reinstate the operational evaluation of the search and rescue program, +$5 million.

The Technology Utilization program was scheduled to be phased out, along with Technology Transfer mentioned above. As you know Mr. Chairman, both these activities have been supported vigorously by our Committee for many years. They ensure that the techniques and knowledge developed by NASA with dollars you appropriate are made available to all of our citizens and businesses. We added $8 million for this very important program.

We added $8 million to the revised budget to continue development of the Solar Electric Propulsion System. Other small additions would be for advanced programs, chemical propulsion information systems, and energy technology.

Now the areas that we would reduce: In Space Shuttle, we reduced the Changes/System upgrading request by $60 million. This just balances a proposed $60 million reprogramming into this category in 1981. In other words, NASA still has the same funding available, it is only available earlier.

We reduced the request for new Upper Stage Development by $20 million. This is consistent with our desire that NASA proceed slowly until it has reassessed national requirements for an upper stage and reconsidered sole source procurement.

Finally, we reduced the funds available for operations of the Tracking and Data Acquisition program by $15 million.

Mr. Chairman, I hope you will agree that these relatively minor changes will result in a NASA program that is more balanced, that meets our international commitments, and that preserves the President's budget goals.

ENVIRONMENTAL PROTECTION AGENCY

With regard to environmental research and development, the Committee on Science and Technology is now considering H.R. 3115 to authorize fiscal year 1982 appropriations for the research programs of the Environmental Protection Agency. This bill provides an authorization of $345.5 million for EPA research, $40.0 million above the President's request, yet $40.1 million below the amount authorized for fiscal year 1981.

Mr. Chairman, I consider this authorization to be responsible and vitally important. If we expect to improve the validity and appropriateness of environmental standards and regulations, and relatedly the state of our environmental quality and public health, then we must act to strengthen our efforts in environmental research. In particular we are concerned with the areas of air, water quality, and energy research as reflected in our recommendation. I certainly believe full funding of these programs essential for accomplishing such a strengthening.

FEDERAL EMERGENCY MANAGEMENT AGENCY

Finally, the Committee has reported out a program total of $92.9 million for the reauthorization of the Earthquake Hazards Reduction Act of 1977 and the Federal Fire Prevention and Control Act of 1974, which are coordinated by the Federal Emergency Management Agency. The program total includes the following: $65.5 million to carry out the National Earthquake program; $22.5 million to carry out the Federal Fire Prevention and Control Program, and $4.9 million to carry out multihazard research, planning and mitigation activities.

The program total represents an increase to an already small budget of only 2 percent above President Reagan's fiscal year 1982 request. Regarding the increase: $1.5 million would be devoted to the first phase of establishing an operational earthquake prediction network in Southern California -- predictions indicate there is a greater than 50 percent chance of a catastrophic earthquake occurring in Southern California within the next 30 years. $300,000 would be added to the U.S. Fire Administration budget to improve outreach and dissemination activities of the U.S. Fire Academy to the two million fire fighters across the country.

The benefits that can result in terms of savings in human life and property should far outweigh the small increase for the reauthorization of the Earthquake and Fire Acts.

Mr. Chairman, as I believe my statement illustrates, our Committee has made only modest changes in the overall budgets of these four agencies. The levels we are recommending are only 2.4 percent above that being requested. We have, moreover, made a serious effort to properly evaluate and reallocate program priorities to reflect our concerns in specific area. I believe the final results are fair and equitable. I strongly urge your Subcommittee to appropriate the funds for these programs at the levels as recommended by our Committee.

National Science Foundation
(authorizations in millions of dollars)

Activities	Current FY 81	Carter Admin. Request FY 82 (Jan. 15)	Admin. Request FY 82 (revised Mar.10)	H.R. 1520 Amended by S&T Committee	Change from Admin. Proposal
Mathematical & Physical Sciences	$257.1	$301.3	$295.4	$295.4	$0
Engineering	86.8	104.6	102.6	102.6	0
Biological, Behavioral & Social Sciences	198.1	219.0	172.0	198.1	26.1
Astronomical, Atmospheric, Earth & Ocean Sciences	236.2	268.0	253.2	253.2	0
Ocean Drilling Programs	22.0	30.0	26.0	14.0	-12.0
Antarctic Research Programs	64.7	70.1	70.1	69.6	- 0.5
Scientific, Technological & International Affairs	56.4	80.0	37.7	56.4	18.7
Cross-Directorate Programs	26.8	97.9	0	29.7	29.7
Program Development & Mgmt.	61.7	67.2	63.2	63.2	0
Science & Engineering Ed.	80.7	111.9	9.9	75.0	65.1
Special Foreign Currency	5.6	3.5	3.5	3.5	0
	$1096.1	$1353.5	$1033.6	$1160.7	$127.1

National Aeronautics and Space Administration
(authorization in millions of dollars)

Activities	Current FY'81 (revised)	Carter Admin. Request FY'82 (Jan. 15)	Admin. Request FY'82 (revised Mar. 10)	H.R. 1257 Amended by S&T Committee	Change from Revised Admin. Proposal
Space Shuttle	$2,003.0	$2,230.0	$2,194.0	$2,134.0	-60.0
Space Flight Operations	676.2	1,043.0	910.9	903.9	- 7.0
Expendable Launch Vehicles	54.4	31.2	31.2	31.2	0
Physics & Astronomy	320.7	451.4	325.4	350.4	+25.0
Planetary Exploration	175.6	256.1	215.3	215.2	- 0.1
Life Sciences	42.188	49.2	43.5	49.2	+ 5.7
Space Applications	331.55	472.9	372.9	410.9	+38
Technology Utilization	6.8	14.6	4.6	12.6	+ 8
Aero. Research & Technology	272.15	323.6	264.8	276.0	+11.2
Space Research & Technology	110.7	141.0	125.3	129.3	+ 4.0
Energy Technology Applic.	1.9	4.4	0	2.0	+ 2.0
Tracking & Data Acquisition	341.1	435.2	415.2	400.2	-15.0
Research & Development	$4,336.288	$5,452.6	$4,903.1	$4,914.9	+11.8
Construction of Facilities	115.0	136.8	104.8	104.12	- 0.68
Research & Program Management	1,071.4	1,136.3	1,114.3	1,114.3	0
TOTAL NASA	$5,522.688	$6,725.7	$6,122.2	$6,133.32	+11.12

EPA OFFICE OF RESEARCH AND DEVELOPMENT-SUMMARY OF AUTHORIZED APPROPRIATIONS

In thousands of dollars

MEDIUM / Program category	FISCAL YEAR 1981 Authorized	FISCAL YEAR 1981 Estimate	REAGAN BUDGET FY 1982 Pres. Req. to Congress	REAGAN BUDGET Pres. Req. vs. FY 1981 Est.	H. R. 3115 Subc. Rec.	H. R. 3115 Subc. Rec. vs. Reagan Req.	Note
AIR							
Oxidants	19,292	16,896	18,076	+1,180	19,476	+1,400	1
Hazardous Air Pollutants	11,294	11,753	10,768	-985	12,768	+2,000	2
Mobile Sources	8,618	9,316	6,253	-3,063	6,753	+500	3
Gases and Particles	34,120	31,529	29,332	-2,197	30,332	+1,000	4
Subtotal	73,024	69,495	64,430	-5,065	69,330	+4,400	
WATER							
Water Quality	26,044	28,510	18,056	-10,454	23,006	+4,950	5
Municipal Wastewater	21,427	21,623	19,385	-2,238	20,085	+700	6
Industrial Wastewater	16,261	15,611	10,598	-5,013	10,598	0	7
Subtotal	63,732	65,744	48,039	-17,705	53,689	+5,650	
DRINKING WATER	28,693	26,774	29,713	+2,939	30,713	+1,000	8
SOLID/HAZARDOUS WASTE	26,796	29,564	31,046	+1,500	31,046	0	9
PESTICIDES	10,053	10,858	6,876	-3,982	6,876	0	10
RADIATION (non-ionizing)	3,259	3,272	2,982	-290	2,982	0	11
INTERDISCIPLINARY	6,301	6,562	6,484	-78	7,234	+750	12
TOXIC SUBSTANCES	40,385	36,507	38,008	+1,501	38,008	0	13
ENERGY							
Control Technology		56,582	39,987	-16,795	49,037	+9,250	14
Health Effects		16,825	5,807	-11,018	11,157	+5,350	15
Ecological Effects		22,870	15,085	-7,785	23,085	+8,000	16
Monitoring Systems		3,139	230	-2,909	1,880	+1,650	17
Acid Rain		7,160	9,037	+1,877	9,037	0	18
Subtotal	110,994*	106,578	70,146	-36,432	94,196	+24,250	
PROGRAM TOTAL	364,037	355,354	297,724	-57,630	334,075	+36,350	
Program Management/Support	11,004	10,204	8,512	-1,692	11,512	+3,000	19
EPA ORD TOTAL	375,041	365,558	306,236	-59,322(16%)	345,587	+39,350	

* P.L. 96-569 authorized all funds under health and ecological effects and control technology

Committee on Science and Technology Reported Amounts

For Federal Emergency Management Agency Budget -- Earthquake, Fire, Multihazard

(millions of dollars)

	FY 1981 Appropriation	President Carter FY 82	President Reagan FY 82	Committee Recommendation[1] For FY 82
Title I:				
Earthquake				
Federal Emergency Management Agency	1.475	2.000	2.000	2.000[2]
U.S. Geological Survey	32.300	37.400	34.425	35.925
National Science Foundation	25.900	27.700	27.150	27.150
National Bureau of Standards	0.425	0.425	0.425	0.425
SUBTOTAL	60.100	67.525	64.000	65.500
Title II:				
Fire				
Federal Emergency Management Agency	17.073	17.219	16.806	17.106[3]
National Bureau of Standards	5.151	5.352	5.345	5.345[4]
SUBTOTAL	22.224	22.571	22.151	22.451
Title III:				
Multihazard				
Emergency First Response Prog.	0.939	0.939	0.939	0.939[3]
Preparedness Measures for Major Hazard Zones	0.000	3.300	3.300	3.300[2]
P.L. 96-472	0.760	0.700	0.700	0.700
SUBTOTAL	1.699	4.939	4.939	4.939
TOTAL	84.023	95.035	91.090	92.890[5]

(1) Committee $ recommendations are for "base programs" only. "Such sums as may be necessary" are authorized for mandated pay increases.

(2) $ 2.0 M is authorized to the Federal Emergency Management Agency (FEMA) under Title I to carry out sections 5 and 6 of the Earthquake Hazards Reduction Act of 1977.

+$ 3.3 M is authorized to FEMA, under Title III to conduct a program of planning, preparedness and mitigation related to multiple direct and indirect hazards resulting from the occurrence of large California earthquakes.

$ 5.3 M Total for FEMA's National Earthquake Hazards Reduction Program.

(3) $17.106 M of a total Title II authorization of $21.115 M is authorized to FEMA's U. S. Fire Administration to conduct a program of fire protection and control. This includes $0.654 M for executive direction (including rent and office supplies) by FEMA. The balance $4.009 M ($21.115 M - $17.106 M) is for a pass-through for the Fire Research Center at the National Bureau of Standards (NBS).

+$ 0.939 M is authorized to FEMA's U. S. Fire Administration under Title III to conduct an Emergency First Response Program.

$18.045 M Total for FEMA's U. S. Fire Administration National Fire Prevention and Control Program.

(4) $ 4.009 M Title II authorizes "such sums as may be necessary" of a total Title II authorization of $21.115 M as a pass-through from FEMA to the NBS Fire Research Center. The appropriation for this is expected to be about $4.009 M.

+$ 1.336 M The National Bureau of Standards Authorization Act for Fiscal Years 1981 and 1982 authorizes $1.378 M to the Secretary of Commerce for the NBS Fire Research Center. The appropriation for this is expected to be $1.336 M.

$ 5.345 M Total for NBS Fire Research Center

(5) $92.890 M This represents the program total recommended by the Subcommittee. Of this, the bill authorizes appropriations of $91.554 M with the balance of $1.336 M authorized by the National Bureau of Standards Authorization Act for Fiscal Years 1981 and 1982.

80-223 O—81——24

Mr. BOLAND. Thank you very much, Mr. Chairman.

Do you know what the Senate Committee did with respect to NSF? Your recommendation for NSF is $127 million above the Reagan Administration's request.

Mr. FUQUA. Have they marked that up, Dr. Maxwell?

Dr. MAXWELL. They marked up yesterday.

Mr. BOLAND. Did they increase this item?

Dr. MAXWELL. They did. They increased in the area of Science Education. There were two committees marking up yesterday, Commerce and the Education and Labor Committees. Both of them increased the area of Science Education a small amount. I think one was $10 million and the other was about $11 million in that category.

In the research areas, Behavioral and Social Sciences, there was a slight increase there They all voted to increase the monies for the Ocean Margin Drilling program.

Mr. BOLAND. Do you support the Ocean Drilling program?

Mr. FUQUA. The Committee voted not to include it. I personally support it.

Mr. BOLAND. Your Committee has supported it in the past. As you know, I wrote to the President of the United States to indicate our support of that particular program.

Is it true that the Senate Committee has restored the funds?

Dr. MAXWELL. That is correct.

Mr. FUQUA. Yes.

Mr. BOLAND. We are inclined to keep the $12 million in for 1982. How would you feel about that?

Mr. FUQUA. I personally would have no objection to doing it. As I said, I personally support the program. I think it has long-range implications, not for the drilling of oil, but for mineral exploration and finding out the technology of drilling in deep oceans. I think it is a very essential program. Many of the Members of the Committee felt that in times when we were cutting back we should not be doing a program that maybe the oil companies or others might engage in.

I think the program is much broader than that.

Mr. BOLAND. I do, too. I don't know what priority the Agency places on this program. If it is low in the Foundation's priorities, then perhaps we would—

Mr. FUQUA. I am not aware that it has a low priority.

Mr. BOLAND. The staff tells me the Foundation places a high priority on it.

Mr. FUQUA. In talking with Dr. Branscom, the Chairman of the Board of National Science Foundation, and Dr. Slaughter, the Administrator, we asked that they get a recommitment from the new Administration of their commitment to this program.

Now, some of the controversy in our Committee has been that maybe it should be in DOE, if it is an oil drilling operation. But it is more than an oil drilling operation. As I mentioned, it involves minerals and critical materials that may be there. I think it is a very high priority program.

I have just been handed a letter that Dr. Slaughter had written me about it where he does state that it is a high priority item with them and will be a cost-sharing program with industry.

Mr. BOLAND. Fine.

Mr. Green?

Mr. GREEN. I have no questions.

Mr. BOLAND. Mr. Chairman, thank you very much. We are about to go up and vote on a significant part of the President's economic program. I appreciate your coming here today.

Again, thank you very much.

Mr. FUQUA. Mr. Chairman, I appreciate it.

FRIDAY, MAY 8, 1981.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

HON. DAVID H. SHEPHERD, MAYOR OF OAK PARK, MICHIGAN, REPRESENTING THE NATIONAL LEAGUE OF CITIES

Mr. SABO. The Committee will come to order.

We appreciate having Mayor Shepherd with us. We will insert your statement in the record, and if you would summarize the statement, we will appreciate it.

[The information follows:]

Mr. Chairman and Members of the Committee: My name is Dave Shepherd, Mayor of Oak Park, Michigan. This morning I am representing the National League of Cities, which represents 15,000 of the Nation's cities, from cities as large as New York and Los Angeles to as small as Grand Isle, Louisiana and Springdale, Arkansas. I am also representing the U.S. Conference of Mayors.

NLC and USCM appreciates the opportunity to testify today regarding FY 1982 appropriations for the Environmental Protection Agency and the Department of Housing and Urban Development.

Le me begin by saying that NLC supports the goals of the President for the economic recovery of America. We believe, however, that several of the programs funded through this Committee are essential elements of such a recovery, for those programs are basic to the infrastructure needs of every city—no matter how small or large.

Thus, when our Board met in February to respond to the President's agenda, it spoke forcefully to support efforts to curb entitlement programs and to eliminate wasteful tax expenditures. We spoke equally clearly in behalf of adequate funding levels for assisted housing, Community Development, UDAG, and wastewater treatment needs. These are problems which will not be addressed nor responded to by the private sector or free market forces. These are programs without which we shall surely have an economic disaster. Consequently, NLC looks to this Committee to provide the leadership and assistance necessary to achieve the Nation's economic recovery goals.

It is essential that $2.4 billion be appropriated in FY 1982 for EPA's Wastewater Construction Grant Program and that it be appropriated now. When Congress passed the 1972 Clean Water Act and amendments, state and local governments were compelled to proceed with the mandates of the Act - with the assumption of a 75% federal share under the section 201 grant program.

To leave the 201 program unfunded for FY 1982 until reforms are enacted, as the Administration has requested, would constitute a breach of faith. It would seriously affect cities under court order, jeopardizing local financing efforts and disrupting existing plans and design work. It would leave still other cities with outstanding bond indebtedness twisting in the wind.

The unpredictability of funding for this program has been largely responsible for the slow rate of progress. This schizophrenic commitment has reduced the ability of local officials to plan effectivley, causing delays with inflationary costs of 15% per year, and leading to increasing numbers of court orders to comply with federally imposed mandates.

When considering 201 appropriations, certain factors must be kept in mind:

- The deadlines of the Clean Water Act would not be revised under the 201 reform legislation, but would be considered during the reevaluation of the entire Clean Water Act next year. Therefore, the mandates of the Act will be in place. With a delay in appropriation, cities presently under court order would be unable to comply, and even more cities would face court action, resulting from federal mandates or environmental law suits. Presently there are 27 cities in 16 states affected by court orders. The costs for these cities to comply alone are estimated at over $1 billion. Thus, just for these cities, every month of delay costs $12.5 million.

- Projects totalling well over $4 billion are ready to go to construction, using remaining FY 1980, FY 1981, and FY 1982 funding. Assuming an annual rate of inflation in this sector of 15%, a one year delay across the board may mean added costs of up to $521 million for a twelve-month period. The inflationary consequences would be particularly severe during the 1981 through 1983 period when construction activity is expected to peak.

- One of the least understood and most severe problems caused by the unpredictability of funding is the profound effect on state and local officials who have proceeded in good faith to meet the mandates established by Congress. Not only have states and local governments committed staff and time to planning and designing systems, but also they have made the difficult political decisions to propose local bond issues based upon moral committments to their residents of a federal match. Time and again they have incurred delays in meeting their own needs in order to comply with EPA regulatory guidelines and timetables. With constant changes in the law, and with uncertainties over appropriations, it is very difficult for a state or local government to set priorities and provide consistent leadership in meeting the Nation's clean water needs...

NLC and the USCM urges this Committee to include $2.4 billion in the FY 1982 Appropriations Bill. The 1972 Clean Water Act as amended constitutes a committment not only to the goal of clean water, but to state and local officials who have proceeded to meet the Congressional mandates.

The National League of Cities and the U.S. Conference of Mayors believe it essential that this Committee not turn its back on low-income housing and distressed city needs. Disproportionate reductions in housing and community development programs will be counter-productive to national economic recovery.

The Administration proposes $4.166 billion for the Community Development Block Grant Program (CDBG), but proposes to eliminate (through consolidation into CDBG) the UDAG ($675 million), rehabilitation loan ($134 million), low-income weatherization ($200 million), planning assistance ($35 million), Solar Energy and Energy Conservation Bank ($125 million), and neighborhood self-help development ($9 million) programs. Thus, programs totalling $1.178 billion would be expected to be funded out of the block grant program, which would be increased by only $206 million. In addition, the Administration proposes a set-aside of up to $500 million for UDAG alone, reducing funding for all CDBG entitlement cities.

NLC is prepared to accept these reduced funding levels affecting hundreds of communities receiving reduced CDBG entitlements, while facing local pressures to undertake increased community development responsibilities. Attached to our testimony is a survey of the impact of such cuts on urban areas.

The National League of Cities and the U.S. Conference of Mayors urge the Committee, however, to increase the funding level for CDBG by at least $500 million to $4.66 billion if the block grant is required to finance these additional community development activities. This would result in a savings from the Carter Budget of $472 million.

The Administration proposes $19.77 billion to finance an estimated 175,000 section 8 and public housing units, a reduction of 85,000 units from the 260,000 level budgeted by President Carter. Moreover, the mix between new/substantially rehabilitated and existing units is to be shifted from 50/50 to 45/55.

NLC and the USCM strongly oppose the disproportionately deep cut in HUD's section 8 and public housing programs. These programs serve primarily those of low-income--below 50 percent of median income-and provide virtually the only source of housing for these families. We urge the Committee to increase the level of funding for assisted housing to the authorization level of $28.8 billion recommended by the House Banking, Finance and Urban Affairs Committee. The approximately 250,000 families this funding level would help is far below any reasonable estimate of need.

We further urge that the mix of new, rehabilitated, and existing housing should be based on locally identified housing needs contained in the Housing Assistance Plan (HAP). The Administration's proposal to further shift the mix to 45 percent new and 55 percent existing will make it difficult for local officials in many communities to use housing funds because of the low vacancy rates in their communities. Furthermore, this dictation of the mix is wholly inconsistent with the President's general philosophy of a proper federal-local relationship.

The Resource Conservation and Recovery Act has had an impact on all aspects of municipal solid waste programs, particularly the elimination of open dumps and their conversion to sanitary landfills. The RCRA Technical Assistance Panels Program provides state and local governments with assistance on upgrading disposal facilities and developing resource conservation and recovery programs. With over 40 percent of the landfills surveyed to date failing to meet one or more of the criteria of the Act, continued technical assistance is critical to achieving the Act's goals.

In a time of budgetary constraints, the cost effectiveness of technical assistance must be considered. The funding needs of this program are very low at $1.1 million. Yet, the TA program has been effective in informing communities of new developments in solid waste management and in implementing innovative solid waste management systems. Without this assistance many communities would be unable to comply with the mandates of the Act and would remain unaware of cost effective and innovative alternatives.

The Reagan Administration's proposal to eliminate EPA's Noise Program in FY 1982 is unacceptable to NLC. While we share the Administration's distaste for the program's unnecessary regulations, the Noise program is a successful federal-local partnership which has been widely praised by cities for its leadership and direction on complex, technical issues, which no city could handle by itself.

Representative James J. Florio (D-N.J.), Chairman of the Subcommittee on Transportation, Commerce, and Tourism, has proposed what we believe to be an acceptable compromise on this issue. This bipartisan recommendation by the Subcommittee is a $4.1 million authorization. We support such a reduced funding level.

In order to focus the program on assistance to state and local governments as the Act mandates, we suggest this Subcommittee state explicitly in its appropriations report that no monies appropriated be used to support regulatory activities provided for under sections 5,6,17, and 18 of the Noise Control Act of 1972. This would eliminate funding for the unnecessary development of product regulations.

Finally, Mr. Chairman, we urge the Subcommittee to provide $5 million in FY 1982 for the National Science Foundation's Intergovernmental Science Program. The intergovernmental program is the only federal program encouraging the transfer of technology to state and local governments. This is accomplished through three major technology transfer networks (the Urban Consortium for Technology Initiatives, the Urban Technology System, and the Community Technology Initiatives Program) and several innovation groups that help local governments improve their management and service delivery capability and enable them to participate in the setting of a national research agenda that recognizes their unique needs.

Continued funding of the intergovernmental program is essential as local governments are forced to assume new responsibilities. If the federal role in supporting the technology transfer networks is to be eliminated, this role should be gradually reduced rather than precipitously eliminated. This can be accomplished by providing funding of $5 million in FY 1982 and gradually reducing the funding further in the out-years. We are willing to accept our share of the cuts in NSF's budget, but we believe the Administration's proposal for immediate elimination of the intergovernmental program is neither fair nor cost effective.

Mayor SHEPHERD. Mr. Chairman and Members of the Committee, my name is Dave Shepherd, Mayor of Oak Park, Michigan. This morning I am representing the National League of Cities, which represents 15,000 of the Nation's cities, from cities as large as New York and Los Angeles to as small as Grand Isle, Louisiana, and Springdale, Arkansas. I am also representing the U.S. Conference of Mayors.

Mr. Chairman, as a local elected official, I am alarmed at the actions of the Congress and the Administration. My city and in fact, every city in this country, has become a ping-pong ball. Congress sets the environmental standards that we are required to meet. EPA determines the enforcement and takes us to court, and, as often as not, the rescission and lack of assured appropriations keep us from pursuing courses of action to comply with court orders.

Nearly every year the law is changed. This year it is Industrial Cost Exclusion. Next year it will be reforms. Of course, within the existing system we're the last ones on the list to be consulted—despite the fact that it is our job to implement immediately or have appropriations reduced.

And then, of course, we are given no idea whatsoever from one year to the next as to what funding will be available. Instead, this year, once again, we will have to shelve all, planning to await your decisions on what we're required to do, and when we're required to have it completed by, and what, if any, funds will be available.

There will be virtually no technical assistance to help us comply with the law. There will merely be the enforcers with threatened court orders and rescissions if we don't comply with each and every Congressional and Administration order.

Is it really any wonder that a project now takes up to 14 years to complete? This year's reforms will require every State in the Nation to alter priority lists, many without consultation with cities, will change virtually every local wastewater construction planning effort, and will surely add even more time to the process and more local and Federal dollars lost to inflation.

And the kicker, Mr. Chairman, is that neither the Congress nor the Administration has allotted any funds for fiscal year 1982—only legally enforceable mandates. By any reasonable standard, we at the local level would be terribly mistaken if we were to continue our present efforts to clean up the Nation's waters, since the budget process dictates no funding, and since those who have best complied with the ever-changing mandates, rules and requirements have been harshly penalized.

I am at a loss as to what advice I should carry back to the cities who are under court order, to the cities who are at the head of present State priority lists and have already issued bond to meet the local match requirements.

Local governments cannot pick up the costs of this effort, nor can their residents via increased property taxes or user fees, particularly now when so many responsibilities are being transferred to local governments and when individuals are bearing increased fuel costs, exorbitant interest rates and inflation. For example, the State of Idaho has estimated the increased tax burden on a single family residence if treatment projects were funded entirely locally.

Presently, the taxes on a $75,000 home are $887.47 per year. With local funding of a plant, alone the annual tax burden would increase to $2,118.22.

We cannot afford to ignore this basic infrastructure problem. Our water resources must be preserved, and used and reused in the most effective way possible. It makes no long-term sense to defer those projects which must eventually proceed, but at higher future costs.

It is essential that $2.4 billion be appropriated in fiscal year 1982 for EPA's Wastewater Construction Grants Program and that it be appropriated now. When Congress passed the 1972 Clean Water Act and amendments, State and local governments were compelled to proceed with the mandates of the Act—with the assumption of a 75 percent Federal share under the Section 201 grant program.

Is $2.4 billion reasonable? The Administration appears to have chosen $2.4 billion based on how much they considered available rather than evaluating the funding necessary to meet current needs and obligations. Congress seems willing to go along. But what about the Federal commitment made in 1972 and reaffirmed in 1977? Is anyone asking what the needs are before determining appropriations?

According to a recent EPA survey, projects mandated by Federal court order include $1 billion in unfunded needs through 1982. There are $2.6 billion of unfunded needs in segmented projects and $2.5 billion in phased projects. This means these areas will likely come under court order unless the projects are finished. Do we know how many cities have issued bonds for their local match, only to find no Federal share is coming? Do we know how many environmentally essential projects there are ready to go to construction? EPA's 1980 needs survey found $93 billion in backlog needs alone, i.e., need base on 1979 populations. What about the effect of funding disruptions to receiving waters?

The National League of Cities and the U.S. Conference of Mayors believe it essential that this Committee not turn its back on low-income housing and distressd city needs. Disproportionate reductions in housing and community development programs will be counterproductive to national economic recovery.

The National League of Cities and the U.S. Conference of Mayors urge the Committee to increase the funding level for CDBG by at least $500 million to $4.66 billion if the block grant is required to finance the additional community development and energy activities being folded in. This would result in a savings from the Carter budget of $472 million.

NLC and the USCM oppose the disproportionately deep cut in HUDs Section 8 and public Housing Programs. These programs serve primarily those of low-income—below 50 percent of median income—and provide virtually the only source of housing for these families.

We urge the Committee to increase the level of funding for Assisted Housing to the authorization level of $28.8 billion recommnended by the House Banking, Finance and Urban Affairs Committee. The approximately 250,000 families this funding level would help is far below any reasonable estimate of need.

Thank you for the opportunity to appear.

Mr. SABO. There has been some indication that the Administration intends to fold UDAG into the Community Development Block Grant program as a discretionary activity. Do you think that would do any damage to the function?

Mayor SHEPHERD. I think so. They are two separate programs. In a lot of ways they are not compatible. UDAG is a program basically to bring in the private investment funds and Community Development Block Grants and includes many other programs.

The redevelopment funding is direct assistance to low-income people. Folding the two together dilutes the whole thing.

Mr. SABO. The administration is also suggesting that the 312 Rehabilitation Loan program be eliminated or folded into the Community Block grants, suggesting that would make the rehabilitation process work more efficiently. Do you agree with that?

Mayor SHEPHERD. No. My personal experience with 312, in my estimation it is probably one of the best programs we have had for years. It is a program where we can spend just a few dollars to rehabilitate before we end up in slums and so forth. I think it is extremely cheap money to spend. We have submitted some previous information on this and would like to have that as part of the record.

Mr. SABO. Very well.

[CLERK'S NOTE.—The additional information has been received and made part of the Committee's records.]

Mr. SABO. My observation is in my community, there are other expenditures made which I am not sure would not have come about except for the 312 program.

Mayor SHEPHERD. It has led to commercial rehabilitation as well. We have found it very salutary in my community.

Mr. SABO. How large is your community?

Mayor SHEPHERD. Thirty-one thousand, five hundred people. We suffered a 15 percent drop in population since the last census.

We have found this has been very, very helpful to us in maintaining areas that might become blighted.

Mr. SABO. One of the problems we regularly deal with is the continuing increased costs of subsidies for Public Housing projects. We recently approved in this Subcommittee and the full Committee a substantial supplemental for Public Housing subsidies for the current fiscal year, but it seems to be ever-increasing. Do you have any good suggestions for us?

Mayor SHEPHERD. Let me say this has been a real problem for me. I am constantly beseiged by people who are retired, senior citizens, people on fixed incomes. They plead with me to find a way for them to take care of their problems of unbelievable increases in rents. I know of one particular project where senior citizens have come to me, and over a ten-month period they have had an increase of almost $100 a month.

We feel that cuts here will just pile up greater pressure for future additional housing assistance. The need is so clear and so documented. This is a good program and we feel it is working well and we would like to see it broadened.

Mr. SABO. Mr. Green, do you have any questions?

Mr. GREEN. I would like to refer to the wastewater treatment program for a minute.

A recent General Accounting Office study found 87 percent of the municipal wastewater treatment plants violated the effluent discharge limit of their permits. Obviously, the wastewater treatment program is costing us billions of dollars but it doesn't make sense to be funding these projects if they are going to be operated in a way that renders them ineffective.

Mayor SHEPHERD. Mr. Green, I think we should take a good look at that survey. My information is that they have covered all the projects in the past. They did not keep the survey to those budgeted under 201. I think taking another look at these numbers from the extent of what 201 has done and has not done could really give a much better picture.

The easiest thing in the world is to exceed a standard. It can happen in a day, and any number of environmental matters can cause a discharge of effluent. I think we should re-examine the methodology of putting those numbers together.

Mr. GREEN. Another concern with the program has been the slow rate of expenditure of the money appropriated. I am told since fiscal year 1973, $34 billion has been appropriated and only $18.4 billion has been expended. What causes this? Obviously it makes the program very, vulnerable every time there is a budget change. Why is there such a large backlog?

Mayor SHEPHERD. We are looking at the difference between outlays and obligations. The obligations are actually $31-plus billion. We are on our way within the program using the appropriation.

It is a very complicated process to put one of these together. There are hearings involved, the engineering. The effect it has on other communities and on the Nation is very complex. It should take time. We should not rush into this—we should have good planning. All these things take time. We are at a point now where $31-plus billion is obligated and the programs have progressed to such a point that there will be nothing left at the end of 1982.

Mr. GREEN. I know my community is having some difficulty with the Federal government requiring completion of sewage treatment plants by a certain time. Is this typical?

Mayor SHEPHERD. Absolutely. In my own area, we are involved in a program where there is a court order. The Carter has taken over the supervision of the metropolitan water supply system—disposal system, excuse me—and we have a $440 million program we are involved in right there. This is going on all over the country. I think there are some 27 cities in 16 States that are under court order at the present time.

Mr. GREEN. Are many of them in the situation we are in that if there is an interruption of funding at this point they will be unable to comply even if funding comes through later on?

Mayor SHEPHERD. It will throw the program so far behind, they will not be able to do it. We are aware of one in a much smaller community. We are aware of one that is under court order in Cottage Grove or Eden, where they have already sold $2 million worth of bonds. The money is not available. In order to meet the court order they will have to sell another $6 million worth of bonds. At the same time we are getting all kinds of signals that construction that is done before money becomes available will not be reimbursed.

Mr. GREEN. It really is a catch-22 situation.
Mayor SHEPHERD. It is a severe problem.
Mr. SABO. Thank you, Mr. Mayor.

VETERANS ADMINISTRATION

WITNESS

JAMES M. PEIRCE, PRESIDENT, NATIONAL FEDERATION OF FEDERAL EMPLOYEES

Mr. SABO. Mr. James Peirce, President, National Federation of Federal Employees.

Mr. PEIRCE. Mr. Chairman and Subcommittee members, my name is Jim Peirce and I am President of the National Federation of Federal Employees. NFFE represents nearly 150,000 government workers, ten percent of whom are employed by the Veterans Administration. It is on their behalf, as well as our Nation's veterans, that I appear here today.

During this period of slow economic growth and high inflation, the current Administration is advocating drastic cuts in the Federal budget, and even larger cuts in Federal income taxes. Both, it is hoped, will lead to a balanced budget by fiscal year 1984. The Admninistration's theory, as we all know by now, is that the tax cut, together with a balanced budget and fewer government regulations, will spur greater savings, investment, and productivity, and thus greater economic growth and a lower inflation rate.

Congress is now considering the Administration's plan, including the stringent measures to reduce fiscal year 1982 spending by billions of dollars. The suggested cuts would adversely affect vital programs in virtually every area of the Federal government, including those within the Veterans Administration, and millions of citizens who depend on these programs for necessary assistance.

It is no surprise that the Administration's budget reductions are presently enjoying widespread support among a majority of the American people and, therefore, many officials on Capitol Hill. Lower Federal spending will make it easier to reduce taxes, the plan's proponents maintain, and both will produce a healthier economy and smaller price rises. Even though some people may have to make sacrifices today, they and everyone else will benefit in the long run. It sounds too good to be true—and perhaps it is.

Like many other organizations, NFFE seriously questions the impact of the Admninistration's plan. Its centerpiece, the three-year, 30 percent reduction in personal and business taxes, seems highly inflationary, especially if the tight monetary policy of the Federal Reserve Board continues or the Administration's economic assumptions prove too optimistic. Even likely supporters of the plan question its wisdom. In a recent newsletter the investment house of David L. Babson & Co. remarked, "The economic projections are jerry-built compromises among different schools of thought. . . On the tax side, the prospects of the Reagan figures working out are equally poor."

We ourselves do not claim expertise in this area, yet so many professional economists have expressed similar reservations with the Reagan program, that we too must doubt its efficacy.

President Reagan says that rampaging inflation has been caused by excess government spending and crushing Federal deficits. He continually blames the so-called bloated bureaucracy for all the ills of government and the economic woes of our country. It is here that we disagree. First, history reveals that if balanced budgets truly cured inflation, it would not be the problem which it is today. The consumer price index experienced major surges in 1968–69 (4.7–6.1 percent), 1973–74 (8.8–2.2 percent) and 1978–79 (9.0–13.3 percent). These price jumps coincide with the only public-sector surpluses since 1966. The surpluses were in 1969 (9.9 billion), 1973 (7.8 billion), and 1979 (11.9 billion). Federal deficits, however, averaged only $9.8 billion during this period with a Federal surplus occurring in 1969. One can readily see that there is no correlation between Federal (or total government sector) deficits and inflation. The U.S. economy first experienced creeping inflation from 1947 through 1960 during boom years and recessions alike. It should be noted, though, that the Federal Government ran substantial surpluses in nine of those 14 years. It was not until the 1970s that we began to experience deficits with some consistency. The main cause of current inflation seems to be a dwindling supply of:

Critical and essential raw materials,

Essential energy materials.

Second, we do not see the so-called bloated bureaucracy. Statistics reflected in the special analyses Budget of the United States Government for Fiscal Year 1982 do not substantiate the allegation. Charts (see attached) in special analysis I, Civilian Employment In The Executive Branch, reflect that Federal employment has been relatively stable since 1952 and that Federal employment per 1,000 population has decreased from 16.3 to an estimated 12.6 in 1981. However, the charts do reflect that public sector (State and local governments) employment as increased from 4.1 million to 13.4 million during the same period. We believe that this represents the huge growth in public employment so often blamed on the Federal sector.

We believe it is time the Administration and Congress look at the facts. They should stop using band-aids and attack the root causes of our problems. The Federal employee is not the cause, yet has been under attack for too long and made the scapegoat. This cannot continue if we are to maintain the productivity and morale of the Federal employee. Wassily Leontief, 1973 Nobel Prize winner in economics, stated:

> My feeling is that the American bureaucracy is a very good bureaucracy, very skilled, very dedicated.
>
> They really can solve problems. They have all the skills and moral qualities. If we have a terrific amount of graft, it was not among our bureaucrats. It was among the politicans. As a matter of fact, let me add that there is at least as much graft in private business as in politics. Private business is the main source of political graft, as we learn now. The most incorruptible part of our society, I would say are our bureaucrats.

Isn't it time to get off the Federal employees' back and start applauding them for the job being performed under the most trying circumstances?

Despite the many knowledgeable critics, Congress is nevertheless pushing ahead with the White House plan. Congress, however, is far more concerned with the tax cut and its potential for setting record-high deficits than the Administration. Indeed, it is my understanding that the Senate Budget Committee at least initially rejected the First Budget Resolution because the spending cuts, already severe, were still not large enough to offset the projected revenue loss from the President's tax proposal.

So it is clear that the major thrust for the pending reduction is not to eliminate wasteful or unnecessary government programs. Their purpose, rather, is to help implement a politically attractive, but extremely risky economic plan. And to achieve this aim the spending reductions must go far beyond simple prudence to the very heart of programs that were once considered essential to the overall well-being of our country and its citizens.

A case in point is the Veterans Administration. The Reagan budget has targeted the VA for nearly $740 million in spending reductions below the figure submitted by President Carter in his January budget. It is NFFE's view that the cuts would seriously hinder the VA's ability to serve our nearly 30 million veterans and their families.

To achieve the savings mandated by President Reagan, the VA would reduce personnel in fiscal year 1982 by more than 5,000 positions from its 1981 operating level and almost 8,000 below the number authorized by Mr. Carter in January. It is important to note that these reductions would follow closely an aggregate loss of 3,000 positions during the past three fiscal years; a loss which would have been twice that total if Congress had not restored 4,900 personnel slots in fiscal years 1980 and 1981.

The vast majority of the personnel cuts would come from the Department of Medicine and Surgery. Approximatley 2,200 would result from a reduction in outpatient, non-service-connected medical visits and the discontinuance of the Readjustment Counseling program. An additional 2,200 positions would be lost by combining hospital awards with low census and occupancy rates and through a general increase in medical employee "productivity."

For an analysis of these proposals we need only listen to the thousands of NFFE members wo work for the DM&S. For years they have complained of the understaffing at VA medical facilities and the inadequate treatment of veterans which results. Certainly, the conditions within these facilities should be known best by the very employees who man them. Congress obviously recognized this because, as noted previously, it restored several thousand positions during the past two fiscal years. Yet, as part of the Administration's economic plan, we are again forced to consider reductions in medical staff.

Moreover, the cut in outpatient visits may actually prove costly in the long run. The House Veterans Affairs Committee, in its report to the House Budget Committee (Committee Print No. 20), estimated that the reduction equated to ten percent of the outpatient workload within the VA health care delivery system. By denying outpatient treatment to such large numbers of veterans we are probably guaranteeing an unnecessary increase in the inpatient load in years to come. This applies also to the elimination of

the Readjustment Counseling program. The money we are supposedly saving now may only lead to much greater expenses in the future.

In addition to the reductions in DM&S, the other major personnel cuts would be made within the Department of Veterans Benefits. Specifically, the Reagan budget calls for the consolidation of the DVB claims processing and loan guarantee functions into centralized operations. The reorganization would eliminate 1,673 positions from the VA payroll.

A valuable aspect of the claims processing and loan guarantee function is their accessability to veterans. Unlike other functions of the Federal government, which are often centralized in a minimum number of locations and therefore inaccessible to most users, these facilities are located throughout the country and are readily available to veterans. They permit personal contact between client and counselor, which can be so vital to the well-being of the veteran as well as to the efficiency and effectiveness of the service being provided.

The Veterans Administration Office in San Antonio is an example. Its ability to provide essential service to a large veteran population may be reduced by personnel cuts.

San Antonio is one of the three areas in the United States with the largest concentration of seriously disabled veterans. This is mostly due to the availability of medical treatment at Wilford Hall Air Force Hospital, Brooke Army Medical Center and Audie Murphy Veteran Hospital. Bexar County has a total veteran population of approximately 123,730.

The San Antonio office serves all disabled veterans residing south to the border, east to Corpus Christi, west to Alpine and north to San Marcos. Many of these veterans are old, infirm, illiterate or unable to understand English. The population of Bexar County is 46.6 percent Mexican-American.

The personal service provided by the San Antonio office cannot be duplicated by telephone or written communication. It has been our experience that in order to properly assist these individuals, it takes patience, understanding and, in many cases, bilingualism.

The Veterans Administration has spent a considerable amount of money to provide the San Antonio office with access to its sophisticated, nationwide computer system. This system has greatly enhanced the office ability to efficiently and effectively resolve many benefits problems, as well as to provide accurate information to our clients.

The Vocational and Rehabilitation and Counseling Division in San Antonio plays a vital role in assisting the seriously disabled veterans, many of whom are paraplegics and amputees. Last year alone they serviced 13,000 veterans. The Vocational Rehabilitation Specialists assigned to the local Veterans Administration office supervise the programs and training of disabled veterans in institutions of higher learning, vocational schools, in the home, as well as on the job.

The Loan and Guarantee Division is also part of the San Antonio office. The office now services 60 counties. The home insuring operation is the most active in the State, with better than 14,000 appraisals in the last 12 months.

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The phase-out or reduction of the San Antonio Veterans Administration Office would create a wide hole in the safety net of services that President Reagan has insisted will be provided by a grateful government to its truly needy.

The Administration, however, has ignored this. In the rush to save money. The facilities would be consolidated into just three units, thereby denying personal access to them to all but the few veterans who would live nearby.

Aside from the programmatic flaws, it's also highly unlikely that the consolidation would save the $46 million projected by the Administration for the upcoming fiscal year. We refer again to the report of the House Veterans Affairs Committee to the House Budget Committee:

> The VA anticipates a low percentage of trained personnel would relocate when the consolidation takes place. With the proposed initial staff reduction of 1,673, together with several thousand new and untrained employees to replace those who would not move to another part of the country, only the most naive would project savings of any kind. The Committee does not accept the anticipated savings in fiscal year 1982. Aside from the impracticality of assuming that the logistics could be worked out in such a short time span, the extent of staff relocation would offset to a significant degree any planned overall reduction in fiscal year 1982. The Committee also takes note that any move involving so many employees with relocation of offices and equipment within the next 18 months would in all likelihood result in utter chaos for disabled veterans and their survivors at a time when they need prompt and efficient service.
>
> Reduced services to disabled veterans would not be the only result. Delays in servicing loan applications and a reduction in the total number of loans processed would be inevitable. Substantial and expensive increases in the number of loan defaults going to foreclosure and a substantial reduction in the number of acquired properties being disposed of would result from such a move. Additional monies would be needed for overtime and employees might find themselves overworked and ultimately less effective. These eventualities are potentially very expensive to the nation—far more expensive than the projected savings.

As you can see, from both a programmatic and budgetary standpoint, the proposed consolidation is a poorly conceived idea.

Another major reduction is a proposal to cap special pay for VA dentists and physicians at 12 percent of the total funding appropriated for this purpose. The special pay provision (Public Law 96-330) was passed only last year after a convincing case was presented to Congress of its need to attract and retain qualified medical personnel. After President Carter vetoed the bill, in fact, Congress overrode the veto by votes of 401 to 5 in the House and 85 to 0 in the Senate, the largest margin in United States history. Yet Congress may now have to weaken the very policy which it approved just months ago with this record-setting vote.

The Veterans Administration is faced with other significant cuts in addition to those highlighted above. But it should be clear by now that the Reagan budget plan will cause immense problems in the VA, as well as in most nondefense agencies. The spending reductions are just too great to be made without hurting essential programs. If the purpose of the budget cuts were to simply eliminate wasteful and unnecessary activities, the proposed reductions would not be nearly so potentially disruptive. But the Administration's economic program is forcing the cuts deep into vital areas and will hinder the VA's ability to carry out its traditional responsibilities.

It is ironic, too, that the White House is proposing huge cutbacks in VA operations at the very moment it is mounting an unprec-

edented buildup of our defense forces. Surely, the promises we gave to the men and women who served in the military should be given priority in any policy to strengthen national defense. As it is now, they are in conflict.

What is most troubling about this entire issue, however, is that ther President's plan is so risky. Hence, there is a good chance that we may sacrifice vital services for a program which, in the end, will not achieve its stated goal. For NFFE, the risks are too great and we urge this committee to restore, as closely as possible, the level of funding for the Veterans Administration that was originally recommended by Mr. Carter last January. This action would allow veterans to continue to receive the benefits and medical care which they need and deserve, and which this nation promised to provide. It might also prod the Administration and Congress to temper the economic program with a reasonable level of concern for the millions of citizens who depend on the Federal government for necessary assistance.

That concludes my statement. I will be happy to anwer any questions.

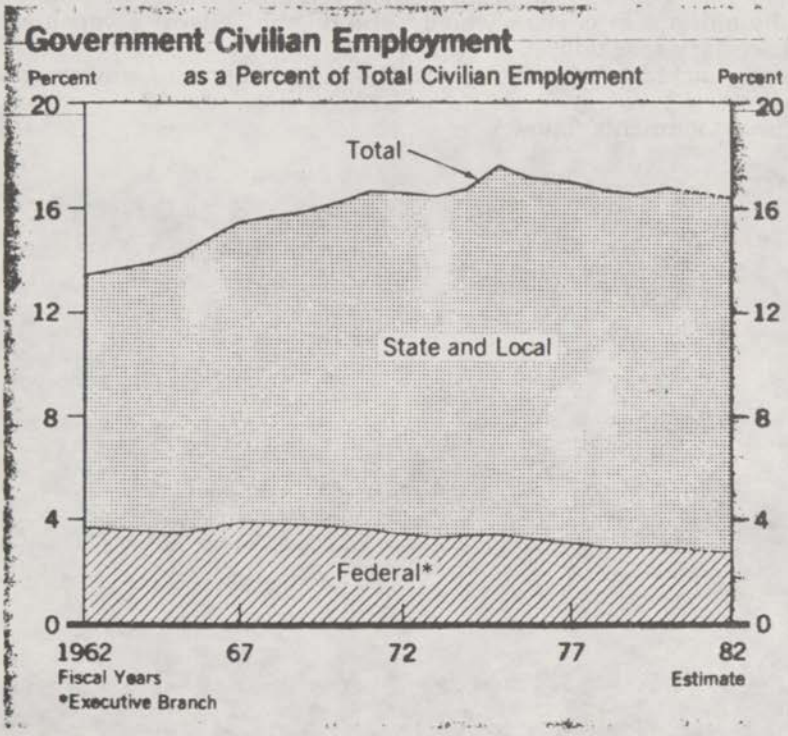
[The attachments follow:]

Government Employment and Labor Force Comparisons

As shown on the following chart, Government employment—Federal, State, and local—will comprise about 16.4% of the total employed civilian labor force in 1982.

Within this segment, Federal civilian employment in the executive branch accounts for 2.8% of the total employed civilian labor force in 1982, down from a high of 3.8% in 1968.

The percentage of the total employed civilian labor force attributable to State and local government has grown from 9.6% in 1962 to 13.6% in 1982.



Government Employment and Population Comparisons

As illustrated in the following chart and in table I–5, the Federal share of total governmental employment has declined significantly over the last three decades, from 38.4% in 1952 to an estimated 17.0% in 1982. Employment for all government has been rising steadily due to increases in State and local government employment.

The ratio of Federal civilian employment to the total U.S. population is expected to be 12.4 per thousand in 1982.

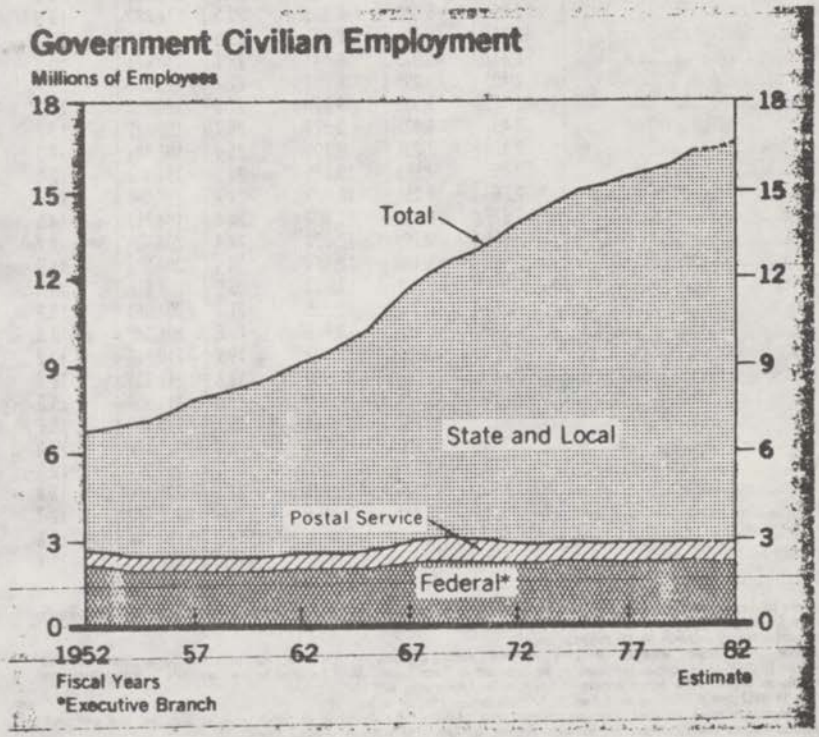


Table I–5. **GOVERNMENT EMPLOYMENT AND POPULATION, 1952–82**

Fiscal year	Government employment				Population	
	Federal executive branch [1] (thousands)	State and local governments (thousands)	All governmental units (thousands)	Federal as percent of all governmental units	Total United States (thousands)	Federal employment per 1,000 population
1952	2,574	4,134	6,708	38.4	157,553	16.3
1953	2,532	4,282	6,814	37.2	160,184	15.8
1954	2,382	4,552	6,934	34.4	163,026	14.6
1955	2,371	4,728	7,099	33.4	165,931	14.3
1956	2,372	5,064	7,436	31.9	168,903	14.0
1957	2,391	5,380	7,771	30.8	171,984	13.9
1958	2,355	5,630	7,985	29.5	174,882	13.5
1959	2,355	5,806	8,161	28.8	177,830	13.2
1960 [2]	2,371	6,073	8,444	28.1	180,671	13.1
1961 [2]	2,407	6,295	8,702	27.7	183,691	13.1
1962	2,485	6,533	9,018	27.6	186,538	13.3
1963 [3]	2,490	6,834	9,324	26.7	189,242	13.2
1964 [3]	2,469	7,236	9,705	25.4	191,889	12.9
1965	2,496	7,683	10,179	24.5	194,303	12.8
1966	2,664	8,259	10,923	24.4	196,560	13.6
1967	2,877	8,730	11,607	24.8	198,712	14.5
1968	2,951	9,141	12,092	24.4	200,706	14.7
1969 [4]	2,980	9,496	12,476	23.9	202,677	14.7
1970 [2]	2,944	9,869	12,813	23.0	204,878	14.4
1971 [2]	2,883	10,372	13,255	21.8	207,053	13.9
1972	2,823	10,896	13,719	20.6	208,846	13.5
1973	2,775	11,286	14,061	19.7	210,410	13.2
1974	2,847	11,713	14,560	19.6	211,901	13.4
1975	2,848	12,114	14,962	19.0	213,559	13.3
1976	2,832	12,282	15,114	18.7	215,152	13.2
1977 [5]	2,789	12,704	15,493	18.0	217,422	12.8
1978	2,820	13,050	15,870	17.8	219,247	12.9
1979	2,823	13,308	16,131	17.5	221,180	12.8
1980 [2]	2,821	13,445	16,266	17.3	[8] 222,672	12.7
1981 (est.) [2]	[7] 2,800			[6] 17.1	[8] 224,744	12.6
1982 (est.)	[7] 2,811			[6] 17.0	[8] 226,883	12.4

[1] Covers total end-of-year employment of full-time permanent, temporary, part-time, and intermittent employees in the executive branch, including the Postal Service, and, beginning in 1970, includes various disadvantaged youth and worker trainee programs.

[2] Includes temporary employees for the decennial census.

[3] Excludes 7,411 project employees in 1963 and 406 project employees in 1964 for the public works acceleration program.

[4] On Jan 1, 1969, 42,000 civilian technicians of the Army and Air Force National Guard converted by law from State to Federal employment status. They are included in the Federal employment figures in this table starting with 1969.

[5] Data for 1952 through 1976 are as of June 30, for 1977 through 1981, as of Sept. 30.

[6] The percentages shown for these years are consistent with reasonable estimates based on recent trends in State and local government.

[7] Reflects fractional counting of part-time permanent positions, pursuant to the provisions of Public Law 95–437.

[8] U.S. population data for 1980–1982 are the latest available from the Census Bureau. Revised estimates, based on the 1980 Census, were not available in time for publication in this analysis.

Mr. SABO. Thank you for an excellent statement. One of our problems is that we are governed by adopted budget resolutions.

Mr. PEIRCE. I am well aware of that.

Mr. SABO. We will have to struggle to see what we can do within those limits.

Mr. Green, have you any questions?

Mr. GREEN. I have no questions.

VETERANS ADMINISTRATION

WITNESSES

PAUL S. EGAN, ASSISTANT DIRECTOR, NATIONAL LEGISLATIVE COMMISSION

ROBERT LYNGH, DIRECTOR, VETERANS AFFAIRS AND REHABILITATION COMMISSION

Mr. SABO. Mr. Paul Egan and Mr. Robert Lyngh.

Mr. LYNGH. Mr. Chairman and Members of the Subcommittee, the American Legion is pleased to have the opportunity to present its views to the Subcommittee on the matter of appropriations for the Veterans Administration for fiscal year 1982.

May we say at the outset we are aware that the present Administration was elected to office on a campaign pledge to balance the Federal budget. Most Americans are agreed that Federal spending has gotten badly out of control. Veterans and members of The American Legion are taxpayers and have as much interest in the fiscal health of the Federal government as do all other citizens.

A thorough overhaul of the entire Federal budget must include an examination of veterans assistance programs along with all other Federal programs, and the Legion will be supportive of such examination. We expect a thorough and objective review by the appropriate committees of the Congress, and we are giving serious study to the proposals of the Administration.

We believe a thorough review will establish the fact that all veterans assistance programs are viable and that they are accomplishing the purpose for which they were intended. Where improvements in organization and management can be identified, the Legion will support them, in the interest of good government. If personnel savings can be accomplished without resulting delay of delivery of benefits to entitled beneficiaries, we will support those.

Within the framework of the above statements, The American Legion stands for full funding for veterans programs; by which we mean there should be provision of such funds as are necessary to effectively carry out the programs that have been legislatively established. We support all those programs. Each of them had a purpose when enacted, and each was adequately justified as meeting a legitimate need of the veteran population. We are not aware of any programs at present that do not have a sunset provision, that are superfluous or redundant; and therefore we support all veterans assistance programs that are now functioning.

To balance the Federal budget, the government must set the national priorities. The American Legion believes that when these priorities are set, veterans assistance programs should rank second

only to national defense. That statement is made with full knowledge of the many special interest groups that will present their petitions to Congress. However, when speaking of veterans we are referring to the men and women who have answered the call of the elected government and have served in the uniformed services to support and defend the national interest.

Millions of them have served in wartime and have engaged in conflict with enemies designated by the government. These men and women most certainly have first call on the attention and the resources of that same government, and on its obligation to respond to their legitimate needs when their service has been completed, as do the survivors of those who have died. We submit that no other interest group can make a claim of equal weight.

The time may come again when the government will turn to the people with a requirement of national service. How the government treats today's veterans will affect the response to tomorrow's soldiers. We believe the Congress, as well as the administration should keep that in mind.

At the conclusion of the Vietnam War, the Veterans Administration budget comprised five percent of the total Federal budget. That same VA budget for fiscal year 1981 comprised no more than 3.5 percent of the total Federal budget. The VA budget for fiscal year 1982 will not exceed that 3.5 percent level. On that basis, no one can say that the appropriations of funds for veterans assistance programs are continuing to expand, or that they are consuming an exorbitant amount of Federal funds. The American Legion says, let the social action programs look to their parameters, and try to constrict themselves as well as is being done for veterans programs before any complaints are raised about funds set aside to meet the needs of the nation's defenders.

Veterans Administration appropriations for fiscal year 1980 came to $20.5 billion. Initial appropriations for fiscal year 1981 were $22.4 billion, subject to supplementals. The Reagan bipartisan budget, which The American Legion supports, provides $24.8 billion in budget authority for VA. We submit that in light of the double-digit inflation that has prevailed for the past several years, that is not an excessive amount. Our analysis indicates it will be barely sufficient to maintain programs at existing levels, and will still require adjustments and modifications The American Legion does not approve.

In outlays, the VA spent $21.1 billion in fiscal year 1980, and $22.5 billion in fiscal year 1981, subject to supplementals. The initial Carter Administration proposals called for outlays of $24.4 billion in fiscal year 1982. The Reagan bipartisan budget calls for outlays of $23.6 billion—substantially less than the initial Carter proposals. Let it not be said that veterans assistance programs are not participating in the movement toward fiscal austerity in government.

In the first place, 64 percent of the Veterans Administration budget comprises benefit programs, leaving only 36 percent of the budget in which adjustments can be made. Although all veterans programs are important, the Medical Care program is critical, because of its very nature, and because the cost factors for medical care are more sensitive than are all others to inflationary pressure.

In medical care, personnel is always the most crucial factor. Medical care is labor intensive—a statement that is a truism in the field of medical care. It is true in all sectors of the practice of medicine, and it is certainly true in the medical care programs operated by VA. Ninety-three percent of all employees of the Veterans Administration are assigned to the Department of Medicine and Surgery. And yet, the core staffing ratios in VA medical centers, system-wide, are consistently lower than those in the private sector, and significantly lower than those in university hospitals. We are here today to tell this Subcommittee, based on our experience, working as volunteers in all of the 172 VA medical centers, that the staffing ratios in many of them is so critical that patient care is definitely being affected. We refer particularly to professional, para-professional and non-professional direct care personnel. And the accuracy of our observations is attested to by the directors, chiefs of staff, head nurses and other responsible offices in the medical centers who have to struggle daily to maintain the quality of patient care in the face to personnel shortages. These marginal staffing levels are further affected by fatigue and morale factors that always arise with personnel shortages in high-pressure occupations.

What we are trying to say here is that there is absolutely no room for any personnel reductions in the VA Department of Medicine and Surgery. We fought this battle for four years with the Carter Administration, and we repeatedly pleaded with Congress to provide funds for more medical personnel. Even with a positive response from Congress, which we frequently received, and even when the Office of Management and Budget would allow VA to use funds appropriated for medical personnel, the levels of personnel in the hospitals was still marginal at best—and we of the Legion could see this effect on the ability of personnel on duty to care for patients. Believe me when I say that we could give instances of beds closed in intensive care units, minimal care delivered in extended care wards, personal hygiene of patients neglected, a myriad of things that happen on a daily basis in this vast system, that Members of Congress would be ashamed of if they had to see them personally.

On that basis we plead with the Committee at this time not to mandate any cuts in personnel in the VA Department of Medicine and Surgery. One thing we are sure the Members will agree on—if the Federal government intends to maintain this system for sick and disabled veterans, then it must be maintained at a level of quality of care delivered that the American people will not be ashamed of, and so that there will not be scandals due to lack of care delivered. We are sure this Congress does not want the VA to revert to the bad old days before World War II when it maintained a human warehouse system for indigent and aging veterans.

Along these same lines there is the matter of professional compensation levels. Members, of course, are aware of the Congressional action of last year in enacting Public Law 96-330, the Physicians Pay Bill, over presidential veto. The new administration proposed a cap on the professional levels included in Public Law 96-330, so that special and incentive pay would not exceed 12 percent of total appropriations to compensate those professionals. Such an action

would, of course, defeat the intent of Public Law 96-330. The seriousness Congress attached to the need for this legislation is certainly evident in the enactment by override. For the new Congress now to negate the action of last year would not make any sense. The alternative to the special and incentive pay levels provided by Public Law 96-330 is a wholesale departure of top quality physicians from VA service, increasing inability of VA to recruit top quality professionals, and a consequent decline in quality of care for sick and disabled veterans. We urge the Subcommittee to include funds for the full implementation of Public Law 96-330 in the appropriations measure.

Next to the maintenance of personnel levels in the Department of Medicine and Surgery is the provision of necessary equipment and supplies. Medical technology is probably the fastest changing branch of science. Improvements in treatment modalities follow upon development of new techniques with more and more modern equipment and devices. The results, of course, are lives saved, pain alleviated, suffering allayed, and such cost-effective benefits as length of stays decreased. To accomplish all this there has to be sufficient funding for equipment and supplies geared to the "state of the art" modern medicine.

Then there is the matter of Medical and Prosthetic Research. This program, through the years, has been a jewel in the crown of the VA medical care program. Both pure research and applied research conducted within the VA system has helped not only veterans but all Americans, and indeed all mankind. The achievements of VA medical research are something the entire Nation can be proud of. And another point in discussing this subject is the fact that if there is any agency that should take the lead in medical and prosthetic research it is the VA, considering the character of its clientele. The nature and location of the wars in which the Nation has engaged has led to a variety of disease and disability that has challenged medical science. It is only appropriate that VA, through its research program, should take the lead in addressing these problems. Yet, each year there is a constant struggle to secure adequate funding for this program. The need and justification for these funds is self-evident, and we of the Legion do not understand why there has to be a repeated justification presented. The Carter budget provided $155.4 million for medical and prosthetic research; the Reagan budget adjusted that figure to $145.7 million. Certainly, there should be no less than the initial Carter proposal.

There will be a legislative proposal to place a $5 deductible on beneficiary travel for a $35 million saving. The American Legion has to be in opposition to this proposal because the veterans affected by it will be the oldest and the poorest. When one is aged and surviving on minimal Social Security benefits and little else, a $5 transportation cost becomes a major item to monthly survival. A recent survey indicated 36 percent of the VA inpatient population have annual incomes of less than $2,000. To impose a $5 deductible on the travel of this class of beneficiary will result in their seeking less care, leading to more acute episodes, and a greater need for hospitalization—at ultimate greater cost to the government. We do

not believe the government can actually save $35 million with this idea.

The renovation and replacement program for the VA medical care system has fallen substantially behind schedule due to underfunding in prior years. Within the last year or two, the Carter Administration undertook an increase in the program in an apparent effort to bring it up to schedule. The American Legion applauded that effort. Now, however, the new Administration wants to revert to the earlier policy of delay, that will cause the program to again fall further behind. This is not a good idea. We will not discuss here the cancellation of the Baltimore and Camden construction projects since they have been dealt with in another measure, although The American Legion feels quite strongly about the need for those hospitals. We are equally concerned about the delay requested by the Administration in nine major construction projects for fiscal year 1982, projected to cost $65.6 million, and deferrals in minor construction amounting to $32 million in budget authority aned $8 million in outlays, also for fiscal year 1982.

The nine major projects include Brooklyn—laundry; Chillicothe—modernization; Denver—clinical addition; East Orange—building environment deficiencies; Gainesville—clinical improvements; Long Beach—research building; New Orleans—clinical addition; Palo Alto—surgical addition; Washington, D.C.—nursing home care unit and parking lot. We have listed these projects in our statement because they are representative of what is needed within the VA system. The VA system operated by the Department of Medicine and Surgery represents a multi-billion dollar capital investment by the government in the finest single health care system in the world. Yet there are still hospitals in the system built before World War II. Others built immediately following World War II have deteriorated and have become outdated by modern medical technology. National commitment to the veterans medical care program and protection of the government's investment dictate that the renovation and replacement program shall proceed on schedule. We have been frankly told by officials at OMB that some of the deferrals may be tranferred to cancellations in future budget messages. That would be a tragedy, both for veterans medical care and for the future of American medicine.

Which comment presents the appropriate moment to recognize the emerging role of VA as the major national security resource in medical care for the defense establishment. There is legislation pending in this Congress that will authorize VA to immediately receive and treat military casualties in case of the outbreak of hostilities overseas involving United States Armed Forces. The fact of the matter is, this is not just a good idea; it is essential to the ability to the military establishment to meet the nation's global commitments. Military medical facilities are not presently able to meet the needs of the first day's hostilities, that, in modern warfare would result in major casualties, most of whom would be immediately returned to the United States for treatment. This fact makes the VA system absolutely essential to national defense in today's dangerous world. That being so, it behooves the government to look carefully to the state of readiness of that system—not only

to care for veterans, its primary responsibility, but to care for the casualties that will follow immediate upon the outbreak of war.

So we repeat that the system is deteriorating, and will continue to do so unless the program of renovation and replacement is kept on schedule. We ask the Subcommittee to keep in mind the context of these remarks that there is no plan to increase the size of the system. The only new hospital that has been planned is that at Camden—and the need for that new facility was thoroughly documented before it was placed on the books. The complete system will be a 173-hospital system—which makes it all the more important for those 173 hospitals to be kept in condition to fulfill their mission.

The Administration has also recommended to the Congress the termination of the Vietnam Veterans Outreach and Counseling Program mandated by Public Law 96-22, and for which authorization expires with fiscal year 1981. The Committees of both houses that have considered the Administration request appear in general agreement that the program should be extended for an additional period, in order to effectively carry out its mission—the provision of direct assistance to that large number of mostly combat veterans of the Vietnam War, who have not successfully completed their readjustment. The American Legion agrees with this assessment, and recommends strongly that funds be provided in the appropriation measure for this purpose.

The Administration proposes to save $104 million by reducing the number of outpatient visits, along with the above-mentioned termination of the Outreach and Counseling Program. With reference to this cutback, the House Committee on Veterans Affairs, in its Report to the Budget Committee said:

> The impact of the cutback in outpatient visits could, in effect, end many of the outpatient services now available to the poor nonservice-connected veteran. The Committee has already established that current available resources for outpatient services are not sufficient to take care of all eligible veterans who are in need of these services. The proposed further reduction would have a major adverse impact on both quality and quantity of care for nonservice-connected veterans seeking outpatient treatment.

Outpatient treatment rendered in this program is demonstrably cost-effective in that it obviates the need for hospitalization in most if not all instances. Needless to say, The American Legion opposes this cutback.

There are still other elements of medical care funding about which the Legion is concerned. We have only highlighted here those that will have the most visible impact, to the detriment of the programs for veterans that have been legislated by the Congress, in its concern for the Nation's defenders. May we conclude this part of our statement by saying that the rationale represented here expresses the Legion's deep concern for the veterans medical care program, and sets forth the principal reasons why we believe Congress should provide full funding for this veterans program.

In another area of veterans benefits, we wish to direct the Subcommittee's attention to a proposal to limit nonservice-connected burial benefits to those veterans with adjusted incomes of $20,000 or less, to a projected savings of $80 million in fiscal year 1982. The reason The American Legion is opposed to this proposal is that this organization has always supported the concept of "Equal benefits

for equal service." By which we mean that a statutory benefit such as the burial benefit has historically been bestowed on the survivors of the veteran in recognition of honorable service rendered to the Nation and to insure dignified burial beneath the flag of our country. The value of service rendered is not predicated on the socioeconomic status of the service member, and the benefit granted should not be either. The benefit should continue to be available to all those who have honorably served the Nation, and not just those who have the misfortune to die poor.

In the category of new legislation that has been proposed in the field of veterans benefits is a comprehensive measure to address the more particular effects visited upon those who were prisioners of war in various conflicts. The additional benefits to be granted, it must be said, are long overdue. No one, we are sure, will argue that there is not a special obligation to these veterans. However, the adjustments proposed are demonstrably modest in nature and scope. There are various estimates as to first-year cost, ranging from $65 million by the Congressional Budget Office (which we of the Legion believe are non-sustainably high) to $10 million by the House Budget Committee. It would be our recommendation that the amount of $10 million be included for this purpose.

Mr. Chairman, and Members of the Subcommittee, we have addressed in this statement certain of the concerns of The American Legion, as Congress proceeds with the funding of veterans assistance programs for fiscal year 1982. The 3.5 percent (and reducing) portion of the Federal budget that is apportioned for veterans programs is most certainly not excessive, nor disproportionate to the other concerns and responsibilities of the Federal government. Any further percentage of reduction of funding for these programs will send a message to the Nation's veterans that they have become a burden to the government they served—and we must say again, that such a message will not be lost on those the government hopes will serve in the future.

This is the reason The American Legion continues to stand for full funding for veterans programs. We do not believe we are asking for too much when we seek a minimum amount of $24.8 billion for our programs for fiscal year 1982. Less than that will most definitely not be enough to maintain the viability of those programs Congress has mandated in prior legislation.

Once again, we appreciate the opportunity to present our views to the Subcommittee.

Mr. SABO. Thank you for your statement.

Mr. Green?

Mr. GREEN. Would you view the Vietnam Veterans Outreach and Counseling Program as essentially something that should be carried on indefinitely or do you see it having some termination date?

Mr. LYNGH. Mr. Green, we recommended in testimony before other committees a two-year extension on the grounds that at the end of that—I know the program only got underway about a year ago and really I hadn't had time to function. But we understand it is doing a substantial amount of good for a great many disturbed young men. I think about a two-year extension to allow it to function at full scope and then another examination by the VA and by the appropriate Congressional committees will give you a

chance to determine its worth. It is certainly going to be a sunset program. We don't visualize it in the Legion as a permanent-type program. At some point, the essential readjustment of those who haven't been able yet to make that readjustment I am quite sure will be accomplished, and those who still remain disturbed will fit into the regular programmatic activity of the VA.

Mr. SABO. Mr. Coughlin?

Mr. COUGHLIN. I want to congratulate you on a very thoughtful statement. The Legion provides a real service to the veterans of the United States and also to the United States Congress.

Mr. SABO. Thank you for being here.

VETERANS ADMINISTRATION

WITNESS

DR. JOHN M. DENNIS, VICE CHANCELLOR FOR HEALTH AFFAIRS, UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

Mr. SABO. Dr. John Dennis.

Dr. DENNIS. Mr. Chairman and Members of the Subcommittee, the Association's interest in the Veterans Administration's medical care programs emanates from the highly productive relationships that have developed between the country's medical schools and the VA hospitals since the end of World War II. Affiliation agreements encompassing patient care, medical education and research are now in force between 102 medical schools and 141 of the existing 182 VA health care facilities. These arrangements have proved enormously beneficial to our Nation's ill and disabled veterans—the objective for which the system was designed.

IMPACTS ON MEDICAL CARE

The VA health care system is currently under great duress. Appropriations for medical care for veterans, including fiscal year 1982 requests, have increased on the average of only 7.7 percent per year since 1977 while the consumer price index has risen by an average of ten percent, and the costs of civilian hospital care have increased even more rapidly. Essentially, resources for the veterans health care have been steadily losing ground to inflation and fallen behind standards of civilian care since 1977. This deterioration will continue inexorably unless this Committee acts to disapprove the many potentially serious retrenchments the Administration has proposed in VA medical services.

The health care services provided by the Veterans Administration function as an essential "safety net" for our Nation's sick and disabled veterans. Thus, it is difficult to understand why the President has requested a smaller appropriation for these programs than his immediate predecessor.

This year the OMB circumvented Congressional intent despite this Subcommittee's efforts to increase the number of direct health care personnel. Under your leadership some 1,100 such positions were approved for the fiscal year now in progress. However, the OMB has, thus far, succeeded in preventing the VA from recruiting this desperately needed staff. Initially, this was accomplished via a

hiring freeze, followed shortly thereafter by the deferral of $29 million until the last quarter of the year. Then, as a final measure, the OMB reduced the Agency's supplemental pay request for medical care by $29 million. Essentially, the VA has been deprived of Congressionally authorized staff increases. We therefore, loudly applaud the Subcommittee's recommendation that the deferrals be disapproved and that steps be taken to ensure that in the future the directives of the Congress are promptly implemented.

Equally as imperative as the fiscal year 1981 restorations is the necessity for this Subcommittee act to forestall the imposition of Administration's proposed fiscal year 1982 staffing decrease that would result in the loss of over 5,000 health care personnel. The VA's overriding need for increased numbers of health care workers is clearly evidenced by its low staff-to-patient ratio that the President's proposals would bring to 244 per hundred in fiscal year 1982. This compares to a ratio of 333 medical care staff per 100 patients in the private sector. Moreover, diminishing in the complement of staff at best marginally adequate, as the preceding figures illustrate—will also impede the VA's efficiency and effectiveness in delivering health care. The Va itself has attributed its performance since 1970 in treating more patients utilizing fewer beds to increased personnel levels. However, to quote the VA, "further improvements in terms of decreased length of stay will be dependent upon additional staff improvements." Thus, enactment of the current request would prevent the VA from effectively delivering care of high quality. The AAMC, therefore, urges the Subcommittee approve the January request for fiscal year 1982 of some $7,004,945,000 in order to assure that our Nation's veterans will receive the caliber of medical care they so rightfully deserve.

We also might add here that we support full implementation of the VA special pay bonus for physicians Congress enacted last year. And, believe that it is urgently needed to ensure staff retention and thus further enhance the overall quality of care.

CONSTRUCTION

The excellence of the care a patient receives is as dependent on the availability of up-to-date tools and facilities as it is the skill of the attending physician. The VA's hospital facilities must meet and maintain the highest possibile standards at all times; there can be no excuse for allowing these facilities to fall into disrepair. Thus, the Subcommmittee's recent decision to move forward with three construction projects is indeed heartening. However, the Association views with great trepidation similar decisions sanctioning the deferral of six, and the cancellation of two other construction projects.

The AAMC is especially concerned about the termination of the new hospital in Baltimore, a facility badly needed to replace three older and inadequate installations that must undergo extensive modernization just to correct basic life safety code deficiencies. Moreover, there is a substantial doubt that cancellation of the construction of the replacement hospital in favor of upgrading the other facilities will save an appreciable amount of taxpayers' money. In 1979, the costs of the replacement hospital—a 400-bed acute care facility—were estimated to be about $87 million while

revamping the three older hospitals would require $121 million. Thus, in 1979 the costs of the new hospital and the attendant benefits to its patients in terms of location, coordination of care, and shared facilities with the University of Maryland, weighed heavily in its favor and the Congress approved its construction. However, the Subcommittee, citing rising costs, recently recommended that this project be terminated—despite the fact that there is no clear evidence that the costs of the alternative modernization has not increased correspondingly or that the other benefits associated with the new hospital can be captured by the older medical establishements.

It is of paramount importance that the government maintain its commitment to the Nation's veterans to provide them with high-quality medical care. In the service of this goal, the Association strongly urges the Subcommittee to reinstate the cancelled projects, move ahead swiftly with all nine deferred construction projects and thus approve a fiscal year 1982 appropriation of $649,909,000.

MEDICAL AND PROSTHETIC RESEARCH

The medical research conducted by the VA represents a unique Federal intramural program in which clinician investigators focus on problems more or less uniquely relevant to the health problems of veteran patients. The Medical and Prosthetic Research program is a very significant component of the overall VA enterprise. The quality of this endeavor is attested to by the fact that two of its biomedical scientists are Nobel laureates.

This program is extremely important because the inherent value of research environment indirectly improves the quality of health care delivery by enhancing the ability of an institution to attract and retain highly competent medical staff. Thus, a stable, well-funded research program impacts positively on patient care as well as the quality of the professionals that deliver care.

The AAMC applauds the decision of this Subcommittee to disapprove the proposed deferrals in this vitally important area and urges enactment of a fiscal year 1982 appropriation of $155,381,000. The Administration's request would result in the loss of 308 full-time equivalent investigators: 224 in medical research; 46 in rehabilitation research; and 38 in health services research. If enacted, this proposal would mean a significant dimunition in the VA's research efforts, as the number of full-time employees would decrease from the fiscal year 1979 level of 4,416 to 4,293 in fiscal year 1982 or by three percent. This is well below the 4,601 level advocated by the previous Administration.

SUMMARY

The veterans of the Nation rely upon the VA to provide them with high-quality medical care. This by necessity entails the support of adequate numbers of staff, construction and remodeling of medical facilities and the maintenance of a vital biomedical research program. The AAMC urges this Subcommittee once again to take the lead in ensuring the continued health of the VA's medical care enterprise and approve a fiscal year 1982 appropriation that

reflects its continued commitment to this especially deserving population.

Mr. SABO. Thank you, Dr. Dennis. Mr. Green, any questions?

Mr. GREEN. I would be interested in what sort of standard you think this Committee should use in terms of cost per bed in reviewing various hospital proposals that come before us.

Dr. DENNIS. Do you mean construction?

Mr. GREEN. Yes.

Dr. DENNIS. I can only tell you that a new private-sector hospital in Baltimore with 350 beds has a cost estimate now of about $80 million. It costs about $200,000, $225,000 per bed. That is in the private sector.

Mr. GREEN. I must say I am a little struck at the concept that a hospital built in the early 1950s is operating. I say that as trustee of a teaching hospital where beds were provided as late as 1950.

Dr. DENNIS. That hospital was built as a tuberculosis hospital, with grossly inadequate facilities, operating room facilities, radiology facilities, laboratory facilities, rehabilitation facilities, and it is a bare-bones hospital. It is on a very small piece of property, which does not allow for expansion. It has had no money spent on it in the past ten years. There is no modern X-ray equipment, and the place has been allowed to deteriorate in view of there being a new facility. I am sure your hospital built in 1950 has had some money spent on it.

Mr. COUGHLIN. Does your State represent a position formally adopted by the National Association of Medical Colleges?

Dr. DENNIS. Yes.

Mr. COUGHLIN. They adopted the position on the hospital?

Dr. DENNIS. Yes. I was not there when they adopted it, but it has been discussed.

Mr. COUGHLIN. I am surprised, in view of the tremendous support the President's program has received in the medical community.

Dr. DENNIS. The medical community other than the medical schools.

Mr. SABO. Thank you.

VETERANS ADMINISTRATION

WITNESS

DONALD H. SCHWAB, DIRECTOR, NATIONAL LEGISLATIVE SERVICE, VETERANS OF FOREIGN WARS OF THE UNITED STATES

Mr. SABO. We welcome Mr. Donald Schwab. We will insert your entire statement in the record, and ask that you summarize for us.

[The statement follows:]

V F W VETERANS OF FOREIGN WARS OF THE UNITED STATES

NATIONAL LEGISLATIVE SERVICE

Office of Director

STATEMENT OF

DONALD H. SCHWAB, DIRECTOR
NATIONAL LEGISLATIVE SERVICE
VETERANS OF FOREIGN WARS OF THE UNITED STATES

BEFORE THE

SUBCOMMITTEE ON HUD-INDEPENDENT AGENCIES
COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

WITH RESPECT TO THE FISCAL YEAR 1982 VETERANS ADMINISTRATION
BUDGET CONTAINED IN THE HUD-INDEPENDENT AGENCIES APPROPRIATION

WASHINGTON, D. C. MAY 8, 1981

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the privilege of appearing before this Subcommittee to present the views of the Veterans of Foreign Wars of the United States.

My name is Donald H. Schwab and it is my privilege to serve the more than 1.9 million men and women of the Veterans of Foreign Wars as their National Legislative Director.

Mr. Chairman, the Carter Administration's proposed fiscal year 1981 budget was $22.5 billion in outlays and the fiscal year 1982 budget, $24.43 billion in outlays. The Reagan Administration's revisions of March 10, 1981 reduced the 1981 budget by more than $200 million and the 1982 budget by $831 million for a total reduction of more than $1 billion over an eighteen month period. Proposed personnel cuts (FTEE's) for 1981 are 1,837 and for 1982, 7,995 -- totaling a loss of 9,832 personnel. The 1981 funding and personnel reductions have been in progress. Those programmed for 1982 are as follows:

REAGAN ADJUSTMENTS TO CARTER FISCAL YEAR 1982 BUDGET

	BA	O	FTEE
Revise cost-of-living increase in Compensation and Pensions from 12.3% to 11.2%	-103.9	- 96.2	0

Revise effective date of elimination of flight and correspondence training from October 1 to July 1, 1981	0	0	0
Reduce outpatient non-service-connected medical visits and discontinue Readjustment Counseling program	-106.4	-106.4	-2,326
Combine hospital wards with low census and occupancy rates and general increase in medical employee productivity	- 52.4	- 52.4	-2,220
Revised schedule for facility activation and reduction in Community Home census	- 37.3	- 37.3	- 203
Medical savings through reduction of overhead and personnel costs	-149.8	-149.8	-1,089
Cap physician special pay by restricting to no more than 12% of total funding appropriated	- 40.0	- 40.0	0
Rescission of Baltimore and Camden hospital construction. Defer nine construction projects -- Denver, Long Beach, East Orange, St. Albans, New Orleans, Chillicothe, Washington, D. C., Palo Alto and Gainesville	- 71.0	- 91.0	0
Reduce minor construction personnel and program	- 32.0	- 8.0	- 61
Consolidation of DVB claims processing and Loan Guaranty Function into centralized operation	- 46.4	- 46.4	-1,673
Close St. Paul Data Processing Center with transfer of workload to other centers	- 3.0	- 3.0	- 140
Other general operating expenses savings through reduction of overhead and personnel	- 16.9	- 16.9	- 209
Eliminate proposal to extend delimiting period for disadvantaged veterans by two years	- 64.6	- 64.6	- 74
Adjust proposal to reduce beneficiary travel costs to change effective date to July 1, 1981 and apply a $5 deductible in lieu of $10	- 20.0	- 20.0	0

Revise interest rates on insurance policy loans to approach current market conditions	0	- 96.0	0
Reduce supply and canteen revolving funds	0	- 2.9	0
TOTAL -- REAGAN ADJUSTMENTS	-743.7	-830.9	-7,995

In all fairness, Mr. Chairman, we cannot take exception to the proposed decrease from 12.3 percent to 11.2 percent in compensation for veterans with service-connected disabilities at this point in time since we do not know what the Consumer Price Index will reflect when enacting legislation clears Congress. The position of the V.F.W., as stipulated in one of our priority legislative goals, is that the cost-of-living increase in compensation be in concert with the increase in the CPI since that granted by Public Law 96-385.

On the other hand, Mr. Chairman, other proposed reductions are horrendous and would do violence to the Veterans Administration hospital and medical care system and the Department of Veterans Benefits which services the claims of veterans, their dependents and survivors. Furthermore, they are diametrically opposed to statements of the President and the Republican Party Platform.

While campaigning last August, President Reagan addressed our National Convention in Chicago, Illinois and stated among other things, " . . to me, it is unconscionable that veterans in need are denied hospital and medical care because of inadequate funding which has closed hospital beds and cut health-care personnel within the VA." Amplifying this commitment the Republican Party Platform reads in part:

"We will maintain the integrity of the Veterans Administration. We will seek to keep it separate and distinct from other federal agencies as the single agency for the administration of all veterans' programs. In particular we feel it is of vital importance to continue and expand the health programs provided to veterans through the Veterans Administration hospitals. Here we see the need for increased access to care, especially for older veterans.

"We further advocate continued and expanded health-care for our Vietnam veterans and consider it vital for the Veterans Administration to continue this program for the rehabilitating of the disabled as well as its job training efforts."

Mr. Chairman, of the more than 9,000 personnel scheduled to be slashed from the VA, more than 7,000 would be within the Department of Medicine and Surgery and of those, more than 6,000 would be eliminated in indirect medical care personnel. Notwithstanding the Administration's contention that these reductions would not include professional health-care personnel, budget documents indicate reductions of 297 physicians, 933 nurses and 104 psychologists. Hospitals cannot be operated by professional hands-on medical care personnel only and it is essential that adequate support personnel are available at all times. As a result of funding and personnel reductions within DM & S, the following proposed actions, among others, would spell the demise of the VA hospital and medical care system as known to us today:

1. Operating hospital beds would be reduced from approximately 83,000 to 78,900 and the daily patient census from approximately 67,000 to 64,000.

2. Sixty wards would be consolidated leading inevitably to the closure of entire hospitals.

3. Outpatient visits for veterans suffering non-service-connected disabilities would be reduced by 1.7 million.

4. The 91 outreach centers for Vietnam veterans suffering readjustment problems and authorized by Public Law 96-22 would be eliminated.

5. Veterans with non-service-connected disabilities seeking care at VA facilities would be required to pay the first $5 of beneficiary travel each trip. (The Administration had first proposed charging these veterans the first $10.)

6. There is not funding for the scholarship program for physicians and nurses authorized by Public Law 96-330 and, in addition, special pay for physicians and nurses would be capped at 12 percent of the total funding appropriated.

In addition, Mr. Chairman, and directly related to the health-care of our nation's veterans, the Administration has canceled construction of the 400 bed acute care hospital at Baltimore, Maryland and the 242 bed intermediate care hospital at Camden, New Jersey consisting of 120 nursing care beds and 122 extended care beds of which four were to have been intensive care beds. The need for the Baltimore hospital of 400 beds consisting of 200 internal medicine, 120 surgical and 60 psychiatric beds has been fully justified. The Camden hospital originally consisting of 480 beds, 300 of which would have been medical, surgical and neurological, 60 acute psychiatric beds and a 120 bed nursing home was also fully justified. Figures available at the time indicated that the national average of VA beds per 1,000 veteran population was 3.2 beds. The ratio in the Philadelphia/South New Jersey area was 0.7 beds per 1,000 veteran population. Financial constraints reduced that facility to 242 beds as previously described. In addition, there are nine other construction deferrals as follows:

1. Denver, Colorado -- one-year deferral of addition to existing facility.

2. New Orleans, Louisiana -- two-year deferral of addition to existing facility.

3. Washington, D. C. -- two-year deferral of addition of a nursing home and parking facility.

4. Long Beach, California -- two-year deferral of addition of research and education.

5. Palo Alto, California -- two-year deferral of addition of surgical and related functions.

6. East Orange, New Jersey -- two-year deferral of renovation project.

7. St. Albans, New York -- two-year deferral of laundry facility.

8. Gainesville, Florida -- two-year deferral of expansion for research and eduction.

9. Chillicothe, Ohio -- two-year deferral of a clinical addition and modernization.

The one and two-year deferrals of these other construction projects with ongoing double digit inflation will make them even more costly. Quite frankly, we fear the eventual cancellation of these projects also.

Mr. Chairman, we of the V.F.W. have stated for years that one of the primary objectives of the Office of Management and Budget is to eliminate the VA hospital system by letting facilities deteriorate and starving it with inadequate funding and personnel. The proposals enumerated above constitute a master plan toward that end. Our assertion has been denied and even ridiculed by the Office of Management and Budget. However, that this is the case is confirmed by a memorandum which has come into my possession bearing the heading "Executive Office of the President -- Office of Management and Budget -- March 5, 1981," the appropriate portion of which is herein quoted: "However, in current economic conditions, some delays can be in the hospital construction program can be accomodated without significant shortrun damage to the VA medical system. The ones chosen here do not have imminent hazards in existing structures and do not affect bed levels significantly. In addition, the existence of excess medical care capacity in many areas of the United States make questionable the need for a separate VA medical system. (Underscoring supplied) This Administration will conduct a complete review of alternative methods for providing readily available quality medical care for eligible veterans. The continuation of currently planned construction in overbedded areas may add to the excess and prove to be a wasteful Federal expenditure." Subsequently, the Director of the President's Office of Management and Budget, David A. Stockman, refuted the foregoing statement indicating that this was not the intent of the Administration. However, and obviously, the thought had to be there for it to have appeared in print.

Cuts in the VA's Department of Veterans Benefits were programmed for 377 in 1981 and 1,874 in 1982 for a total of 2,251 employees. However, and due to anticipated budgetary constraints, DVB notified regional offices that 1,630 personnel would be cut by September 30, 1981. A station-by-station breakdown of these reductions is appended to my testimony. However, last week the Chief Benefits Director of the Veterans Administration made a hotline call to all regional offices deferring personnel reductions until after the budget is finalized. To accomplish these reductions, it was the intent of the Administration to close 57 of the 58 VA regional offices as such and consolidate claims processing and the loan guaranty function into one centralized location. Such action would leave only a contact office at all other locations where a veteran could do little more than file a claim since no records would be maintained at these points and adjudication of claims would no longer be accomplished locally. The VA alternative was to have three fully functional regional offices -- one on the West Coast, one on the East Coast and another in the central portion of the United States. Under such an operation the VA admitted a claim presently taking six months to resolve would take at least 18 months.

Obviously, Mr. Chairman, reducing VA regional offices to satellite or contact points would hinder the ability of our service officers and other representatives to research and present a claim at that level since the claim file would not be available, would restrict the claimant's access to a full and fair hearing since a veteran who would readily travel a relatively short distance to appear before a board in his or her state, might well be unable to travel half the distance of our

country to make a personal appearance for any number of reasons and the adjudication of claims and the initial payment of benefits to which the claimant is entitled would be greatly impeded.

On March 31, 1981, representatives of the Veterans of Foreign Wars, Disabled American Veterans and the American Legion met in the White House with Edwin Meese, III, Counselor to the President, to discuss the Administration's proposed budget reductions for the Veterans Administration. The enclosed letter enumerating our concerns and signed by the National Commanders of the three veterans' organizations was left with Mr. Meese.

The House Veterans' Affairs Committee in its report to the House Budget Committee did not accept the Administration's proposed reductions in funding and personnel. Instead, and following considerable research and deliberation and realizing the Veterans Administration would have to sustain some reductions in the President's quest to right the economy, that Committee proposed a reduction of $351 million in budget authority, $441.2 million in outlays and 99 personnel broken down as follows:

	BA	O	FTEE
Reduce compensation rate increase from 12.3% to 11.2%	-104.0	- 96.2	0
Terminate flight and correspondence training	- 32.0	- 32.0	-38
Limit non-service-connected burial benefits to those veterans with adjusted incomes of $20,000 or less	- 80.0	- 80.0	0
Reduce interest subsidy on veterans insurance policy loans	0	- 96.0	0
Defer minor construction	- 32.0	- 8.0	-61
Delay certain major construction	- 71.0	- 91.0	0
Terminate education loan program	0	- 6.0	0
Eliminate presumptive service-connection for Class II outpatient dental treatment	- 32.0	- 32.0	0
TOTAL COMMITTEE RECOMMENDATIONS	-351.0	-441.2	-99

Subsequently, the House Budget Committee in its First Concurrent Resolution on the Budget, H. Con. Res. 115, proposes restoring $600 million in budget authority and $400 million in outlays in Function 700, Veterans Benefits and Services, for a total FY 1982 budget of $24.8 billion in budget authority and $24.0 billion in outlays. I would be remiss, Mr. Chairman, if I did not commend the Chairman of the Budget Committee, the Honorable James R. Jones, and all members of that Committee for having restored essential funding for the Veterans Administration. These same amounts for the Veterans Administration are reflected in the Reagan Bipartisan Budget Resolution commonly referred to as the Gramm-Latta amendment.

The Veterans of Foreign Wars of the United States has gone on record in support of the Reagan Bipartisan Budget Resolution for the reasons enumerated in the enclosed letter from our Commander-in-Chief, Arthur Fellwock, which was sent to all members of the House of Representatives.

The overriding concerns of the V.F.W., Mr. Chairman, are that the Veterans Administration hospital and medical care system be properly funded and staffed so that all veterans in need of care will be properly treated and not turned away as they often are now, that the Veterans Administration Department of Veterans Benefits be fully funded and staffed to retain 58 fully functional regional offices, as they are today, and that the integrity of the compensation and pension programs be maintained.

If $600 million in budget authority and $400 million in outlays is restored to the budget by Congress, over 5,000 medical personnel and 1,764 positions in the Department of Veterans Benefits will be restored. Therefore, 1.7 million outpatient visits will not be cut, the outreach centers for Vietnam veterans will be retained, the 58 VA regional offices will not have to be closed and restorations in other areas can be effected. Also, and directly related to medical care, the special pay authorized for VA physicians and dentists under the provisions of Public Law 96-330 will not have to be capped at 12 percent of the total funding appropriated as envisioned in the Administration's March 10th mark of the budget. You will recall that the enacting legislation for this law, the thrust of which is to recruit and retain high caliber, full-time VA health-care personnel, was vetoed by the President and four days later the House of Representatives passed the legislation overriding the President's veto by a roll call vote of 401 to 5.

While speaking of Public Law 96-330, no funding is included in the budget for the health professionals scholarship program, a most important provision of the law. As you may be aware, 300 hospital beds have been closed due specifically to the shortage of registered nurses. Therefore, we strongly recommend that $5 million for nurses and $7 million for physicians and dentists be included in the appropriation for implementation of this badly needed scholarship program.

It is regretted that the construction of the Baltimore VA hospital has been canceled and the facility at Camden, New Jersey, which was to have been a model geriatric care center, has been canceled since both were fully justified and approved by prior Administrations. It is hoped that funding can be made available for these facilities and, if not, that they be deferred rather than canceled.

Mr. Chairman, funding for State Approving Agencies as authorized by subchapter I, chapter 36, Title 38 USC has been reduced from $17 million to $8.1 million by pending budgets. As you are no doubt aware, State Approving Agencies have performed a very valuable function and uncovered fraud and abuse in educational programs administered by the Veterans Administration saving that agency millions of dollars. It is my understanding that if $6 million is restored for this purpose, State Approving Agencies will be able to function at the level they have in the past due to diminished enrollments in educational programs. Our current Resolution No. 648, entitled "Oppose Funding Cuts of State Approving Agencies and On-The-Job-Training," opposes drastic and disproportionate cuts in this area and, therefore, the V.F.W. recommends funding in the amount of $14 million for State Approving Agencies be approved by this Subcommittee.

The following resolutions pertinent to the Veterans Administration budget are appended to my testimony:

Resolution No. 609 -- "Veterans Administration Budget"
Resolution No. 611 -- "Government Reorganization"

Resolution No. 639 -- "Opposing Reduction of Operating Staff and Funds for VA Hospitals and Outpatient Treatment"

Resolution No. 648 -- "Oppose Funding Cuts of State Approving Agencies and On-The-Job-Training"

Resolution No. 683 -- "Support Continued Funding for Beneficiary Travel"

Resolution No. 697 -- "Oppose Curtailment or Elimination of Earned Veteran Benefits and Privileges"

Resolution No. 714 -- "Vietnam Era Veteran Psychological Readjustment - Health Care"

Mr. Chairman, the V.F.W. appreciates the task facing this Subcommittee each year which may be even more difficult this year. You have, in the past, demonstrated both fairness and compassion with respect to funding for the Veterans Administration and more than this we do not ask.

This concludes my testimony, Mr. Chairman, and I will be happy to respond to any questions you may have.

ANALYSIS WORKSHEET						DATE 4-13-81	
STATION NAME	STATION NUMBER	FTE FY 81 TO 2/28/81*	FTE ALLOWANCE FY 1982	REDUCTION 2/28/81 TO FY 1982	OUT STAT. L.G. PERS. 4/3/81	OUT STAT. VSD PERS. 4/3/81	OUT STAT. VR&C PERS. 4/3/81
EASTERN REGION							
ATLANTA	16	350	327	23	0	4	1
BALTIMORE	13	183	155	28	0	2	0
BOSTON	01	276	240	36	0	10	0
BUFFALO	07	233	204	29	0	17	3
COLUMBIA	19	229	204	25	0	7	0
HARTFORD	08	133	119	14	0	7	1
HUNTINGTON	15	142	120	22	0	5	0
MANCHESTER	73	82	73	9	0	1	0
NEWARK	09	341	295	46	0	9	1
NEW YORK	06	620	550	70	1	32	1
PHILADELPHIA	10	1,039	890	149	0	11	3
PITTSBURGH	11	235	193	42	0	7	2
PROVIDENCE	04	107	89	18	0	1	0
ROANOKE	14	263	250	13	1	14	3
SAN JUAN	55	213	206	7	0	0	0
ST. PETERSBURG	17	740	659	81	169	31	15
TOGUS	62	116	102	14	0	4	2
WASHINGTON	72	318	276	42	0	7	0
WHITE RIVER JCT.	05	60	57	3	0	0	0
WILMINGTON	60	64	58	6	0	1	0
WINSTON-SALEM	18	345	322	23	0	10	0
	TOTAL	6,089	5,389	700	171	180	32
CENTRAL REGION							
CHICAGO	29	506	450	56	0	17	1
CLEVELAND	25	667	602	65	0	34	16
DES MOINES	33	135	122	13	0	5	0
DETROIT	29	441	393	48	0	17	4
FARGO	37	68	67	1	0	0	0
INDIANAPOLIS	25	272	240	32	0	7	0
JACKSON	23	195	175	20	0	5	0
LINCOLN	34	107	103	4	0	2	0
LITTLE ROCK	50	198	174	24	0	5	0
LOUISVILLE	27	199	180	18	0	2	0
MILWAUKEE	30	237	213	24	0	11	3
MONTGOMERY	27	284	254	30	0	9	6
MUSKOGEE	51	260	216	44	7	11	6
NASHVILLE	20	264	236	28	0	13	4
NEW ORLEANS	21	241	217	24	3	8	3
SIOUX FALLS	36	74	71	3	0	3	0
ST. LOUIS	31	308	276	32	2	13	1
ST. LOUIS-RPC	76	94	84	10	0	0	0
ST. PAUL	35	723	694	29	0	2	0
WICHITA	52	172	155	17	0	4	1
	TOTAL	5,445	4,922	523	12	168	45
WESTERN REGION							
ALBUQUERQUE	40	113	101	12	0	1	0
ANCHORAGE	63	39	39	0	0	2	0
BOISE	47	80	72	8	0	0	0
CHEYENNE	42	40	40	0	0	1	0
DENVER	33	302	256	46	6	3	2
FT. HARRISON	36	90	81	9	0	1	0
HONOLULU	53	85	81	4	0	1	0
HOUSTON	62	482	431	51	35	25	8
LOS ANGELES	44	787	720	67	9	21	0
MANILA	58	147	132	15	0	0	0
PHOENIX	45	233	204	29	0	6	2
PORTLAND	48	186	169	17	0	4	1
RENO	54	60	59	1	0	3	2
SALT LAKE CITY	41	100	90	10	0	1	0
SAN DIEGO	77	189	180	9	0	3	0
SAN FRANCISCO	43	549	493	56	1	17	3
SEATTLE	46	288	256	32	0	5	0
WACO	49	469	428	41	29	27	14
	TOTAL	4,239	3,832	407	80	121	32
	GRAND TOTAL	15,773	14,143	1,630	263	469	109

VA FORM JAN 1980 20-8587

EXISTING STOCKS OF VA FORM 20-8587, SEP 1977, WILL BE USED.

* Rounded to Nearest Whole Number

March 31, 1981

Honorable Edwin Meese, III
Counselor to the President
The White House
Washington, D.C. 20500

Dear Mr. Meese:

Following is a joint statement by the National Commanders of The American Legion, Veterans of Foreign Wars and Disabled American Veterans.

These are points the organizations would like you to consider in projecting funding for veterans programs. OMB actions contradict the following statements.

At the VFW National Convention in August 1980, Candidate Reagan said: "---to me it is unconscionable that veterans in need are denied hospital and medical care because of inadequate funding which has closed hospital beds and cut health-care personnel within the VA."

The 1980 Republican Party Platform states: "In particular we feel it is of vital importance to continue and expand the health-programs provided to veterans through the Veterans Administration hospitals. Here we see the need for increased access to care especially for older veterans.

In the face of these public statements of policy by the President and his Party, these are the things that have happened since he took office.

In a document presented to the staffs of the Committees on Veterans Affairs, the OMB Director wrote: "In addition, the existence of excess medical care capacity in many areas of the United States makes questionable the need for a separate VA medical system. This Administration will conduct a complete review of alternative methods for providing readily available, quality medical care for eligible veterans."

In an appearance before the Senate Budget Committee, the OMB Director said that the Reagan Administration is preparing --- proposals to effect a more efficient system of veterans health services.

The Administration proposes $1.3 billion in reductions in VA programs for FY 1981 and 1982. The major areas of impact of these reductions will be the medical care program and the regional offices, both of which are the main points of contact between veterans and VA.

OMB defends the reductions as being less than 3.2% of the total VA budget. However that includes entitlement programs which comprise 64% of the VA Budget and are fixed costs. The reductions comprise about 10% of the adjustable funds - some 36% of the total VA Budget.

Medical care reductions will, by VA projections

Cause reduction of 933 nurses, 297 doctors and more than 4,000 medical support personnel

Cause closing 1,800 beds in 60 hospital wards, equivalent to four hospitals

Result in a decrease of 1,583,000 outpatient visits and 3,628 nursing care patients

Terminate the Readjustment Counseling Program for Vietnam veterans

Reduce VA doctors' incentive pay (provided by Congress to alleviate a severe recruitment and retention problem)

Decrease rehabilitative and medical research

Reduce vocational rehabilitation counseling for service-connected disabled veterans

Regionalization proposed for VA Regional Offices will eliminate direct service to veterans who are attempting to develop claims for benefits. Regional Offices will be reduced to information and counseling contacts.

In FY 1976 the VA Budget was 5% of the total Federal Budget. In FY 1981 the VA Budget was 3.2% of the total Federal Budget - proving that veterans programs are not expanding.

During the past ten years the size of the VA hospital system has been reduced by 20,000 beds, 15,000 of those in the last 4 years at a time when the veteran population has been increased by 9.6 million Vietnam Era veterans - and the 12.5 million WW II veteran population has reached an average age of 61 - becoming more subject to catastrophic illnesses.

Elimination of the Readjustment Counseling Program will terminate the single program established to deal with the special problems of non-readjusted Vietnam veterans.

The overwhelming majority of veterans in VA hospitals, and who use the clinics, are elderly and poor. They would be public charges in any case.

The military has indicated it is no longer able to handle any appreciable number of casualties in event of overseas hostilities. It will have to have help from VA. And VA facilities will inevitably deteriorate, both physically and in staff capabilities, under the Administration's planned reductions.

The veterans organizations are strongly in favor of the most efficient and cost-effective management of veterans programs, and will work positively with the Administration to that effect - if they are invited to do so. In point of fact comprehensive care in VA hospitals costs 10% less than comparable care in private sector hospitals.

The three major organizations, with their Auxiliaries, represent more than 7 million active citizens - and they speak as much as anyone can for the veteran constituency.

History shows that veterans will in fact fight to save their hospitals - and, if necessary, will take their case to the people - as they have done before.

The veterans organizations are convinced the planned funding reductions will severely hurt both medical care and delivery of service to veterans and dependents. The veterans organizations believe economies can be effected, but not in the way they are now projected by OMB.

The veterans organizations ask that the funding be replaced for medical care, for medical and prosthetic research, for rehabilitation counselling (including the Vietnam Veteran Outreach Centers), and for operation of the Regional Offices.

The veterans organizations are willing and desirous of meeting with VA and OMB officials to work out plans for economies in management and operation of veterans assistance programs.

If current OMB policies vis-a-vis veterans health care and regionalization of Regional Offices are pursued into future fiscal years, the VA will be unable to render effective and efficient service to the nation's 30 million veterans, their dependents and survivors.

Sincerely yours,

Michael J. Kogutek

MICHAEL J. KOGUTEK
National Commander
The American Legion

Art Fellwock

ARTHUR J. FELLWOCK
Commander-In-Chief
Veterans of Foreign Wars of the U.S.

Stan Pealer

STAN PEALER
National Commander
Disabled American Veterans

VFW

VETERANS OF FOREIGN WARS OF THE UNITED STATES

OFFICE OF COMMANDER-IN-CHIEF

May 1, 1981

TO: ALL MEMBERS, U. S. HOUSE OF REPRESENTATIVES

FROM: ARTHUR FELLWOCK, NATIONAL COMMANDER-IN-CHIEF, VETERANS OF FOREIGN WARS OF THE UNITED STATES

SUBJECT: REAGAN BIPARTISAN BUDGET RESOLUTION

As National Commander-in-Chief of the Veterans of Foreign Wars of the United States, I well know that to govern is to choose; and often, as in the present case, between less-than-ideal alternatives.

Between the two budget alternatives under consideration by the House of Representatives, the V.F.W. casts its support to the Reagan Bipartisan Budget Resolution being advanced by Mr. Gramm (Texas) and Mr. Latta (Ohio).

My reasons follow:

As for fully earned and Congressionally-mandated veterans' entitlements, the Gramm-Latta FY 1982 budget does represent a partial restoration of $600 million in budget authority and $400 million in outlays over the shocking March 10th VA budget developed by Mr. David Stockman.

My staff has been advised by Mr. Stockman that the additional funding will assure the restoration of personnel within the Veterans Administration Department of Medicine and Surgery to provide adequate health-care for our nation's veterans and within the Department of Veterans' Benefits to maintain the 58 Veterans Administration Regional Offices at a fully functional level. Our support of the Reagan Bipartisan Resolution is predicated in no small part upon this commitment.

In addition, in a letter dated April 23, 1981 from Mr. Stockman to the Chairman of the House Veterans' Affairs Committee, the Honorable G. V. (Sonny) Montgomery, he stated in part, "In response to your inquiry concerning the Administration's commitment to the budget authority figure for Function 700, Veterans Benefits and Services, in the Reagan Bipartisan Budget Resolution, I want to assure you that we do not intend to support any amendment, on the House floor, to lower that or any other figure."

Let there be no mistake here: V.F.W. endorsement of the Reagan Bipartisan Budget Resolution will be publicly and forcefully repudidated should Mr. Stockman water down, waffle or welch on these partial restorations to the cruelly underfunded VA budget.

The Administration's alternative budget will serve properly to start the decade long effort needed to re-arm America. The M-X missile, a follow-on penetrating bomber, a 600-ship Navy, envisioned 9.1% and 5.3% pay raises for the armed forces, a peace-time GI Education Bill and the five-year plan to increase the active services by up to 250,000 people will not come cheaply. The Gramm-Latta alternative, which the V.F.W. supports, generates an additional $7.1 billion in defense budget authority and $4.4 billion in defense outlays for the revised FY 1981 and 1982 budgets over the alternative budget being advanced by Mr. Jones (Oklahoma), using all the budgetary assumptions developed by the House Budget Committee.

V.F.W. support for the Administration's Bipartisan Budget should put to rest for all time the mindless charge that the V.F.W. is just another "gimme" organization. We stand first, last, and always for our country. We have again led the way. Let other non-governmental groups with their special concerns follow.

Sincerely,

Art Fellwock

ARTHUR FELLWOCK
Commander-in-Chief

Resolution No. 609

VETERANS ADMINISTRATION BUDGET

WHEREAS, the Veterans Administration budget has been cut in proportion to the federal budget every year since 1975 when it was 5.1 percent to a programmed 3.4 percent in outlays in the Fiscal Year 1981 budget; and

WHEREAS, as a result, 7,000 hospital beds have been cut under the present Administration and 8,000 health-care personnel were eliminated or scheduled to be eliminated until through our efforts, Congress mandated the restoration of 3,800 of these positions; and

WHEREAS, veterans in need of hospitalization and medical care to which entitled by the law are denied such by the VA and referred to community resources which in many instances means lining up with welfare recipients; and

WHEREAS, compensation increases for those with service-connected disabilities and DIC for their survivors has not kept abreast with inflation; and

WHEREAS, only in this election year has the President recommended a meager 10 percent increase for Vietnam veterans availing themselves of educational benefits under the GI Bill notwithstanding that the Congressional Budget Office opined they needed a 20 percent increase in October, 1979 to catch-up and by October, 1980, would probably need a 30 percent increase; and

WHEREAS, medical programs passed by Congress and signed into law have been underfunded and under-staffed; and

WHEREAS, even though the F.Y. 1981 budget submitted by the President was approximately $750 million short of funding needed to meet the demand for health-care for our veteran population and adequately fund the benefit programs, the President and his Office of Management and Budget cut an additional $321.7 million; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we continue our unabated efforts for an adequate budget that will insure that the health-care needs of our nation's veterans are met and that all other benefit programs are kept abreast with the cost-of-living.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 609

Resolution No. 611

GOVERNMENT REORGANIZATION

WHEREAS, Public Law 95-17, the Reorganization Act of 1977, grants the President of the United States authority to revamp Executive Branch agencies below cabinet level, subject to veto by either House of Congress within 60 days; and

WHEREAS, when the President was Governor of the State of Georgia, he attempted to combine the Georgia State Department of Veterans Service with Human Resources; and

WHEREAS, the Veterans of Foreign Wars has historically opposed the splintering of veterans' benefits and programs by other departments and agencies; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we oppose any proposed Presidential reorganization or other plan which would abolish all, or part of the functions of the Veterans Administration, or its programs; consolidate all, or part, of the Veterans Administration and its programs with any other agency; or, change the name of the Veterans Administration or downgrade the title of the Administrator; or, which would, in any way, dismember the integrity of the programs administered by the Veterans Administration.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 611

Resolution No. 639

OPPOSING REDUCTION OF OPERATING STAFF AND FUNDS FOR
VA HOSPITALS AND OUTPATIENT TREATMENT

WHEREAS, the curtailment of funds the past two years has hurt the efficiency of the VA Hospital Service operation; and

WHEREAS, the Administration is again reducing the VA staff and benefits to veterans seeking hospitalization or outpatient care; and

WHEREAS, the veterans with service connected disabilities which were the result of injuries incurred while serving their country have earned the right to this service and are entitled to the best in medical care; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we oppose any reduction in staffing or funding of the Veterans Administration medical care system.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 639

Resolution No. 648

OPPOSE FUNDING CUTS OF STATE APPROVING AGENCIES
AND ON-THE-JOB TRAINING

WHEREAS, the Veterans Administration is supporting legislation which would cut state educational approving agency funding by over 50%; and

WHEREAS, that cut in funding represents a disproportionate share of the total budgetary cut of the Veterans Administration; and

WHEREAS, the proposed bill would eliminate funding for State Approving Agencies for apprenticeship and on-the-job training, reversing the policy established by Congress over 35 years ago by eliminating state and local input and giving all approval powers to the Federal government; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that our opposition to such a drastic and disproportionate cut be communicated by letter to the members of the House and Senate Committees on Veterans Affairs in Congress.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No 648

Resolution No. 683

SUPPORT CONTINUED FUNDING FOR BENEFICIARY TRAVEL

WHEREAS, the office of Management and Budget recently attempted to eliminate beneficiary travel by witholding funds; and

WHEREAS, such a move would work a severe hardship on veterans living in more remote areas far distant from VA Hospitals and Outpatient Clinics; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we vigorously support continued funding for beneficiary travel for all eligible veterans.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 683

Resolution No. 697

OPPOSE CURTAILMENT OR ELIMINATION OF EARNED VETERAN BENEFITS AND PRIVILEGES

WHEREAS, there is a growing trend toward reduction of the earned benefits and entitlements of veterans, their spouses, dependents and survivors which were explicitly promised or provided by law or regulation in recognition of the hardships and dangers of service life; and

WHEREAS, the erosion of the earned benefits and entitlements are detrimental to the morale of veterans, active, reserve and retired; and

WHEREAS, the continued erosion and reduction of earned benefits and entitlements will adversely affect maintaining an effective and efficient military force needed for the security of the United States; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we oppose all efforts by any individual, group, organization, government office, bureau or agency, or the United States Congress, to discriminate against a veteran, discharged under honorable conditions, or to eliminate or curtail in any manner their earned benefits or privileges.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 697

Resolution No. 714

VIETNAM ERA VETERAN PSYCHOLOGICAL READJUSTMENT - HEALTH CARE

WHEREAS, with the continued deterioration of the V.A. Medical System and cut-backs in Health Care personnel; and

WHEREAS, with the growing need for Vietnam Era Veterans to be treated for service-connected disabilities, chemical dependency, psychological disorders and exposure to the herbicide 'Agent Orange'; and

WHEREAS, not only Vietnam Era Veterans, but all Veterans are not receiving the medical and psychological care they deserve and are entitled to receive because of budgetary cut-backs; now, therefore

BE IT RESOLVED, by the 81st National Convention of the Veterans of Foreign Wars of the United States, that we continue to support the V.A. Medical System and work to strengthen medical and psychological care in the areas of Chemical Dependency, 'Agent Orange' and Psychological Adjustment; and

BE IT FURTHER RESOLVED, that the V.F.W. encourage recruitment of Qualified Vietnam Era Veteran Medical Doctors and Psychologists whenever positions occur in the V.A. Health Care delivery system; and

BE IT FURTHER RESOLVED, that the V.F.W. continue to support outreach programs such as the Vets Center and 'Agent Orange' on behalf of Vietnam Era Veterans.

Adopted by the 81st National Convention of the Veterans of Foreign Wars of the United States held in Chicago, Illinois, August 15-21, 1980.

Resolution No. 714

Mr. SCHWAB. Mr. Chairman, I appreciate that. I will not belabor you with a recitation.

Let me present an overview of the fiscal year 1982 budget for the VA so far through Congress. Suffice it to say the OMB's March 10 markup of the budget which would reduce outlays by $831 million and cut 9,000 personnel out of the VA would have done violence to the Department of Medicine and Surgery, the hospitals, medical care system and the Department of Veterans Benefits.

The Reagan bipartisan budget resolution, which passed yesterday and which was supported by VFW, restores $400 million in outlays for the Veterans Administration and over 5,000 health care personnel and some 1700 personnel in the Department of Veterans Benefits. In addition, the restored funding would permit the restoration of 1.8 million outpatient visits in the fiscal year 1982. That would retain the Vietnam Outreach Centers, which we supported, and make other adjustments that are necessary.

We were disturbed with the complete cancellation of the Baltimore and Camden hospitals. The Baltimore hospital was fully justified by two prior Administrations, and the facility in Camden, New Jersey, was supposed to be a model geriatric care center. We are hopeful funding can be found, that these facilities not be cancelled but merely deferred.

There are two other areas where there is matching funding in the budget this year which do disturb us: one, the fact there is no funding for the scholarship program authorized by Public Law 96-330, which the House passed over the President's veto by a vote of 401 to 5. We believe that $5 million ought to be funded for nurses scholarship programs because more than 300 hospital beds have been closed due specifically to the shortage of registered nurses and $7 million ought to be included for the scholarship program for physicians.

Another area where we think funding should be restored is for the State approving agencies. They had a budget last year of $17 million, and it is proposed to cut it by $8.1 million. It is my understanding if the funding in the amount of $6 million is restored, they will be able to function at the previous level due to the falloff of enrollments in educational programs under the G.I. Bill.

Mr. Chairman, I want to thank the Subcommittee for its consideration in the past. They have dealt fairly with the Veterans Administration budget, they have been compassionate, and more than that we cannot ask. I will be happy to respond to any questions you have.

Mr. SABO. Just so I understand, Mr. Schwab, do you feel that the restoration of $6 million would allow the State Approving Agencies to continue?

Mr. SCHWAB. Yes, sir. That would give them a budget of approximately $14 million for the fiscal year 1982.

Mr. SABO. Restoring $6 million?

Mr. SCHWAB. Yes, sir.

Mr. SABO. Mr. Green, any questions?

Mr. GREEN. A very clear statement; I have no questions.

Mr. SABO. Mr. Coughlin?

Mr. COUGHLIN. I have read your statement and appreciate it very much.

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

LARRY SILVERMAN, EXECUTIVE DIRECTOR, AMERICAN CLEAN WATER ASSOCIATION

Mr. SABO. Mr. Silverman.

Mr. SILVERMAN. I testified about the EPA budget last year and I think you chaired the Committee then too. I was the only one of 20 witnesses who testified against increasing the fund.

Mr. Chairman, the organizations I represent today are deeply concerned about sewage. Our members and contributors earn their living or spend their leisure, or both, in the management of recently used water. As such, we have the pleasure of following the activities of many committees of the Congress. Indeed, the number of Congressional committees and subcommittees with jurisdiction over American water and waste management seems to grow each year.

The April 18 issue of *Congressional Quarterly* contains an excellent article on this subject, entitled "Water Crisis is Predicted Unless Congress and States Get Together on Water Policy," by Kathy Koch. Ms. Koch has identified 12 House committees with jurisdiction over water issues, and 31 subcommittees. The number of committees with an interest in this subject perhaps reflects the fact that water and sewage policies affect every Congressional district in the Nation in important ways.

The purpose of my testimony today is to suggest some ways that this Subcommittee might play a larger and more constructive role in the stewardship of the Nation's water systems. I would also like to comment on this Subcommittee's role vis-a-vis recent and anticipated actions of the House Public Works Committee, the Administration, and of course the budget resolution. With the chairman's permission, I would like to discuss water problems and programs in terms of this Subcommittee's role.

As we see it, this subcommittee needs to perform three important functions in connection with the national sewage grants and assistance programs.

(1) This Subcommittee must ask and answer the hard questions of how much things cost and where they stand on the national priority list, and who will pay for them.

(2) This Subcommittee exercises important quality control responsibilities over the expenditure of sewage treatment funds.

(3) This Subcommittee has unique opportunities to manage and coordinate various large and small programs which shape American water and waste management.

THE QUESTION OF COST

This Subcommittee will have a difficult time reconciling the budget resolution with the actions of the authorizing committee, House Public Works. Here is a summary of the situation, as I

understand it. On Tuesday, May 2, the House Public Works Committee will mark up H.R. 2957, which, as reported out by the Water Resources Subcommittee, does three things:

(1) It expands eligibilities for EPA sewage treatment funds for building new industrial wastewater capacity in municipal systems.

(2) It provides a special grant to New York City to cover all or a portion of the capital costs of a temporary sewer for the sole purpose of accommodating the Convention Center in Manhattan.

(3) It extends for an additional year special incentives for innovative and alternative technologies in the form of a three percent set-aside of State funds for the purpose of giving bonus grants.

These items are being taken up now, before May 15, in keeping with the Budget Act, because all or some of them have spending implications. That, in any case, is the view of Subcommittee Chairman Roe.

The budget resolution, on the other hand, as I understand it, does not clearly include or exclude the EPA Sewage Treatment Construction Grants Program. It does set a ceiling of $2.4 billion on the grants segment of the program, contingent on certain reforms.

The EPA Needs Survey, put together by the Carter Administration, identifies some $90–100 billion of needs over the next ten years. The Office of Management and Budget has indicated a willingness to spend only $23 billion. OMB would reduce the Federal liability by limiting the types of activities eligible for Federal grants. For example, OMB will eliminate the funding of collector sewers and reserve capacity. Such obvious and sensible activities as identifying and repairing leaky sewer pipes would also become ineligible for Federal funding.

The Needs Survey is a kind of estimate, the sort of thing a person might get from an auto mechanic or a carpenter. The people I represent tend to believe that the estimate is inflated, that it calls for some work which is not really necessary, and that it is premised on methods which are not very efficient. We believe this because again and again, we have seen communities change from expensive, environmentally questionable plans to lower cost approaches, which often meet higher environmental standards. In general, we believe that with better management and planning, the country could care for its sewage with lower costs and greater benefits. This is why we applaud the work of the House Public Works Subcommittee, in recommending an extension of the Incentive Program for innovative and alternative technologies. Innovative and alternative technologies are designed to substantially improve the productivity of sewage systems to produce more clean water and other benefits for the dollar. We need to direct a greater share of our scarce resources into the most efficient operations.

We believe that the country can buy more with $23 billion than OMB projects, and that some of the proposed limits on eligibility are unwise and unnecessarily severe. On the other hand, we acknowledge the need to reduce Federal financial participation. For this reason, we question the repeal without limitations of the so-called Industrial Cost Exclusion provisions of the Clean Water Act. The effect of this action, as near as we can tell, is to commit about $4.5 billion of the available $23 billion for new construction of industrial treatment capacity. Additional billions will also go to

fund old industrial capacity, defined as construction begun prior to November 15, 1981.

Helping municipalities serve their industrial customers appears to be a worthy goal. But is it more worthy than infiltration/inflow work, or, in plain words, patching the leaky pipes?

The role of this Subcommittee as we see it, is to insist that the cost of new spending programs be spelled out very clearly, and that dollar limits be imposed. Thus, if the House repeals ICE, and opens up a new category of assistance to industrial users, this Subcommittee should insist that a dollar limit be set so that other priorities are not neglected. Similarly, with regard to the Administration's proposed restrictions on eligibility, this Subcommittee should insist on a clear estimate and justification of the proposed savings, as well as an accounting of potential costs of such actions.

Insisting on hard figures will not make this subcommittee popular. The Chairman will probably never get a sewage treatment plant named after him, but you will help inject an element of fiscal responsibility into a program that badly needs it.

We also urge this Subcommittee to cast a dispassionate eye on the temporary sewer for the New York City Convention Center, the costs of which are still unclear. New York City's once magnificent water and sewer system is today in a perilous state. Is the Convention Center sewer really the highest priority in New York, a city which dumps its sludge into the ocean, which is years behind in the construction of treatment plants, whose sewers and water pipes are hemorrhaging, which even in the face of drought fail to meter its water consumption?

Will the Convention Center sewer really protect the Hudson River or just the public relations of the Convention Center? It is not pettiness of contentiousness that causes us to raise these questions, but rather the conviction that New York City's hard core, basic problems with water and sewage need to be addressed comprehensively and quickly. I don't think the New York representatives are doing enough in looking for that particular sewer.

If the Appropriations Committee does not address unpleasant questions of costs and priority, then who will?

QUALITY CONTROL

In years past, this Subcommittee, over a chorus of objections, imposed certain restrictions on the funding of high-cost, advanced waste treatment systems. In our view, these restrictions have had a salutary effect. A number of bad projects were rejected and a number of mediocre ones were made good.

We urge you to keep up the good work. It would be especially helpful if this Committee were to probe a little more deeply into how well and how quickly the Nation is implementing the innovative and alternative technology provisions of the law.

PROGRAM COORDINATION

In the course of planning and distributing trillion-dollar budgets, it is very easy for Members of Congress to lose sight of small programs with big payoff. A few weeks ago, at the request of Congressman Tim Wirth of the Budget Committee, we prepared a

list of small programs whose continued existence would help the Nation make progress towards clean water while at the same time absorbing the major budget restraints recommended by the President. I have attached this list to my testimony. I believe that in the past, the Appropriations Committee has not been sufficiently sensitive to the importance of these programs which deal with training, tehnology transfer, public education, technical assistance, aid to rural communities, coastal planning, and non-point source pollution.

We have a lot of facilities that don't work because people are not trained. We have training centers at $1 million a year. It is easy for the Committee to forget about that and it is easy for EPA to forget it because it doesn't benefit them directly. The people out there in New York or Duluth or wherever they are need that training. They are not up to speed. Similarly with the other programs, the components of that national effort necessary to provide America with clean water at an affordable cost are spread throughout the government.

This Committee is one of the few in Congress with a real opportunity to shape the many divergent efforts into a winning team. This might require a reexamination of this Committee's structure. According to the *Congressional Quarterly* article I mentioned at the beginning of my testimony, there are no less than six subcommittees of the House Appropriations Committee concerned with the subject of water. What would happen if the water element of all six Subcommittees were merged into one?

Thank you for the opportunity to testify.

[The attachments follow:]

American Clean Water Association
1341 G. Street, N.W., Suite 200A, Washington, D.C. 20005 (202) 638-3013

A SHORT LIST OF NECESSARY WATER RELATED PROGRAMS CONSISTENT WITH THE REAGAN ADMINISTRATION BUDGET PROPOSAL

1. Water and Wastewater Programs

A. EPA- The Research and Development portion of EPA's budget funds a number of low-budget programs involving training, technical assistance, and education. These programs enhance the use of the larger water and sewer grant programs. The Reagan Administration has proposed either eliminating or severely cutting back these programs.

1. National Training and Operations Technology Center- The only national organization that trains instructors for sewage treatment plant operators and devises training curricula for use in community colleges around the country. A national information clearinghouse. Without programs of this sort, our $40 billion investment in sewage treatment plants could turn to junk. Funded at approximately $1 million/year.

2. Center for Environmental Research Information- Conducts seminars and workshops, publishes design manuals and other material to acquaint consulting engineers with the most cost-effective wastewater treatment technologies. Many engineers and other specialists in designing urban water systems are unfamiliar with decentralized. low-energy ststems most appropriate in rural areas. This program promotes the adaptation of cost-effective systems, thus lowering sewage costs for the federal government as well as rural residents. Funded at approximately $2 million/year.

3. Public education under Section 214 of the Clean Water Act- Provides information and educational materials on recycling and reuse of water and water conservation. With numerous regional droughts and the pervasive mismanagement of our water resources, there is a need for more education and not less. Funded at approximately $300,000/year. We recommend at least $1 million.

B. Community Services Administration

1. Rural Community Assistance Program- The Demonstration Project Division of the Office of Community Action funds the RCAP. The function of the RCAP, which operates form six regional centers, is to help rural communities plan for water and wastewater treatment projects and provides technical assistance. The program is aimed primarily at low-income rural. It gives training to local government officials and community-based organizations. The elimination of the CSA and thus the RCAP will mean that the rural poor will have to do without the ammenities of water and wastewater treatment facilities. Moreover, urban water systems which originate in rural areas will continue to be degraded. Funded at approximately $2.4/year- to be folded into block grants. We recommend a line item for RCAPs at $2.4 million.

C. Department of Commerce, Economic Development Administration

1. National Demonstration Water Project- The Office Of Technical Assistance in the EDA funds about half of the $1.5 million/year budget of the NDWP. The NDWP is a network of rural cooperatives which helps rural poor communities plan for and develop water and sewage treatment facilities. Aside from the RCAP, the NDWP is the only outreach program to rural communities concerning water and wastewater. This portion of NDWP's budget will disappear with the demise of the EDA.

D. Farmers' Home Administration

1. The FmHA is a mojor piece of the federal water and pollution control puzzle. Sweeping changes have been suggested for the water and wastewater program of the FmHA. FY 1981 loans are to be cut by $160 to $570 million and will be reduced to $300 million by FY 1982. The grant program will be cut in half-- to $100 million by FY 1982. But the most severe impact and the one likely to impose the most hardship on people least able to bear it is the change in the interest rate charged for FmHA water and sewer loans from 5% to about 11%. This change will effectively prevent the low-income communities taking advantage of this program, and will direct federal funds to communities better able to solve their porblems without federal funds.

FmHA should be encouraged to target its funds to drinking water problems and encourage communities to seek sewage funds from EPA.

He support the proposed cuts in FmHA grant programs, if the EPA rural set-aside program and innovative and alternative technology incentives are retained and/or expanded. If rural communities can finally receive their fair share of EPA grants as mandated by Congress in 1977, then FmHA grants can be cut without serious injury to rural communities'water quality.

He strongly oppose a change in the interest rate on FmHA loans, particularly on the time frame recommended by OMB.

II. Water Planning Programs

A. Department of Commerce, National Oceanic and Atmospheric Administration

1. Coastal Zone Management- Section 306 of the Coastal Zone Management Act (planning and management) should be terminated or scaled down slowly, to insure that plans that are near completion today are not abandoned. More than $200 million has been invested in this program. The CZM agencies have created a more streamlined approach to permit-writing and coastal development, particularly as pressures from an enhanced coal export business and from deep seabed mining activities become more intense. We recommend the following funding schedule for CZM:

FY 1982- $30 million (down $7 million form Carter Administration)
FY 1983 $20 million
FY 1984 $12-15 million

B. Non-Point Pollution- While we do not necessarily recommend complete retention of all funding for the various federal programs that deal with soil erosion and other manifestations fo non-point pollution, the elimination of these programs, which has been proposed by the Reagan Administration, will not make the problems disappear. The failure to address this source of pollution will negate the progress of the multi-billion dollar effor to clean up the water by building wastewater treatment plants

Some of these programs-- the area-wide planning provisions of Section 208 and the Clean Lakes program under section 314 of the Clean Water Act-- have not been notably successful..On the other hand, the Rural CLean Water program administered by the Agricultural Stabilization and COnservation Service and funded at $50 million/year is worthwhile; by helping farmers and others to lessen soil erosion, this program has contributed both toward cleaning the water and preserving the soil. It should be retained.

Mr. SABO. Thank you for your excellent testimony. I am curious about your understanding of the budget resolution. It is difficult at times to know for certain what programs are or aren't in there. It is my understanding the $2.4 billion was not contained in the budget resolution and was not in the President's recommendation. Am I wrong?

Mr. SILVERMAN. The President originally said zero and then in the package of materials they sent down, he said, "Well, if you reform the program by cutting out eligibilities, we will give you 2.4," and I have not seen the language of the budget resolution but I am told it is in there with an asterisk.

Mr. SABO. I understood it was not in there and would depend upon a budget amendment in the future.

Mr. SILVERMAN. I think the *Washington Post* said something about there being $36 billion of things that are in there but are contingent upon being squeezed in someplace. In other words, it is very much up in the air. That is a cause of great concern all around in this industry. The President says you have to limit eligibility and the Public Works Committee comes and opens up a new, rather significant eligibility, and how is that going to be resolved?

I really think it is this Subcommittee that is going to play a very decisive role in that resolution.

Mr. SABO. Whether there is or isn't a budget authority, it will have to be determined.

Mr. Green?

Mr. GREEN. I agree with you that the Convention Center sewer is not our number one priority, at a time when we have a water problem, where the whole city could be without water. On the other hand, we seem to have difficulty getting the Congress to help us with that one.

Mr. SILVERMAN. New York doesn't only have problems, it has some opportunities. You know under the South Bronx, there is an aquifer which in days past was used for indutrial purposes. Phoenix does not have that, and that is a great economic resource. If you had a little bit of money it seems to me you might want to put it there, for example, or put in metering buildings or something like that. Do a little bit better. There is a tendency to avoid the problem because it is so big. We just didn't get it on the agenda.

Mr. GREEN. We are still getting criticized for the World Trade Center effort.

Mr. COUGHLIN. Thank you, Mr. Chairman.

We appreciate the statement and we appreciate the attention you have paid to this subject on a year-in and year-out basis.

Thank you.

Mr. SABO. Thank you. I appreciate the statement for your understanding of the relationships between different Congressional committees.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. RUSSELL C. DREW, VICE CHAIRMAN, U.S. ACTIVITIES BOARD, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Mr. SABO. We welcome Dr. Russell C. Drew, Vice Chairman, U.S. Activities Board, Institute of Electrical and Electronics Engineers, Inc.

Dr. Drew, we will insert your entire statement in the record. We would appreciate it if you would summarize for us.

[The statement follows:]

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

UNITED STATES ACTIVITIES BOARD

STATEMENT OF DR. RUSSELL C. DREW
VICE CHAIRMAN UNITED STATES ACTIVITIES BOARD OF THE
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
ON THE FY 1982 BUDGET OF THE NATIONAL SCIENCE FOUNDATION
AND THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
BEFORE THE SUBCOMMITTEE ON HUD AND INDEPENDENT AGENCIES
HOUSE COMMITTEE ON APPROPRIATIONS
MAY 8, 1981

Mr. Chairman, members of this Subcommittee, it is a privilege to have this opportunity to appear before you at this time as a representative of the United States Activities Board of the Institute of Electrical and Electronics Engineers (IEEE). I have previously appeared before your subcommittee on several occasions as the Director of the Science Advisor's Staff in the National Science Foundation. Now I am having to become familar with a new and somewhat different role as a close observer of the agencies being considered today, rather than as a participant. I am particularly pleased to be able to bring to you the views of the IEEE, the world's largest engineering society, with over 210,000 members world-wide and with more than 165,000 members in the U.S. These 165,000 U.S. members of the IEEE make their views known on matters of public policy and on professional activities through the United States Activities Board.

One of the most important issues facing the U.S. today is the continuing economic vitality of this nation. It is important, not only for our own citizens, but also for people throughout the world, who are dependent upon our military strength to decrease the threat of aggression, upon our food to decrease hunger, and upon our technology to help provide needed goods and services. We recognize the threat which inflation poses to our economic vitality and we support measures to curb inflation.

I believe that technology is a key to economic vitality. Technology must be effectively utilized and advanced to provide better products and services, using labor, capital and raw materials more efficiently than ever before. Since World War II, the U.S. has been the world's technological leader, but technological leadership is not a static condition. It requires continual attention and dedicated effort. If we fail to continue to improve and move forward, we will be challenged and occasionally overtaken in specific areas, as evidenced by the very significant Japanese and Western European competition in automobiles, consumer electronics and a variety of other products.

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For our major competitors, there are a number of factors that have contributed to their success. While our practices do not permit the same relationships between industry, government and the banking community as our competitors, it does appear that we must take measures that will strengthen private sector capabilities and utilize government support in areas where the private sector cannot be expected to invest. I believe this will require the formulation of a new technology policy for the United States, if we are to remain technologically competitive. The outline of this policy is emerging; it includes the following elements:

- o A reduction in unnecessary government involvement and in regulatory barriers to innovation;
- o measures to improve capital formation and to encourage investment in new plant and new equipment to improve productivity
- o increased incentives for the private sector to invest in research and development, complemented by focused government support in key areas;
- o education of adequate numbers of scientists and engineers -- maintaining the quality of our education system and the people it produces; and
- o trade policies that open markets to U.S. goods on an equitable basis and measures to remove unnecessary constraints imposed by present U.S. Tax or Antitrust Policies.

The precise nature of the measures that will be needed in these areas remain to be defined, but it is important that we work for a new understanding of the issues and a new consensus of the shape of U.S. Technology Policy.

In my testimony today, while I will be focusing primarily on the FY 1982 budget proposed for NSF and NASA, two agencies that are very important parts of the Federal structure that support U.S. technology policy, I wish to emphasize the larger context in which our recommendations should be viewed.

The National Science Foundation is unique among Federal agencies in several respects -- it is the only agency with a part time Board of Directors that sets agency policy, and the only agency whose mission is to promote the health of science. Over the past 31 years its budget has grown from a very modest initial appropriation to the current proposal of slightly over $1 billion for 1982. During that period, it has carried out its mission with great care and distinction. I should point out,

however, that its initial emphasis was on science and even today its principal thrust is science -- with engineering as a secondary role. Only in the last ten years or so has the NSF been assigned a broader role in applied research and been allowed to contract to profit making entities. And in the past year, NSF has responded to a growing awareness of the need for increased attention to engineering and to the problems of technlogical innovation with an internal reorganization that created a new engineering research directorate and dispersed the applied science activities throughout the agency program offices. We applaud this move to increase the NSF focus on engineering, and will be observing its progress toward this objective with great interest and in the spirit of cooperation.

It should be pointed out that almost two years ago the IEEE presented testimony to the Congress identifying the needs that NSF is now attempting to meet and also suggesting that it would be desirable to establish a National Technology Foundation to carry out this mission. With the significant reduction in support for this year, and similar cutbacks proposed in innovation programs in NSF, the issue regarding the desirability of a National Technology Foundation remains unresolved. It certainly seems clear that we, in the engineering community, need to do a much better job in redefining and then defending such innovation-related initiatives regarding the nature of the Federal role in this area. Whether NSF will be able to provide needed Federal agency leadership in this task remains to be seen. Certainly, a new director of the Office of Science and Technology Policy in the Executive Office of the President could take a leadership role in this regard, and call upon NSF resources for support. The IEEE has been vigorously encouraging early action with respect to the appointment of an OSTP director.

In summary, while supporting the moves NSF has made -- both organizationally and in the way they have responded to budget reductions -- we believe there is a considerable agenda that needs to be addressed. We plan to work toward the development of that agenda with the NSF as it exists or as it evolves, and with other government and non-government entities.

Returning to the budget proposals, there was one additional observation prior to addressing specific parts of the NSF and NASA programs. Today, though the total proposed for Federal spending for R&D is $40 billion, 53% of that total is projected for military purposes, up from 47% in FY 1981 and 44% in FY 1980. The result is that the civil objectives are being relatively more constrained in the budget before you now than in FY 1980 or 1981. There are other indicators that all point to a significant national under-investment in R&D in the civil sector. Falling productivity rates, decreasing patent licensing, and

penetration of our markets by R&D-intensive products from abroad, all reinforce this view. There are other factors that must be addressed also -- such as capital formation, interest rates, labor, improved technical management -- but these do not reduce the need for more R&D. In the current climate the majority of funding for the increase will undoubtedly have to come from the private sector. For this to occur, a number of incentives will be required and a number of barriers will have to be lowered. But large areas will remain that have high social benefits, and yet do not attract sufficient private capital. In those areas, the federal government must play a key role in sponsoring the necessary supporting effort. NSF in particular, has key responsibilities -- in basic research, science and engineering education, and in studying and stimulating innovation.

In the programs of the NSF, one area of great interest to the IEEE is the division of electrical, computer, and systems engineering under the engineering directorate, with the proposed FY 1982 budget of $28,440,000, an increase of 25.6% over the revised FY 1981 budget. The division programs in Automation, Bioengineering and Sensing Systems; Electrical and Optical Communication; Systems Theory and Operations Research; Quantum Electronics, Waves and Beams; Solid State and Microstructures Engineering; and Computer Engineering are intended to support investigations to gain new knowledge in engineering principles that are applicable to the creation of new electrical and electronic devices, and the structuring and control of large-scale electronic systems. These basic research programs have relevance to applied research in various mission agencies and within the industrial sector, in areas including communications, information, energy, transportation, automation, and national defense. IEEE strongly endorses the support of these programs.

The second subactivity of NSF of great interest to IEEE is that of computer research, under the Mathematical and Physical Science Directorate with a proposed FY 1982 $27 million, an increase of 25.1% over the revised FY 1981 budget. The program supports basic research in computer science, including theoretical computer science, software systems science, software engineering, intelligent systems, computer systems design, and coordinated experimental research. Regular scientific research project support is estimated at $17.5 million, leaving approximately $9.5 million for a variety of experimental computer research facilities. The extent of the information technology sector and the pervasive use of computers throughout the society, suggest that advances in computer science could have tremendous influence on future life styles. IEEE strongly endorses this program.

A third subactivity of interest to IEEE is the Materials Research Laboratories Program element within the Mathematical and Physical Sciences Directorate, with a proposed budget of $23,540,000, an increase of 14.3% over the revised FY81 budget. This program element supports 13 university laboratories which provide interdisciplinary and interdepartmental experimental research facilities. In all cases, faculty and graduate students in electrical engineering are involved. Individual project grants are usually too small to afford the type of shared laboratory facility which NSF successfully established in this area. IEEE endorses this program.

Engineering as a profession is largely applied but its scope includes engineering research and engineering science. Basic research in engineering deals with the discovery of new knowledge of engineering principles and we strongly endorse the overall engineering directorate budget proposed for FY 1982.

Before going on to NASA, Mr. Chairman, I would like to touch upon one area that is of growing concern throughout the engineering community. That is the emerging crisis in engineering education. Demand for engineering graduates is great and faculty positions are increasingly left unfilled with the consequence that sometime in the future we will not be able to produce the qualified graduate engineers needed for our technological society. Coupled with the reduced number of faculty are the problems of aging or obsolete teaching laboratory equipment and experimental instrumentation for engineering research, resulting in an alarming view of current trends in areas basic to our ability to produce continuing high quality input to our pool of trained engineers. This is an area that requires continued attention. The restoration of some of the funds that were cut from instrumentation, and for science and education, along the lines of the House Authorization markup, appears desirable as a first step. In addition, NSF should begin to give greater attention to the development of proposed measures to deal with specific problems of engineering education.

Proceeding on to NASA, I am pleased to join in complimenting the NASA contractor team and the program directors for the successful first orbital flight of the space shuttle. It was a highly visible demonstration of the great potential of American engineering when effectively applied to an extremely challenging objective. I am emphasizing the engineering aspects of the shuttle, because it was overwhelmingly an engineering project, not dependent upon scientific breakthroughs, but almost entirely the product of a sophisticated application of our knowhow to the design and construction of a complex system. The IEEE recognizes and supports the need for research -- both in scientific fields and in engineering -- but we also believe it is important to stress our technological capabilities and their applications to restore our international competitiveness.

It is indeed ironic at this moment of great technical achievement that NASA should be facing significant reduction in its planned program of space missions. Recognizing the need for fiscal restraints, difficult choices are required and it would be unrealistic for me to suggest restoration of a significant fraction of the proposed cuts. Let me suggest rather some criteria that may be applied to the program in reconsidering the extent of such reduction, for example:

- Uniqueness -- That is, does the mission provide a first look at a new area, phenomenon, or object?
- Launch Window -- Is there a special opportunity available because of either unique positioning of objects in space or intensity of activity?
- Personnel -- Is the team of experimenters and technical support personnel adequate and available -- will critical elements of this team dissipate if the mission is delayed or deferred -- how difficult will it be to recreate these skills?
- Sunk Costs -- What commitment has already been made to the mission?
- International Relations -- What negative impact will it have on present or future cooperative activities which may be desirable because of their potential for cost savings or improved scientific returns?
- Secondary Effects -- Will the withdrawal or cancellation affect our image in the way we are perceived at home and abroad?
- Competition -- Are we likely to be losing an important competitive position vis-a-vis the Soviet Union or other space-faring nations?

In applying these criteria, Mr. Chairman, it is clear that continuation of the Galileo Mission to Jupiter and particularly the Space Telescope are of high priority, and the IEEE supports the Administration request in this area. In addition, it appears highly desirable to reverse the decision to curtail the International Solar Polar Mission and continue this program in order to take advantage of both the unique observation perspective that dual mission will provide as well as the cooperative funding and support of this undertaking by the European Space Agency (ESA).

We are concerned that measures taken for short term expediency may have long term and lasting effects and we strongly support continuation of the ISPM.

At this time when we are considering shrinking our horizons regarding our future in space, I believe it is useful to recall the basic foundations for our space efforts. In the Space Act of 1958, Congress specified, inter alia, that the U.S. be a leader in the development and use of space technology for the benefit of all mankind. In the past 23 years we have accepted and carried out the mandate with a remarkable degree of success --largely due to the dedication of the people in NASA and its contractors. To me, it is remarkable that a development so revolutionary and complex as the space shuttle can be achieved over the period of a decade of rising inflation with such minor cost growth over the original estimates. Compared with other development programs not as complex in DoD and elsewhere, NASA has done a superb job. But during the period of shuttle development, many opportunities and new initiatives in space have been delayed or deferred, and overall funding for the civil space program has been severely constrained.

In the 1980s, we at the IEEE believe that it is important for the U.S. to continue to work to maintain its leadership position in the development and use of space systems. In order to achieve this objective we believe the U.S. should provide adequate funding for:

1. Programs that will lead to an expansion of earth orbit commericial activities;

2. The exploration of our solar system and the universe beyond; and

3. Extension of the shuttle capability through acquisition of additional shuttle orbiters and development of associated booster systems for orbital transfer for deep space missions, improvements to extend time in orbit for the shuttle, and permanently manned orbital habitats.

We believe that a balanced space program, with exploitation of new opportunities in each of the above areas, will yield important benefits to the nation through the new commercial services that will result, increased scientific knowledge, and improvement of our level of technology. In addition, we believe there will be other long term benefits to the nation from the exploration of space that are difficult to quantify at this time.

Our national space achievements are a positive motivating force -- to our youth, to the nation, and to the world. We support the continuation of a national civil space effort that maintains these positive values.

Mr. Chairman, this completes my prepared testimony, I will be pleased to answer any question you may have.

Dr. DREW. Thank you, Mr. Chairman.

It is a pleasure to be here and have an opportunity to present to you today the views of the IEEE—the Institute of Electrical and Electronics Engineers.

The IEEE is the world's largest engineering society, and we have over 165,000 members in the United States. The IEEE, primarily a professional and technical group, carries out its activities in the public policy arena and professional development through the United States Activities Board, of which I am Vice Chairman.

The IEEE has been quite active in observing and participating in the development of U.S. technology policy. As we go through the statement, I would like to emphasize the continuing interest of the IEEE in some of the matters that we are going to present to you today, and the continuing role that the IEEE and its membership in various committees, local sections, intends to play in U.S. technology policy development.

The major pressing issue in the United States—our continuing economic vitality—is very strongly a function of our technological vitality. We believe this connection is an extremely important one to foster via government policy development, and therefore, we see as part of the strategy of fiscal constraint that reduces the pressure on inflation, balancing Federal budgets. For example, a similar effort to provide incentives to the industrial and scientific and technological community to continue to revitalize that effort as well, because it is an extremely important factor in improving the productivity of U.S. industry, and providing for the competitiveness team, competitiveness of U.S. goods and services on the international marketplace.

Now technology leadership is something that we have enjoyed in the world probably since War II. The main point we want to emphasize here is that this is not a static thing, that we can't sit back on our laurels, we can't rest upon the investments that were made in World War II or even the investments that were made when we saw a very great increase in Federal support for science and technology, that is with Sputnik in 1957.

The foundations that were laid there have served us well, but if you look at the way in which there was a down turn in the true value of Federal support in the late sixties, you can see a relationship between Federal support and the amount of Federal support for R&D and an increasing penetration of the U.S. marketplace by new products and services from other Nations today. So, there is a lead time in the system.

The actions that we are suggesting need to be taken today are not going to show up in dramatic changes tomorrow, but they are going to show up about eight to ten years from now. We have got to be taking them today, if we are in fact going to continue to resist what is becoming a very competitive world.

Now we have suggested that a new technology policy, which is really a set of policies, needs to be considered for the United States, and I would like just to call your attention to what we feel are some of the very important elements of that. First of all, we believe the excessive government involvement in regulations is an extremely important factor, which seems to be a trend that is already accepted and under way. We also see it is very important to take

measures to improve capital formation and to encourage the appropriation application of that capital in ways which encourage productivity improvement investment. The third item we think is extremely important is that we provide incentives for the private sector to make investment in the application of knowledge, the technology that we think is so important to our future.

Now that calls for a strong private sector role, but we believe there is an equally strong and important government role which goes to the investment in the long-term high industry research which is characterized with agencies like NSF, NIH and NASA. The Defense Department, by the way, makes a significant contribution to this as well, so we have many Federal agencies making these long-term investments. It has to also be coupled with selective technology investments as well on the part of the Federal government. Now here I think we find there has to be a very delicate balancing of the Federal role vis-a-vis the private sector. It is not clear at this point that the Administration has set the right balance in this area, and that is where incentives to technological innovation are concerned, which do not substitute for an appropriate private sector role, but which can act as incentives to it.

We think we have to maintain a strong and continuing educational system to produce the scientists and engineers that are going to continue to provide the corrective new capabilities in the system. It has been pointed out, that the most corrective periods tend to be those right after graduation, and therefore this ability to bring in new blood is very, very important. That is not to take away, by the way, the skills and the ability to make contributions of the older scientists and particularly engineers as well.

I think we have to have a system that is dynamic and continues to have new input. The quality of our educational system is also extremely important.

Now engineering education. I am sure you have heard of the emerging crisis in engineering education. We make reference to that. It is one problem that is not easily solved, because if you look at the extent of the problem, it is primarily a problem of engineering faculty. The economic climate is such today that engineering faculty basically has been drawn away from working in our engineering schools to work in industry, because they are in short supply, and demand is great. Salaries are commensurate with that.

I would like to highlight the two agencies that we feel very strongly about and are the responsibility of your Committee. That is, the National Science Foundation and NASA. The National Science Foundation has reorganized to provide a special engineering director, and they have provided an appropriate increase in support. This is engineering research, and we wish to support that increase very strongly, and we would like to see that program of increased support for engineering research extended and increased in future years. We think the money that is proposed this year is entirely appropriate, and we wish to see that held in the budget.

Moving to the National Aeronautics and Space Administration, we have in the NASA program some very serious concerns about our future direction in space. We have with the successful Shuttle flight this new capability they have been working on for over a ten-year period. During the period in which Shuttle development has

dominated the program, we have underinvested in other areas in important ways. At the present time, we suggest some important criteria for looking at and deciding on support for missions. We think if you apply those criteria, that an important change in the NASA program, that is the restoration of the International Solar Polar Mission, would be obvious and an important change, and therefore while it does not require significant budget change, it does require Congressional endorsement of this program to enable NASA to go ahead and support the continuation of that mission. That has implications for 1983 funding.

Mr. Chairman, those are the highlights of our testimony, the important points that we would like to get across. We would look forward to the opportunity to respond to any questions you may have.

Mr. SABO. Mr. Green and Mr. Coughlin, any questions?

Mr. GREEN. No questions.

Mr. COUGHLIN. No questions.

Mr. SABO. Thank you. We appreciate your being with us. You presented a good testimony.

COUNCIL ON ENVIRONMENTAL QUALITY

WITNESS

HON. ROBERT O. BLAKE, SENIOR FELLOW, INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT

Mr. SABO. The Honorable Robert O. Blake, Senior Fellow, International Institute for Environment and Development.

We will insert your entire statement in the record and you may proceed, Mr. Blake.

[The statement follows:]

Mr. Chairman:

My name is Robert O. Blake. I am a Senior Fellow of the International Institute for Environment and Development (IIED). IIED is a policy research organization made up of people from many countries dedicated to sensible and equitable use of the world's natural resources.

I am also a member of The Year 2000 Committee, a group of American leaders working to convince the American people and government of their self-interest in making more rational use of the world's basic resources -- crop lands, forests, waters, and air. I have been concerned most of my adult life with these resource problems. For 30 years I served as a career diplomat, in senior U.S. foreign policy positions, in 11 countries and here in Washington. Since my retirement in 1977, I have spent almost full-time monitoring and helping to mold U.S. policies designed to respond to the challenge of saving the world's rapidly deteriorating resource base.

Today, I would like to discuss with this Committee one aspect of that problem, the past and the potential role of the Council of Environmental Quality in bringing about a better and quicker response to global resource problems. CEQ is, in my view, one of the five U.S. agencies which have major roles to play in that regard. The other four agencies to which I refer are: the Agency for International Development and the U.S. Department of State, the two agencies having the principal international responsibilities; the Department of Agriculture, with great responsibilities both at home and internationally for crop lands, erosion control, and forestry programs; and, the Department of Interior, with its responsibilities for water and minerals policies.

In the short run, I'm convinced that CEQ could potentially have the most important role because it is so well positioned as a part of the Executive Office of the President to influence the policies of many agencies. CEQ can lead the effort to define for our people the American interest in better management of our own and the world's basic resources. Just as important, it

can and should take the lead in designing new policies and programs to achieve this result. Whenever we have a new administration, this becomes especially important for all major programs.

Originally, concern for global resource problems was only vaguely a part of CEQ's mandate. In fact, the National Environmental Policy Act speaks only briefly of CEQ's international responsibilities. However, during the administrations of Presidents Nixon and Ford, members of CEQ became increasingly concerned about international resource and environmental questions and their relation to our national welfare. It was on the base of these perceptions that during President Carter's administration, CEQ's international role came into sharper and, I believe, very appropriate focus. CEQ leaders realized that if they were to properly discharge their statutory functions they must increasingly concern themselves with the gathering and interpretation of global resource data, with the formulation of U.S. policy to deal with those problems, and with urging the President and other U.S. leaders to assume a leadership role in resource problems. The job is far from complete. Without meaning to derogate from CEQ's domestic responsibilities, I submit that CEQ has nothing it can do in the next four years of greater importance to our future than to get our Government on top of these global resource problems.

As this Committee will recall, CEQ, together with the State Department, was responsible for putting together The Global 2000 Report to the President and a companion piece, Global Futures: A Time to Act. Whatever weaknesses there are in the data base of these studies, they broke very important new ground in bringing to the fore not only some of the horrendous resource problems, but also what can and must be done to correct the situations they pinpointed.

This Administration must move decisively ahead with these studies. Happily, the Chairman-designate of the CEQ, Alan Hill, shares this view of the importance of CEQ's international responsibilities. In a recent interview, Mr. Hill said, in answer to a question about what was the most important en-

vironmental question facing this country:

> "As I see it, it is the (group of) issues raised by the Global 2000 Report . . what are we going to do to get ready for our future? It doesn't look too good. This is so not only just for our nation. After all, we all belong to one world. And, what somebody else does is going to impact on us as well. Addressing those problems is the most important thing we in CEQ have to do."

Mr. Hill's views are shared by others in the new administration. I have had the opportunity to discuss U.S. responsibilities for global resource questions with several high officials appointed by President Reagan to the Department of State and the Agency for International Development. I found that these officials recognize that there are serious resource problems which will not go away and which will, unless countered, negatively affect our national welfare. I found a willingness, indeed a determination, to act and not sit back and wring hands.

All of this would be somewhat more encouraging if it were not for the drastic cuts in CEQ's budget proposed by the Reagan Administration, cuts which your Committee is now considering. How can CEQ hope adequately to analyze global resource problems and advise the President on their implications, let alone carry out its statutory domestic responsibilities, with a staff reduced from 49 (17 of them permanent "temporaries") to 16 persons? It can't be done.

Two paliatives have been suggested. First, to farm out some of CEQ's work to other agencies. But, all of these agencies have had their staffs drastically cut, too. And, in the area of global resources, only the State Department, and perhaps the CIA, even theoretically have the potential to do the

the necessary analysis across the broad spectrum of questions and countries involved. In my experience, State is still too concerned with urgent but shorter run political, military, and economic problems to put the right perspective on and give high enough priority to longer-range resource issues.

The other suggested solution -- to rely more heavily on private scholarly institutions -- has more merit. Indeed, it will be essential for CEQ to enlist all of the outside expertise it can find. But, this will take more money for outside contracting than it appears CEQ will have. And, it will require more people inside CEQ to coordinate outside work and insure its relevance to what Congress and the President want.

What, exactly, am I suggesting that CEQ should attempt to do in the international sphere in the next four years? This is important for your Committee to consider if it is to pass on how large a budget CEQ is to have. I believe CEQ has at least three major tasks before it in the area of global resources. First, as the new Administration must do in all major areas of national concern, CEQ must review the data and conclusions of The Global 2000 Report and let the Executive Branch, the Congress, and the American people know that the basic thrust of three previous administrations' conclusions on the urgency of effective international action fits in well with President Reagan's priorities. More precisely, CEQ should, in a paper which should not long be delayed, articulate its own concept for the longer range restoration and management of global resources.

Once this is done, CEQ should address itself to the question of what the United States Government can and should do in this area, this year, next year, and for the immediate future. What is needed is a plan of action, more refined than that contained in Global Future and more reflective of the President's own philosophy. There is much that can be done -- even within our present financial limitations. I would be happy to address this question in some detail if you wish. Suffice to say here that it is urgent that such an action program be

coordinated throughout the Executive Branch so that its conclusions can be reflected as soon as possible in the budget and philosophy of the agencies which must take the necessary actions, CEQ not having action programs of its own. Closely related is the study of what can be done in more limited areas of resource management. In some cases, government-wide study is already so far advanced and so divorced of politics that action can move ahead without delay. For example, work on a U.S. program to combat tropical deforestation is so mature that it should be translated into action in the coming few months.

Third, and most importantly, CEQ should even now begin to attack the problem of how to create in our government the longer range capacity to measure global resource trends and how to project the impact of these trends on our own programs, particularly in the annual budget process. Very little of this kind has yet been done. In part, this is because we in this government simply do not yet think ten to twenty years ahead, except perhaps in defense planning where leadtime considerations for weapons systems require we do go with weapons systems. In part, also, this is because we lack the necessary data base to make such projections. We still do not even have refined concepts of how to put together such a data base, particularly for the areas which lie outside the market economy. Much theoretical and practical work remains to be done. For example, what agency is best situated to do this job? We still do not have clear ideas. And, once we have the data, how do we bring them to bear on our short range government planning -- for energy plans, for foreign aid, for agricultural plans, to cite a few of the most obvious.

Well, these are big, mind-busting tasks for CEQ,and I'm convinced the proposed budget is not big enough. Even these tasks alone will require a few more good people and more money, although in terms of our big military and social security or massive agricultural expenditures, they would be nothing, particularly when measured against their importance. What should Congress do

about them at this present session? I suggest two courses of action. First, Congress should, perhaps in your appropriation bill, express its concern about the lack of longer range planning in the area of global resources and make it clear to CEQ that the Congress places a high priority on continuing high quality work in this area. Second, I believe that your Committee should increase CEQ's budget, not necessarily to the level requested by the Carter Administration, but at least by fifty percent more than the Reagan Administration has requested. It should also authorize at least eight more positions, at least two of which should be earmarked for international functions. The impact of this increase on the overall budget will be little more than nominal. The decrease over the Carter budget, even when proposed restorations are made, will be quite in line with other cuts proposed by the Reagan Administration.

The single most important conclusion reached by The Global 2000 Report is that the very little time for effective action to stop the deterioration of our resources base remains. But, the job can be done -- and, at an acceptable cost -- if we have the courage to get to work now. CEQ should be put in a position to do a major part of this urgent task this year -- not sometime in the future when our global resource base will have disintegrated even further.

Mr. BLAKE. Thank you very much, Mr. Chairman, for the chance to talk with you today. I will depart a little bit from my testimony to tell you a little bit about who I am and what I am doing. I am a retired Ambassador, who after 30 years saw the light, and I have now been working on the problems of global resources because I believe this is going to be one of the chief limits that we are going to face very soon in our development, on our own welfare.

In my years in traveling around the world to various places, I became very aware of the enormous difficulties that we were having in our own policy, certainly the lives and quality of the lives of people everywhere, by deterioration of land for crop systems, deterioration of water, and deterioration of forests. I was impressed this morning, Mr. Chairman, in listening to the testimony of the other people here, how often they talked about two similar things: the fact that we do to a certain extent lack many of the basic things we need in life here in this country, and that we have to plan for their rational use.

I believe that it is time, it is very necessary that we launch ourselves as a Nation into some longer range considerations in planning for these very systems on which our lives and our welfare depend. I believe that CEQ has begun to play a role in this process, and has a very essential role to play about this in the future.

It seems clear to me that there is something wrong with our Nation and our government when we are not able to project into the process of budgeting and into the process of other types of planning that we have to do the same advance 5, 10, 15-year projections that we find in the Defense Department, for example, when they project for a weapons system; or good companies in the United States when they get involved in their future. There is no such process, and in fact there isn't even a data base there to support this type of work.

We just got started doing this this last year with the Global 2000 report, again to see some of the information which must be developed from the data which are needed for this process. It is my view that probably best of all the places in CEQ, you can start to go through to do three things. First, find a way to generate the data so we know where we stand on some of these really big, major problems hitting the world. At the end of this generation they are going to hit the world with serious blows of the kind which were equivalent to energy in the early seventies. Second, we have got to start to figure out what we can do about this here and to help do it in other countries, because what happens in any country on these big things impacts on us. Third, we have to begin to have a mechanism for cranking this kind of thinking into what we are doing in your work, in the budget process and in many of the things we are doing.

It is really quite amazing how little of this goes on. When I had my last job in the Department of State, which was Assistant Secretary for International Organizations, I tried to see if we could begin to get some of that worked in. We formed a Committee called the Year 2000 Committee, headed by Russell Train; headed also by Bob Anderson, the head of Atlantic Richfield; Cyrus Vance, the Secretary of State; Walter Cronkite; and a series of people. The Commit-

tee's purpose was to make people aware of the urgency of these problems.

It overrides almost everything you people are doing. I am really amazed at the wide variety of things you are dealing with, but everything I have heard this morning, advance planning, thinking ahead, knowing what your resources are, recognizing the limits of resources are what it is all about, and yet we are not into it yet.

I have made a couple of very simple suggestions down here about what should be done about that. CEQ is probably the best place because it is in the Executive Office of the President. If it is used properly by this President, and I hope it will be, then it is a place where you can get people to crank this kind of information into their planning, where you can get them to begin to take a better fix on it, and where they can begin to figure out how we are going to do a better job of this projecting.

You can't do it with the budget which the Reagan Administration proposed. It is my feeling that it was to go from 49 people to 16 people, was to cut the guts out of an organization right now at the time when at least this part of it is very essential.

I would like to see this Committee do two things: study in a very real way the nature of this problem, and in your legislative history of the appropriations bill tell them that you feel they should pay special attention to this problem, because if they don't, who is going to? I would like to see you restore about half of the money cut from CEQ to allow them to go ahead with this problem. Even if you did restore about half of what was cut—they had a 72 percent cut—they would still have a percentage cut which would be much smaller than you had in similar agencies right across the board. You would also have them have a chance to begin to address a problem which is urgent for all of us.

I think that is about all I want to say to you right now, Mr. Chairman. I haven't gone through the reasoning presented in my prepared statement, but perhaps you will have a chance to look at that later.

We are trying to talk all over the country. We are getting magazine articles written. We are having speeches made. Elliot Richardson is going to write an article for us for the New York Times magazine. We feel it is urgent to call attention of everybody to these, and I felt the hearing today, just in these few minutes I was here, everything I heard underlined the urgency of undertaking this type of approach right away. We shouldn't allow the small amount of money involved in the CEQ budget cut to interfere with that.

Thank you, Mr. Chairman.

Mr. SABO. Thank you for your excellent testimony. We have an awful time trying to plan ahead and look ahead.

Mr. BLAKE. Right.

Mr. SABO. I am not sure one may totally plan ahead, but it helps to have an overall plan——

Mr. BLAKE. That is right.

Mr. SABO. Assuming that one is aware of the context in the current situation.

Mr. BLAKE. We get scared by it, Mr. Chairman. We think it is so difficult, and therefore we don't try. In my experience when we

really do get the data, and begin to project, we see what we don't know and then we start filling in the blanks. This is a truly remarkable process, when you think that if, for example, on croplands, we go ahead at our present rate of loss of soil, within the next 20 years we probably won't be able to support our own people on the lands we have. These are frightening things. If you look at the projects of water, there are many things that can be done, and if you think the situation is bad in this country, you should look at the situation in some other countries. Look at what is happening in Haiti today. Nothing is done, and we are getting the incoming flood of people. Haiti has become an ecological disaster area. China was at one time, but by small steps it is beginning to pull back from that. Do we have to go farther down the line before we really wake up and have to deal with basket cases?

Mr. SABO. Mr. Green.

Mr. GREEN. I guess the problem I have with thrusting more funds into CEQ is that it is part of the Executive Office of the President. If it does the kind of things it is to be done, you have to have confidence. If it isn't set up the way it is wanted then it can't do the job. Why give it more money?

Mr. BLAKE. I think, Mr. Chairman, that part of the cuts which were made in the CEQ came from OMB's sort of across-the-board work. Now I have personally talked with the Vice President about this. I have talked with people in OMB. I have talked with the new Director of CEQ. I have talked with the Secretary of State about these things. He personally is interested, and I believe that what was done in the very first days does not accurately reflect what the President personally feels. Some of the people close to the President have indicated that they are very anxious for the new head, Mr. Alan Hill, to go ahead on these lines, and I believe that we must make it possible for them to do it.

Mr. GREEN. I am sure that the Subcommittee would entertain further requests from the President on this issue, but I really think it is sort of futile if this is what the President has requested for his office. It would be hard to say, no, you can't run your office the way you want.

Mr. BLAKE. Who is going to do it then, Mr. Green? Isn't it essential that we get going on it? Is there another agency that can do it?

Mr. GREEN. Again, I don't think this one can do it if the President doesn't want it structured that way. That is my problem. Yes, there are other agencies that can do it. Obviously the CIA does give us resource estimates and it has made projections on critical resources, particularly in the oil and energy field.

Mr. SABO. Thank you. We appreciate your testimony.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WITNESS

DR. FREDERICK B. HENDERSON, III, PRESIDENT, THE GEOSAT COMMITTEE, INC.

Mr. SABO. Dr. Frederick Henderson, President of GEOSAT.

Dr. Henderson, we will include your entire statement in the record. If you will summarize, we would appreciate it.

[The statement follows:]

STATEMENT OF DR. FREDERICK B. HENDERSON, III

PRESIDENT OF THE GEOSAT COMMITTEE, INC.

AT THE HEARINGS HELD BY

THE HOUSE APPROPRIATIONS COMMITTEE FOR HUD AND OTHER INDEPENDENT AGENCIES

ON THE NASA BUDGET APPROPRIATIONS FOR FISCAL YEAR 1982

May 8, 1981

Mr. Chairman, I am pleased and appreciative of the opportunity to testify before this Subcommittee on behalf of The Geosat Committee on the issues related to the appropriation of funds for the NASA 1982 budget as they apply to global satellite remote sensing programs, their applications to this country's growing dependence on global sources for strategic mineral and energy resources, and the future of the NASA/NOAA satellite remote sensing systems. In 1978 we had the honor of testifying before your Committee in support of appropriations for a NASA STEREOSAT program, a system which would have assisted the United States in global exploration and development of strategic energy and mineral resources. For reasons to lengthy to discuss here, STEREOSAT remains an unfunded program, either within the 1982 NASA budget or within the private sector.

During the past four years, the Geosat Committee has worked with NASA/JPL on a number of R&D test site studies to support satellite remote sensing for geological applications. These studies have demonstrated high potential value for the Landsat D/Thematic Mapper system for improved rock, soil and vegetation discrimination and geological mapping in general. Since 1978, Geosat has encouraged NASA to include some realistic funding for basic research in this area. The direct result of these efforts by Geosat and NASA was formulated in a $10M program called the Geological Applications Program (GAP) and included in the final Carter 1982 budget; subsequently, the new Reagan Administration saw fit to cut this important R&D step towards geological applications for future satellite systems. In a period where the U.S. is confronted with recognizing its growing dependence on foreign sources for strategic energy and mineral resources, we feel that this cut of the GAP is a serious mistake. Apparently, the House Authorization Subcommittee for Space (Congressman Ronnie Flippo, Chairman) and the full House Committee on Science and Technology (Congressman Don Fuqua, Chairman) agreed with our view and have recently reinstated the $10M into the NASA 1982 budget. The Geosat Committee strongly supports this $10M reinstatement for the GAP program. We urge, in the best interests of this country in development of satellite remote sensing techniques to assist us in dealing with U.S. growing energy and mineral dependency on non-U.S. resources, that your committee will appropriate this $10M for the GAP program in the 1982 NASA budget.

THE GEOSAT COMMITTEE RECOMMENDATIONS

The Geosat Committee, Inc., is sponsored by approximately 100 U.S. and non-U.S. international oil, gas, mineral and engineering geological companies who produce more than half of this nation's non-renewable energy and mineral resources. This Committee is a unique industrial initiative to present to NASA and all other pertinent U.S. and non-U.S. governmental entities the considered professional geological recommendations of the nation's largest single industrial group of users of satellite imaging data. Since 1976, The Geosat Committee has worked diligently with various branches of NASA, the United States Geological Survey, France's C.N.E.S., Japan's NASDA and others in order to determine what supplemental remote sensing capabilities which when added to present and planned satellite remote sensing systems including Landsat would optimize the combined systems for geological remote sensing from space.

The Geosat Committee recognizes the advantages of remote sensing from satellites include (1) greater synoptic perspective, (2) efficient access to global coverage, (3) improved efficiency of other geophysical and geological techniques when combined with satellite remote sensing, and (4) improved efficiency of geological mapping on a regional scale.

The Geosat Committee strongly urges the addition of the following satellite remote sensing capabilities to the current Landsat program. These include (1) higher resolution (to 10M IFOV), (2) digital Landsat mergeable stereoscopic data, (3) rock and soil spectual data (notably the 1.6 and 2.2 micron bands of the Landsat D Thematic Mapper, and (4) synthetic apeture radar (SAR) which offers the advantage of providing a cloud-free topographic and geomorphological coverage of the earth.

Of perhaps greatest interest to the Geosat Committee in terms of new remote sensing information is the development of the Landsat D/ Thematic Mapper. The Thematic Mapper extends the spectral vision of the Landsat system out to the 2.5 micron region (.4 - 2.5 microns) which significantly expands this remote sensing system far beyond the range of the human eye. The Thematic Mapper will allow us to spectrally discriminate clay minerals as well as phosphates, sulfates, carbonates and some other oxygen bonded anionic molecules; thus chemicals, thus minerals, thus rock and soils. This increase in the capability to discriminate rocks and soils and yet to be determined vegetative spectral responses increases the value of the Landsat (MSS, TM) systems by a factor of at least two or more. It allows the system to discriminate, among other things, clay alteration zones associated with basic mineral deposits, (See appendix), clay content of basic sedimentary rocks such as shales, low grade metamorphic rocks, clay content and type in soils and other sedimentary, metamorphic and alteration rock/soil types.

Other systems worthy of future basic R&D by NASA include solid state multi-line array multi-spectral and thematic mapper systems, the Fraunhoffer Line Discriminator system under study by the U.S. Geological Survey, the airborne Laser Fluoroscope system being flown by the Canadian Centre for Remote Sensing (CCRS), and the development of multi-spectral thermal IR systems. Also, the proposed 1982 NASA budget item, the

Geological Applications Program (GAP), is strongly supported by the Geosat Committee. We believe that the non-renewable resource studies of NASA have been disproportionately funded with respect to the renewable resource R&D in the past. The GAP would in part alleviate this inequity and would among other research allow the continuation of the Phase B portion of the highly successful Phase A portion of the joint Geosat-NASA/JPL Test Case Program. An example of the results of the Test Case Program (the Silver Bell, Arizona porphyry copper deposit of ASARCO, Inc.) demonstrating the inhanced mapping capability of the Landsat D/Thematic Mapper is appended. Also appended is a summary of a prepared industry evaluation of a prototype Airborne Thematic Mapper (ATM) system in support of the development of the satellite Thematic Mapper system.

NASA'S GEOLOGICAL APPLICATIONS PROGRAM (GAP)

Since 1976, the Geosat Committee has been trying to get government to recognize the critical national need for geoscience programs to address longer-term, high-risk, but potentially high-payoff research and technology development that cannot be effectively undertaken by the private sector. The impact of NASA research in the fundamental and applied aspects of geological remote sensing is now just becoming apparent.

The Geosat Committee recognized a lack of geological expertise and a need for coherent geologically oriented programs within NASA and was extremely pleased, when in 1978 the Office of Space and Terrestrial Applications reorganized, that a Non-Renewable Resources Branch was formed and staffed with first-rate geoscientists. In response to many requests, including those from the Geosat Committee, NASA has recognized that their relative R&D expenditures for non-renewable resources (energy and minerals) has been woefully low compared to renewable resources (agriculture, timber, etc.). Accordingly, an excellent long term Geological Applications Program (GAP), description appended, was proposed and included in the 1982 Carter NASA budget at the $10 million level, although we feel the program is still under funded with a runout of $50 million for five years.

The Geosat Committee strongly supports the GAP program because it is a fundamental and applied research program which leads to efficient definition of the mission requirements for spaceborne systems that are badly needed by both the exploration industry and government for global resource evaluation and development. We were quite disappointed when the GAP program was removed from the new Administration's FY 1982 budget. Geosat recognizes the need for reducing government spending, but we are not certain the new Administration had enough time to fully understand the critical importance of the GAP initiative to our economy long term. We were, again, pleased to learn that GAP was restored to NASA's 1982 budget by the House Subcommittee on Space Science and Applications and by the full Committee on Science and Technology.

Mr. Chairman, we are sensitive to the concerns of the Congress and the new Administration regarding the appropriate role of government sponsored research in areas of potential commercial payoff. Clearly, the results of a NASA research program in geological applications will contribute to the effectiveness of the U.S. mineral and energy exploration industry. However, this should be viewed as a reason for pressing on with the development of the GAP program rather than a reason for curtailing it. The type of research being proposed by NASA cannot be explored by the private sector in the near term. It involves development and testing advanced aerospace techniques which are not yet routinely used by the energy and minerals resource industries. The GAP program represents exactly the type of advanced research program that is most appropriately sponsored by the public sector. It has the potential of making a major contribution to both private and public sector capabilities for resource evaluation and development.

SOME OTHER RESEARCH AND DEVELOPMENT ASPECTS OF THE 1982 NASA BUDGET OF CONCERN TO THE GEOSAT COMMITTEE

Technology Transfer

The Geosat Committee recognizes the great importance of transfering the developing satellite technologies to the end user community as a whole. Within the geological community, who are major users of satellite remotely sensed data, the actual end users are the resource companies, government geologists and academia. Accordingly, the Geosat Committee supports the increase of $9M for Technology Transfer Activities in the 1982 NASA budget as recommended by the House Subcommittee on Space Science and Applications and the House Committee on Science and Technology on 6 April 1981.

Ground Segment

The geoscientists that work with space imagery are deeply concerned at the low level of effort put forth on the ground based systems to record, process, and archive data returned from space so that it can be utilized by all communities.

Whereas 1982 budget support of the Landsat 1, 2, 3 and D ground segment systems are being transferred to NOAA and are under the current jurisdiction of the NOAA budget, the Geosat Committee strongly urges that the government budget process involving NASA and NOAA operational Landsat transfer process recognize the shortsightedness of the 1982 budget cuts in the proposed funding of the upgrading of the Goddard ground station receiving and data handling system to support the Landsat D and D/Thematic Mapper systems beginning in 1982.

International Aspects of Satellite Remote Sensing and R&D

The United States faces increased competition from the developing international satellite remote sensing systems for the 1980's. However, this creates increased opportunities for international cooperation in the best interests of all.

From a U.S. perspective, it is important, however, to recognize that most of the original 1976 Geosat Committee requirements will be met by the French and Japanese systems during the 1980's. IF the Landsat system is preserved during the 1980's, as envisioned in the Carter 1982 budget, then the U.S. will contribute strongly to the international geological community in the areas of rock/soil spectral bands and better resolution (30m pixels) and good global coverage. If as proposed by the Reagan 1982 budget no U.S. commitment to continuity of operational earth resources observation satellite systems (i.e., Landsat D and Follow-on) is planned past Landsat D', then the United States risks losing its technology leadership in satellite remote sensing and its place amongst contributing governments to the development of international cooperative complimentary and compatible civilian remote sensing systems during the 1980's. (See chart Landsat Program 1982-1992.)

The current likely sources of the needs of the industrial geological community are shown on the "Geosat Requirements" chart (appended). This chart demonstrates that most of the Geosat requirements will be provided during the 1980's by the French SPOT (high resolution, digital stereo, global coverage, MLA/MSS) and the Japanese MOS (microwave, global coverage, MLA/MSS) and ERS (digital stereo, global coverage, SAR, MLA/MSS/TM) systems.

It is abundantly clear to the Geosat Committee that these systems require supporting basic R&D such as the NASA Geologic Applications Program for future systems development.

It is equally clear that the French and Japanese satellite remote sensing systems have benefited from and fully value the U.S. R&D already conducted supporting Landsat type technology.

The Geosat Committee strongly encourages continued U.S. support of basic R&D such as the GAP program in order to develop, maintain and benefit from a continuing evolution of civilian satellite remote sensing system of the future.

SUMMARY STATEMENT

In support of GAP and other basic R&D program of NASA let me paraphrase portions of a recent speech by Senator John Glen before the 18th Space Congress, Cocoa Beach Florida, 29 April 1981.

> "Research, and the technology we developed to exploit the fruits of that research, made America the wealtiest, most powerful and most productive nation on Earth."

"Global competition in Research and Development. . .may be the most compelling challenge of our age. History has shown that missing or retreating from such challenges almost inevitably leads to a loss of national eminence."

"The loss of our once commanding lead in space should both embarass and frighten us. We should be embarrassed because we are consciously choosing to default rather than to compete. And we should be frightened because that default could some day prove literally fatal."

Silver Bell Test Site: NASA/GEOSAT Project

The accompanying picture of the Silver Bell porphyry copper test site was produced from data obtained by NASA's NS-001 multispectral scanner. This instrument was designed to have wavelength bands similar to those of the Thematic Mapper, to be flown on board the Landat-D satellite.

The image was computer processed to bring out those areas which have iron-oxide and clay minerals present at the surface. These areas are displayed in yellow. Overlayed on the image is an alteration map based on field mapping depicting the distribution of the potassic and phyllic zones associated with the ore deposits. Additional NS-001 wavelength bands sensitive to the presence of hydrous minerals permit the discrimination of the clay-rich alteration zones. The high correlation of the zones with the yellow color is evidence of the Thematic Mapper's potential for locating these types of alteration. This distinction could not be made with other types of remote sensing data examined.

NASA OFFICE OF SPACE AND TERRESTRIAL APPLICATIONS

Geologic Applications Program (GAP)

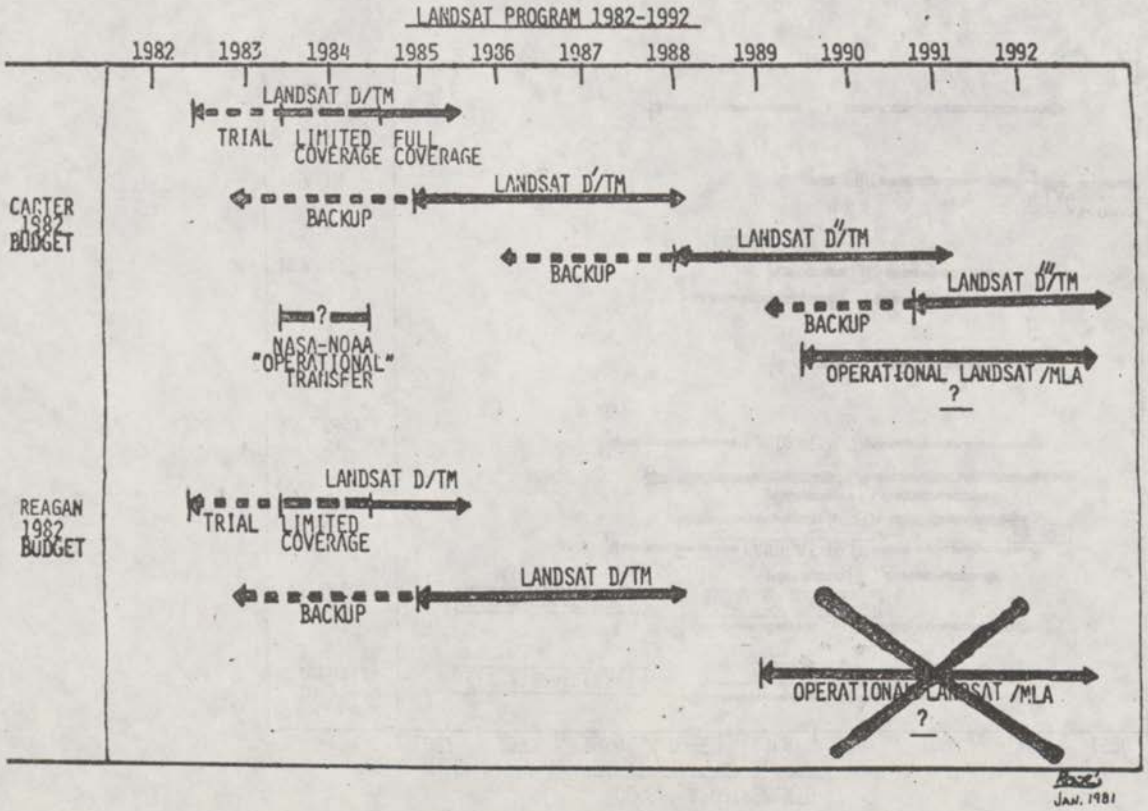
NASA's Geological Applications Program has evolved in response to a developing national concern that the problem of availability of critical mineral and energy commodities to this country has become international in scope. Global information is required to evaluate resource alternatives and to formulate policy. In recognition of these needs for global resource information, foreign countries are developing their own satellite systems which are optimized for mineral and energy assessment, exploration and development.

NASA's Geological Applications Program (GAP) is designed to determine the utility and optimize the development of space techniques with respect to national needs for non-renewable resources information. GAP builds on research in spaceborne geologic mapping techniques that has been conducted by NASA for the past 15 years. GAP expands this research to support the development of geological models which are required for effective use of space acquired data in global resource assessment, exploration and development. GAP tests applicability of the techniques and models to non-renewable resources investigations in different geographic environments with Government agencies and industry.

In FY 1982 GAP will initiate a series of test case studies jointly with the U.S. Geological Survey and industry to determine the remote sensing attributes of critical resource commodities identified by an interagency coordinating committee. A mineralogenic study will be conducted with both academic and industry geologists in FY 82 to develop mineralization models for an active volcanic environment in the tropics (the Caribbean). A large area minerals assessment experiment will be initiated in FY 82 with a consortium of Federal, State, and industry users in Alaska.

The NASA Geologic Applications Program will be closely coordinated with the National Science Foundation which supports basic geological research, and the U.S. Geological Survey which is responsible for resource assessment in the United States. In the past, industry has provided about 5.5 million dollars of support to the joint NASA/Geosat test case study and NASA has supplied about 1.7 million dollars from the Non-Renewable Resources Program. Industry participation will increase under GAP and the proportions will remain about the same for the area concerned with geologic mapping techniques. The government will benefit from industry participation because the utility of spaceborne techniques for resource exploration will be evaluated by a large body of highly skilled practitioners. Furthermore, there will be a two-way transfer of technology between users of spaceborne data and developers of spaceborne data collection systems.

NASA feels that the Geologic Applications Program will result in an increase in economic productivity of the country through more efficient discovery of critical resources and more efficient evaluation of the environmental and engineering factors of resource development. Secondly, and perhaps most importantly, this NASA program will allow our nation to develop an improved methodology for evaluating the availability of critical resource commodities on an international scale.


LANDSAT PROGRAM 1982-1992
1982
1983
1984
1985
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1988
1989
1990
1991
1992
CARTER 1982 BUDGET
LANDSAT D/TM
TRIAL
LIMITED COVERAGE
FULL COVERAGE
BACKUP
LANDSAT D'/TM
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NASA-NOAA "OPERATIONAL" TRANSFER
OPERATIONAL LANDSAT /MLA
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REAGAN 1982 BUDGET
LANDSAT D/TM
TRIAL
LIMITED COVERAGE
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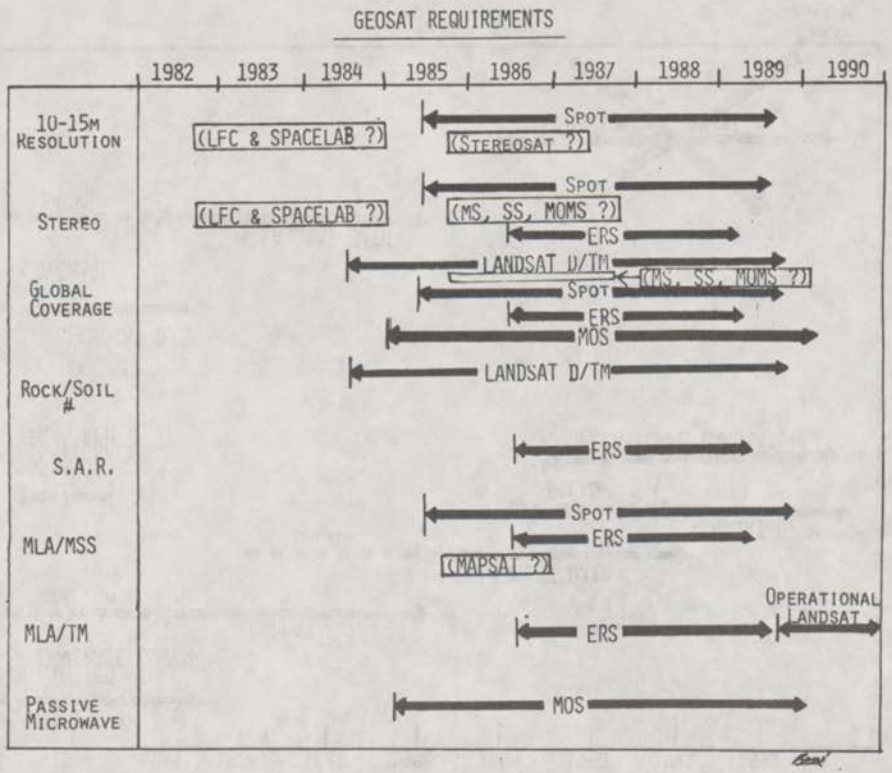
GEOSAT REQUIREMENTS
1982
1983
1984
1985
1986
1987
1988
1989
1990
10-15M RESOLUTION
(LFC & SPACELAB ?)
SPOT
(STEREOSAT ?)
STEREO
(LFC & SPACELAB ?)
SPOT
(MS, SS, MOMS ?)
ERS
GLOBAL COVERAGE
LANDSAT D/TM
(MS, SS, MOMS ?)
SPOT
ERS
MOS
ROCK/SOIL #
LANDSAT D/TM
S.A.R.
ERS
MLA/MSS
SPOT
ERS
(MAPSAT ?)
MLA/TM
OPERATIONAL LANDSAT
ERS
PASSIVE MICROWAVE
MOS

The Geosat Committee, Inc.

April 24, 1981

TO: *Members of The Geosat Committee*

FROM: *Frederick B. Henderson, III, President*

RE: *Summary of First Airborne Thematic Mapper Proposal Meeting, April 14, 1981; Superior Oil Company Conference Rooms, Houston*

The organizational meeting of the Geosat/Daedalus Airborne Thematic Mapper (ATM) Group Shoot Proposal had in attendence 35 representatives from 17 resource companies and 5 service companies.

After President Henderson reviewed the objectives, proposed ground rules and requirements for participation, it was generally agreed that Daedalus and participating Geosat members would come to a written agreement to conduct the Group Shoot under the guidance of Daedalus Enterprises. It was further agreed that 1) only members of The Geosat Committee would be participants, and 2) each member of the final group, to be determined by 15 July, will pay an equal share of the in cost of the Group Shoot. This amount will be determined between Daedalus and the participants with Geosat acting as coordinator. A proposed time frame schedule (listed below) was presented and agreed upon.

Peter Pleitner and Thomas Ory from Daedalus Enterprises described the technical operations of the Group Shoot. In brief, the proposed model calls for the Daedalus prototype TM to be mounted and flown in a Lear jet over a 14 day period in October 1981. Daedalus will operate this mission on a no-profit basis; the base costs to them, including CCTs and the 2-week flying time, will be approximately $500,000. This amount will be split equally between the participants. On conclusion of the Group Shoot, Daedalus will return the ATM to their laboratories for any modifications required. Daedalus will provide and maintain the High Density Digital Tapes (HDDTs), the use of which will belong to the Group Shoot participants; provide raw CCTs with geometric preprocessing to all Group Shoot members. It was agreed that after a proprietary period of time, these tapes will be made available to other Geosat members at a time and cost to be determined by the Group Shoot participants. The rights to these data will belong to the Group Shoot members and/or Geosat or both (this will be determined by the participants at a later date).

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During the 14 day flight period, Daedalus proposes to obtain an equivalent of 1 hour a day track time for 7 days which, at 40,000 feet, would produce approximately 50 CCTs covering approximately 50,000 square miles over sites to be selected by the Group Shoot participants.

The Geosat member service companies who observed the meeting were invited to offer their services independently to those present and to possible future Group Shoot members who would require systems in processing and interpreting the CCTs. A list of these Geosat service companies will be made available on request.

After further discussion of the cost considerations and the general model, 17 probable participants of the Geosat/Daedalus ATM Group Shoot Proposal identified themselves as intending to follow the time frame schedule and to become participants (list appended). These probable participants then selected a list of potential site areas from which the ultimate sites to be covered will be chosen (list appended).

The final item of business was to present the time frame schedule, which was agreed upon in principle by the 17 probable participants.

- *May 18, Denver: Second ATM proposal meeting (meeting notice enclosed); probable participants to attend with a signed Letter of Intent and a designated management level representative. Any issues, such as ground rules, that need to be negotiated prior to committing formally to the Group Shoot may be brought to this meeting. Companies with the Letter of Intent will review site areas in order to reduce the total number of sites to a manageable level; the list of potential sites will be distributed May 22. It was also proposed that a draft agreement with Daedalus and Group Shoot participants and/or Geosat be completed by 28 May.*

- *June 3, San Francisco: Third ATM proposal meeting to be held in conjunction with the AAPG Conference and the Geosat Board of Directors meeting June 4; all participants will provide a Letter of Committment and a deposit of a percentage yet to be determined of the earnest money, payment in full by 15 July. On the 14 day proposal, this amounts to 60% ($300,000) of the total $500,000 cost for the Group Shoot. Depending on the wishes of the final number of participants, the 14 day flight time could be extended to include more sites at some yet-to-be-specified increase in cost. It should be noted that the $300,000 will be covered by a Performance Bond and that the remaining $200,000 is not due until delivery of the tapes to all participants at the same time, on or about the end of the year.*

- *June 30: This is the final date for any additional participants to be admitted to the Group Shoot upon agreement to pay their share. At this time, Geosat will notify the participants of the final membership and of the total pro rata share of the $300,000 earnest money. This amount is due 15 July.*

Any Geosat members who are interested in participating in the Geosat/Daedalus ATM Group Shoot proposal who did not attend the organizational meeting in Houston are urged to contact this office; 415/981-6265, prior to the May 18 meeting in Denver.

PROBABLE PARTICIPANTS April 14, 1981	SELECTED SITES April 14, 1981	VOTES
AMAX EXPLORATION	Nevada Gold Belt	7
AMOCO	Delaware Basin	5
ANSCHUTZ	NW Nevada	4
CHEVRON	Texas Overthrust	4
CONOCO	Williston Basin	4
EXXON	Overthrust Belt	4
GEOSPECTRA	NW Idaho/Challis	3
GRACE PETROLEUM	Paradox San Juan	2
GULF R&D	Sierra Nevada Gold	2
MOBIL	Colorado Moly	2
PHILLIPS	California/Nevada Border	2
ST. JOE	Anadarco	1
SUNMARK EXPLORATION	North Coast Range/Calif.	1
SUPERIOR OIL	Central Wyoming	1
TEXASGULF	NW Arizona	1
UNION OIL	S Cent. Washington/N Cent Oregon	1
UTAH INTERNATIONAL	S Texas	1
	W Cent. New Mexico	1
	Michegan Basin	1

12/5/80

TELEGRAMS SENT TO:

George Lowe
Office of The President-Elect
1727 H St.
Washington, DC 20270
202-252-6848

Calvin Collier
Reagan Transition Team
US DEPARTMENT OF COMMERCE
Washington, DC 20230
202-377-4260

Dr. Simon Ramo
TRW, Inc.
1 Space Park
Redondo Beach, CA 90278
213-536-1005

Dr. E. Teller
The Hoover Institute
Stanford University
Stanford, CA 94305
415-497-0601

cc: Dick Burris
Ron Cormick

The Geosat Committee which represents 100 international energy, mineral and engineering companies has worked with NASA/NOAA to improve satellite remote sensing for geology during the last Administration. We strongly urge your consideration of the following points during your transition task.

1. Satellite remote sensing for non-renewable and renewable resources for practical use of the space program be given high priority and suitable funding/personnel.

2. High priority be given to establishing a charter responsiblity for developing global exploration technology such as satellite systems to improve resource acquisition within a specific Federal department/agency.

3. Government committment to satellite data continuity be reaffirmed.

4. An operational land observation satellite system be given high priority with the earliest possible private sector involvement.

5. A meaningful non-Federal Advisory Board for end user input to NASA/NOAA be created.

6. Increase international cooperation to optimize compatible remote sensing satellite and ground segment systems under the Open Skies policy.

7. Efforts be continued to evaluate the potential value of reclassifying some government satellite derived data for civilian use.

Frederick B. Henderson, III, Ph.D.
President, The Geosat Committee

1981 BOARD OF DIRECTORS

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THE GEOSAT COMMITTEE, INC.

1977-1981 SUPPORT

One of the ways in which corporations may participate in Geosat is by contributing financially each calendar year, thereby becoming voting Corporate Members of the Committee. These voting Corporate Members shall have access to all information and communications generated by the Committee and the open Board Meetings, held 5 times a year. The following are past and present Corporate Members:

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TGA
TRW
UNION CARBIDE
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UNION OIL/HOLY CORP
US BORAX
US GYPSUM
UTAH INTERNATIONAL
VALERIUS ROYALTY
VENTURES WEST
WESTERN MINING

Dr. HENDERSON. Mr. Chairman, I am pleased to have the opportunity to talk to you briefly on the 1982 NASA budget, in particular as it applies to some of the basic R&D items which have been both put into the 1982 Carter budget, removed in the new Administration, and then at least in the authorization side of the House been reimplanted, in particular, a program called the Geological Applications Program.

In the interest of time, I would like to submit some additional material with this testimony.

Mr. SABO. We will insert it in the record.

Dr. HENDERSON. During the last four years, the GEOSAT Committee, which is about 100 oil and gas, mining and engineering companies working with NASA and JPL, have done a series of test case site studies on some of our properties with satellite remote sensing type technology, and supported in part by the Geological Applications Program or the forerunner which is now called the Geological Applications Program.

In this program we have been able to examine what is coming down the road in terms particularly of the thematic map and we do want to comment on that particular and specific item. In this case, the continuation of what we think is a very important program, namely, this joint test case program with NASA and JPL—which is, by the way, an extremely unique one for industry to be involved in, a very large scale effort—will be continued along as part of the GAP program. Therefore, we are very much interested in supporting that item in its reinstallment into the NASA 1982 budget.

We have had the opportunity to testify before you on Stereosat and some other things, and we have discussed the same basic kinds of requirements to be added to the Landsat program to help professional geologists do their job worldwide to explore for diminishing energy and mineral resources of great importance to our own economy. These primary additions to the Landsat program, and I emphasize the word addition, are increased resolution, titanium digital Landsat mergeable stereoscopic data, rock and soil spectual data. The 1.6 and 2.2 microbands of the Landsat thematic mapper and synthetic apeture radar.

The most exciting new information to come out of this test case program does support the justification of the two new bands on Landsat D. It expands the ability of the human eye to discriminate chemical minerals in rocks and soils, and vegetation patterns—we are not yet fully aware of what they mean—by several factors over what we can see with the current Landsat system.

There are other systems and technologies being worked on which I won't go into here that are included in my testimony and part of the GAP program which we also support as future potential sensors for the space program.

I apologize for the quality of the photograph, and I will be glad to provide you with better examples on one of our copper sites. To simplify the explanation of it, in 30 seconds of night time of a simulator of the thematic mapper using all six bands of thematic mapper D, including importantly the new bands of 1.6 and 2.2 microns where we can see clays. For the first time, we can discriminate with this system all of the alteration of clay in iron oxide

associated with a major copper deposit in this particular ideal case. That is in Southeast Arizona.

The important point—although not well shown in this poor Xerox copy—is the alteration map here which took ASARCO thirty years of field mapping, yet 30 seconds with this airborne system. It is an ideal case. Everything is not going to be that simple to use. In an ideal situation we can really discriminate what we are looking for which you can't see with the human eye.

Supporting this kind of technology and our own particular input to it, I want to emphasize that it is important for the government to support some forms of what may simply be called applications type of R&D, but it is important to understand from our perspective that NASA should be developed in applications of this type for high risk with potentially high payoff research and development technology which can't effectively be taken over by the private sector, at least not at this time.

We do not have access to the aerospace systems, but we do have the problems that these systems can address and working with NASA and supporting programs like the GAP program, we would like to see these things continued.

In terms of line items, in the past NASA has been woefully underfunded in terms of non-renewable resource vis-a-vis renewable resources, agriculture, timber and so on. We would like to see this altered a bit with more emphasis being put on non-renewable resources, and GAP is the first step in that direction.

A couple of items beyond GAP. The specific item we are concerned with in our testimony today and the 1982 budget is comments on technology transfer. This I believe was cut out in the Reagan Administration budget cuts, but has been reinstituted in the House and Senate authorization hearings this week. We encourage that as the government is interested in the private sector investment development in the programs in the future, we need to transfer this technology out to develop the market that the private sector can use to develop our investment in this area.

Another issue, perhaps not directly in the 1982 NASA budget but somewhere caught up or dropped between the cracks in the shift between NASA to the NOAA operational system and their budgets this year, is the decrease in (I believe) the NOAA budget of the money that was to upgrade the Goddard Space system to handle the ground segment for Landsat D. I think this is certainly penny-wise and very pound-foolish.

Just two final comments, if you can refer to two diagrams I want to comment on. I think you are all aware of the comparison of the Carter budget which promised continuity under PD 54 of operational remote sensing satellite systems, and that was provided for Landsat D with the thematic mapper systems and also the starting operational mobile system. The Reagan budget cuts out the operational mode of this thing, it is so terminated in the budget statement, dropping out the third and fourth D thematic mapping systems. At this time, there is no intent to build a U.S. operational solid state earth remote sensing satellite system in the civilian community.

If you look at the next chart I will show you why we are concerned about that decision. Depending on what can happen in

terms of supplying that data perhaps in the private sector, perhaps it can be solved. I don't have that answer today, but if you look on the left of this chart you will see when the GEOSAT Committee got organized the top five were basic recommendations to add to Landsat to make the geology job more effective worldwide, higher resolution, stereoscopic visual data, rock bands, soil bands, synthetic apeture radar.

I am sorry that this chart is not clear. However, you will notice high resolution by the print systems, stereo coverage first presented by the French, Japanese and U.S. systems, Landsat D, SPOT, the two Japanese systems, earth satellite and MOS will provide global coverage, but again the only spectral bands will be by the Landsat D program, cut in half here by the Reagan Administration, and also the first synthetic apeture radar civilian worldwide system will be on this earth satellite provided by Japan in 1987.

It is clear to me or clear to the GEOSAT Committee, that certainly the Japanese and French have benefited and we will, too, if the U.S. is not going to put it up by our own basic R&D that went into supporting the systems. We just simply would like to encourage again that your Committee consider appropriating the $10 million authorized for the GAP program, and to be aware of these other problems that are developing with R&D.

If I may, I would just like to quote the last couple of paragraphs of Senator Glenn's speech to the 18th Space Congress last week in Cocoa Beach.

> Research, and the technology we developed to exploit the fruits of that research, made America the wealthiest, most powerful and most productive nation on earth.
>
> Global competition in research and development . . . may be the most compelling challenge of our age. History has shown that missing or retreating from such challenges almost inevitably leads to a loss of national eminence.
>
> The loss of our once commanding lead in space should both embarrass and frighten us. We should be embarrassed because we are consciously choosing to default rather than to compete. And we should be frightened because that default could some day prove literally fatal.

I think if you will examine this chart in detail it suggests that is at least a possibility. Thank you.

Mr. SABO. Thank you.

About three years ago we added $1.5 million for a Stereosat camera on your recommendations. Whatever happened to that money?

Dr. HENDERSON. It got down to $500,000 by the time we got through Senator Proxmire's Committee. That money was put into another year's study. We worked with the government. If you recall, at that time it didn't really meet the caryographic criteria. It was not designed to do that—it was designed to help geological interpretation. We still think it was a great crime we didn't see that built, because it would have been automatic mapping worldwide for one to 100,000 scale which doesn't exist, for everybody's benefit.

In that study, which was in part supported by the moneys appropriated here, we finally designed what I call a stereoset to design which was bigger, better, and met most of the Federal departments requirements but still wasn't the automatic high stable requirement for the topographic survey, so it is not in this budget. We don't know where it is going. We are still pushing for steroscopic

coverage. The French system will give us good data, but nowhere near as good as if we had the other system which technically was better.

Mr. GREEN. Given the expense of all this space activity and budget constraints that we are under, don't we have to proceed in a cooperative way with other countries that are willing to put resources into this? Can we really do it all ourselves and be competitive across the board?

Dr. HENDERSON. I couldn't agree with you more, Congressman. We see this as a plus and a minus depending on what happens. It is a minus if the U.S. drops out as per this. This is my opinion, but I think most would agree with my reasoning.

If we go this route and simply drop out as a public system, that takes one thing away from the private sector investment and maybe to companies providing some of this data as U.S. entry so to speak on the worldwide scene.

Last year prior to these budget cuts, and this different scenario which does not commit the U.S. Federal government to continuity data, NASA, the Japanese NASDA and CNES in France began a series of meetings starting a year ago leading toward looking at just what you are saying, the expensive systems, but share the ground segment, let's share the electromagnetic spectrum and not all build exactly the same systems and let's make sure everybody's data works in everybody's computer. That is a logical, intelligent way for the world community to go, if you are going to keep an open sky access to this kind of data. Certainly, we in the geological community would like to see that happen.

My concern, our executive statement (coming out in June from my Board, which will hopefully address this issue), is that if there is no U.S. supply, the private sector cannot, does not, or is not able for investment reasons or whatever to pick up that load, that with the United States withdrawing in the mid-eighties from such cooperative efforts, there is nothing to prevent the French and Japanese to be more restrictive with their data, that is use it themselves first.

We don't think they would do that. They are not interested in doing that now as long as the United States is a cooperating participating member in such worldwide cooperation. What they will do if we don't cooperate, I don't know. It is a risk we take, I hope not one that would evolve.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. SABO. Thank you for your excellent testimony.

Dr. HENDERSON. Thank you, sir.

[CLERK'S NOTE.—Since the photograph will not copy well, the original is on file with the Committee.]

Environmental Protection Agency

WITNESS

TOBIAS ANTHONY, DIRECTOR, BUSINESS DEVELOPMENT AND WASHINGTON AFFAIRS, RESEARCH-COTTRELL

Mr. Sabo. Mr. Tobias Anthony, Director, Business Development and Washington Affairs, Research-Cottrell.

Mr. Anthony, we will insert your entire statement in the record. If you would summarize, we would appreciate it.

[The statement follows:]

Mr. Chairman and members of the Committee. My name is Tobias Anthony, Director of Business Development and Washington Affairs for Research-Cottrell, the parent organization of Metcalf & Eddy. Mr. Peter Gianacakes, President of Metcalf & Eddy was to have joined me today, but had to travel to Europe.

The subject I will address today is the EPA's construction grants program. Metcalf & Eddy has been a pioneer in designing waste-water treatment plants for over seventy (70) years, both domestically and overseas. With more then 1,000 employees located in thirteen domestic offices and five project offices abroad, Metcalf & Eddy provides engineering services in every state and in many parts of the world.

I should like to address two subjects. One is the condition of the construction grants program as it affects the consulting engineering profession and the other is recommendations for a "new direction" towards reforming the program.

Condition of Construction Grants Program

It now takes 8-10 years to plan, design and construct a sewage treatment facility valued at approximately 10-20 million dollars. By contrast, it takes the same length of time to provide a billion dollar, 1,000 MW coal-fired power plant, including hundreds of millions of dollars of pollution control equipment. Only fifteen years ago it took half the time to do either project when inflation rates were a third of current rates. Why?

The reason lies in the inclusion of a myriad of laws and orders to protect and preserve every imaginable social or economic interest the mind can imagine. Not only have these laws caused an extension in the time it takes to provide these facilities, but these same well-meaning laws have caused the double-digit inflation rates that make prices of these facilities unconscionable. On the face of it, if costs and prices rose lock-step in an indexing way, who would argue with such a process. In reality, the shock resulting from escalating costs hits us periodically causing us to reassess whether we are receiving value for such prices, particularly when public funds are involved or power rates hit hard at consumers.

The construction grants program has undergone a number of these reassessments over it's lifetime and we now are undergoing another such evaluation. Each reassessment causes stops-and-starts that futher confound prudent planning and efficient execution of the process who's initial intention was to simply clean-up waters clearly becoming unfit for commerce, pleasure and well-being.

More than half of the time it takes to complete a facility involves planning and submission of plans and specifications. EPA reports

that on average, for a plant that takes 92 months to complete, it takes 58 months for step one and step two. Those are phases where consulting engineers are the dominant factor and where efficiencies must be found.

Inefficiencies are caused by delays in funding, multi-tiered approvals and consideration of some 54 laws and orders which have to do with everything but reducing contaminants in wastewater. Funding delays and multi-level approvals can be easily cracked. The hard nut is those laws and orders. As you know, they involve consideration of historical and archealogical sites, environmentally sensitive areas, civil rights, wildlife, the Clean Air Act, endangered species, noise, bridges, solid waste, rehabilitation and on and on. We must reduce the number of these considerations.

No consideration remains fixed in time. Each law or order begets rules and guidelines which beget interpretations and appraisals which beget discussions and agreements and finally approvals. Each change in those laws or orders starts the process over again. And of course some of these considerations are missed in the first step which causes the step to be scrapped and redone. Furthermore, it seems almost anyone can intervene in the process by siting accurately the law or order which gives him that authority. I have enclosed a list of those considerations in the attachment.

Effects on Consultant Engineers

You would think consulting engineers would profit from all this work. The average rate-of-return before taxes to our profession has shrunk from 10% to 6% in five years. This is due to two very important factors:

(a) Interruptions in the planning process cause our firms to retain personnel when there is no chargeable time

(b) Government procurement policies ignore added costs due to delays

I have also included in the attachment a typical example of how delays can erode profits. It reveals how the estimate for the cost of the project rose over time because of added considerations resulting in a net loss on the project of $45,000.

I need not tell you firms are finding this to be an unattractive business in light, too, of reduction in funding proposed in the future.

The program is too cumbersome to accomplish it's objective. In order to make fewer dollars more productive, we must shorten the cycle for planning, designing and constructing plants, eliminate multi-tiered approvals and institute a policy of predictable, long-term funding. I submit in addition the following suggestions:

Recommendations

- Funds should be targeted, as the Administration has suggested, towards those projects which will have the greatest benefits per dollar invested, and towards those which will benefit directly areas of urban-industrial concentration.

- There should be a singleness of purpose to design and build treatment plants which will result in the greatest benefit for the investment made. While I support innovative and alternative technology, such as land treatment and disposal, for consideration by consulting engineers, I feel strongly that unproven commercial technology should be more properly evaluated in a separate research-oriented program.

- The single most effective means of negating the adverse effects of the proposed funding reduction is to reduce the time it takes to plan, design and build the facilities. An achievable goal which would vastly improve the program's effectiveness with limited funds, is to halve the current project time span. This can be done through streamlining the program and eliminating those disincentives which are turning away the needed engineers, contractors and equipment suppliers.

- Along those same lines, we should be encouraging and rewarding better engineering which can lower construction costs and reduce the time involved from the start of the project to the start-up of the plant. The current emphasis on squeezing the less expensive front-end of a project - the engineering - has been counter-productive. Better engineering saves money.

- For this reason, I would oppose any suggestion, such as that implied in the Administration's proposal, to reduce federal funding of Steps I and II to say 50 percent. I do support giving Governors the option to reduce the existing 75 percent federal share, but I cannot support reducing the federal funding of Steps I and Steps II as a cost-effective action. Maintaining the 75 percent share will ensure that needed water pollution control projects are not sacrificed in the arena of competing local programs.

- Additional efficiencies can be gained by combining Steps I and II in order to move projects ahead at the faster pace consistent with good management and technical practices.

Mr. Chairman and members of the Committee, I would like to thank you for this opportunity to present my views here today. The position and recommendations I have put forth have of necessity given existing time constraints been somewhat broad in nature.

I would welcome the opportunity to discuss them or any other issue concerning this important program with you in more detail. I believe we have an excellent opportunity to improve our water pollution control efforts, and as key participants, the professional staff of my organization looks ahead to the challenge of doing so. Thank you.

ATTACHMENT A

DOLLARS ($000)

PROJECT A

	APPL.	START	COMPLETE	TIME ELAPSED	ESTIMATE CONSTR COST	ENGRS. FEE	ENGRS. COST	PROJECT P&L
STEP I	-	2/74	4/77	3 Yrs. 2 Mos.	$10,000	$100	$110	(10)
		DELAY		5 Months				
STEP II	1/77	9/77	1/79	1 Yr. 4 Mos.	15,800	900	935	(35)
		DELAY		9 Months				
STEP III	4/79	10/79	3/80	5 Months	16,800 [1]	---	---	
(SELECTION OF CONTRACTOR)				6 Yrs. 1 Month		1,000	1,045	(45)

Increase in Construction Cost - $6,800K

% Increase - 68%

Cut Period in Half (3 years)

Estimated Savings in Construction Cost - $3,400K

3/10/81

FIGURE III.1 SUMMARY OF LAWS, ORDERS, AND REGULATIONS
EFFECTING CONSTRUCTION GRANTS PROGRAM

Subject/Law	Summary of Requirements	Lead Agency
Archeological and Historic Preservation		
• Archeological and Historic Preservation Act	When construction is harmful to historic property undertake preservation of property.	Interior
• National Historic Preservation Act of 1966	Determine and consider the impact of construction on historic properties.	Advisory Council on Historic Preservation
• Executive Order 11593 (Protection of Cultural Environment)	Provide leadership and strive to preserve and protect cultural environment; locate and inventory properties.	Interior
Environmentally Sensitive Areas		
• Executive Order 11988 (Floodplain Management)	Reduce the flood hazard associated with federally-assisted projects.	Each Agency
• Executive Order 11990 (Wetland Protection)	Minimize harm to wetlands as a result of federally-assisted projects.	Each Agency
• Wild and Scenic Rivers Act	Agency must consult with lead agency when construction has "direct and adverse" impact on wild or scenic river.	Agriculture or Interior
• Coastal Zone Management Act	Agency actions effecting coastal area must comply with state Coastal Zone Management plan.	Commerce
National Environmental Policy Act of 1969	Actions having significant impact on environment must be accompanied by EIS detailing impact and alternatives.	EPA

FIGURE III.1, CONTINUED

Subject/Law	Summary of Requirements	Lead Agency
Local Financing		
. Uniform Relocation Assistance and Real Property Acquisition Policies Act	Reasonable compensation must be paid for any project resulting in relocation of people or acquisition of real property.	Each Agency
. Intergovernmental Cooperation Act of 1968	Local/state/federal cooperation and coordination as to development of assistance policies.	Each Agency
. Housing and Urban Development funding	Certain treatment facilities may be funded under the Community Development Block Grant program.	HUD
. Farmers Home Administration funding	Rural treatment projects may receive guaranteed loans from FmHA.	Agriculture
. Economic Development Administration funding	Projects in economically depressed areas may be partially funded by EDA.	Commerce
Nondiscrimination Requirements		
. Civil Rights Act of 1964	No person shall be discriminated against on the grounds of race, color, national origin in any project receiving federal assistance.	Justice
. Age Discrimination Act of 1975	No unreasonable discrimination on account of age in any federally-assisted project.	HHS
. Executive Order 11914 (Handicapped Nondiscrimination)	No discrimination against handicapped individuals in any federally-assisted project.	HHS
. Executive Order 11625 (Minority Business Enterprise)	Use of MBEs shall be encouraged in all federally-assisted projects.	Each Agency
. Executive Order 12138 (Women Business Enterprise)	Use of WBEs shall be encouraged in all federally-assisted projects.	Each Agency

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FIGURE III.1, CONTINUED

Subject/Law	Summary of Requirements	Lead Agency
Wildlife Conservation		
. Fish and Wildlife Coordination Act	Federal agencies shall coordinate with Fish & Wildlife Service on any impacts to fish or wildlife.	Interior
. Endangered Species Act	Coordination and mitigation plans required for any effects on endangered or threatened species or their critical habitat.	Commerce or Agriculture
Contract Requirements		
. Davis-Bacon Act	Minimum wages for each class of laborer (based on the community norm) shall be paid for a federally-assisted construction project.	Labor
. Contract Work Hours and Safety Standards Act	Time and one-half must be paid for any work over 8 hours per day or 40 hours per week for federally-assisted projects.	Each Agency
. Copeland Act	Prohibits kick-backs in federally-assisted projects.	Each Agency
Other EPA Laws		
. Resource Conservation and Recovery Act	Prohibits disposal of hazardous material (e.g. sludge) without a permit.	EPA
. Clean Air Act	Sources must meet requirements prohibiting deterioration in air quality; allows for cut-off of construction grants funds if certain air quality standards are not met.	EPA
. Clean Water Act (non-CGP)	Section 402 permitting for discharges of pollution.	EPA

Other Requirements

Age Discrimination Act of 1975

Soil and Water Resources Conservation Act of 1977

Toxic Substances Control Act (1976)

Rehabilitation Act of 1973

Historic Sites, Building and Antiquities Act of 1935

Marine Protection Research and Sancturaries Act of 1972

Rivers and harbors Act of 1899

Solid Waste disposal Act (1973)

Water Resources Planning Act (1965)

Federal Power Act (1935)

Intergovernmental Cooperation Act of 1968

Antiquities Act of 1906

Federal insecticide Fungicide and Rodenticide Act (1973)

Marine Mamal Protection Act of 1972

Noise Control Act of 1972

Bridge Act of 1906

General Bridge Act 1946

Contract Work Hours and Safety Standards Act (1969)

Coepland (Anti-Kickback) Act (1969)

Hatch Act (1967)

Appalachian Regional Developemnt Act (1969)

Consolidated Farm Rural Development Act (1973)

Demonstration Cities and Metropolitan Development Act

Intergovernmental Cooperation Act of 1966

Housing and Urban Development Act of 1970

Public Works and Economic Development Act of 1965

Local Public Works Employment Act of 1976

Executive order No. 11593, "Protection of the Cultural Environment"

Executive Order No. 11738, "Utilization of Facilities on EPA List of Violating Facilities"

Executive Order No. 11914, "Non-discrimination with respect to the Handicapped in Federally Assisted Programs"

Executive Order No. 12114, "Environmental Effects Abroad of Major Federal Actions"

Presidential Memorandum on Environmental Quality and Water Resources Management, July 12, 1978

Mr. ANTHONY. Certainly, sir. Thank you.

Mr. Chairman, I am here representing one of our divisions, Metcalf and Eddy, a consulting engineering firm that has been doing business for 70 years. I am also here operating under two premises. Number one, that if reforms are made in the Construction Grants program, that $2.4 billion will be restored in fiscal 1982 as the President had indicated. My recollection is that Senator Domenici in March committed himself to that position, but I have not read the budget resolution.

The second premise is that there are no sacred cows in the goal to achieve these reforms. If I may, I would like to read this part of my statement for the record. It now takes eight to ten years to plan, design and construct a waste water treatment plant that costs in the area of $10 to $20 million. By contrast, it takes the same length of time to provide a $1 billion, 1,000 megawatt coal fired power plant including millions of dollars of pollution control equipment. Only 15 years ago it took half the time to do either project when inflation rates were a third of current rates, and one has to ask why.

The reason lies in the inclusion of a myriad of laws and orders to protect and preserve every imaginable social or economic interest the mind can imagine. Not only have these laws caused an extension of the time it takes to provide these facilities, but these same well-meaning laws have caused the double-digit inflation rates that make prices of these facilities unconscienable. On the face of it, if costs and prices rose lock step in an indexing way we wouldn't argue with such a process. In reality, the shock resulting from escalating costs hits us, periodically causing us to reassess whether we are receiving value for such prices particularly when public funds are involved or power rates hit hard at consumers.

The Construction Grants program has undergone a number of these reassessments over its lifetime and we are now undergoing another such evaluation. We do agree that the funding level proposed by the Administration is achievable in terms of getting the construction we want, but we have to cut the cycle in half, and this is what I would like to address myself to.

More than half the time it takes to complete a facility involves planning and submission of plans and specifications. EPA reports on an average for a plant that takes 92 months to complete it, takes 58 months for step one and step two. These are phases where consulting engineering are the dominant factor and where efficiencies must be found. Inefficiencies are caused by delays in funding multi-tiered approval and consideration of some 54 laws and orders which have to do with everything but reducing contaminants in waste waters.

Funding delays in multi-level approvals can be easily cracked. The hard nut is those laws and orders. As you know, they involve consideration of historical and archeological sites, environmental sensitive areas, wildlife, the Clean Air Act, and I have added in the attachment a list of all the laws that have to be considered by consulting engineers in phase one and phase two.

No consideration nevertheless remains fixed in time. Each law or order begets rules and guidelines which beget interpretations and appraisals which beget discussions and agreements and finally ap-

provals. Each change in those laws or orders starts the process over again. And of course some of these considerations are missed in the first step which causes the step to be scrapped and redone. Furthermore, it seems almost anyone can intervene in the process by citing accurately the law or order which gives him that authority.

You would think consulting engineers would profit from all this work. The average rate-of-return before taxes to our profession has shrunk from ten percent to 6 percent in five years. This is due to two very important factors: (a) interruptions in the planning process cause our firms to retain personnel when there is no chargeable time. The longer the process is stretched out, the more this personnel or the longer this personnel is held in place; (b) government procurement policies ignore added costs due to delays.

I have also included in the attachment a typical example of how delays can erode profits. One example is Metcalf and Eddy. It reveals how the estimate for the cost of the project rose over time because of added considerations resulting in a net loss on the project of $45,000. This is happening to us more often these days than is the exception.

The program is too cumbersome to accomplish its objective. In order to make fewer dollars more productive, we must shorten the cycle for planning, designing and construction plants, eliminate multi-tiered approvals and institute a policy of predictable, long-term funding. That is extremely important. I know you have been given that message many times in the past, but it is absolutely essential. That is the part that this committee can address itself to.

I also have other suggestions. The funds should be targeted, as the Administration has suggested, toward those projects which will have the greatest benefits per dollar invested, and toward those which will benefit directly areas of urban-industrial concentration. There should be a singleness of purpose to design and build treatment plants which will result in the greatest benefit for the investment made. While I support innovative and alternative technology, such as land treatment and disposal, for consideration by consulting engineers, I feel strongly that unproven commercial technology should be more properly evaluated in a separate research-oriented program.

The single most effective means of negating the adverse effects of the proposed funding reduction is to reduce the time it takes to plan, design and build the facilities. An achievable goal which would vastly improve the program's effectiveness with limited funds, is to halve the current project time span. This can be done through streamlining the program and eliminating those disincentives which are turning away the needed engineers, contractors and equipment suppliers.

Along those same lines, we should be encouraging and rewarding better engineering which can lower construction costs and reduce the time involved from the start of the project to the start-up of the plant. The current emphasis on squeezing the less expensive front-end of a project—the engineering—has been counterproductive. Better engineering saves money.

For this reason, I would oppose any suggestion, such as that implied in the Administration's proposal, to reduce Federal funding of steps 1 and 2 to 50 percent. I do support giving Governors the

option to reduce the existing 75 percent Federal share, but I cannot support reducing the Federal funding of steps 1 and 2 as a cost-effective action. Maintaining the 75 percent share will ensure that needed water pollution control projects are not sacrificed in the arena of competing local programs.

Finally, we recommend lumping step 1 and step 2 together and funding them as one package of funds. At the completion of those two steps, the grantee would go to the EPA and receive funds for the construction of the project. That is my testimony today, Mr. Chairman.

Mr. SABO. Thank you.

Mr. Green, any questions?

Mr. GREEN. No questions.

Mr. SABO. Thank you. We appreciate your excellent testimony.

Mr. ANTHONY. Thank you, sir.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

HON. MATTHEW F. McHUGH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

RICHARD B. GLAZER, DIRECTOR OF ENVIRONMENTAL AND ENERGY PROGRAMS, NATIONAL ENVIRONMENTAL TRAINING ASSOCIATION

Mr. SABO. We now recognize Congressman McHugh and appearing with him Richard B. Glazer, Director of Environmental and Energy Programs, National Environmental Training Association.

Welcome back to the Committee.

Mr. MCHUGH. Thank you. We appreciate the opportunity to be here. This is perhaps the third or fourth year that I have had the privilege of introducing Professor Glazer to the Subcommittee. He is a friend, but much more than that, for your purposes is the Director of the Water Management Training Program at Ulster County Community College, which is one of the institutions in our country that has successfully used EPA academic training funds, and this Subcommittee has been stalwart in Congress in seeing that there are at least some funds each year for this purpose. The idea, as Professor Glazer will point out at greater length, is that if we are going to have a pollution control program we need people who are professionally and well trained to monitor and manage these pollution control programs. That is the purpose of the program at the Ulster County Community College and the other programs across our country which are funded with the fairly limited funds that the Subcommittee has provided for them in the past. So, thanks very much for the opportunity. It is my pleasure once again to introduce my friend, Professor Glazer.

Mr. SABO. Welcome back, Mr. Glazer. We will insert your entire statement in the record, and if you would summarize it, we would appreciate it.

[The statement follows:]

It is a pleasure to be here today and I would like to thank the members of this committee for providing me with the opportunity to address them.

In the past, you have generously and wisely supported academic and other training within EPA. This training has led to the development of an environmental workforce essential to the proper operations and maintenance of our waste and wastewater treatment plants and the management and enforcement of our air, safe drinking water, wastewater and radiation control programs.

Unfortunately, although these programs have the support of Congress, the National Academy of Sciences, the American Academy of Environmental Engineers, the National Environmental Training Association, the Water Pollution Control Federation, the American Water Works Association and the professional community, the Office of Management and Budget, and the Environmental Protection Agency, have made the decision to terminate these programs for the 1982 fiscal year.

The purpose of my testimony is threefold. One is to make Congress aware of the extremely grave consequenses that will result from the present administration's and EPA's policy of allocating zero funds in 1982 for environmental workforce training and development, and the elimination of the National Training Operation and Technology Center from the Environmental Protection Agency.

The second is to make positive recommendations with respect to Congressional support of these workforce development programs, and the third is to point out that no new moneys are necessary to do this as approximately $6 billion, under Public Law 92-500, are presently appropriated, but unspent. A small fraction of these funds would be sufficient to assure the continuation of these essential training activities and preserve the worth of the many billions of dollars already spent in the construction of wastewater treatment plants and recovery systems.

Since the passage of the Federal Water Pollution Control Act and its amendments, over $25 billion in federal funds and many billions more (close to 40% of the federal figure) in state and local monies have been spent to construct new wastewater treatment plants and systems or to significantly modify existing ones. It is further estimated by EPA, that through the year 2000, an additional $35.6 billion in federal funds will be needed to construct additional plants.

In addition, many millions of federal dollars have been spent in the development, operation and regulation of the National Pollution Discharge Elimination Systems (NPDES) permit program. It is now clear that this program is on the verge of collapse. The NPDES permit program is the primary regulatory mechanism for accomplishing the objectives of PL-92-500. All of the permits, which were to be reviewed every five years, were to be issued prior to December 31, 1973. In 1978, the United States General Accounting Office, in a report to Congress noted:

> "We found widespread and frequent noncompliance with permit conditions and frequent failure to submit industrial self-monitoring reports which could conceal additional violations and widespread failure to meet the required July 1, 1977 discharge standards."

Nothing has changed.

What is particularly distressing, is that over the years, EPA has reported that somewhere between 50 and 75 percent of municipal wastewater treatment plants, at any given time are violating their permits. The 1980 GAO report noted that, "our random sample of 242 plants showed an even drearier picture. For a one-year period between 1978 and 1979, 87% of the plants in our sample violated the effluent discharge limits of their permit. Thirty-one percent were, in our opinion, in serious violation. In addition, 119 (56%) of the violating plants exceeded their discharge permit limits for more than half the year."

When presented with these facts, it is no surprise that the goal of restoring and maintaining "the chemical, physical and biological integrity of our waters, has not been achieved." On the contrary, the continuing discoveries of toxic contamination of our waters and drinking water supplies are dramatic evidence that we have yet to achieve our goals of adequately protecting the public health.

The obvious question is why, why aren't the plants conforming as they should, what has happened to NPDES, and why is it so difficult to identify and control toxics in our waterways?

The Hegg report, published in the Journal of Pollution Engineering, gives us some immediate insight. Of 71 predefined factors which could potentially limit the performance of a biological wastewater treatment plant, the top 4 out of 5 problem areas were directly related to inadequate training.

The Internal Joint Commissions Committee on the Assessment of Human Health Effects of Great Lakes Water Quality for 1979-80, noted that "for optimal operation, there is a continual emphasis on the

need to improve plant operator training."

These conclusions have been further reinforced by the American Acadamy of Environmental Engineers, 1980 report to EPA, the WPCF White Paper of 1979, and the December 1980 report by the Subcommittee on Oversight and Review of the Committee on Public Works and Transportation, House of Representatives which noted that "from its inception, the Construction Grants Program has suffered from a serious staffing shortage at all levels....Be it engineers, chemists, clerks, data processors or field inspectors, there have simply not been enough qualified and experienced staff to run this complicated multi-billion dollar planning, design and construction effort."

With all this data and reports of continuing facility, system and program failure, due to a great extent to the lack of a continually trained and upgraded environmental workforce, it seems incredible that the Office of Management and Budget and EPA would continue their quest to reduce or eliminate training funds to produce the environmental workforce they so desperately need.

During these times of dwindling budgets, lower federal assistance to the states and irate taxpayers, it is even greater folly for EPA to expect the states or local municipalities to take on a greater share of this training effort.

As a former supervisor of the Town of Rosendale, I know the tremendous tax burden that has been placed on the property owner and how impossible and impractical it would be to expect them to pay more for a wastewater treatment facility that in all probability, is not performing up to design capability or permit requirements.

At the same time, I would not ask Congress, which is under the same budget stresses as all other legislators and legislative bodies, to appropriate new monies to fund these training programs. Rather, I would point out that as of January 1, 1981, a total of $33.3 billion has been appropriated for the construction grants program. Of this amount, $27.3 has been obligated and $18.4 billion has actually been spent. Currently, 4700 projects valued at $22.6 billion are actually under construction, leaving a surplus of unspent funds of approximately $6 billion. It is from these surplus funds, which in escrow will be wasted away by inflation, that I ask you to take $4.2 million (.07% or 700ths of 1 percent) to fund the skilled workforce necessary to assure that the billions of dollars spent through EPA's Construction Grants Program, the billions more in local (city, town and village indebtedness) and the many billions yet to be spent, works for us and are not wasted because of OMBs and EPAs refusal, for an infinitesimal fraction of this cost, to continue to fund and train an environmental workforce.

I therefore wish to recommend the following to Congress.

1. That the budget of $4.2 million as appended to this testimony, be funded in its totality from the unspent $6 billion in construction funds money. It is inappropriate to build new plants when we can not operate the existing ones.

2. That the following statement be placed either as an amendment to the 1977 Clean Water Act or into the FY 1980 EPA budget:

   "The Environmental Protection Agency under training grants and contracts, sections 109, 110, 111 and 112 will receive $500,000 to provide training grants in support of under graduate students in Water Quality Monitoring, Analysis and Technology at the Associate Degree and Bachelor of Engineering Technology and Technician level in the specialized curricula developed by EPA grants."

   This statement will assure that these funds are received by the proper EPA office to be spent as Congress has willed rather then being distributed arbitarilly as has occurred in the past.

3. That funding be reinstated for the National Operational and Technology Center so that it can continue to serve as a focal point for coordination, materials and programs development, technical assistance to state and local municipalities, and to provide continual, leadership in the training of an environmental workforce.

   The location of the NTOTC should be a policy decision of EPA.

In conclusion, I would like to reiterate my closing statement from my 1978 testimony as I believe it is even more appropriate now, than it was then.

"As the fiscal officer of my town and an administrator in educational programs, I recognize that funds of all levels are limited and it is therefore essential to weigh programs and assign

priorities to those which will provide the greatest return for the moneys expended. The moneys being requested here are not of the magnitude that would require financial sacrifices or have a major impact on the overall federal budget. Rather because they are so minimal in comparison with other requests they often tend to be overlooked as too small to be able to accomplish anything of significance. Actually, just the opposite is true, the few millions of dollars spent on manpower training has had a major impact on the worth of the billions of dollars spent on facilities construction and equipment purchases.

As Congress considers these budget requests, it must ask itself these questions:

1. What sense does it make to spend billions of dollars on pollution control construction and programs, if we do not have the trained manpower to operate these plants or monitor these programs?

2. What will be the results of a zero budget in manpower training on the success of our pollution control programs?

3. How much money have these programs cost us and how much more will they cost us in the future if our plants, enforcement and regulatory agencies cannot function because of the lack of skilled semiprofessional and professional workers?

It is clear that if Congress does not refund the manpower training programs it will have spent many billions of dollars on treatment plants, regulatory systems and major national programs while denying them the trained manpower that is necessary for these plants and programs to function and to be operational. It seems a shame that for so little money we are willing to risk so much."

I wish to thank Congressman Matt McHugh for his graciousness and continual support and the members of this committee for their patience, committment to our environmental programs and their past support.

Proposed Budget

EPA Academic Training

FY 1982

PL 92-500

Water Pollution Control

Section	Purpose	Amount
104 (g)(3)(A)	Professional (graduate) Training	500,000
104 (g)(3)(B)	Research Fellowships	500,000
104 (g)(3)(C)	Direct Training	500,000
109-112	Undergraduate Training	500,000
109-112	Curriculum Development	200,000
104(g)(1)	Operator and Instructor Training	100,000
	National Training Operation & Tech. Center	1,000.000
		$4.2,000.000

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Report by the Subcommittee on Oversight and Review of the Committee on Transportation. House of Representatives, Dec. 1980 (96-71)

Report by the Comptroller of the United States; Costly Wastewater Treatment Plants Fail to Perform as Expected. Nov. 14, 1980. CED-81-9 United States Accounting Office.

Hegg, BA et al: Evaluation of O&M Factors limiting wastewater plant performance. Journal of Pollution Engineering.

The Internal Joint Commissions Committee on the Assessment of Human Health Effects of Great Lakes Water Quality. 1980

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May 5, 1981

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The Honorable Edward Boland
Chairman
Subcommittee for Housing & Urban
Development & Independent Agencies
U. S. House of Representatives
Committee on Appropriations
Washington, D. C. 20515

Dear Congressman Boland:

The National Environmental Training Association (NETA) is deeply concerned with the reductions in federal assistance to environmental training as proposed by President Ronald Reagan's Administration.

The oversight hearings scheduled to investigate the programs of the U. S. Environmental Protection Agency is a commendable and judicious decision. This is an especially critical period for dealing with both the persistent traditional and exotic environmental dangers which threaten both our health and our environment. The NETA represents individuals employed by the private and public sector and all levels of government who are responsible for training and development of all of the environmental work force.

The NETA supports fiscal responsibility and reduction in federal spending, but the Association opposes indescriminate elimination of all environmental training programs. As financial work force resources diminish, the need for training and staff development intensifies.

The enclosed statement is submitted for consideration as testimony during the oversight hearings scheduled for May 8, 1981. The Association also requests that if scheduling permits, the Association be considered to provide oral testimony during the hearings.

Thank you for your thoughtful consideration.

Please contact me if the NETA can be of further assistance.

Sincerely yours,

Andrew A. Holtan
President

AAH:js

Enclosure

cc: NETA Board
Mr. George Kinias
Mr. Robert J. Borchardt
Mr. Richard Glazer

Testimony Prepared by the
National Environmental Training Association
for the Congressional Oversight Subcommittee
Hearings Concerning the Programs of the U. S.
Environmental Protection Agency Scheduled for
the Spring of 1981

Introduction

This testimony is to express the concerns of the membership of the National Environmental Training Association (NETA) with the proposed reduction in financial support to environmental training.

The NETA is a nonprofit Association supported by member dues. The membership of NETA include individuals employed by academic institutions, water and wastewater treatment facilities, governmental agencies at all levels, and the private sector (consulting firms, etc.).

Although NETA is concerned with all sectors of environmental training, this testimony will concentrate on water quality and wastewater treatment. The urgency for training and the necessity for training applies equally to the other areas of environmental training (air, solid waste, drinking water, noise, etc.).

Problem

The ever increasing emergence of exotic environmental pollutants such as toxic degradation involves an ever expanding technology. Despite the tremendous investment of public tax revenues in the construction of wastewater treatment facilities, a recent GAO study reports that over 87% of the privately owned treatment plants operate improperly and that 31% are in serious violation of NPDES permit limitations. In many cases, permit limits are exceeded by 100 percent (1000 percent in some cases) often for periods exceeding one year.

A report in 1980 by Hegg et al identifies the top three factors responsible for poor plant performance as:

- Failure to apply treatment concepts
- Failure to understand treatment concepts
- Improper advice and guidance from advisors

The International Joint Commission on the Assessment of Human Health Effects of Great Lakes Water Quality reports that "optional functioning" of wastewater treatment plants will require improved plant operator training.

The need for training is further substantiated when the demand and supply of qualified and competent environmental work force is examined. At present construction rates, an estimated 3000 additional environmental workers will be needed each year as projected by the draft copy of the 1990's Construction Grants Strategy Report. A 1980 Report by the American Academy of Environmental Engineers demonstrates how critical the problem of an inadequate work force is. The Academy's report shows a reduction in the number of graduates with an environmental degree and a reduction in the number of advanced degree candidates. The ramifications are far reaching, not only will there be a very limited supply of advanced degree graduates to continue the development of an environmental work force, but the limited supply of existing workers will result in aggressive competition for the most competent. Because salary ranges are greater in the private sector and the Federal government, the states, counties, and local government must settle for individuals less prepared to effectively deal with environmental challenges.

The result is that state and local governments have an even greater need for environmental training to develop a competent work force. Few will be able to take a responsible position as they attempt to deal with inflation and significant reductions in Federal financial assistance. The necessity for training is intensified when staff and budget are extremely limited. Under these conditions employers supply cannot afford to take the time and money to correct mistakes or increase enforcement activities.

Responsibilities

When Congress passed the Water Pollution Control Act (P.L. 92-500), it clearly mandated the U. S. Environmental Protection Agency to develop and fund training programs for water pollution control personnel.

Inherent in this responsibility is the protection of the public health of all Americans and individuals residing in or visiting the United States. Protection of environmental quality is the first line of defense in maintaining a healthful existence.

Advantages

There are numerous advantages to developing a competent environmental work force. Properly operated and maintained equipment results in reducing costly repairs and replacements. Energy usage and chemical usage are similarly reduced and subsequently the costs to the public and local budgets is reduced. Effective treatment will also reduce the need for enforcement action at all levels of government. As treatment facilities realize design capacity and efficiency, effluent standards are achieved and the potential for additional work-ups increases. The "bottom line" is good health, acceptable environmental quality, reduced public expenditures and general assistance to the Nation's economic rebuilding.

Availability of Training

Tremendous advances have been made in the field of environmental training and technical assistance. The U. S. EPA established extensive support services for technical assistance and training to include technical guidance, direct training and financial support. The NTOTC was established to dessiminate this information, make training resources available, and coordinate training resources to minimize duplication of effort and maximize limited training funds. This responsible position is deteriorating.an since 1973, 72% of the expenditures for O and M training were rescinded and the staff in this area reduced to one in each of 10 regional sections and a handful at the Washington office.

State governments, academic institutions and associations have established training programs for the environmental work force. Few programs were established as self-sufficient programs. Many utilized training resources such as manuals and financial assistance from U. S. EPA. Although much has been accomplished as the GAO report reflects, much more must be done.

Successes

Everyone professes to acknowledge training as a necessary and critical entity. Private industry has long recognized that training is a cost-effective activity. How cost effective? The U. S. EPA office of State and Local Manpower Development Branch published a report in 1973 which stated that for every one dollar invested in training results in a savings of $91.

Training can often represent the difference between compliance and noncompliance. The January 1981 edition of the journal "Water/Engineering and Management" reported on a wastewater treatment facility in Durham, N. C. which consistently exceeded the NPDES permit limitations. After attending an EPA workshop on "Activated Sludge Process Control" sponsored and instructed by the NTOTC, the facility's compliance with effluent requirements improved from 61% to 90% of the time.

Support

The need for training is recognized and supported by all sectors of the country. The Water Pollution Control Federation (WPCF) in 1979 published the article "Operation and Maintenance of Water Pollution Control Facilities: A White Paper" which included forty references to the need for and recommendations for training. The National Office of NETA has received numerous copies of letters stating concern and support for training ranging from the Personnel Advancement Committee of the N. Y. WPCF to the grass roots membership of NETA.

Recommendations

The NETA supports fiscal responsibility and reduction in federal spending, but opposes indiscriminate elimination of all environmental training programs. The Association advocates state self-sufficiency. Through EPA-State agreements, state training plans and strategies should be established which will gradually reduce federal assistance and increase local funding over a defined period of time resulting in a state training program which is self-sustaining. Continuation of federal training resources such as the NTOTC will provide the direction and technical assistance to achieve state self-sufficiency.

The Construction Grants Program is the most logical source of funding for this activity. Over six billion dollars of construction grants funds are unencumbered. This approach to funding will provide financial resources without increasing the EPA budget allocation and will minimize the inflationary reduction of the unencumbered funds. Specifically, Section 205(g)(1) of the Clean Water Act of 1977 (P.L. 95-217) should be amended to permit the Administrator of the U. S. EPA to award grants to the states for the purpose of carrying out work force development programs mandated by Sections 104(g), 106 and 109 of P. L. 92-500.

As stated previously, the NETA is equally concerned with financial and technical assistance to the other areas of environmental training. Congress is strongly encouraged to review the specific issues in this testimony and apply the concepts to the environmental training for drinking water, solid waste, toxic and hazardous materials, air quality, noise, etc.

The NETA is thankful for the opportunity to provide this testimony and respectfully request that Congress consider our concerns and assume a responsible position in developing a competent and qualified environmental work force.

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May 5, 1981

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The Honorable Jake Garn
Chairman
HUD & Independent Agencies Subcommittee
United States Senate
Committee on Appropriations
Washington, D. C. 20510

Dear Senator Garn:

Thank you for your April 13, 1981 reply to my letter expressing my concerns for the need for financial and technical assistance from the U. S. Federal Government for the purpose of training and developing a competent and qualified environmental work force.

I am contacting you now on behalf of the National Environmental Training Association (NETA) to convey the concern of the members of NETA relative to maintaining Federal assistance for the development of an environmental work force.

The NETA is a nonprofit organization comprised of members of academic institutions, government agencies at all levels, water, wastewater treatment facilities and the private sector (consulting firms, etc.). The primary objective of the Association is to develop a competent and qualified environmental work force through competency based job related training.

The purpose of this correspondence is to respond to your April 13 letter and in so doing to establish the foundation for providing testimony during Oversight Hearings should the Association be afforded the opportunity to testify.

I will address each of the points in the order that they appear in your letter:

The observation that states should assume a larger role in training the local environmental work force is certainly justified. However, few states are in the position to assume such an important responsibility on such short notice. This is especially true when inflation and reduced federal financial assistance are considered. As the decision to reduce federal financial assistance to training reflects, when budgets are reduced the first item to be reduced is training. The fallacy of this approach is that as size is reduced, the need for training increases because workers must be well trained to maximize productivity and minimize errors which require corrective action. To further substantiate this observation, consider that improperly operated and maintained equipment must be repaired and replaced more frequently. A more logical approach would be to enter into agreements with states with an established time line for gradual phasing out of federal financial assistance and phasing in of local finances over a 2 or 3 year period to result in a self-sufficient state training program. This would ensure the availability of training without interruption and allow the states to gear up for a more responsible approach to environmental training.

The availability of alternative funding sources for environmental training also raises several questions. States are already using all of the available federal funds and in most cases are still understaffed. There are no incentives for states to reallocate these funds to environmental training especially when these funds are also being reduced.

Entering into agreements with states which will push training where plant failures warrant such action is commendable. A brief review of the GAO report on the performance of wastewater training facilities suggest that such agreements should be negotiated with all states. Why not identify the states which require such agreements and negotiate the agreements first, then reduce the funds where they are not needed? Although the GAO report does not identify the reasons for poor plant performance, a study conducted in 1980 by Hegg et al identified 47 factors which influence plant performance. The top 3 factors for poor plant performance are all directly training related. These factors are: failure to apply treatment concepts, failure to understand treatment concepts and poor advice from regulatory and consulting personnel concerning plant operation.

The availability of training funds under Section 109b of P.L. 92-500 is certainly a viable option. But consider why only 16 states have taken advantage of these funds. One explanation is that these funds must come

from the states construction grants program. The state must elect not to use this money to upgrade and construct new facilities and to dedicate these funds to training. There is also some question as to the flexibility in how these funds may be used. Construction of training facilities rather than operation of a training program appears to be the preferred approach.

The existence of the National Instructional Resource Center is an excellent service but it only assists in locating materials and does not provide any support for the utilization of these materials. Nor does this Center contribute to the development of additional training materials which are needed.

The National Training Institute is a project in its early ifancy. No one knows how it will work or if it will work. Again, this service does not provide support to the delivery of training at the local level.

There is a reference to an adequate supply of professional environmental work force which must be refuted. The National Academy of Science Report in 1978 and the American Academy of Environmental Engineers Report in 1980 both emphasize that there are not sufficient professionals in the environmental field. The result is that the most qualified professionals are employed by the private sector followed by the Federal Government. The state, county and local governments have third, fourth, and fifth choices respectively. Frequently these individuals must receive additional training and education to become effective.

While it is true that we have made tremendous advances in environmental training in the last five years, there is still a great deal that remains to be done. The following considerations are offered:

Promote state self-sufficiency in environmental training through agreements which involve a state strategy and a time frame for gradual reducing of federal funds and an increasing of state fiscal responsibility to maintain an ongoing self-sufficient state training program.

Support the development of training materials in those areas where materials are lacking. The duplication of effort on the part of states as they attempt to develop these materials independently is not a cost-effective approach. While states may be able to financially support the delivery of training, the cost of development of training materials is beyond the capability of most states.

Consider construction grant funds as the source for environmental training funds. Continued expansion and construction of new training facilities is ill advised unless something is done to ensure that they can and will be properly operated and maintained and subsequently that this tremendous investment of public tax revenues is protected.

The NETA supports fiscal responsibility and reduction in federal spending but opposes indescriminate elimination of all environmental training programs. As financial and work force resources diminish, the need for training and staff development intensifies.

If the schedule permits, please consider this request to afford the NETA the opportunity to provide testimony during the upcoming oversight hearings.

Thank you for your courteous reply and thoughtful consideration. Please contact me if the NETA can be of further assistance or provide additional information.

Sincerely yours,

Andrew A. Holtan
President

AAH:js

cc: NETA Board
Mr. George Kinias
Mr. Robert J. Borchardt
Mr. Richard Glazer

National Environmental Training Association
158 S. Napoleon St., P.O. Box 346/Valparaiso, IN 46383/219 - 465-1744

May 5, 1981

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Mr. Richard Glazer

Mr. GLAZER. It is a pleasure to be here today and I would like to thank the Members of this Committee once again for providing me with the opportunity to address them.

I have appeared before this Committee, as Matt has said, several times in the past, and have enjoyed your support. This time I no doubt face my most difficult task. It may in fact be an exercise in futility, but the importance of my topic is too great not to pursue it.

In my testimony I believe that I have built a very strong case for continuing Federal support through EPA of training funds and programs for the development of an effective and continually upgraded environmental work force.

Because of its length, due to the necessary documentation, I will not read my testimony to you, but rather I will read excerpts of it, particularly a number of quotes which will highlight the problem and part of the solution.

The purpose of my testimony is threefold. One is to make Congress aware of the extremely grave consequences that will result from the present Administration's and EPA's policy of allocating zero funds in 1982 for environmental work force training and development and the elimination of the national training operation and technology center and its staff from the Environmental Protection Agency. I think that is a grave error. The second is to make positive recommendations with respect to Congressional support of these work force development programs. The third is to point out that no new monies are necessary to do this, as approximately $6 billion under Public Law 92-500 are presently appropriated but unspent.

Since the passage of the Federal Water Pollution Control Act and its amendments, over $25 billion in Federal funds and many billions more, close to 40 percent of the Federal figure in State and local monies have been spent to construct new waste water treatment plants and systems or to significantly modify existing ones. It is further estimated by EPA that through the year 2000 an additional $35.6 billion in Federal funds will be needed to construct additional plants.

Let me now quote to you from a number of documents about what has happened to these funds. From the United States General Accounting Office in a report to Congress on the national pollutant discharge elimination system permits program in 1978:

> We found widespread and frequent noncompliance with permit conditions and frequent failure to submit industrial self-monitoring reports which could conceal additional violations and widespread failure to meet the required July 1, 1977, discharge standards.

The 1980 GAO reports on waste treatment plants noted:

> Our random sample of 242 plants showed an even drearier picture. For a one-year period between 1978 and 1979, 87 percent of the plants in our sample violated the effluent discharge limits of their permit. Thirty-one percent were, in our opinion, in serious violation. In addition, 119 (56 percent) of the violating plants exceeded their discharge permit limits for more than half the year.

The obvious question is why? Why aren't the plants conforming as they should, what has happened to NPDES, and why is it so difficult to identify and control toxics in our waterways?

The Hegg report, published in the Journal of Pollution Engineering, gives us some immediate insight. Of 71 predefined factors

which could potentially limit the performance of a biological wastewater treatment plant, the top four out of five problem areas were directly related to inadequate training.

The Internal Joint Commissions Committee on the Assessment of Human Health Effects of Great Lakes Water Quality for 1979-1980, noted that "for optimal operation, there is a continual emphasis on the need to improve plant operator training."

In the December, 1980, report by the Subcommittee on Oversight and Review of the Committee on Public Works and Transportation for the House noted:

> From its inception, the Construction Grants Program has suffered from a serious staffing shortage at all levels. . . . Be it engineers, chemists, clerks, data processors or field inspectors, there have simply not been enough qualified and experienced staff to run this complicated multi-billion dollar planning, design and construction effort.

With all this data and reports of continuing facility, system and program failure, due to a great extent to the lack of a continually trained and upgraded environmental work force, it seems incredible that the Office of Management and Budget and EPA would continue their quest to reduce or eliminate training funds to produce the environmental work force they so desperately need.

As a former supervisor of the Town of Rosendale, I understand the budget stresses we are facing and I would not ask Congress, which is under the same budget stresses as all legislators and bodies, to appropriate new moneys to fund these training programs. Rather, I would point out that as of January 1, 1981, a total of $33.3 billion has been appropriated for the Construction Grants program.

Of this amount, $27.3 billion has been obligated and $18.4 billion has actually been spent. Currently, 4,700 projects valued at $22.6 billion are actually under construction, leaving a surplus of unspent funds of approximately $6 billion. It is from these surplus funds, which in escrow will be wasted away by inflation, that I ask you to take $4.2 million (.07 percent or 700ths of one percent) to fund the skilled work force necessary to assure that the billions of dollars spent through EPA's Construction Grants program, the billions more in local (city, town and village indebtedness) and the many billions yet to be spent, works for us and are not wasted because of OMB's and EPA's refusal, for an infinitesimal fraction of this cost, to continue to fund and train an environmental work force.

Based on this information I would like to make the following recommendations:

That the budget of $4.2 million as appended to this testimony, be funded in its totality from the unspent $6 billion in construction funds money. It is inappropriate to build new plants when we cannot operate the existing ones.

That the following statement be placed either as an amendment to the 1977 Clean Water Act or into the fiscal year 1980 EPA budget: "The Environmental Protection Agency under training grants and contracts, sections 109, 110, 111, and 112 will receive $500,000 to provide training grants in support of undergraduate students in Water Quality Monitoring, Analysis and Technology at the Associate Degree and Bachelor of Engineering Technology and Technician level in the specialized curricula developed by EPA

grants." This statement will assure that these funds are received by the proper EPA office to be spent as Congress has willed, rather then being distributed arbitrarily as has occurred in the past.

That funding be reinstated for the National Operational and Technology Center so that it can continue to serve as a focal point for coordination, materials and programs development, technical assistance to State and local municipalities, and to provide continual, leadership in the training of an environmental work force. The location of the NTOTC should be a policy decision of EPA.

In conclusion, I would like to reiterate my closing statement, in retrospect they seem quite prophetic but are still appropriate today as in 1978:

> One, what sense does it make to spend billions of dollars on pollution control construction and programs, if we do not have the trained manpower to operate these plants or monitor these programs?
>
> Two, what will be the results of a zero budget in manpower training on the success of our pollution control programs?
>
> Three, how much money have these programs cost us and how much more will they cost us in the future if our plants, enforcement and regulatory agencies cannot function because of the lack of skilled semiprofessional and professional workers?
>
> It is clear that if Congress does not refund the manpower training programs it will have spent many billions of dollars on treatment plants, regulatory systems and major national programs while denying them the trained manpower that is necessary for these plants and programs to function and to be operational. It seems a shame that for so little money we are willing to risk so much . . .

That was an exact quote from my 1978 testimony.

I wish to thank Congressman Matt McHugh for his graciousness and continual support and the Members of this Committee for their patience, commitment to our environmental programs and their past support.

Mr. SABO. Thank you, Mr. Glazer.

Mr. Green, any questions?

Mr. GREEN. Our first witness was Mayor David Shepherd, representing the National League of Cities, and I questioned him about the report you cite which showed 87 percent of the plants were in violation. His response gave a somewhat different picture. He said that the GAO report covered the whole spectrum of municipal water treatment plants and was not limited to EPA funded plants. He suggested that many of the violations in the GAO report found were essentially technical violations and if one just looked at the basics of the EPA funded plants one would get a very different picture from what the GAO report revealed.

Would you care to comment on that?

Mr. GLAZER. My comment on that would be that there are very few non-funded waste treatment plants. Most of them have funding in one manner or another from the Federal government, unless they are very small plants. They are much too expensive for large municipalities and particularly small municipalities to do by themselves. That is number one, but whether they are a large plant or a small plant, whether they are Federally funded or not, they are still ending up being taxpayers dollars. It doesn't matter if EPA paid for it or the town went out for a bond of $1.5 million or $2.5 million. It is still taxpayers dollars, still at a given percent and the people still have a right to expect to get their money's worth and to have their plants operating for them.

Mr. GREEN. I think his point was that the non-EPA funded plants tended to be older, less sophisticated plants.

Mr. GLAZER. You are right.

Mr. GREEN. You wouldn't see this kind of result with the EPA, with the newer plants.

Mr. GLAZER. There is an interesting report which I mention here, which is the Hegg report, which was a study in the Journal of Pollution Engineering on pollution which notes this and notes 71 different problems in EPA-funded plants, and it goes through each one of these and it is using the same statistics. The statistics really don't vary very much.

For my own example, and I was the supervisor of a small town in which we put in a 50,000 gallon-per-day plant, a small plant. The plant, very frankly, was designed incorrectly. It was designed by engineers who, when they had their training, didn't have the opportunity to go back for retraining. They were using some methods which they should not be using. I was fortunate in that I knew the system and I don't know how many town supervisors have a professional background in this area. I doubt if very many do, but I knew the system and I was able to make some corrections, but even that there are problems and will continue to be problems, and the plant is just opening.

We are really a microcosm of the whole United States. I think you will find that if you yourself go through a plant, you will find that most plants will be running possibly at 65 percent efficiency. There are some good ones. There are some plants which are running at 50 percent efficiency and there is one excellent example in North Carolina in which they then took the operators, put them through a special training program, and it is now running at 91 percent.

Mr. GREEN. Thank you very much.

Mr. SABO. Thank you, Mr. Glazer and Congressman McHugh. It is nice to have you with us again.

Mr. GLAZER. Thank you.

Mr. MCHUGH. Thank you.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

KENNETH A. HAGG, ACTING DIRECTOR, DIVISION OF AIR QUALITY CONTROL, THE COMMONWEALTH OF MASSACHUSETTS

WILLIAM BECKER, EXECUTIVE SECRETARY, STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS

Mr. SABO. Mr. Kenneth Hagg, Acting Director for Division of Air Quality Control, the Commonwealth of Massachusetts.

Mr. Hagg, welcome to the Committee.

Mr. HAGG. Thank you, Mr. Chairman.

Mr. Chairman, my name is Kenneth A. Hagg. I am the Director of the Massachusetts Division of Air Quality Control. I am here today on behalf of the State and Territorial Air Pollution Program Administrators (STAPPA), the national association representing State air pollution control officials. The agencies STAPPA repre-

sents have been given the primary responsibility under the Clean Air Act for preventing and controlling air pollution. Accompanying me today is Mr. William Becker, STAPPA's Executive Secretary. We appreciate the oportunity to testify here today in support of the Administration's fiscal year 1982 request for $87.7 million for State air pollution abatement and control grants under Section 105 of the Clean Air Act.

The Eleventh Annual Report of the Council on Environmental Quality estimates that this country will spend nearly $340 billion for air pollution abatement in the decade ending 1988. State air pollution agencies are responsible for making sure this massive investment is spent efficiently and effectively for the purpose of protecting air quality. Unfortunately, our ability to meet this responsibility is seriously impaired by the lack of resources available to us.

Our programs are funded by both Federal and non-Federal funds, with the major share coming from State and local revenues. State support has increased over the years, but most legislatures are now no longer able to provide any additional funds to pay for Federally-mandated programs. Federal support was increased in fiscal year 1979 in response to new requirements under the Clean Air Act Amendments of 1977; but since then, Federal grants for State air programs have remained essentially level in terms of actual dollars, and have actually decreased in terms of real dollars.

Meanwhile, States have been delegated increased responsibilities under the Clean Air Act. Further, we are devoting additional resources to energy-related issues, such as coal conversion in the eastern States and energy development in the west. In short, our responsibilities are outstripping our program capabilities. This was substantiated by the recent report to Congress of the National Commission on Air Quality, which recommended that the Clean Air Act authorize increased funding and that the "Administration and Congressional Appropriations Committees . . . provide the needed funds." Further, an August, 1980, General Accounting Office survey of 45 State environmental programs found that State and local air pollution agencies need additional Federal resources to effectively manage their programs.

I would like to take a moment to focus on the severe effect that inflation has had on our programs, based on a recently completed STAPPA survey. Because funding for State air grants has been essentially level for the past three fiscal years, we have had to absorb all salary, equipment and other cost increases, reducing program activities and delaying program implementation. Nine percent of the States reporting in our survey have cut back on their quality and source surveillance. These reductions strike at the heart of our program responsibility—namely to protect the public's health and to make sure pollution control regulations are enforced. In addition, most States have been forced to delay hiring new staff, and are postponing to future years purchases of monitoring and data processing equipment, supplies, vehicles and necessary maintenance services.

Unfortunately, we only expect the situation to worsen in the future. All indications are that the current reauthorization of the Clean Air Act will shift more responsibilities to State agencies. The

National Commission on Air Quality conclusion on this point is important to note. It states:

> Although a transfer of resources to more substantive technical areas appears possible if existing nonsubstantive procedural requirements are lessened, State and local agencies appear to be ill-equipped to accept substantial additional responsibilities without additional financial resources and personnel.

The States need additional resources to carry out their mandates under the Federal Clean Air Act, but we also realize that it may not be possible to appropriate increased funds this year. With this understanding, we urge you to appropriate the $87.7 million for State air program grants which was requested by the Administration. As you did last year, we urge you to designate that these funds be made available to States in the general grant allocation. We would like to thank this committee for its critical role in defining the process of the end of earmarking Federal 105 funds for State programs.

Before closing, I wish to note one further area of concern for our programs, namely training. At salaries substantially below the private sector and the Federal government, State agencies cannot attract and retain qualified staff. Section 103(c) of the Clean Air Act requires EPA to provide training for State agency personnel. EPA has failed to request any funds for support of academic training in fiscal year 1982 and it is significantly reducing the short course (in-service) training programs next year. We need these programs, and we request your assistance in providing funds for this necessary service.

Thank you.

Mr. SABO. Any questions?

Thank you for your testimony, Mr. Hagg. We appreciate your being here today.

Mr. HAGG. Thank you.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

DR. JOSEPH HIGHLAND, CHAIRMAN, TOXIC CHEMICALS PROGRAM, ENVRONMENTAL DEFENSE FUND
DAVID J. LENNETT, ATTORNEY

Mr. SABO. Dr. Joseph Highland, Chairman, Toxic Chemicals Program, Environmental Defense Fund.

Welcome to the Committee. Again, we will enter your entire statement in the record, and would appreciate if you might summarize.

Dr. HIGHLAND. Mr. Chairman and members of the committee, I am Joseph Highland. With me today is Mr. David J. Lennett, who is an attorney with EDF.

EDF is a non-profit, public interest organization that has focused attention in the last five and a half years on many toxic chemical related problems in an effort to improve the quality of life.

We are here today specifically because we are concerned about the Administration's proposed budget for Superfund, a bill which was enacted into law last year, which provides monies for the clean

up of hazardous waste dump sites. We are concerned that the proposed budget represents a level of spending far less than the money necessary to impact significantly on this existing hazardous waste problem. Moreover, the limitation on funding cannot be justified as a significant budgetary savings since the additional funds needed to properly implement Superfund will be available largely through current tax being collected from industry.

It is just over three months now, four months perhaps, that Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, which has been referred to as Superfund. It provides for the establishment of a fund, 7/8 derived from a tax on industry, to clean up releases from dangerous hazardous waste dump sites and spills of hazardous substances. The Fund is authorized for $1.6 billion over the next five-year period.

The bill received overwhelming Congressional support because there was near unanimity regarding the scope of the health and environmental problems posed by the release of hazardous substances from spills and dangerous dump sites. I am sure you are all familiar with the many stories from around the country of hazardous waste sites and the problems they have caused.

EPA has already identified hundreds of such dumpsites which require immediate attention. The list grows larger almost daily. New Jersey alone estimates it has 230 sites which require remedial attention, 50 of which should be addressed quickly, eight of those being so bad that "cleanup should have been completed yesterday." New York has identified 157 different site locations which raise "substantial environmental and public health concerns." And the State of Michigan has estimated that it will require from $23 million to $77 million to determine the extent of groundwater contamination at 655 locations in the State. Obviously there is a need for this Fund and obviously that need was felt when Congress passed the law last year.

I think another reason that Superfund has received widespread support is that the deleterious consequences of improper hazardous waste disposal have reached all segments of American society. One can look at the more wealthy communities such as that around the Stringfellow Quarry in Riverside County, California, or the poor communities such as around the Hollywood dumpsite in Memphis, Tennessee. All Americans have been affected by this problem, and all stand to suffer in the future unless the problem is properly addressed.

As I mentioned earlier, there is a fund that is created largely through a tax on selected organic and inorganic chemical feedstocks and on crude oil. The collection of this tax started in April, April 1st of this year. EPA estimates that approximately $25 million per month will be collected from industry, or about $300 million per year. In addition, $44 million per year is authorized from general revenues. Therefore, full funding is $344 million available to be spent in fiscal year 1982.

The Carter budget proposal for Superfund in fiscal year 1982 was $250 million, almost $100 million below full funding. The Reagan proposal of $200 million for fiscal year 1982 represents a hefty 20 percent reduction from the Carter proposal. Actually, Reagan has

cut Carter's proposal by more than that. In fiscal year 1981, Reagan's supplemental request of $68 million is $10 million less than Carter's request for fiscal year 1981. In addition, money for work by the Public Health Services and enforcement division of Justice totalling $15 million will come out of the proposed EPA budget now. Thus the Reagan proposal means an actual reduction of $75 million from the Carter proposal, considering both fiscal year 1981 and 1982, and represents a very significant amount less than is available.

The impacts of such a reduction are highly significant. The decrease of 20 percent alone for fiscal year 1982 means that almost a ten percent reduction in spill removal capability, almost a 40 percent fewer emergency site actions, 40 percent fewer site inspections and 40 percent fewer enforcement cases. We prepared and sent over yesterday to the Committee an addendum supplemental to our statement based on some new information we had received which further gives you a feeling for the magnitude of the impact of these reductions.

Over 100 sites have been identified by EPA as warranting emergency action of some type. Yet the proposed Superfund budget provides sufficient resources for only 50 such actions.

The shortfall could have disastrous environmental consequences. We have sent to the Committee a table listing examples of current emergency actions to give you a feeling for the type of work which is going on and would be curtailed. I draw your attention to just one. For instance, the Kin-Buc site in Edison, New Jersey, which is on the third page of the table we supplied. You can see that at Kin-Buc, which has already received attention as a hazardous site, the impact of delay or termination of work is described in the following way: "Leachate from chemical land fill poses a severe threat. Dead animals have been observed. High tide may transport leachate to nearby marina."

There is a discussion as to leachate containing 20 to 50,000 ppm PCB's. Discontinuing cleanup threatens the Raritan River ecosystem and major flood could innundate thousands of drums of collected leachate if transportation and temporary offsite storage is not funded, and it describes the devastating impact that an attempt to deal with this problem by reducing the funds would have. This should provide you with an indepth feeling of the kind of impact the reduction has.

In addition, EPA is identifying additional sites at a large rate of almost 400 per month. It has already identified slightly over 9,000. Seventy-five hundred sites still need to undergo a site investigation. I think the failure to perform that investigation now is very important to understand. If we fail to investigate sites early on through site inspections, early on meaning in fiscal year 1982, we will be able to take fewer response actions in the years ahead. The more money that we can spend now to get a better understanding of the magnitude of the problem we are facing on the sites that need to be addressed, obviously the better will be the decisions which we make in the future years in terms of the cleanup activities.

The Carter request of $250 million provided for 1,500 site inspections, which is about 600 more than is provided with the Reagan proposal.

Let me stress that from our point of view the cuts being proposed make really no economic and no environmental public health sense. The longer it takes to clean up a dumpsite, the more it is going to cost. This is due both to inflation and the nature of the problem. The longer you wait before taking action, the farther contamination can spread, thus raising cleanup costs and the loss of valuable resources. Cutting the Superfund budget is a false way to economize. This is not a case where growth in a program comes at the taxpayer expense. The special tax on industry is earmarked for Superfund. It is going to be collected, so that the money is there to be spent.

In addition, each dollar appropriated from general revenues results in an additional $8 in purchasing power for the cleanup program.

It is our opinion that no one in society benefits therefore by delay in the actions of the Superfund, and for those reasons we recommend a $100 million increase in the Reagan proposal for Superfund. $75 million of the increase will restore the budget to the Carter level by the end of fiscal year 1982, and $25 million will bring us even closer to the program Congress envisioned a little more than three or four months ago when it passed the law.

That completes our testimony. We would be pleased to answer any questions.

[The statement follows:]

Mr. Chairman and members of the Subcommittee. My name is Joseph Highland and I am Chairman of the Toxic Chemicals Program at the Environmental Defense Fund (EDF). With me today is Mr. David Lennett, an attorney with EDF.

EDF is a non-profit, public interest organization with over 45,000 members across the United States. During the last five and one-half years EDF's Toxic Chemicals Program staff has worked actively to improve the quality of life by supporting public policies that minimize or eliminate the use of hazardous chemicals. As part of this effort, we have testified on numerous occasions before congressional committees and have sought action by regulatory agencies such as the Environmental Protection Agency (EPA), the Consumer product Safety Commission (CPSC), and the Food and Drug Administration (FDA) on individual chemical hazards or for changes in public policy related to the production, use and disposal of toxic chemicals. When necessary we have undertaken litigative action to secure these goals. In addition, we have maintained a public education program designed to provide individual consumers with answers to questions about the significance of chemical contamination in the water they drink, the air they breathe, the products they use and the food they eat.

We are here today because we are greatly concerned that the Administration's proposed budget for Superfund represents a level of spending far less than the amount necessary to significantly impact the existing hazardous waste problem. Moreover, the limitation on funding cannot be justified as a significant budgetary savings since the additional funds needed to properly implement Superfund will be available largely through a tax currently being collected from industry.

Just a little over three months ago, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, most commonly referred to as Superfund. It provides for the establishment of a fund, 7/8 derived from a tax on industry, to clean up releases from dangerous hazardous waste dumpsites and spills of hazardous substances. The fund is authorized for $1.6 billion over a five-year period.

Superfund passed by a wide margin in both chambers of Congress, because as a compromise bill it was a consensus piece of legislation. The Senate passed it summarily, after approving the use of the final version as a substitute by a 78-9 vote. The House passed a similar version by a vote of 351-23 in September, 1980, and passed the bill as approved by the Senate, 274-94, on December 3, 1980.

The bill received such overwhelming support because there was near unanimity regarding the scope of the health and environmental problems posed by the release of hazardous substances from spills

and dangerous dumpsites. As the Senate Environment and Public Works Committee stated last summer in its report on Superfund:

> The legacy of past haphazard disposal of chemical wastes and the continuing danger of spills and other releases of dangerous chemicals pose what many call the most serious health and environmental challenge of the decade. Chemical spills capable of inflicting environmental harm occur about 3,500 times year year, and an estimated $65 to $260 million is needed to clean them up. More than 2,000 dumpsites containing hazardous chemicals are believed by the Environmental Protection Agency to pose threats to the public health. The costs of containing their contents is estimated to be an average of $3.6 million per site.

The Congressional Research Service, in March of last year, released a catalog of resource losses from groundwater, surface water and atmospheric contamination. It described 128 incidents of groundwater contamination alone, which resulted in the closing of 1,363 wells affecting the drinking water supplies of over 500,000 Americans. Most of these incidents were caused by chemical spills or improper waste disposal.

The Surgeon General, last August, released a report on the health effects of toxic pollution, in which he stated:

> The Surgeon General believes that, while at this time it is impossible to determine the precise dimensions of the toxic chemical problem, it is clear that it is a major and growing public health problem. We believe that toxic chemicals are adding to the disease burden of the United States in a significant, although as yet ill-defined way. In addition, we believe that this problem will become more manifest in the years ahead.
>
> The health effects of chemical toxicity often are not evident for years. As the problems of toxic chemical waste dumps and aquifer contamination have shown us, we are currently in the very early stages of a health problem which may take years to assess fully. We believe the magnitude of the public health risk associated with toxic chemicals will continue to increase until we are successful in controlling the introduction of these chemicals into our environment.

EPA has already identified hundreds of dumpsites which require immediate attention. The list grows larger almost daily. New Jersey alone estimates it has 230 sites which require remedial attention, 50 of which should be addressed quickly, eight of those being so bad that "cleanup should have been completed yesterday."

New York has identified 157 different site locations which raise "substantial environmental and public health concerns." And the State of Michigan has estimated that it will require from $23 to $77 million to determine the extent of groundwater contamination at 655 locations in the state, and several billion dollars for remedial work. Obviously, the bill which passed, creating a $1.6 billion fund, was regarded as the minimum necessary to address the problem -- a bare bones bill.

Another reason why Superfund has received such widespread support is that the deleterious consequences of improper hazardous waste disposal have reached all segments of American society. They have reached the wealthy white community surrounding Stringfellow Quarry in Riverside County, California, and the poor black community surrounding the Hollywood dumpsite in Memphis, Tennessee. In addition, virtually every state in the United States has at least one site requiring attention, thus the problem is truly national.

Superfund imposes a tax on selected organic and inorganic chemical feedstocks, and on crude oil. The tax will be collected beginning in April, 1981. EPA estimates that approximately $25 million per month will be collected from industry, or about $300 million per year. In addition, $44 million per year is authorized from general revenues. Therefore, at full funding, about $344 million is available to be spent in FY 82.

The Carter budget proposal for Superfund in FY 82 was $250 million, almost a hundred million dollars below full funding. The Reagan proposal of $200 million for FY 82 represents a hefty twenty percent reduction from the Carter proposal. Actually, Reagan has cut Carter's proposal by more than that. In FY 81, Reagan's supplemental request of $68 million is $10 million less than Carter's request for FY 81. In addition, OMB recently informed EPA that money for health studies by the Public Health Service and enforcement activities by the Department of Justice will come from EPA's budget. These activities will cost about $15 million during FY 81 and FY 82. Thus, the Reagan proposal means an actual reduction of $75 million from the Carter proposal, considering FY 81 and FY 82 combined.

The impacts of this reduction are significant. The decrease of twenty percent alone for FY 82 means almost a ten percent reduction in spill removal capability, amost forty percent fewer emergency site actions, forty percent fewer site inspections and forty percent fewer enforcement cases. In effect, Reagan proposes to stretch out the Superfund program.

This makes no sense. The longer it takes to clean up a dumpsite, the more it costs. This is due both to inflation and the

nature of the problem. The longer you wait before taking action, the farther contamination has spread, thus raising cleanup costs and the value of resource losses.

Cutting the Superfund budget is a false way of economizing. This is not a case where growth in a program comes at taxpayer expense. The special tax on industry is earmarked for Superfund and is going to be collected, so the money is there to be spent. In addition, each dollar appropriated from general revenues results in an additional eight dollars in purchasing power for the cleanup program.

Who gains by underfunding Superfund? Primarily OMB, for a number of reasons. First, the difference between collected fees and expenditures will help balance the budget. Under the Reagan proposals for FY 81 and FY 82, unspent fees will total $189 million by the end of FY 82. In addition, at a hearing on Superfund several weeks ago, we learned from Congressman Madigan that the Treasury may be able to borrow against the unused fees at low interest rates to fund other federal programs. Finally, OMB can justify a greater reduction in EPA's personnel requirements if less money is spent by the Superfund program, notwithstanding the scope of the problem.

Who loses by underfunding Superfund? Everyone. Industry loses because the tax it has paid to clean up waste sites may be subsidizing the food stamp program or the development of the MX missile. Taxpayers lose because it will cost more in the long run to solve the problem. The states lose because they have relied on the federal government for help in this area, and indeed may be preempted by Superfund from taking action themselves, but help will not be forthcoming as quickly as is required. Finally, the affected communities lose, because they will be forced to suffer the economic, physical and emotional consequences of toxic chemical pollution longer than anticipated just last December.

For these reasons, EDF recommends a 100 million dollar increase in Reagan's proposal for Superfund. Seventy-five million of the increase will restore the budget to the Carter level by the end of FY 82 as described above, and the additional 25 million will bring us even closer to the program Congress envisioned a little more than three months ago.

This completes our testimony. We would be glad to answer any questions you might have. Thank you.

Joseph Highland, Ph.D.

David J. Lennett

SUPPLEMENT TO EDF STATEMENT

Over 100 sites have been identified by EPA as warranting emergency action. Yet the proposed Superfund budget provides sufficient resources for only 50 such actions. This shortfall could have disastrous environmental consequences. The attached table is a brief description of emergency actions currently underway, and the consequences of resource deficiencies. As you can see, emergency actions involve extremely dangerous waste sites. Delays in undertaking emergency actions will have severe human health and environmental consequences. More money can make a difference. For example, the Carter request of $250 million for FY 82 provided for an additional 30 emergency site actions.

EPA is identifying additional hazardous waste sites at an alarming rate of over 400 per month. It has already identified 9,200 sites. In order to determine whether these sites pose a potential risk, EPA must undertake a site investigation. First, a preliminary assessment is conducted, which primarily consists of data collection without actually visiting the site. Then, if it appears a hazard may exist, EPA will conduct a site inspection. Site inspections are critical to the evaluation and cleanup programs because they represent the initial first-hand gathering of information at the site. They are used to obtain preliminary data so that a determination can be made as to whether further work on the site is required, and they are necessary to prioritize sites for further action. Currently, almost three out of four sites require some form of site inspection. Seventy-five hundred sites still need to undergo a site investigation. The failure to perform large numbers of site inspections in FY 82 will mean fewer response actions in FY 83 and beyond, fewer enforcement actions, and less of an assurance that response actions are being taken at the most urgent situations. Again, more money can make a difference. The Carter request of $250 million provided for 1500 site inspections -- 600 more site inspections -- than the Reagan proposal.

ONGOING EMERGENCY ACTIONS AT UNCONTROLLED WASTE SITES

All $ In 000 UNLESS NOTED

Reg.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
I	Picillo Coventry, RI	289/3-24	234	254	500	70	90	Completion of site preparation (Mar. 20) and monitoring but delay of excavation of Northwest trench	Fluctuating chemical leachate flow into nearby swamp is leading to irrigation system and Moosup River. Extensive ground water contamination. Potential high organic vapor concentrations at residences near swamp. Excavation of Northwest trench (containing 10,000 drums) cannot begin unless it can be completed without interuption.
I	Ottati & Goss Kingston, NH	309/3-19	248	248	400	142	97	Overpack, transfer and staging of drums to be completed, then phase down security and monitoring	4375 deteriorated drums adjacent to small stream, leaking to Powwow River. Powerlines above drums present possibility of explosion/fire. Surface, ground water and private wells in aquifer threatened. Warming trends increase drum deterioration, creating potential organic vapor prob. in residential area.
I	Motollo Raymond, NH	274/3-24	259	60	250	52	32	Occasionally over pack leaking drums. Delay drum disposal	As many as 1,000 buried leaking drums containing organic chemicals contaminated ground water and caused surface discharge into small stream flowing to Exeter River, the DW supply to Town of Exeter. Warming weather will increase drum leakage and vapor problems at site.
I	Sylvester (Gilson Rd.) Nashua, NH	60/	60	43	600	8	0	Security & maintenance of sorbent filters. Delay construction of treatment system.	Chemicals in buried drums and liquid wastes poured into gravel pit area have migrated to nearby stream adjoining tributary of Nashua River. Private wells and residences located within 1/4 mile of site may be exposed to vapor problems and increased flow of contaminated ground water.

All $ In 000 UNLESS NOTED

Reg.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
I	Holden Mun. Landfill Holden, Mass	11/3-12	5	2	10	8	6	Maintenance of sorbent filters to continue.	Contminated ground water from landfill flows via spring flowing into Quinapoxet River, flowing into the Wachuset Reservoir, a major DW supply for Boston. Town of Holden and State are involved in response action and it is hoped they will take full responsibility.
I	Keefe Env. Serv.* Epping, NH	70/3-3	60	60	70	70	60	Increase height of lagoon walls, draw down and treat contents.	Organic and wastes (phenols, cyanides several metals, and several organic compounds) leaching from lagoon into Piscassic River. Also located on site are several thousand drums of various waste materials. Leachate is moving further downstream at higher and higher concentrations. Problem will worsen with warming weather.
II	Lipari Landfill Mantua Township, NJ	170/1-31	170	70	300	65	0	Completion of drill & sampling & monitoring of wells. Delay design of slurry walls and cap.	Improper disposal of 2.9 million gallons of liquid hazardous waste caused chemical leachate (known to contain carcinogens) to flow into Chestnut Branch, flowing into Alcyon Lake, and finally to the Delaware River. Alcyon Lake - closed to public for recreation. Reported fishkills. Conventional containment impractical due to pollutant subsurface movement. A 6-8 wk. drilling and sampling program to to determine depth of impervious layer, direction of flow, and contamination zones has begun. About $1M required for construction of slurry walls.
II	Goose Farm Plumstead, NJ	2.73M/3-11	2.64M	890	360	360	227	pumping & treatment of contaminated ground water terminated 3-25 due to lack of funds	Discharge from buried drums into a tributary of Delaware River. Ground water above the Vincetown aquifer contains high organic concentrations. Sandy soil and downward vector of water movement at the Vincetown aquifer, with the spring rise in water table, will rapidly increase the spread of the contaminated plume. Operation of ground water treatment system - terminated due to funding restrictions. Start-up costs may run as high as $400K. Completion of pumping and treatment and disposal of drummed materials cannot be completed without further funding.

*Incident began after March 1 - Present ceiling should allow completion

All $ In 00' 'NLESS NOTED

Reg.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
II	Kin-Buc Edison, NJ	835/3-24	795	390	900	320	60	Continue leachate collection, drumming and storage on site. Delay development of final solution to discharge problem	Leachate from chemical landfill - severe threat. Dead animals have been observed. High tide may transport leachate to nearby marina. Mirror Lake, recreational area, which is hydrologically connected to Kin-Buc via underground aquifers face potential contamination. Leachate contains 20-50,000 ppm PCBs. Discontinuing cleanup threatens Raritan River ecosystem. Major flood could inundate 4,000 drums of collected leachate if transportation and temporary off-site storage is not funded. Lack of funds prevent utilization of oil/water separation and transport of PCBs to bulk storage facility. Response action consist merely of containing direct discharge. Final solution to continuing discharge cannot be developed without additional funds.
II	Chemical Control Elizabeth, NJ	2.98M/3-2	2.53M	1.67M	1.5M	0**	0	Completion of ground water treatment.	40,000+ corroding, leaking drums caused many explosions/fires and direct discharges of numerous hazardous substances to Delaware River. Dense residential area located 1/4 mi. from site. Potentially explosive natural gas tanks also nearby. Current response directed at continual discharge to Eliz. River via ground water. Drasti cut back of on-site cleanup due to fund restrictions.
II	Pollution Abate. Serv. Oswego, NY	2.30M/ 3-18	1.794	3	800	4	4	Maintenance of filter box, delay removal of remaining drums (12-14,000)	Deteriorating storage tanks and 14,000+/- steel drums - discharging waste oil into adjacent swamp, then to Wine Creek then to Lake Ontario (800 ft. from site). Weeping tanks have been emptied of contents and leaking drums moved to higher elevation on site. Filter box maintained at point of discharge. 12-14,000 drums on site in tempora storage. No further cleanup without additional funding.

** As of 2-28 all further funding of this project to be assumed by USCG

All $ In 000 UNLESS NOTED

Reg.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
II	Old York Oil Moira, NY	550/12-31	550	0	200	0	0	No further work being done at site. Delay constructing of secure landfills for PCBs & cap for lagoons.	Oil/PCBs leaching from 1 of 3 lagoons into wetlands leading to Lawrence Brook. Contaminated ground water plume reaches navigable waters. Contaminated soil has been dewatered and removed from wetland. Runoff and somelagoon contents have been decontaminated. Cleanup and stabilization of site is curtailed until conditions improve in spring. Restricted funding prevents construction of secure landfill on site for PCBs and cap for 3 lagoons cannot commence without further funding.
II	Black Creek Niagara Falls, NH	500/1-31	499	160	500	0	0	No work scheduled to be completed during this period. Delay const. of sewer diversion & leachate collection/treatment syst.	Many hazardous materials (dioxin, etc.) discharged from sewers have entered Black Creek, which drains the Love Canal area and flows through a residential area. Engr. specs for sewer diversion and on-site leachate collection and treatment unti being finalized. Construction of same cannot take place without further funding.
III	National Wood Preservers Haverford, PA	230/3-11	210	2	20	20	20	Maintain sorbent filter fences & drill bore holes to determine extent of contamination	Oil/PCB mixture discharged to well migrated through ground water to abandoned sewer, from which discharges threaten Delaware River. Filter fences in place to stop discharge. Maintenance of fences and sorbents continues. Negotiations with response party to complete clean-up underway.
III	Dracup Warehouse Youngsville, PA	850/1-31	850	244	163	43	0	Transport barrelled PCBs from G.E. facility to SCA & pay storage to 1 July. Delay removal of low level contaminated soil	Soil contaminated with low-level PCBs poses threat to Youngsville DW supply. Soil must be removed and dispose of at approved site. Region awaiting State selection of approved disposal site. Negotiations with responsible party to complete clean-up underway.

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Reg.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
V	Seymour Recyl. Seymour, IN	2.02M/2-19	1.920	140	800	0	0	Continue bulk tank removal & complete ground water study funded elsewhere. Delay removal of damaged drums from site.	50,000 drums (many damaged) containing at least 1 different hazardous substnces have entered ground water and have migrated to White River. Fumes have caused eye and lung irritation to local residents and chemical reactions have caused evacuation of nearby business. Emerg. containmen of surface runoff has been started and contents o 25 bulk tanks are being removed. No removal of damaged drums or estimate of extent of ground water contamination can take place without furthe funding.
V	Cordova Chem. N. Muskegan, MI	300/1-31	300	300	500	0	0	No work to be completed in this period. Delay removal of contaminated soil from site.	Improperly disposed haz. wastes have migrated offsite to creek adjoining Muskegan River. Est. 1.4 billion gals. of ground water incl. residential wells have been contaminated. Many residents on bottled water. Studies to confirm soil and water contamination will be completed March 1. Removal of contaminated soil cannot begin without additional funding.
V	OMC Corp. Waukegan, IL	200/1-31	200	200	400	0	0	No work scheduled to be completed in this period. Engr. plan for diversion around contaminated N. Ditch & construction of 1st lagoon delayed.	Past discharges of PCBs to harber contaminated sediments (Est. 275,000 lbs. PCBs in sediments). Study to develop workplan fo removal will be completed June 1981. Const. of lagoon cannot begin without additional funds.

All $ In 000 UNLESS NOTED

Req.	Site/Location	Ceiling $/Date	Total Oblig.	Oblig. Since Dec. 11	Estim. Needs 1 Mar. 1 Jul.	Alloc. 1 Mar. 1 July	Auth. Expen. 1 Mar. 1 July	Status of Work 1 March - 1 July	Impact of Delay or Termination of Work
V	Laskin Poplar Jefferson, OH	416/3-26	400	300	400	7	14	Completion of study to determine extent of clean-up needed. Clean-up of lagoons may be delayed.	2 filled waste oil lagoons threaten to overflow with PCBs and phenlols to Cemetery Creek. Initial recover and treatment operations drainded nd treated lagoons but they are again filled to capacity. Completion of study to determine extent of clean-up need cannot be completed without further funding.
V	Summit Nat. Liq. S. Deerfield, OH	300/1-31	300	200	800	15	0	Competion of study of vapor problem from polymer pit. Delay mitigation of discharge from polymer pit.	20,000 damaged drums above ground, more below, contai organics (inc. C-56 and unknowns). Overflowing waste lagoon contaminated secondary water supply for Youngstown. Site is fire hazard to local residents an businesses. Vapors from polymer pit are expected to become serious problem as summer approaches. Actions at site have been stopped pending additional funds to mitigate discharge from polymer pit containing unknow viscous material.
V	Old Mill (Jack Webb) Rock Creek, OH	10/	10	8	120	10	0	Continue control of surface runoff w/ sorbent filters. Delay sampling of drums & removal/ disposal of liquids	1,000 leaking drums containing PCB, arsenic, mercury, chromium are leading to Rock Creek, then to Lake Erie Ground water contamination has been confirmed and reactive materials at site pose hazard to nearby residents. All action at site has been stopped pending funds to sample drums and remove and dispose of liquids.
V	Ohio Drum Recl. Cleveland, OH	7/	12		10	10	0	Diversion of creek around contaminated area.	PCBs from this site have contaminated wetland area draining to Big Creek, then to the Ohio River. All work at site has been stopped pending additional fund to divert flow of creek away from contaminated area. Discharge of PCBs continues.

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V	Fed. Mar. Term. Riverview, MI	59/3-18	14	45	200	45	45	Drain diverted runoff to public sewer & construct berm around one ditch. Delay fill-in of ditches.	An unknown number of buried drums contaning at least 27 different hazardous substances have contaminated water in two ditches adjacent to the Detroit River. surface run off has been redirected around 2 ditches and berms are under construction to prevent a discharge. Open ditches cannot be filled in without further funds.
VI	French Ltd. Barrett, TX	600/	600	325	150	10	0	Construct security fence around area. Sampling and analysis of high level contamination areas may be delayed.	Abandoned waste lagoon containing PCBs and other hazardous substances has failed causing discharge to march and tributary of San Jacinto River. Contaminated sludge outside lagoon is currently being removed and returned to lagoon. Initial operation should be completed by June 1 but needed sampling and analysis program and site fencing cannot take place without further funding.

Mr. SABO. Thank you, Dr. Highland.

Mr. Green, any questions?

Mr. GREEN. You indicated that $25 million a month was anticipated from revenue flows.

Dr. HIGHLAND. Yes, sir.

Mr. GREEN. Do we know from the first month's estimate whether that estimate is being achieved?

Mr. LENNETT. No, we won't know until July how much is going to be collected.

Dr. HIGHLAND. I think that was a reasonable estimate, based on who was going to pay into the Fund and the rate being paid in. Our concern is that that money is there to be spent in this way, and there was a great concern on industry's part during the discussion of this bill that that money if collected be used for the purpose it is being collected for, not being available in the public treasury to offset debts or to finance other activities, and we concur with that.

We think that industry has been made to pay to help clean up a program that it would be inappropriate not to use the money for that, and we are very concerned that if the money is available we take the action now. If we fail to do it we make the problem worse, and I can tell you that from our experience there is just overwhelming public support for the clean up of the sites, in addition to which I think it is important to realize that unless we can make an effective effort to clean up the sites now, siting of new sites in the future will almost be impossible. Communities just don't believe that the problem can be handled properly, and unless they can see some concrete evidence that if a problem occurs it can be dealt with correctly to clean it up, there will be little sympathy for the need for increased disposal capacity.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. SABO. Thank you for your excellent testimony.

Dr. HIGHLAND. Thank you.

Mr. SABO. The Committee will be recessed until 1:30 p.m.

AFTERNOON SESSION

VETERANS ADMINISTRATION

WITNESS

Dr. RICHARD M. RYAN, JR., D.Sc., ASSOCIATE DEAN FOR MEDICAL SERVICES, HARVARD MEDICAL SCHOOL

Mr. SABO. [presiding]. The Committee will come to order.

Dr. Ryan, we will insert your entire testimony in the record. If you would like to summarize, we would appreciate it.

[The statement follows:]

CONGRESSIONAL TESTIMONY
Richard M. Ryan, Jr., D.Sc.
May 8, 1981

Mr. Chairman and Members of the Committee:

My name is Dr. Richard M. Ryan Jr., Associate Dean, Harvard Medical School, Boston, Massachusetts. I currently serve as a member of the Veterans Administration Special Medical Advisory Group.

I am pleased to appear before you to testify on behalf of the Veterans Administration fiscal year 1982 budget. I wish to focus on the Department of Medicine and Surgery (DM&S) portion of the revised budget.

There are four points that I wish to make:

1. The budget for the Department of Medicine and Surgery has been effectively declining for the past several years, while its workload has not. In order to accommodate to this declining resource base, the Department has made some programmatic adjustments. The major reductions, however, have been across the board, affecting staffing, supplies and equipment in all patient care areas. Whether these reductions result in fewer veterans being taken care of or in longer waits in the clinics and admission waiting lists, the result is to reduce the amount of medical care which the V.A. is providing to eligible veterans.

2. There are an inordinate number of people and offices outside of the Department of Medicine and Surgery which are involved in the management decisions concerning the mix of medical care programs and their capabilities. The Board of Directors of any major corporation understands that they should replace the Chief Executive Officer if they do not like the way the business is being run. If they want a strong manager, they do not tell him how to run the business. Internal DM&S management is significantly hampered by the involvement of OMB and various oversight groups in its internal management.

3. The V.A. Department of Medicine and Surgery is not an isolated hospital system which can be increased or decreased without having an impact upon the rest of the nation's health care delivery capability. It is not financed by dollars which can be isolated from general tax revenues. And, it is not an isolated part of the political system belonging only to a small group of self-interested constituents. Alterations in the scope, financing, and structure of the V.A. health care system should be done within the context of the nation's health care system, the availability of public funds to finance the health care needs of all medically indigent citizens, the needs of the defense sector for acute care beds in the time of a limited war, and perhaps above all, within the context of the medical care needs of those veterans who have served us in times of war and in peace.

4. An appropriate assessment of the FY82 budget request for the Department of Medicine and Surgery can best be done against the objectives and goals articulated in a long term strategic plan for the Department.

As you know, the revised budget request for DM&S is 330 million dollars under the January submission for 1982 resulting in an increase over the 1981 request of five percent. In fact, Mr. Chairman, DM&S has averaged a six percent per year increase for the past five years. Inflation alone has averaged over six percent during this same period of time. When we contrast the five percent per year increase in V.A. medical care financing with that of the private sector, which has averaged 11 to 13 percent increase per year, we must conclude that the V.A. health care system is now more efficient or it is not being funded at that level required to meet the medical care needs of those veterans who are seeking care.

DM&S is now more efficient than it was. During the past ten years the inpatient workload has doubled and the total number of outpatient visits has tripled while the effective funding for the department has stayed level. In addition, the V.A. has reduced its bed complement by 20,000 beds during the past decade. This is equivalent to closing one hundred averaged sized community hospitals.

The increased efficiency of DM&S is only part of the picture. There are insufficient funds to care for all of the veterans who are seeking care. Veterans are being turned away from V.A. hospitals and clinics. The Department is taking care of veterans who are older and sicker. The waiting periods for clinic appointments and the waiting lists for scheduled admissions are getting longer. Additional resources are required by the Department in order to keep pace with the increasing incidence of illness in this ageing veteran population, to improve efficiency even further and to maintain the high quality of care currently being provided.

For example, modern management assumes that appropriate computer systems will be available to permit efficient operations. Practically every hospital in the private sector is using computerized management systems to reduce the costs of laboratory tests, to provide pharmacy management support, to handle medical records, and to provide administrative support to the director and top management. The V.A. has an inexcusable score card. Among the 220 or so V.A. hospitals and clinics there are 8 with integrated clinical laboratory, scheduling, admission and discharge systems and 7 hospitals with a computerized pharmacy system. There is one archaic admission and discharge system which serves 17 hospitals, one additional scheduling system and no medical record management systems of which to speak.

Some of this disparity is due to internal V.A. organizational problems in which DM&S must ask the Office of Data Management and Technology for permission to buy a computer of any size. In a time when the major businesses in the nation utilize table top computer systems costing $2,000 to $3,000, it is unthinkable that hospital directors are not allowed to make local decisions about computerized management systems which they need to provide efficient and improved medical care. Some of this disparity is due to circumstances byeond the control of the V.A. It is difficult to understand, for example, why the

Office of Management and Budget denied a recent request by DM&S to improve its pharmacy and scheduling systems. And some of this disparity is due to the pre-1975 requirement for centralized control over the acquisition of computer hardware. The development of advanced computerized management support systems for local and central management will require that you discontinue the embargo on the acquisition of computers and software.

Other, externally imposed restrictions can significantly inhibit the ability of the Department to provide high quality, low cost medical services to eligible veterans. For example, it has been decided in discussions between the V.A. Administrator and the Office of Management and Budget, that hospital closings and mission redefinitions for facilities are unnecessary at this time.. It is further stated in Mr. Wilson's testimony before this committee that economies will be achieved by the system without the reduction of workloads or without changing the current range of benefits. It is difficult to see how this can be achieved without compromising the quality of care and the current quality of DM&S medical programs.

As has already occurred, reductions in the number of nonservice connected veterans cared for by the Department results in a significantly altered case mix in the system. As you cut back on the care for the ambulatory low cost patients, you are left with the high cost intensive care for the very ill. Such a shift in the case mix will impact every facet of care, all programs... clinical, academic and research.

Mr. Wilson has suggested that the question of hospital closings, mergers and consolidations will be discussed at a later time, in the Spring Briefing with OMB. If that prospect is real, it would appear important to all concerned to insure that consumers, providers and affiliated teaching institutions be involved in that process. The V.A.'s Department of Medicine and Surgery can not be manipulated and adjusted as if it were independent of the many factors which influence our political and medical care system.

The V.A. Health Care System is a national health resource. It is annually responsible for the care of over 3,000,000 veterans. It annually trains 37 percent of the U.S. physicians filling approved medical residencies, 31 percent of all U.S. medical students, 17 percent of all dentists engaged in post-doctoral training, 15 percent of all graduate psychology students and over 11 percent of all nurse students at all levels.

Changes in the medical service base of the V.A. will affect medicine as it is practiced throughout the land. The V.A. is not a separate system of care in the nation, it is inextricably inserted into our nation's health delivery system.

The fantasy that the voluntary health care system could or should provide the care offered by the V.A. is both absurd and dangerous. The alternative to V.A. health care for many of the patients DM&S takes care of is not private sector care, it is no care. Many of those who are receiving care in the V.A. have been abandoned or rejected by the private sector. Many have exhausted long term care benefits provided by Medicaid and Medicare. Others are receiving rehabilitation care which is unavailable elsewhere. Most are chronically ill and would find no option for care in the private sector. In certain cases, such as spinal cord injury care, multiple loss of limbs, blindness, and other types of cases, the Veterans Administration Department of Medicine and Surgery affords the only hope.

By the 1990's, two out of every three American males over age sixty-five will be veterans. Eight million veterans 65 and over will require hospitalization, nursing home care and long term community support services. In FY 80 11% of this age group received some medical care in the V.A. Chronic and long term care services are already overburdened throughout the nation. Where will they receive this care in the 90's? Social Security is threatened with bankruptcy in 1982-83, and Medicare costs have increased at two times the rate of the V.A. budget over the past ten years. In the midst of this developing long-term chronic care crisis, a decision has been made to limit the size and growth of the Geriatric Research and Education Centers in the V.A. These Centers focus the professional's attention upon the medical care of our elderly veterans through education and training activities, research programs and model patient care settings. Limiting their growth is an ostrich-like denial of the reality which faces the V.A. now.... indeed will face the nation in 10 years.

Another example of the integral role the V.A. plays in this nation's social fabric: The Department of Defense's hospital backup support role played by the V.A. is familiar to those of you who arrived in the Congress during the dark days of Korea and Viet Nam. The potential impact of a limited war and demands for 20,000 immediate beds is outlined in the Maximus Report prepared for the Department of Defense in 1979. Only the V.A. with a national system of care can logistically meet this national defense need.

Each day, we, who have invested so heavily in this system, hear discussions about cutbacks in staffing, equipment, construction, eligibility, research and training. Instant solutions for short run economies are disseminated lightly. For example, the restriction on DM&S acquiring CAT scanners comes without concern for the constraints such an action imposes upon veteran's diagnostic care. CAT scanners are now an integral part of the diagnostic armamentarium used in acute and chronic care. Their use, distribution, and cost are no longer considered to be important issues. As was demonstrated recently, they are essential in the diagnosis of acute trauma. How can OMB and others presume to deny the veteran access to acceptable quality of medical care without being accountable for such decisions? Must this system of care continue to depend on the dangerous practice of transferring acutely ill or seriously wounded patients to community hospitals for CAT scans?

A recent example of what I am concerned about is contained in the fiscal year 81 legislation on the Veterans Administration Medical Care budget supplement. Therein is a precise prescription concerning ceilings on full-time permanent staff years and non-ceiling staff years. It is appropriate for Congress to specify an overall ceiling on FTEE. However, management needs to be unencumbered from over restrictive OMB and Congressional formulae which inhibit sound management. (See attached illustration.)

A final example of nearsighted decision making. The Baltimore Hospital replacement, the only regional tertiary care facility in Maryland, is cancelled or deferred after thirteen years of planning. Where will these patients receive care if not from the V.A.? What different dollars will be used to pay for their care, if any? What will the quality of care be if it continues in physically deteriorated facilities? Is this a harbinger of things to come in the system?

Can the V.A. health system continue to absorb across the board cuts in program and staff and continue to meet the expectations of a generous Congress? How many veterans is DM&S responsible for? What, exactly are their entitlements to V.A. medical benefits, and can the V.A. deliver the required care in a high quality, timely manner? I suggest that we may be on the verge of an eligibility crisis for the Veterans of this nation. I am uncertain as to whether the system can provide for all those who are currently entitled.

I have discussed just a few of the many factors and issues which affect the V.A. Department of Medicine and Surgery and influence the evaluation of its budget request for Fiscal Year 1982. It is impossible for me, and I suspect very difficult for others, to rationally criticize this proposed budget. There is no road map. There is no way of knowing who the Department should be taking care of, what their medical care needs are that the Department should be servicing for them and what the expected and appropriate costs of such services will be. How adequate is the Veterans Administration Department of Medicine and Surgery budget for 1982? It is probably inadequate to do all that the V.A. is expected to do.

In spite of the many studies and reports which have been done on the V.A.'s Department of Medicine and Surgery, we still do not have a long term strategic plan for the Department. A rational planning program involving all appropriate constituencies is necessary. Such a program, however, requires resources and a commitment by the Congress and the Administration to identify and support the best solutions. We are responsible to the public for the operation and maintenance of a high quality health care system for eligible veterans, and yet we do not perform even the most rudimentary long term and strategic planning. The collage of conflicting legislation enacted by Congress since the days of the Veteran Bureau must be reviewed, amended and put into the context of the 1980's if this budget or any other V.A. health care budget is to be fairly evaluated.

In summary, I have attempted to point out that V.A. management does not have the tools to plan and scope its system adequately. We have touched upon issues of importance to this committee and have developed a few outstanding illustrations of how DM&S management is being hampered in doing its job because of over control by others and by poorly defined legislative entitlements which threaten to swamp the system. We have pointed out that the V.A. is an essential part of the public financing of this nation's health and welfare system, that it is an inseparable part of this nation's health manpower educational complex and that it is an integral part of the nation's health care delivery system. In addition, the Department of Medicine and Surgery plays a key role in health care delivery research and development. And we have described its vital public role as a national defense and disaster care backup resource. Finally, we suggest that the solution to all of these complex problems is to have a long term and strategic plan for the Department of Medicine and Surgery, one which is developed by all of the involved constituents.

We can not here and now explicitly define the needs, mission and goals the strategic and long range plans of the Department of Medicine and Surgery. This appropriations committee, however, can serve as the stimulus to initiate the mandate for a long term management plan for the Department... a road map which can be used to chart an acceptable course for the Department, one which the Department can use to account for its own actions and decisions and one which we all can use to evaluate the Department's performance and proposed budgets.

As an administrator, planner and academician, I urge you to approach the promised solutions and economies of the FY 82 budget with extreme caution.

I thank you for these precious minutes of testimony and hope that you will find my brief remarks to be of help in your decisions.

Attachment

held from obligation by the Librarian of Congress pursuant to section 309 of H.R. 7593 as provided by section 101(c) of Public Law 90-536; and $88,750 to be derived by transfer from the appropriation "Furniture and furnishings" by release of that amount withheld from obligation by the Librarian of Congress pursuant to section 309 of H.R. 7593 as provided by section 101(c) of Public Law 90-536;

Copyright Office: "Salaries and Expenses", $655,000, and in addition, $206,300 to be derived by release of that amount withheld from obligation by the Librarian of Congress pursuant to section 309 of H.R. 7593 as provided by section 101(c) of Public Law 90-536;

Congressional Research Service: "Salaries and Expenses", $1,033,000, and in addition, $573,000 to be derived by release of that amount withheld from obligation by the Librarian of Congress pursuant to section 309 of H.R. 7593 as provided by section 101(c) of Public Law 90-536;

Books for the Blind and Physically Handicapped: "Salaries and Expenses", $219,000 to be derived by release of that amount withheld from obligation by the Librarian of Congress pursuant to section 309 of H.R. 7593 as provided by section 101(c) of Public Law 90-536;

"Collection and Distribution of Library Materials (Special Foreign Currency Program)", $21,000, to remain available until expended;

In connection with "Salaries and expenses, United States Attorneys and Marshals" in the Department of Justice:

: Provided, That amounts provided for the processing and detention of Cuban nationals under Title VII of H.R. 7584, as incorporated into Public Law 90-536 are available to pay other expenses under this head.

In connection with the Veterans Administration, Medical Care:

: Provided, That within the total Medical care resources available in fiscal year 1981, the Veterans Administration shall fund not more than 19,381 other than full-time permanent staff years and not more than 1,401 non-ceiling staff years

RESCISSIONS

Pursuant to Clause 1(b), Rule X of the House of Representatives, the following table is submitted describing the rescissions recommended in the accompanying bill.

Dr. RYAN. It gives me great pleasure to be here today. I have worked with the Veterans Administration for the course of the past 12 years, as a VA employee, as a medical district director and a hospital director in the system, and as an academic administrator. As an academic administrator, I have been responsible for academic programs at Harvard Medical School.

I think there are four major points I would like to make in my presentation today. Since they are in the record, you will find the details supporting these points in the testimony which I have presented to you.

Let me briefly allude to them.

First, the budget for the Department of Medicine and Surgery has been effectively declining because of inflation, over the past several years. By this, I mean specifically the past five years. If we look at that bottom line adjustment, it is approximately six percent per year in a period of time in which the cost of medical care has incrementally been increasing by 12 percent to 13 percent. I feel that this does several things. It dilutes the quality of care because cuts come down horizontally, and it very much compromises what one can do for the eligible veteran population.

Secondly, there are, I believe, prescriptions for resolving the problems in the Department of Medicine and Surgery in a national health care delivery system which come over from OMB and from the Congress, which are clearly so directed that they constrain efficient and effective management of the systems. I think that they, rather than recommending some of the problems, tie the hands of the chief medical director and the administrator in resolving the problems of the system.

Thirdly, I believe if you look at the technology capabilities of the system, particularly in the area of management and patient information systems, they are dealing with the primitive technology, where other hospitals are using computers. I think continued restraints on technology applications in the VA will result in a primitive system which cannot cope with modern-day medical science. That is clearly the case. I have made my points on what the management and patient information system of the VA is in the body of my text, which I have presented to the Committee.

Finally, I wish to re-emphasize a concern about Federal medicine in general and the VA, in particular.

The Public Health Service hospital closings, the impact that we see currently on the Communicable Disease Center in Atlanta, the multiple impacts that we see on VA programs and on defense-sector programs, indicate to me that people have fantasies that the private sector will be able to assume responsibility for these multiple needs that the country is confronted with related to veterans' care, related to defense and related to national disaster health care management.

I am very much concerned that nobody is looking at the role of Federal medicine in the provision of care and the meeting of national needs, and that if we continue to dismantle on a fragmented approach these essential services, we will indeed have a detrimental situation for the country in terms of national defense.

I have alluded in the text to the fact that the report, which was conducted for the Department of Defense looking at the need for

back-up resources, bed resources in time of a limited war, suggests that there is only one national resource which can meet those needs, namely, the Veterans Administration, because it is a national system of care, with the availability of beds, with the tertiary, secondary, and primary capability necessary to back up defense.

I am aware that the DOD is currently negotiating with the American Hospital Association hospitals to provide backup to their systems. However, I am not convinced that the available beds in the voluntary sector, which are very often obstetrical, pediatric, chronic and other kinds of beds, are going to meet the needs of the defense sector.

What I am pleading for in this testimony is that we begin to look at the tools which are necessary for efficiency within the Department of Medicine and Surgery and to make sure that those tools are available for effective management.

The budget is the articulation of a management strategy based upon a definition of mission goals and long-term and short-term goals. I do not feel the Department of Medicine and Surgery has yet achieved a long-term and short-term strategic planning instrument against which we can measure the effectiveness of the department.

I would urge this Committee to insist and to provide the resources for the Department of Medicine and Surgery to do precisely that, to give you a strategic plan against which you can project the efficiency of this system. Incorporated in that recommendation is the acknowledgement that you must give them the kind of technology, whether it be computers or CAT scanners, that are necessary to run a modern system. If we truly believe the system should be here, then we are going to have to give it the resources.

Basically, that is a summary of my presentation to you. My comments are more explicit in the text of the document. I would like to have this time used as the Committee sees fit for an exchange of views.

Mr. SABO. In terms of the Administration's request for the 1981 supplemental, the Committee did add back in direct medical care personnel.

Dr. RYAN. I am aware of that.

Mr. SABO. Hopefully that will be somewhat helpful.

Mr. Green, have you any questions?

Mr. GREEN. In your statement you note that two-thirds of the elderly males would be veterans. Obviously one-third will not be. Women tend to live longer, and they will have the same need—except for small percentages in the various populations.

Don't we face the same problem in looking at our whole population that we do in looking at the veteran population? Does it really make sense to plan for two-thirds of the men in one category and one-third of the men and most of the women in another category?

Dr. RYAN. If that was the plan, I would be opposed to it. I believe the VA affords the geriatric clinical resource for providing significant care to the male population, and if we thoughtfully look at the way in which we use those resources, we can build companion services for the spouses.

If we approach it that way, and we build our geriatric clinical base in the country utilizing the strength of the VA, I am convinced we can accommodate the needs of the spouses and that we can provide a step up in doing something about this aging population.

You are aware that Mr. Hash has introduced a bill which would extend long-term care and Medicare to the aging population because he is concerned about the same thing I am, which is, namely, if we continue to meet their needs in the acute care sector, we will overwhelm that sector. Similarly, if we dump the veterans who will be over the age of 65 by the year 1990 into the Medicare program and the voluntary sector, I would say we are going to overwhelm those programs and those resources, and I think, therefore, we do have to do our homework.

Mr. GREEN. You are saying we need some sort of planning that looks at the resources in the veteran sector and in the voluntary sector.

Dr. RYAN. You can not separate those two systems. To do so is very hazardous. My concern is that people are looking at this very narrowly and not looking at the context in which Federal medicine is provided and what the implications are of a shutdown in that system.

I contend that in terms of the chronic and rehabilitation needs of this particular population, we would exhaust the available resources in the U.S. if we try to mainstream them by providing care in the voluntary sector.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. SABO. When we added personnel back in the supplemental bill, we restricted the numbers to be hired for temporary positions.

The reason was that when we have added full-time positions, the VA has hired temporary people rather than permanent positions. We have intended to add full-time regular employees. This was an attempt to limit it.

I had some reservations about the fact that the medical personnel available today, particularly nurses, are limited to temporary rather than full-time. I am curious if you have any feeling as to how we can approach what we all want to do in the best fashion Do you think this approach is one that makes sense—limiting temporary people?

Dr. RYAN. Because I have had experience in the system as a medical district director and as a hospital director, I am opposed to second-guessing the management calls that have to be made at the local stages. I think when you give too precise a formula in terms of the recommendations—I understand your problem, to ensure that the ceiling is used appropriately.

I am concerned that you will over-man it and that you will tie hands rather than untie hands.

Mr. SABO. Isn't part of the problem that those management decisions are being made by OMB?

Dr. RYAN. Yes, sir.

Mr. SABO. That is where we end up trying to countermand it.

Dr. RYAN. That is absolutely the case. We have seen administrative impoundment for the past several years, and I feel that the extent to which OMB is calling the shots in the VA is a candle, in

terms of the Administrator and the Chief Medical Director being able to manage the system. I think we are incrementally inhibiting them year after year.

Mr. SABO. How open do you think the VA would be to some serious joint planning? You accurately suggest if we are looking at the quality of health care in this country, one has to look at the VA system; one has to look at the private care system.

I am very much in favor of looking at both systems. Due to some experience with a local VA hospital, I discovered the great reluctance in the VA system to be involved in any joint planning process.

Dr. RYAN. It depends upon at what level you mean that. I really feel when you are planning to meet national needs, you have one equation in terms of regional needs, in terms of the total Nation, and if you are planning to meet local needs, you have another equation, and you need two different planning bodies to effect solutions to those two needs.

Under 93-641, the Comprehensive Health Planning Act, I have reservations about the extent to which the Federal sector can participate in a meaningful way, other than through communications, and that is because they transcend the local jurisdiction of those planning bodies.

Mr. SABO. I have heard that argument, and it is not an accurate one, because those local planning bodies also look at other agencies that transcend. If they avoid that, then they don't apply, even in a large metropolitan area, to the private sector, because they transcend.

Dr. RYAN. Are you talking about defense in particular?

Mr. SABO. I am talking about the Minneapolis/St. Paul area. Just a year ago, we got an expansion in the VA hospital. I have no problem if people want to reject the recommendations of the local health planning board if they think they are wrong, but it was rejected for the argument that they had no capacity to look because it was a regional thing that dealt with facilities in a particular geographic area.

This would apply to most of our hospitals whose reach goes far beyond that particular geographic area. I was more upset by reaction than substance, because the reaction was that once you mix these, this was a great threat.

I think fundamentally it represented the opposite, that the system was going to maintain the type community-based support that it needs, and, if so, this was a positive thing for them to do rather than view it simply as a threat and something that was negative.

Dr. RYAN. I agree with your concern and with your comments and have seen the same thing, myself, certainly in local planning agencies.

I think submitting VA facility plans to the local planning agencies makes good sense, and I have no problem with that. I think the reservation of decision-making when it comes to an identification of national priorities, and retaining that in Washington, makes eminent good sense as well. I am not going to argue with you on that.

I agree that we should have the input of local people. However, I really feel where the breakdown in terms of looking at VA DM&S needs in the context of total national health needs is right here in Washington, where policies and strategies are developed in the White House and developed in various other agencies of Congress, without the kind of input and communication between the agencies.

I am aware of the Federal sharing committee, et cetera. What I am saying is, it isn't working the way it really has to. What I am suggesting is that we have a strategic and long-range plan for the entire Department of Medicine and Surgery. Let's run it up a flagpole and see who salutes it.

I would be very content to see the country live by those decisions, because I agree with you—that is the way to do it.

Mr. SABO. We appreciate your being here and testifying today.

Mr. RYAN. Thank you very much.

Dr. Richard Schmidt, President of the Upstate Medical Center, the State University of New York had planned on testifying before this Committee today but was unable to do so at the last minute. I request, on his behalf, to submit his statement for the record, along with a draft report of the Special Task Force entitled "Proposed Organization and Functions of ACMD for Program Analyses and Development Office."

Mr. SABO. Without objection, they shall be inserted in the record.

[The information follows:]

SUMMARY STATEMENT

OF

RICHARD P. SCHMIDT, M.D.
PRESIDENT, UPSTATE MEDICAL CENTER
STATE UNIVERSITY OF NEW YORK
SYRACUSE, N.Y.

BEFORE THE HUD AND INDEPENDENT AGENCIES SUBCOMMITTEE

HOUSE APPROPRIATIONS COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

May 8, 1981

Mr. Chairman and Members of the Committee:

My name is Dr. Richard P. Schmidt, President of the Upstate Medical Center, State University of New York at Syracuse. I wish to thank you for your courtesy in permitting me to speak before your committee on behalf of the members of the Special Medical Advisory Group. This Veterans Administration advisory group has a long and distinguished history, having been formed in 1946 coincident with the establishment of VA's Department of Medicine and Surgery. I am honored to be its present chairman. I will speak in strong support of this unique medical care system. For this reason, I believe it would be useful to first present a few basic facts about the system itself.

From what has been essentially "old soldiers homes," there evolved the largest, comprehensive medical care system in the free world. The Department of Medicine and Surgery now includes 172 hospital medical centers. Ninety-two of the hospitals have nursing home units and 15 have domiciliaries. Each of the hospitals has ambulatory care or outpatient facilities. And there are 59 additional outpatient clinics and one additional domiciliary. Productivity in these units has increased at an astounding rate since FY 1965. The number of inpatients treated has almost doubled, and outpatient visits have more than tripled.

At the same time, the average number of hospital beds has decreased by some 35,000 and nursing home care beds increased by more than 8,000.

This table shows by year the changes in workload and resources:

	Inpatients Treated	Outpatient Visits	Average Number of Hospital Beds	Average Number of Nursing Home Care Beds	Average Number of Domiciliary Beds
FY 1965	762,683	4,770,802	119,118	208	16,544
FY 1970	821,458	6,135,633	102,633	4,002	11,998
FY 1975	1,142,893	12,595,514	94,801	7,032	10,310
FY 1980	1,275,446	15,751,690	84,145	8,394	9,217

Note that the major changes are: more patients are being treated as outpatients, and length of stay for those hospitalized has been shortened.

The entire veteran population on September 30, 1979, consisted of 30,072,000 veterans, all but 679,000 of whom were males. Veterans of World War II comprised the largest segment with 12,674,000, followed by 5,866,000 veterans of the Korean Conflict, 8,910,000 veterans of the Vietnam Era, and 594,000 veterans of World War I. The remaining served between the Korean Conflict and the Vietnam Era, or after the Vietnam Era.

The average age of all veterans is 48 years, with about 9 percent being over 65. The percentage of veterans 65 years of age or older is expected to increase to about 25 percent in 10 years and to about 29 percent by the year 2000.

To support this system, as of the end of FY 1980 there were 194,000 employees, 831 of whom are here in Washington. The budget for the same period (FY 1980) was $6,022,355,000.

I know from first hand experience what it costs to run a medical center, and I am all too familiar with the many difficulties inherent in managing within the constraints of governmental rules and regulations. This increases my great admiration for Dr. Custis, the Chief Medical Director, and his staff for their continuing ability to fulfill the nation's obligations to provide health care to eligible veterans.

Yet, even a professional of Dr. Custis' caliber comes to a point where improving efficiency and increasing technology fail to make up the difference for declining resources.

I must say that I am fully aware of the national need for budget restraint. Nevertheless I asked to appear before you to request support for the budget submitted by VA for Department of Medicine and Surgery operations. There is no doubt but that the needs of the veteran population are changing. This budget can allow time to complete the review of changing needs and to carry out the planning I know is underway in DM&S for dealing with those changes.

Over the years, many studies have been made about the size and character of the federal government's responsibility for health care. It has been looked at both as a financial agent and as the direct provider of care. There has been little coordination among those making the studies, however. Almost no attention has been given to comprehensive, rational planning. The obvious reason is that different constituencies are served under a variety of different laws.

In the case of veteran's medical care, there is such a maze of laws and regulations governing eligibility that not even the professional staff in veterans organizations can keep abreast of them. The size, scope and complexity of VA's medical care is not widely understood. This is reflected in the current talk about "dismantling" or radically altering the system, either directly or indirectly, in an effort to provide care in other ways to fulfill our patriotic obligation. I would hope that before any such moves are made, care would be taken to examine all the consequences.

First, I believe the private sector is unable and in many respects unwilling to assume the care of a great many of the veterans being cared for by the DM&S. That population is largely a disabled, aging and needy population requiring a full range of acute, chronic, and extended care.

Second, if it should be decided to limit VA's responsibility to one group, the service-connected, the appropriate patient mix or "critical mass," that must be maintained in order to provide quality would be lost.

Third, the disabled veteran requires many special services which are not readily available in the private sector. For example, the private sector would have to develop or greatly expand that range of services for those with spinal cord injuries, rehabilitation problems (physical, mental and social), and the other special needs of the aging veteran.

Fourth, would be the abandonment of the long-established and mutually advantageous relationship of the VA system with the nation's medical schools. This relationship has, in large measure, made it possible to insure quality care in VA hospitals. This partnership, which began in 1946, has resulted in excellent care for the veteran and excellent training for about a third of the country's residents each year. A great many of today's practicing physicians have received part of their training in VA hospitals. And there is still another side benefit. VA's exemplary research program has resulted in many significant advances in scientific knowledge relating directly to the problems of both VA patients, and the population at large. The quality of VA's research program has been recognized by the award of two Nobel prizes to VA researchers. It is a program of great merit. Research is carried out by VA staff as well as by VA researchers working in collaboration with medical schools.

This assessment, coming from the president of a large medical center, may seem self-serving. But I must say, as strongly as it can be said, that both research and medical education in the United States would be affected profoundly by any radical change in the VA medical care system. And finally, I believe there needs to be serious attention paid to costs - both cost benefit and cost effectiveness - in considering alternative ways of providing care for eligible veterans. VA's medical care system is a national resource built with tax payers dollars. Health planners must recognize it as such. Not only is there a lack of understanding of that system and its many interconnections with the private sector but there is serious misunderstanding of the difficult and sensitive issue of eligibility and entitlement.

Over the years many laws have been passed with the very best of intentions. In considering areas on which the SMAG might most helpfully advise the Administrator and the Chief Medical Director, we came to the conclusion that this entire subject of veterans' medical eligibility needs detailed and thoughtful study. Congress most certainly needs such a study in order that those good intentions may be realized. This is particularly true in an era of declining resources.

A task force has been studying the issue for the SMAG and we expect to have a preliminary report ready for discussion at our June meeting. We will submit the report to the Administrator, the Chief Medical Director, and the Congress for consideration after that meeting.

It is clear, however, that many anomalies exist which should be examined. We fully realize the anxieties which exist, not only among the veterans but in Congress itself, when an effort is made to define who should receive care because such a decision also dictates who should not, and on what basis. Nevertheless, we feel that the choices have to be made, and the eligibility rules clearly spelled out on a rational and balanced basis.

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PROPOSED
ORGANIZATION and FUNCTIONS
of
ACMD
for
PROGRAM ANALYSIS
and
DEVELOPMENT
OFFICE

Report of Special Task Force
April 20-23, 1981

B. Fred Brown, Chairman
Robert M. Donati, M.D.
Joseph L. Moore
John Fears
James Holsinger, M.D.

BACKGROUND:

The Task Force was assembled at the request of Murray G. Mitts, Director, Program Analysis and Development Office, charged to:

1. Ascertain the elements, organization, and functional characteristics of the Planning and Program Development element in VA Central Office which would be necessary to implement immediate and long term planning responsive to the needs of DM&S, the Agency, and national priorities in a timely fashion. Previous broad scoped recommendations are to be found in the document dated April 10, 1981, and entitled "Proposed Functional Requirements ADCMD for Program Analysis and Development." The contents of this document may further be extended and evaluated by appropriate interviews with managers in VACO including the Chief Medical Director.

2. Elucidate and list the elements necessary in the Planning and Development element to reflect the philosophy of the Department and Agency. These elements and their interrelationships should be stated in operational terms, of sufficient detail so that if the recommendations of this task force are implemented the Chief Medical Director can determine if the needs of the Department have been met and the recommendations have been successfully implemented.

The Task Force received orientation briefing and was provided background material and supporting documentation by Dr. Mitts. During the course of its deliberations, the Task Force interviewed:

Donald Custis, M.D., Chief Medical Director

William Jacoby, Jr., M.D., Deputy Chief Medical Director

Turner Camp, M.D., Associate Deputy Chief Medical Director for Operations

Murray G. Mitts, M.D., Deputy ADCMD for Operations

Philip T. White, M.D., Deputy ADCMD for Program Management

Martha Phillips, Deputy ACMD for Academic Affairs

Hollis G. Boren, M.D., ACMD for Research and Development

Marjorie Quandt, ACMD for Administration

Carl Hughes, M.D., ACMD for Professional Services

Ronald Nelson, Director, Resource Management

Donald Pabst, Director, Facility Engineering, Planning, and Construction Office

Tom Watt, M.D. Director, Program Development Service

Lawrence Klainer, M.D., Special Assistant to the Chief Medical Director

Barbara Pryor, Special Assistant to the Chief Medical Director

James Must, Executive Assistant to ACMD for Planning and Program Development

Elsie Tytla, M.D., Deputy Director, Health Systems Development Service

Frank Morrone, Director, Medical Statistics Service

The Task Force proceeded to review the essential elements and their operational interrelationships and formulate recommendations as a result of the briefing and interviews utilizing the draft report of the Task Force dated April 10, 1981, entitled "Proposed Functional Requirements ADCMD for Program Analysis" as the framework.

EXCLUSIONS:

* Policy and legislative elements were excluded from consideration except for the development of a coordinating interface between policy and planning functions.

* The prioritization of planning issues and programs was discussed but not formalized into recommendations.

* The consensus of the Task Force was that time or the information base available precluded valid individual personnel recommendations.

* Though there was concensus that the resources (FTEE) presently available to the Planning and Program Development Service appear adequate to accomplish the mission, the distribution of resources among organizational elements was not addressed.

PERCEPTION:

Key section heads in Code 17 stated that their activities could have been accomplished a great deal with positive leadership and priorities established with deadlines. Each individual the Task Force met with defined planning as being driven by available dollars. Also, most people demonstrated a low level of understanding of planning, planning definitions, and planning concepts. Alternative strategies, concepts, and the importance of planning for the future were not articulated by individuals in our discussions. All individuals clearly stated a need to improve coordination of policy, broad planning parameters, and operational planning efforts with ACMD's,Operations, and appropriate staff offices. However, there was not a universal recognition of the necessity of total field involvement.

There is a major communication problem in the current planning system. The ACMD's were unanimous in the assertion that collegial communications are non-existant. It is obvious that planning cannot be successful unless the process includes the people responsible for the programs involved. There must be full vertical and lateral communications.

The committees initial analysis of the communication problem is that it is a problem of leadership. The responsible official for planning must establish working relationships with the ACMDs. The organizational chart developed will establish a formal communication structure for all staff and program elements; however, the need for informal collegial communication channels to all ACMD's and program officials cannot be overemphasized.

Vertical communications to the field can be accomplished through the Education/ Training program to be established. Additional channels must be established with the Medical District Directors due to their coordinating role in the planning process. The possibility of a small advisory committee of Medical District Directors should be explored to insure the necessary two way dialoge with the field continues to exist.

DIRECTION:

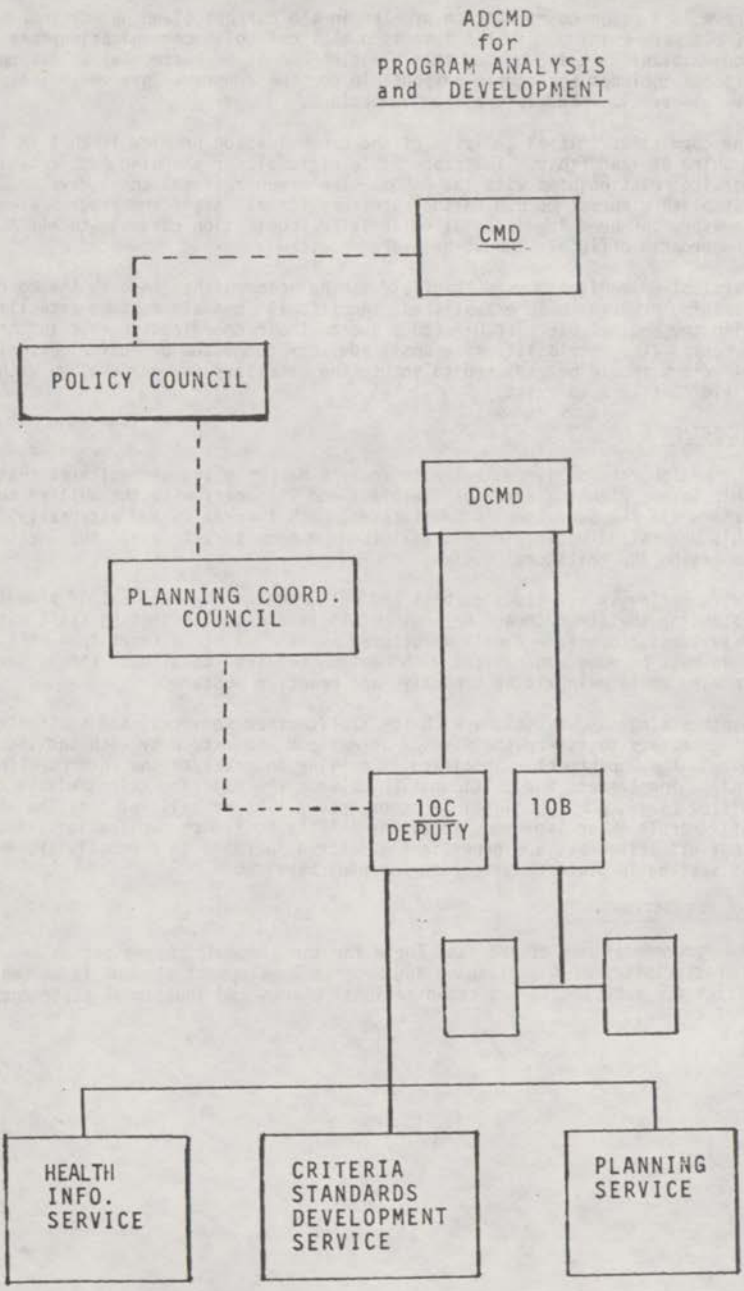
The health care delivery system in today's market place necessitates that leadership in the planning arena be steadfast and visionary with the ability to articulate the Department's initiatives, both internally and externally. With this understanding in mind, it will then be necessary to avoid the inclination to assign IOC collateral duties.

Reorganizing is tumultous at best and will require a great deal of time in assessing the strength and weakness of individuals; reassigning staff within the Department, to attain a well structured Service within a short span of time. This must be done concomitant with meeting required deadlines, strengthening morale, while maintaining proactive and reactive posture.

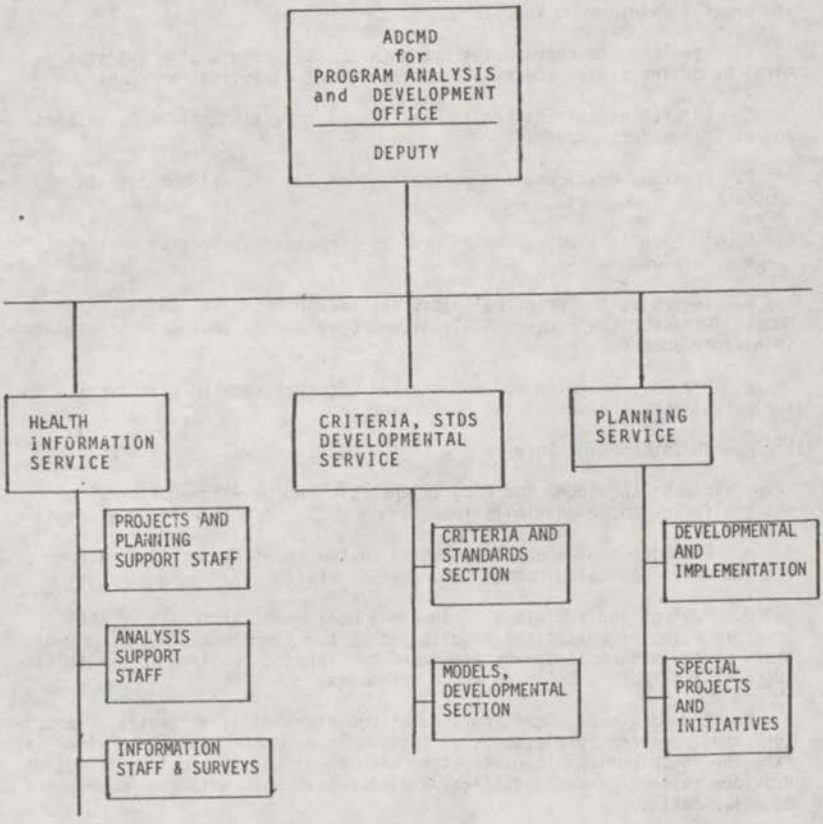
Synthesizing communications with the field, other services, and staff elements is necessary to insure the mission is met and understood by each individual within the Department. Specifically serving to catalyze the interrelationships, involvement and participation between the existing talent within Central Office (e.g., ACMD, Regional Director, etc.). It is believed that the above will result in an improved image, the ability to reduce duplications, improve cost effectiveness, and generate the desired increase in productivity, as well as setting in place an effective Planning Service.

RECOMMENDATIONS:

The recommendations of the Task Force for the elements, organization and functional characteristics of the Planning and Program Development element in VA Central Office are embodied in the organizational charts and functional statements that follow.


ADCMD
for
PROGRAM ANALYSIS
and DEVELOPMENT
CMD
POLICY COUNCIL
DCMD
PLANNING COORD.
COUNCIL
10C
DEPUTY
10B
HEALTH
INFO.
SERVICE
CRITERIA
STANDARDS
DEVELOPMENT
SERVICE
PLANNING
SERVICE

ADCMD
for
PROGRAM ANALYSIS
and DEVELOPMENT



FUNCTIONAL STATEMENTS

I. Associate Deputy Chief Medical Director for Program Analysis and Development (10C)

A. Responsible to the Chief Medical Director for the development, formulation and coordination of health care planning, statistical reporting and program development functions.

B. Develops and coordinates the departmental information and statistical reporting system and provides statistical analytical services.

C. Identifies current health care issues impacting on the Department and evaluates such impact.

D. Creates, develops, and maintains planning education and training programs.

II. Deputy Associate Deputy Chief Medical Director for Program Analysis and Development

A. Serves as the principal assistant to the Associate Deputy Chief Medical Director for Program Analysis and Development and acts for him/her in his/her absence.

B. Provides coordination and liaison with program and management support offices throughout the department

III. Health Information Service

Responsible to the ADCMD for Program Analysis and Development to carry out the following responsibilities:

A. Provides management information to the Chief Medical Director and the Chief Medical Director's management staff.

B. Advises and assists all concerned management officials in the interpretation of analytical results and in the formulation of recommendations or courses of action necessitated by planning problems in health care. Suggests alternative policies and assessments.

C. Provides management appraisals; budgetary data; estimates of short-term and long-range projections of patient loads and resources necessary to care for these patient loads together with their geographical distribution. Provides research into statistical/analytical factors affecting management decision-making.

D. Plans for, develops and/or applies distinct mathematical/statistical methodologies.

E. Conducts special studies including design. development analysis and interpretation of results. Such studies are related to the health care delivery systems that are related to changes in composition of the veteran population who use, or may use, these VA systems.

Consideration should be given to the geographic location of the Criteria Standards and Development Service at one or more field locations. Such a course of action would allow a greater degree of field input from a full spectrum of health care providers, managers, and consumers. In addition, such a location should optimize the expediated translation of models and systems to the implementation phase as determined by field needs.

V. Planning Service

Responsible to the ADCMD for Program Analysis and Development to carry out the following responsibilities:

/ Develops and implement MEDIPP.

B. Integrates planning efforts for the Department of Medicine and Surgery.

C. Provides linkage for planning within DM&S and the agency as well as with external agencies such as SHCCO and NIH.

D. Develops alternative strategies based on perceived needs with the department considering external forces which may impinge on the delivery of health care by the department.

E. Provides a review and analysis of Medical District plans as well as the individual Medical District's planning process.

F. Provides advisory services to planners at all levels of the department.

G. Develops and maintains emergency, disaster, and contingency planning reflected by both the internal needs of the department as well as other federal agencies.

H. Conducts oversight reviews of all DM&S programs in coordination with other staff offices and Office of ADCMD for Operations.

I. Develops, coordinates, and publishes, departmental assumptions on a semi-annual basis.

J. Recommends to the ADCMD for Program Analysis and Development actions relating to medical district, regional, and departmental planning process and plans as developed at each level of the department.

K. Develops, publishes, and maintains the DM&S Master Plan.

L. Provides a VACO advocate for the MEDIPP program, enabling the district level planners to interact with the Office of the ADCMD for Program Analysis and Development.

VI. Planning Coordinating Council

The role of the Planning Coordinating Council is to provide the liaison mechanism between the Policy Council and other inputs from CMD's office and the ADCMD for Program Analysis and Development. It should meet weekly.

F. Assists in the identification of appropriate data sources (VA and Extra-VA) for DM&S personnel for their analyses.

G. Advises and assists all concerned management officials in the analysis of results and the formulation of strategies to appropriately interpret such data.

H. Initiates, performs or participates in the analysis and interpretation of surveys conducted to develop information of current trends in health issues impacting on the Department.

I. Maintains the database for management information at the departmental level including purging or adding to the database as appropriate.

J. Provides information concerning the available management information systems and recommends those systems determined to be useful to the department.

K. Provides liaison with other information holders both within and outside the department, working with the Health Care Information System Office, the VA Controller, and other sources of data to assure that the needs of the department are met on a current basis.

L. Provides the capability to create or simulate information for use in model building of health care delivery systems that impact on the care of veterans.

IV. Criteria and Standards Development Service

Responsible to the Associate Deputy Chief Medical Director for Program Analysis and Development to carry out the following responsibilities:

A. Tests, designs, and implements management methodologies and systems having specific responsiveness to VA staff or programs to meet patient care needs, quality of care, cost and efficiency and the effective utilization of all types of resources by program or systems.

B. Develops criteria, methods, and tools for analysis and appraising of staffing and productivity measurement.

C. Establishes working relationships with other departments, appropriate agencies, professional societies, groups and individuals to share information on developments in methodologies relating to medical care delivery and administrative fields related to health care delivery.

D. Provides estimates of costs/benefits for proposed new or modified systems and feasible alternatives.

E. Develops program performance measurement tools for determination of demand, efficiency, effectiveness, and unit cost for systems in operation in the Department.

F. Develops models for simulation of the tools needed to deliver health care in the Department.

G. Develops methodologies to merge as necessary and maintain Quality Indicators for the delivery of health care within the department.

The membership of the Planning Coordinating Council should consist of the Special Assistant to CMD, ADCMD for Program Analysis and Development, ADCMD for Programs, AD_MD for Operations, and a representative from an appropriate veterans interest group.

NATIONAL CONSUMER COOPERATIVE BANK

WITNESSES

CHARLES C. SAVITT, DIRECTOR, THE CO-OP BANK MONITORING AND ASSISTANCE PROJECT, WASHINGTON, D.C.
ALMA FELIX GREEN, EXECUTIVE DIRECTOR, WOMEN'S DEVELOPMENT CORP., PROVIDENCE, R.I.

Mr. SABO. Representative Schneider had hoped she would be able to be here to introduce her good friend, Alma Felix Green. She has asked me to put in the record this introduction, which explains that Alma Green is Executive Director of the Women's Development Corporation in Providence, and has broad experience in community activities. She is on the boards of eight organizations and has been a member of some twelve commissions. She has worked with minorities, women, community fund organizations, troubled youth, and virtually every other disadvantaged segment of our society.

Representative Schneider believes that we will find Alma's unique background particularly conducive to a sound analysis of the solid value provided by the National Consumer Co-op Bank and its usefulness in a tight budget year for providing a cost-effective alternative to programs addressing a variety of social concerns.

Mr. Savitt?

Mr. SAVITT. Mr. Chairman and Members of the Committee, I am grateful for the opportunity to testify today. My name is Charles Savitt, and I am the Director of the Co-op Bank Monitoring and Assistance Project. The project was established in October, 1979. It grew out of the coalition of low income, minority community and civil rights groups which fought for passage of the National Consumer Cooperative Bank Act. After the Act's passage, members of that same coalition worked to create the Monitoring Project. Its purpose was to ensure that the bank would be responsive to both the letter and spirit of the Bank Act, particularly in addressing the interests and needs of low-income, neighborhood, and community groups. We strongly supported the original Co-op Bank legislation.

I am here today to ask that the Subcommittee appropriate the House Budget Committee's recommendation of $86 million for the NCCB for fiscal year 1982. My testimony is abstracted from a larger statement prepared as a reply to OMB's Program for Economic Recovery and subsequent administration's accusations regarding the Bank. That statement is on file with this Committee.

Senator Robert Taft once said that co-ops are as American as apple pie. And every President since Teddy Roosevelt has signed some piece of legislation designed to encourage their development.

The Co-op Bank is not a Republican, nor a Democratic program; it was passed in Congress with support of a bipartisan coalition. It is consistent with the goals and philosophy of both major parties.

In a recent article in the business section of the Washington Post, the Co-op Bank was called a "tiny organization tucked into the folds of the federal umbrella, with credentials that read like a free-marketeers dream." It is in business to help people help themselves. It is anti-inflationary. It is preparing to shift itself out of government control and into the free-market sector. It is designed in the long run to cost the government almost nothing.

You are all familiar with the Administration's complaints about the Bank, so I will not report them here. However, I would like to respond briefly to the most significant of OMB's charges.

First, it is too early to say definitively that the Bank is a success or failure. The NCCB is a large and complex business. Over the course of the next few years it will sink or swim based on the hard-nosed decisions of the market; it will survive if its portfolio is sound and profitable, and it has been so far.

Loan repayments to the Bank are on schedule. Five Wall Street brokerage firms have investigated its portfolio and indicated a willingness to underwrite the Bank's bonds.

Second, co-ops do pay taxes. Cooperatives do not get a tax subsidy. They must pay property taxes, sales taxes, franchise taxes and income taxes, just like any other business. OMB is probably referring to the tax treatment of patronage refunds, which are not taxed. But no business pays taxes on customer refunds.

Third, the Bank is needed. When the Bank bill was introduced in Congress, the Carter Treasury Department argued that it was not needed. At the insistence of the Bank's many supporters in Congress, Treasury did a nationwide study of credit availability for cooperatives. They concluded that "Most cooperatives have experienced difficulty in obtaining credit." And the Bank has shown its total loan demand to date is $420 million.

Fourth, the Bank makes loans to efficient co-ops. Co-ops are not subsidized by the Bank; it makes market-rate loans to cooperatives that meet conventional credit tests. It is required by Congress to be a prudent lender; to survive, it must make loans to credit-worthy, efficient cooperatives. Cooperatives tend to be more efficient than other businesses because they are accountable to their member-users, they cut waste and frills, and they must compete in the same marketplace, with the same tests that face every other business.

Fifth, the real savings: OMB's assertion that getting rid of the Bank will save $730 million by 1986 is absurd. The total authorization for the Bank is only $300 million, of which the Bank has received $136 million. But the actual amount involved is not the real issue here—this argument ignores the main feature of the Bank—it pays the Treasury back, with interest. Government money is only used as initial seed capital.

The Administration claims that the Bank contributes towards high inflation. That is not true. The Bank, and the co-ops that it lends to, are the best inflation-fighting tool consumers have; it does not make sense to get rid of it to save this tiny amount of money, which will be repaid in any case.

Sixth, the Bank's performance: the OMB said the Bank was not making loans fast enough. This assumption does not hold water—speed is not an appropriate measure of any bank's performance. It is important to remember that the Bank is a bank, not a grant-making agency, and therefore should not rush to get its money out. Quality should be stressed over quantity.

In closing, I would like to mention briefly Title II, the Office of Self-Help Development and Technical Assistance.

The Office is essential if the NCCB is to meet its statutory responsibility to stimulate the growth and strengthen new and

existing consumer cooperatives, particularly in low-income communities.

Title I functions essentially as a debt-financing institution. It is severely limited in its ability to help poor people or be a creative lender by its financial structure, its requirement to lend at prevailing market rates and its need to have a "marketable" portfolio when it offers debentures to Wall Street.

Title II was created because of Congress' belief that if the Bank was to succeed it must have the ability to provide development financing, offer equity like funds, venture capital, and extensive managerial and technical assistance. Without Title II, low-income communities will be unable to utilize the NCCB. They will not have the technical assistance to organize and structure their cooperatives, or affordable financing to allow them to take their first steps towards self-help.

As you are pondering future funding for the Co-op Bank, please don't forget Title II, or the Bank will need to put up a sign which says "Poor people need not apply."

Thank you very much.

[The statement follows:]

Mr. Chairman and Members of the Committee:

We are grateful for the opportunity to testify today. My name is Charles Savitt, and I am the Director of the Co-op Bank Monitoring and Assistance Project. The Project was established in October, 1979. It grew out of the coalition of lowincome and minority community and national groups which fought for the creation of the National Consumer Cooperative Bank. After the Bank's creation, members of that same coalition worked to create the Monitoring Project. Its purpose was to ensure that the Bank would be responsive to both the letter and spirit of the Act, particularly in addressing the interests and needs of low-income, neighborhood, and community groups. We strongly supported the original Co-op Bank legislation.

I am here today to ask that the sub-committee appropriate the House Budget Committee's recommendation of $86 million for the NCCB for FY 1982. My testimony is abstracted from a larger statement prepared as a reply to statements made about the Co-op Bank in OMB's Program For Economic Recovery and subsequent Administration's accusations regarding the Bank. That statement is on file with this Committee.

Senator Robert Taft once said that co-ops are as American as apple pie. And every President since Teddy Roosevelt has signed some piece of legislation designed to encourage their development.

The Co-op Bank is not a Republican, nor a Democratic program; it was passed in Congress with support of a bi-partisan coalition. It is consistent with the goals and philosophy of both major parties.

In a recent article in the business section of the Washington Post, the Coop Bank was called a "tiny organization tucked into the folds of the federal umbrella, with credentials that read like a free-marketeers dream." It is in business to help people help themselves. It is anti-inflationary. It is preparing to shift itself out of government control and into the free-market sector. It is designed in the long run to cost the government almost nothing.

The Administration says the Bank is an unnecessary and "heavily subsidized special interest program" that is "not of national scope or interest." They say that it does not, and cannot work, because its loan servicing cost is too high. They also say nobody would want to invest in it anyway, so it will not be able to raise funds in the private money market.

In addition, the Office of Management and Budget made the following accusations about the Bank:

1. Cooperatives are subsidized through special Federal tax treatment;

2. Cooperatives should be able to obtain credit elsewhere;

3. The Bank subsidizes inefficient cooperatives;

4. Getting rid of the Bank will save $730 million by 1986;

5. Only a very small part of the Bank's loan funds had been disbursed by the end of the fiscal year;

6. There is no need for "yet another federal agency to provide housing credit," implying that the Bank's loans to housing co-ops were improper.

I would like to briefly respond to the most significant of OMB's charges.

THE BANK IS SUCCESSFUL

Some of these arguments are very easy to counter. For example, how did OMB conclude "the Bank doesn't work" after it had been in operation for less than a year? Even small businesses have three years to get on their feet before they are expected to show a profit. The NCCB is a large and complex business. Over the course of the next few years it will sink or swim based on the hard-nosed decisions of the market; it will survive if its portfolio is sound and profitable.

Loan repayments to the Bank are on schedule. Five Wall Street brokerage firms have investigated its portfolio and indicated a willingness to underwrite the Bank's bonds. Evidence to date suggests that the Bank is very successful, in a strict business sense.

CO-OPS PAY TAXES

Cooperatives do not get a tax subsidy. They must pay property taxes, sales taxes, franchise taxes and income taxes, just like any other business. OMB is probably referring to the tax-treatment of patronage refunds, which are not taxed. But no business pays taxes on customer refunds, no matter who owns the business, or what form the refunds take, whether as cash, merchandise, or rebates.

THE BANK IS NEEDED

When the Bank Bill was introduced in Congress in 1976, the Carter Treasury Department argued that it was not needed. At the insistence of the Bank's many supporters in Congress, Treasury did a nation-wide study of credit availability for cooperatives. They concluded that "Most cooperatives have experienced difficulty in obtaining credit."

Most established co-ops are credit-worthy. They do have trouble getting loans, but only because most bankers do not understand the self-help, non-profit way of business. Already, loan requests to the Bank total over $420 million. No need for the Bank?

THE BANK MAKES LOANS TO EFFICIENT CO-OPS

Co-ops are not subsidized by the Bank; it makes market-rate loans to cooperatives that meet conventional credit tests. It is required by Congress to be a prudent lender; to survive, it must make loans to credit-worthy, efficient cooperatives.

Cooperatives are not inefficient. In fact, they tend to be more efficient than other businesses. They are accountable to their member-users, they cut waste and frills, and they must compete in the same marketplace, with the same tests that face every other business.

THE REAL SAVINGS

Getting rid of the Bank will not save $730 million by 1986. In fact, the total authorization for the Bank is only $300 million, of which the Bank has received about one third. But the actual amount involved is not the real issue here--this argument ignores the main feature of the Bank--it pays the Treasury back, with interest. Government money is only used as initial seed capital.

Another point we can make here is that the Bank, even if it receives its full authorized budget amount, makes up only a miniscule part of the total budget amount. Of a total spending level of $695 billion, the Bank has $0.1 billion, less than 0.014% of the total. How can OMB seriously maintain that eliminating the Bank will contribute "significantly to reducing inflationary pressure?" The Bank, and the co-ops that it lends to, are the best inflation fighting tool consumers have; it does not make sense to get rid of it to save this tiny amount of money, which will be repaid in any case.

THE BANK'S PERFORMANCE

The OMB said the Bank was not making loans fast enough. This assumptiuon does not hold water--speed is not an appropriate measure of the Bank's performance.

In fact, the Bank has now approved more than $77.4 million in loans from Title I, market-rate funds, and more than $7 million in loans from Title II Self-Help Funds. However, it is important to remember that the Bank is not a grant-making agency, and therefore should not rush to get its money out.

In closing, I would like to briefly mention Title II, the Office of Self-Help Development and Technical Assistance.

The Office is essential if the NCCB is to meet its statutory responsibility to stimulate the growth and strengthen new and existing consumer cooperatives, particularly in low-income communities. Title I functions essentially as a debt-financing institution. It is severely limited in its ability to help poor people or be a creative lender by its financial structure, its requirement to lend at prevailing market rates and its need to have a "marketable" portfolio when it offers debentures to Wall Street. Title II was created because of Congress' belief that if the Bank was to succeed it must have the ability to provide development financing, offer equity like funds, venture capital, and extensive managerial and technical assistance.

Without Title II, low-income communities will be unable to utilize the NCCB. They will not have the technical assistance to organize and structure their cooperatives, or affordable financing to allow them to take their first steps towards self-help.

As you are pondering future funding for the Co-op Bank, please don't forget Title II, or the Bank will need to put up a sign which says "Poor people need not apply."

Thank you very much.

80-223 O—81——36

Ms. GREEN. Rhode Island is the State we consider so small it must depend upon cooperation. The water system gives water to various cities and towns. We are used to the cooperative spirit in Rhode Island.

I am familiar with the cooperatives from Rhode Island. I have testimony here before you which speaks of them.

The one I most would like to share with you is the Villa Excelsior Cooperative. That is a cooperative of low-income single women, heads of households, 90 percent minority, who got together one day and decided they were tired of developers' creating housing for them to meet family needs, their design needs. They were tired of having developers make Section 8 profit on the people's money, and continue to make it on the people's money through section 8 subsidies. They were tired of that. They thought they would get together somehow to form a housing development corporation which is a task unto itself for people who have money that is loaned to people who have nothing but the people's money.

They decided to form somehow a cooperative—a cooperative largely because there was such a thing as the National Consumer Cooperative Bank.

They called upon the Women's Development Corporation to see how we could help them somehow come up with an idea as to how they could develop their own housing.

We received a great deal of help from the National Consumer Cooperative Bank, both nationally and later on in Boston at the regional office, which helped us set up some sort of a concept as to the kinds of things that could be done with the cooperative Bank salaries.

We received encouragement. This was a most important thing. Encouragement somehow made us proceed and try to be creative.

The women formed a cooperative. They went out and looked for someone who had experience in development. Lo and behold, they were able to convince the Reynolds Metals Development Corporation, whose subsidiary is in Rhode Island, which owns or manages better than 50,000 units. Reynolds gave them help, and said: Fine, if you can be a general partner with us, we will enter into a general partnership with you to develop 100 units of subsidized housing. What you have to do, however, is come up with some money for options, and you have to be able to come up with some sort of corporate capacity to be able to handle the section 8 matter in the neighborhood and try to convince the Rhode Island financing agency or a national financing agency to put some section 8 in Providence.

The women got together and with whatever clout they could, again inspired by the fact that the Cooperative Bank recognized them and they have to date secured 75 percent of the needed units, which is 100 units. In some cases they almost forced slum landlords to give them options. The development corporation persuaded the city council to give us some city properties. They have also been able to somehow begin to think of themselves as a tenant-controlled organization because they are continuing through the development process; they are beginning to understand the meaning of syndication and what is in it for the full-profit developers that they could perhaps be having.

At the end of a very long road, these women joined together as a cooperative with a common purpose of providing good, decent, safe housing for themselves in a joint venture with a full-profit partner, and, largely through the help of the National Consumer Cooperative Bank, will be able to go on with the Reynolds Corporation and develop this housing and come up with some dollars for social amenities for themselves.

The investment of $50,000 from the National Consumer Cooperative Bank would not only revert back with interest, but also the venture will enable these women to go into the same kind of development somewhere else. It was a seed, a seed of hope, that the Cooperative Bank put before them, and I think this is a very important element for you to continue to pursue.

Thank you.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I am Alma Felix Green from the State of Rhode Island. I wish to thank you for this unique opportunity to speak before you on behalf of the Friends of the Co-op Bank. In my professional and volunteer life, I am deeply involved with low-income, minority and women's organizations. In particular, I wish to inform you that our small state survives largely through the spirit of cooperation. A spirit which distinguishes America from the rest of the world.

It is through this spirit of interdependence and mutual support that the people by the people and for the people have continued to overcome. It is thus that I implore your support for the continuation of the NCCB.

Let me tell you about three (3) cooperatives that are struggling to survive in Rhode Island. 1) Villa Excelsior Cooperative (A non-profit housing development Co-op.) VEC is a group of low-income women who, thanks to a loan from the Bank, will be enabled to have control over their housing environment. In joint partnership with a for-profit developer, they will develop 100 units of housing in two of the most blighted areas of the city of Providence. Financing from this development will pay back the NCCB in full for the loan and interest. This is business as usual.

2) ASQAH Co-operative Inc., is a non-profit housing cooperative established by a grassroot group of citizens from North Kingstown, R.I. for the purpose of acquiring 471 units of abandoned ex-military housing - talk about waste. This Co-op seeks to rehabilitate those units and make them part of a cooperative home-ownership program for low, moderate and middle income families. For six years after the Navy left these properties have remained vacant, even though there exists a severe housing shortage in the town. Neither of these two housing cooperatives could have made a feasible proposal for converting this deteriorated housing stock for individual home ownership without the technical assistance and support of the NCCB. Ordinary Banks, State and Federal housing agencies are unfamiliar with cooperative housing and are not willing to risk on such ventures.

3) The South East Asian Cooperative is a business cooperative of eighty Hmong women who produce handcrafted artistic embroidery (PANDAUS) and small clothing items from their homes. The cooperative has provided an opportunity for Hmong women to maintain their cultural heritage through their needlework as well as earn supplemental income from sales of their product. The Hmong sell their products in an urban retail location suitable for sustaining a moderate-priced market. The South East Asian Cooperative is at a point where their product line could further diversify and expand

from the cottage industry state into a full-time business with increased production capacity. Again conventional financing institutions shy away from lending to such a venture. The NCCB could truly help these individuals in their efforts to join the American Economic main stream.

In each of these three (3) instances the people could benefit by the investment of the people.

The NCCB is not a social program, it is an Economic recovery program. It invests in small but strong private initiative, the waste is minimal, the risk is less. To believe that groups of people joined together toward a common economic dvelopment goal can succeed and profit is to believe in the common will that is America. Americans can if America will.

Cooperation is as American as competition, the one supports, the other descimates. It is this creative tension between the arms of the American Giant which strengthens our economy, our political system and our national character.

Mr. GREEN. Mr. Savitt, you mentioned the House Budget Committee. We are now operating under the substitute, Gramm-Latta. Do you know what the potential is there for funding of the Bank?

Mr. SAVITT. No.

Mr. GREEN. What is the minimum amount that you would perceive as being necessary in addition to the capital that has already been subscribed?

Mr. SAVITT. The man the Comptroller of the Currency estimated for the Bank that if they were able to have an initial seed fund of $200 million, that would enable them to develop a sufficiently significant portfolio to go to the bond market in order to borrow enough money to become a viable national bank capable of actually fulfilling its mandate. They estimated they needed to have $200 million. That would allow them to leverage that 5:1, which would allow them to become a billion-dollar bank by 1990, which would, in fact, allow them to meet those goals. That means they need about 63 million more dollars.

Mr. SABO. Thank you for being here today.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WITNESSES

RONALD P. ANDRADE, EXECUTIVE DIRECTOR, NATIONAL CONGRESS OF AMERICAN INDIANS
ROBIN R. SHIELD, NATIONAL CONGRESS OF AMERICAN INDIANS

Mr. SABO. Welcome to the Committee.

Mr. ANDRADE. Mr. Chairman and Members of the Subcommittee, my name is Ronald P. Andrade. I am the Executive Director of the National Congress of American Indians—NCAI—the largest national Indian organization in the country with a membership of approximately 200 tribes whose combined enrolled population is approximately 400,000 people. With me today is Ms. Robin Shield, of my staff. On behalf of the officers and member tribes of NCAI, I want to thank you for giving us this opportunity to present testimony here today.

Mr. Chairman, because we knew of the shortness of time, I have already cut down the statement extensively. I appreciate the amount of time you must be having to take in this testimony.

We are very concerned that the Administration has proposed there be no further housing units, or the Indian housing program would cease to exist. That is very critical to us. We are very much in need of housing. Our people live very much in substandard housing and continue to do so in many of the areas. We have always been looking toward the housing program to help us relieve some of our problems.

Our tribes have tried to move toward a program essentially developed by the Nixon Administration and supported by the last three Administrations, and that was the whole area of self-determination and self-sufficiency, the building of self-sufficiency. Not only do we see the elimination of the housing division, but we are also looking at the loss of other funding sources, such as EDA and Community Services Administration, and some of the other pro-

grams that help tribes do planning and development. We now see almost all of these programs going out of existence that are helping the tribes to reach some kind of self-sufficiency.

We are hopeful that the program will be continued and the Indian tribes will continue to have access to the program. Last year's funding level was $33.5 million. As you will see in our testimony, we have noted how many tribes applied and how many tribes are actually funded. There is still a long way to go.

Our testimony goes to the three main areas the Administration has cited as the main concerns: cost, the issue of the pipeline, and the issue of housing authority management. We have tried to address all those three areas to make it a little more clear. All three of them really are confusing and, as a result, really do not give a really clear picture of what we feel is the true nature of the housing.

The costs we do not feel are as extensive as the Administration proposal has identified. The pipeline situation, as you see in some of the attachments, are much the result of HUD's own requirements. If we do not have to resort to having to comply to so many HUD regulations, we may be able to significantly cut down the pipeline. In the housing authority management it is difficult for us to respond to housing authority management when HUD has not developed a housing authority manual. It is very simple for anyone to get up and say it is the Indians' fault for not managing those housing units correctly. It is very difficult for us to respond since we have no manual to know what we did wrong until the auditors appear. Those three areas are the main ones.

In many years before this Committee we have asked that the housing units be restored to the 6,000 unit level. We testified we felt that was wrong, and HUD could not justify it and, in fact, they seemed to be moving toward the position that there should be no Indian housing. We bring this up in our testimony. This is not just a general statement on our part, but a prophecy, to a large extent, because we see no housing program recommended by HUD saying there is no need for the Indian housing claims.

We do not believe they have adequately reviewed this program. We do not believe they have adequately reviewed the reservation situation. We do not believe they even come close yet to meeting the needs of those people on those reservations.

We would request that the 4,000 unit level be restored and that the tribes be allowed to continue the housing programs. We feel there can be a cut. The 4,000 units is a reduction from the 6,000 units requested last year. We think a one-third cut in the program is still equitable. We feel it is an equitable cut, and our people could exist, but we do not believe that HUD and the Administration can adequately say that the Indian housing has been ended.

I would be more than happy to answer any questions. I know we have gone through this very fast, but we did not want to take up a lot of your time. We believe this Committee has always been willing to hear our complaints. Unfortunately, our complaints don't change from year to year. I wish there was a year when we did not have to come back to this Committee and ask for housing units.

As it is, if there are questions, we will be more than happy to answer. We appreciate the opportunity we have been given to appear.

[The statement follows:]

Mr. Chairman and members of the subcommittee:

My name is Ronald P. Andrade. I am the Executive Director of the National Congress of American Indians (NCAI), the largest national Indian organization in the country with a membership of approximately 200 tribes whose combined enrolled population is approximately 400,000 people. With me today is Ms. Robin Shield of my staff. On behalf of the officers and member tribes of NCAI, I want to thank you for giving us this opportunity to present testimony here today.

The Indian tribes of this country enjoy a unique relationship directly with the United States Government that is resultant from treaties, Executive Orders and Acts of Congress, and has been reaffirmed time and time again by the highest court of the land: the Supreme Court. It is a relationship peculiar to Indian people and sets us apart from all minority, ethnic and special interest groups in the country. Through the federal trust relationship tribes are also unique from individual states in that they (the tribes) receive all operational and developmental monies from the federal government. Indian nations have not enjoyed the independence provided by taxation or other local revenues, therefore, they are encumbered by a very delicate infrastructure which is largely dependent upon the United States Government.

Tribal governments are moving slowly, but surely toward the goal of strong, self-sufficient economies and governmental infrastructures. Last year, tribes were encouraged by the statement of then President-elect Reagan:

> "Economic self-sufficiency will be the goal of my Administration, both in Indian affairs and in the nation at large. It would work to make available financial, technological and management assistance which will enable tribal enterprises to develop their own project for self-sufficiency. This will result in the reduction of income dependency and an increase in productive employment -- which are the desires of Indian people."

However, sources of funds for tribes for economic and community development and planning assistance -- tools vital to tribes to promote self-sufficiency -- are being cut to the bone. For example, the Economic Development Administration (EDA), traditionally a prime source of funds for tribes for economic planning and development will no longer exist next year. What monies there are available from the Bureau of Indian Affairs (BIA) for economic development are being lumped together with the Bureau's housing monies, education monies and eight other unrelated programs into a single block grant program. Although tribes will set their own funding priorities for their communities, a desirable benefit of self-sufficiency, there is only $121 million projected for the block grant program next year. That money will not go very far with over 400 tribes and Alaska Native governments eligible to participate. In fact, that amount is less than what the HUD January budget had projected was needed to build 4,000 units of Indian housing in Fiscal Year 1982: $703 million.

With funding sources such as EDA and the Community Services Administration (CSA) becoming non-existent, tribes will be forced to depend more heavily upon the Department of Housing and Urban Development's Indian and Alaska Native Community Development Block Grant Program. This program is funded entirely out of the Secretary's Discretionary Fund. In FY 1980, according to HUD, there were 166 tribes funded out of 490 eligible applicants, although 277 had actually submitted pre-applications.

According to the HUD office of Community Planning and Development, there has been a slow, but steady rise in the number of tribes applying for CDBG funds since the program's establishment in 1977 when Sections 103(a)(1) and 107(a) of the Housing and Community Development Act of 1974 were amended by P.L. 95-128.

The program is currently funded at approximately $33.5 million. We would like to see this program continued by HUD next year at the current or an increased level of funding. If more tribes will be turning to the Indian and Alaska Native CDBG program next year and in future years, it is imperative that the program remain available as a viable and much-needed source of community development/ economic development/planning assistance funds.

When the trust relationship between the federal government and the tribes was established many years ago, a commitment was made to Indian people that the needs for their well-being would be met. Decent housing is part of that need and HUD has the responsibility to provide Indian families with decent, safe and sanitary housing. In fact, HUD administers the primary housing program on Indian reservations today.

> "Congress, in the Housing Act of 1949 (42 U.S.C. §1401), as amended, established as a national goal that each American family have a decent, safe, and sanitary home, and authorized various subsidized Federal housing programs to help meet that need. In 1961, public housing programs administered by the Department of Housing and Urban Development (HUD) were made available to Indians living on reservations through Indian Housing Authorities (IHAs) which were formed to develop and operate both rental and homeownership public housing projects. HUD programs have since been the major source of new housing for Indians...In general, Indians living on reservations have had to rely heavily on Federal programs to meet their housing needs because of relatively low incomes, isolated locations, and the unique land ownership status."[1]

In any given reservation community, one housing project does at least four things: generates employment, increases the population, alters the environment and, above all else, raises people's hopes for decent homes for themselves and their families. With the Indian Housing Program being as far-reaching as it is, one can imagine how tremendously this single program impacts on tribes all across the country. Yet HUD, whose role in providing housing to Indian people is so large, has proposed to terminate the program in Fiscal Year 1982.

We understand that the Administration's position for a zero budget for Indian Housing is based upon three factors: cost, pipeline, and IHA administrative capability. We would like to address these factors.

1. COST: For Fiscal Year 1981, HUD estimated the average total development cost of Indian housing to be $73,000 per unit. Estimates for Fiscal Year 1982 were $79,000 per unit. HUD officials state the average total development cost for non-Indian housing was estimated at $58,000.

[1] Report on Indian Housing, pp. 2 & 3, Select Committee on Indian Affairs, United States Senate, 1979.

We contend that the comparison between Indian housing and non-Indian housing is like comparing apples with oranges. First, it should be noted that non-Indian housing is totally rental housing consisting of many multi-unit, high-rise complexes, much on the order of the Cabrini-Green project in Chicago, Illinois and other urban areas, which create substantially more social cost than the original economic investment.

Indian housing is predominantly mutual-help homeownership, single-family detached housing with more recent property built on scattered sites. The economic cost may be slightly higher, but we contend that single family detached housing on scattered sites has a better chance of promoting economic upward mobility than does the urban prisons. (The Wall Street Journal of Tuesday, May 5, 1981, reported on the urban blight of the big ghetto project in Chicago and quoted a tenant who called the project a prison.)

Furthermore, it should be noted there is a difference between rental projects and homeownership projects in that rental projects receive an annual operating subsidy to cover the difference between the amount paid by a tenant (usually less than 25% of adjusted family income) and the fair market rents or operating cost of the project. On the other hand, mutual-help homeownership projects rarely receive operating subsidies. If one were to add together the development costs and operating subsidies over the life of a project, the scales of fairness would weigh in the favor of the homeownership program.

In regard to the cost of Indian housing, we too feel that the total development cost is approaching the unacceptable. However, we also feel that there are innovative ways of reducing total development cost. We contend that the dwelling construction and equipment cost of Indian housing is competitive with housing produced in non-reservation areas. It is the administrative and overhead costs that have run unabated. Architectural, engineering, legal, interest, HUD, housing authority cost, to name a few, range from $15,000 to $20,000 per unit at the present time.

We believe public housing resources, if properly administered, can stimulate a more competitive supply of high-quality, low-cost housing that could be produced in a more timely and responsive manner. Utilization of resources under the acquisition program could be one innovative way of addressing the high administrative and overhead cost. Cataloging standard house plans for use by IHAs could reduce or eliminate the fees commanded by architects for even simple modifications to existing plans. And the interest a number of tribes are showing in pre-fabricated or manufactured houses leads us to believe that they are looking for more cost-effective methods of home construction.

2. PIPELINE: The second argument presented by HUD for the zero budget recommendation for FY 1982 is the pipeline of Indian housing activity. We submit that this is as much the fault of HUD as it is of anyone

else. We understand the average time required to process and develop a project is 36 months on a national average, with some regions (Seattle and Denver) averaging 25 months and another (San Francisco) 55 months. If you examine the flow chart of the Indian housing program which accompanies our testimony, you can quickly see that the most time-consuming process involves site planning, selection, approval and development, followed closely in time by the technical reviews of HUD.

Again, we submit that there are existing methods and innovative ways that could be explored to reduce process and development time requirements. For example, making annual contributions contracts (ACCs) separate from dwelling construction has merit. Site selection and approvals are time-consuming because of the number of offices, agencies and processes involved, yet coordination leadership is generally unclear and conducted by individuals with limited experience in site planning, selection, approval and development.

We are aware of a large project (150 units) which required 16 months between program reservation and Date of Full Availability (DOFA) and was completed under budget, utilizing a concept of project management with a guaranteed up set price and performance bond.

We are convinced that high quality, low-cost housing can be built in a timely and responsive manner.

3. HOUSING AUTHORITY MANAGEMENT: The subject of Indian Housing Authority management is, in our opinion, a red herring issue in order to develop the so-called "third strike, you're out" game.

It is true that Indian Housing Authorities have experienced a number of administrative problems. However, when one assesses the progress made by IHAs in their short history, we would have to conclude that substantial progress has been made. Yes, they still need support and technical assistance, but it should be noted that the provision of technical support from HUD has been very limited. Housing authorities have had to depend upon themselves or their peers at other reservations to learn what is considered a highly complex program.

During May of last year, NCAI appeared before this subcommittee to request that the Indian Housing Program be funded in Fiscal Year 1981 at the level of 6,000 units (a level, we might add, which has not increased over the past three years at least nor has a higher level been requested during that same time by Indian people). In our testimony, we made the following statement concerning HUD's complaints about the costs of building Indian housing:

> "HUD's idea that cutting the number of units (from 6,000 to 4,000) will decrease the cost of housing is not logical in the sense that cutting units will not stop cost increases; the remaining units will still take money to build and maintain. If that is HUD's approach to cost containment, then it will continue to cut units until there is nothing

> left. In other words, the cheapest Indian housing is no Indian housing."

We did not realize at the time that our statement was, in fact, a prophecy.

In conclusion, we feel it is morally wrong and illogical to totally eliminate a budget for the Indian housing program. Although we appreciate very much the Administration's desire to reduce government spending as a means of curbing inflation and strengthening the Nation's economy, and to a certain extent support this effort, we had hoped that it would be accomplished with a sense of fairness and decency. We, therefore, recommend that the Indian Housing Program be funded at a level to support 4,000 units in Fiscal Year 1982. This represents a cut of one-third in the program -- a cut which we feel is equitable.

18 THE WALL STREET JOURNAL, Tuesday, May 5, 1981

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Urban Blight

Cabrini-Green Project, Big Ghetto in Chicago, Fights a Losing Battle

Mayor Byrne's Dramatic Act Of Moving In for a Time Has Little Lasting Effect

One Family's Way of Escape

By David J. Blum
Staff Reporter of The Wall Street Journal

CHICAGO—The 13,500 residents of the Cabrini-Green housing project here are all black and all poor. Nine out of 10 get public assistance. Only four out of 10 have telephones.

But ask a resident what makes him unhappy, and he is unlikely to mention his poverty or his lack of a job. He will probably blame his home—Cabrini-Green.

"A man's home is supposed to be his castle," says Diana Bradley, a resident in her 20s. "But this place is more like a prison."

Within sight of a wealthy white neighborhood on the Near North Side, the 78-building Cabrini-Green project is much like big-city ghetto projects elsewhere. Rows of rundown towers, built cheaply with the wealth of the Great Society, provide low-cost, low-quality housing for the poor.

Pervasive Problems

To urban experts, Cabrini-Green's deterioration also is typical of such projects in other cities. One critic calls the public-housing projects "America's dumping grounds for the poor."

At Cabrini-Green, the elevators don't work much of the time. Street lighting is inadequate. Children, representing almost 70% of the project's population, have the use of a few scattered swings and basketball hoops but not much else. Adults have the use of a few dingy taverns and not much else. Job prospects for residents are scarce, and a Cabrini-Green address can make it particularly tough to get hired.

Then there is the crime problem. So far this year, 11 murders have been committed in Cabrini-Green, along with 37 shootings and numerous rapes and robberies. Gang warfare breaks into the open periodically.

These conditions prompted Mayor Jane Byrne this spring to move to Cabrini-Green from her fashionable lakefront high-rise only a mile away. She promised she wouldn't leave until Cabrini-Green is "cleaned up." Yet less than a month later, she and her husband moved back to her old apartment, keeping the Cabrini Green flat for occasional visits.

Results of Cleanup

Cabrini-Green residents say that the place is indeed cleaner since her stay began but that otherwise it hasn't changed much. Policemen, who were seldom seen here before, now are much in evidence, yet residents complain about the friskings they are subjected to by the police while just walking on the grounds. And everyone seems to doubt that Mrs. Byrne or anyone else can revive Cabrini-Green.

"I don't know whether the place can ever be put back together," says James Fuerst, assistant director of urban studies at Chicago's Loyola University, "but Jane Byrne isn't going to be able to do it. I know that much."

Before her visit, local newspapers were filled with reports of gang wars and accounts of bystanders' being terrorized by random violence at the project. Shootings have subsided since the mayor's visit and the arrival of more policemen, but few people expect the lull to last.

Given the conditions at Cabrini-Green, the only attraction is the attraction of public housing anywhere—the price. A two-bedroom apartment can go for less than $50 a month here, while a similar apartment elsewhere in Chicago would cost at least $400 a month. The buildings range up to 19 stories high, and many are overcrowded because of the high proportion of children.

Staying Indoors

The problems are painfully clear to new residents. Eldorah Bradford moved into Cabrini-Green in January from a house on Chicago's South Side. Her new home has created a sense of isolation that she never felt before.

"In my old place, I could sit outside on the porch and watch people go by, playing in the park or something," she says. "Here I don't want to see anybody. I just go home from work, straight to my apartment, and I don't go out."

But for Mrs. Bradford and others, even getting up to their apartments can be a chore. She is divorced, with a baby girl, and lives on the ninth floor of her building. That circumstance has quickly taught her about the elevator problems.

Several days each week, both elevators in her building are broken. Mrs. Bradford says, and she is forced to carry her groceries or her baby up eight flights of stairs to her $90-a-month apartment. The stairs themselves are usually dark, smelly and filled with graffiti. "After getting home from work, and shopping, and taking care of the baby," she says, "it's the last thing I need."

People often get caught inside the elevators when they break down. "A little girl was stuck in the elevator here the other day, so I called the elevator man," says Elax Taylor, a 65-year-old retired utility worker. "He said he'd be by after he was done with something else. So I had to break the door and get the girl out. The elevator man never showed up."

Once in the apartment, residents confront the huge rodent and cockroach populations that infest most Cabrini-Green buildings.

"We've got some pretty fair-sized roaches around here," says one long-time resident, stretching his thumb and forefinger wide apart to indicate their length. "The city comes by to spray, but we all know that

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Urban Blight: Cabrini-Green Public Housing Project In Chicago Shows Little Gain From Mayor's Efforts

Continued From First Page

roaches like that spray, and they get bigger afterwards. So we'll sign the sheet when the exterminator comes around, but we'll ask him not to use his stuff."

City authorities say spraying is indeed effective, and they plan a building-by-building extermination program in which residents will face eviction if they refuse to cooperate.

Mice and rats aren't found in the apartments as often, but they still frighten the children. "The mice always scare me," says a 10-year-old girl named Diane, sitting on the front porch of her building. "I like to stay out here, so I can get away from them quick."

Popular Hangout

The porch is a popular hangout for children at Cabrini-Green. There's almost no place else for them to go. At the occasional youth center on the sprawling Cabrini-Green grounds, there are few activities. One center has only a Ping-Pong table and a couple of classrooms for day care. Even employes are downbeat about their services.

"I guess kids don't really want to come in here," says Walter Davis, a 28-year-old Cabrini-Green resident who works at a center. "I didn't either, when I was a kid."

The Cabrini-Green branch of the Chicago Public Library has the same problem. Although the branch has a series of programs and activities, only a small percentage of the youth population ever takes part. One consolation is that the problem of book theft that plagues other libraries doesn't exist here.

"People don't bother to rip them off," a library employe says. "Who around here would want to buy a hot library book?"

The employe says people don't come to the library for the same reason most of the streets in Cabrini-Green are deserted, both day and night – the shootings.

Ever since the 1960s, residents say, the sounds of gunfire has been commonplace at Cabrini-Green. Sometimes it has been directly related to gang violence and at other times, says one young resident, "people just shoot off their guns to hear the sound of it."

Despite the frequency of shots fired, there have been only a few deaths or injuries to bystanders. Most residents say they have grown accustomed to the gunfire, but it still brings fear to some hearts.

Elax Taylor, the retired utility worker, says, "The other night, I was at a meeting with 20 people, when we heard some shots. Suddenly everybody dropped to the floor and stayed there. It was like a war."

Even during the day, few people walk around the 70-acre project. But with the appearance here of Chicago police in huge numbers since the mayor's arrival, Cabrini-Green resembles a prison. "We're like hostages here, waiting to be saved," Mr. Taylor says.

Residents say they can't recall ever seeing policemen on routine patrol before Jane Byrne moved in. Indeed, even though a nearby police station is assigned almost exclusively to the project, residents say it used to be difficult to get a policeman to come. Today, the project is swarming with police.

Fear of Friskings

That change has kept many young people off the streets to avoid being frisked or hauled off to the police station. "You're safer here if you're white," one resident says. "They figure you've got a reason to be here. If you're black, they think you're doing something wrong."

A 21-year-old lifelong resident puts it this way: "If you and I went walking, and you kept your tie on," he says, addressing a white reporter, "we wouldn't get stopped by the police. If we went walking and you took your tie off, we'd get stopped, and I'd get frisked but you wouldn't. If I went out walking by myself, I'd definitely get frisked."

Youths often join Cabrini-Green's gangs out of boredom. "I joined the gang to give me something to do," says a 21-year-old member of the Black Gangster Disciples gang who joined when he was nine. "We don't have jobs, we don't have money. So the gang is like an organization for us."

On his left arm, partly hidden under his short-sleeve shirt, is a tattoo that identifies him as a disciple. On his shoulder, he displays a wound from a nine-millimeter bullet sustained in a gang fight last June.

Drugs and Liquor

At the root of the gang structure is drug traffic. Many youngsters who join the gangs have little money, but by pooling their resources with others, they can buy enough marijuana to go around. Police friskings these days have led to some arrests for drug possession. Elax Taylor, the utility worker, faces a possible eviction from the project because his 14-year-old grandson was arrested for carrying a "nickel bag" of marijuana, or $5 worth.

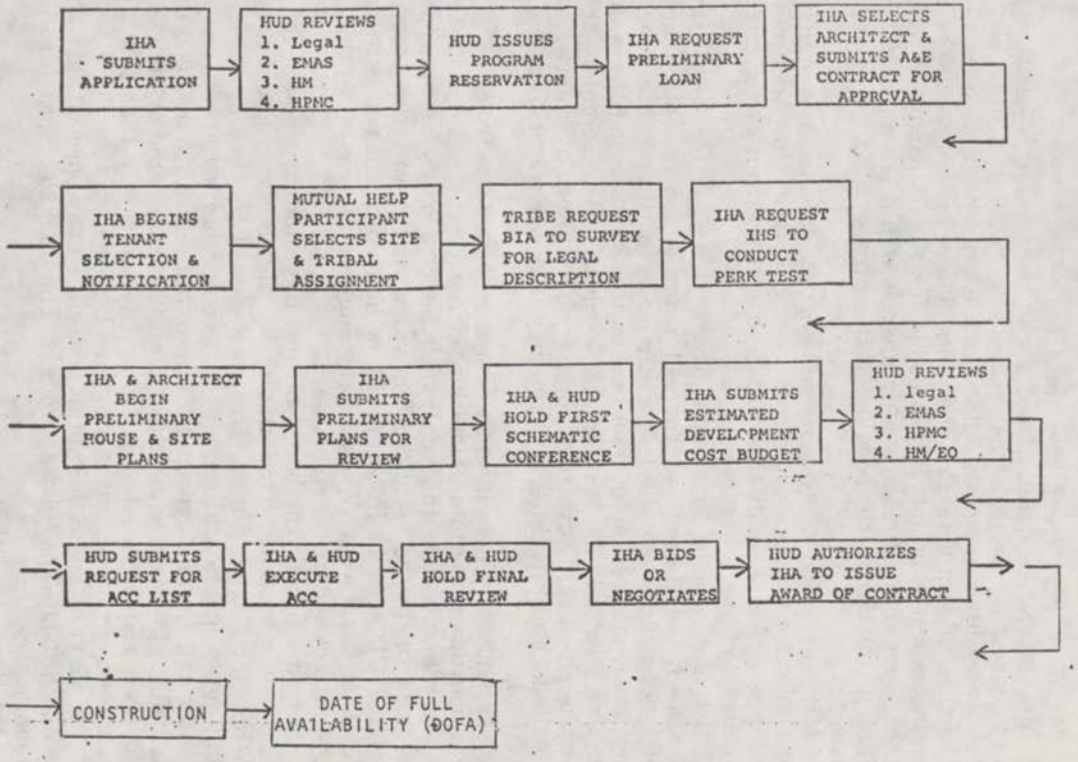
Liquor is to Cabrini-Green adults what drugs are to its youths. Chicago Avenue and Division Street bordering Cabrini-Green are lined with liquor stores, with customers and drinkers milling about their doorways.

With all its problems, Cabrini-Green isn't much different from the many other public housing projects across the nation that sprang up after the passage of the public-housing program in 1935. Cabrini-Green was originally the home of many Italian immigrants, but by the early 1960s, as new buildings swelled the project's size, it had become a black ghetto.

As part of the city's new program to upgrade Cabrini-Green, sheriff's deputies this spring evicted 23 families for lack of rent payment. One family was Bruce Conn, a 31-year-old unemployed black resident, who has lived there 20 years, and his wife and three children. Because they hadn't paid the $106-a-month rent on their two-bedroom apartment for five months, they were evicted and put in a temporary shelter in a former nursing home, along with several other Cabrini-Green refugees.

Far from being dejected at the turn of events, Mr. Conn considers it an escape from the Cabrini-Green trap. "This may be the best thing," he says. "I've been wanting to get out of the place for a while now. But once you're in, it's almost impossible to get out."

GENERAL APPLICATION PROCES. ..NVENTIONAL MUTUAL HELP ON TRIBAL LANDS



Mr. SABO. Mr. Green, any questions?

Mr. GREEN. As I understand it, the Department's justification for not requesting units is that there is a backlog of units for which the water lines are not in place and are not likely to be in place by the time of completion of the units. Therefore, in a time of budget stringency it was not very sensible for the Department to use up these very limited resources on units it would not make sense to go into production with, because of the prospect for the water facilities.

Mr. ANDRADE. It is also confusing; it puts us in a much more ridiculous situation when you consider that the Administration also recommended in this fiscal year to rescind all of our water money and our sewer money.

It makes a good argument. There is no use for us to have the houses if they take away the water and sewer systems. Whether it is reasonable, even the houses that are in the pipeline now would not reasonably be able to be hooked up. By reducing the water and taking away all the sewers, then we can't even complete the ones in the pipeline. They are saying we should not have houses because of the lack of pipelines, and yet they take the water from the sewer system.

Mr. GREEN. Where does the sewer system come from?

Mr. ANDRADE. Indian Health Services.

Ms. SHIELD. The Indian Health Service bases its appropriation request or budget request for water and sewer construction on what HUD goes for in terms of how many units it wants in housing for that fiscal year. We can only commit money to a project once the project begins construction.

For this fiscal year, they did not have money enough for water and sewer systems. That was to be under construction this year. When the Carter Administration was still in, they approved a $23 million supplemental request that they felt they needed to provide water and sewer facilities for approximately 6,000 or 7,000 units of housing. However, when this Administration came in, they rescinded their request, and it has only been recently that that request has been approved, but it was done by the Congress.

Mr. GREEN. The Subcommittee declined to approve that?

Ms. SHIELD. They did approve it. They did take action to put the money back in.

Mr. SABO. Plus they added the $23 million.

Mr. GREEN. How many units will that cover in the pipeline?

Ms. SHIELD. The units that are coming into construction now, it is on an average of 36 months' time period in what they call the pipeline, to the date of full availability. Therefore, there is a large period of time where unit sites have to be accepted and approved and all kinds of approval begin, and things like that. By the time the construction starts, that is when they commit the money.

Now the money they are requesting for houses that were financed or approved for construction one or two years ago will be finished this year. However, the pipeline for this year from HUD is going to be shortened considerably from 15,000 units. HUD was stating there would be that many in the pipeline with the unit allocation for this year.

Field offices of HUD, as I understand it, have been instructed to reserve only 2,000 units for this fiscal year, so that cuts that pipeline down by 3,000.

Mr. ANDRADE. The money in IHS, they would have only those houses started three years ago. It would be approximately one-third of what they claim.

Mr. GREEN. Once you use up that $23 million and you hook up whatever houses that is going to cover, is there still money at HUD that doesn't have corresponding water and sewer money from Indian Health Service?

Ms. SHIELD. Indian Health Service is always behind.

Mr. GREEN. How many units still have to be funded?

Ms. SHIELD. There will be about 5,000 coming up for this year, 1981, where they will commit monies, and that will leave another 5,000 units coming in. They will come in next year. They will be finished next year, and it will just kind of peter out in 1983.

Mr. SABO. If the pipeline were zero and we approved 4,000 units, how long would those take to be built?

Ms. SHIELD. Those units, if they were begun——

Mr. SABO. If we approved 4,000 units for 1982, and you assume the pipeline was zero, I assume those would not be built until 1984 or 1985?

Ms. SHIELD. That is right.

Mr. ANDRADE. There is also one other thing. HUD and the Administration confused it a little bit. All the money in Indian Health Services for water and sewer is not only tied to the houses; we have Community Development Block Grant programs; we have other developments solely handled by the tribes, perhaps another community facility out of their own funds.

There may be other projects. Those aren't noted. Well-drilling projects. We are concerned with a water drought. It is not only with Indians. It is hitting everybody in the West. Any well-drilling project may well have to be stopped because those come out of the water and sewer system hookup. It is not totally tied to Indian housing.

Mr. GREEN. Is what you are saying that if we were to authorize some number of units this year for Indian housing in the normal course of things, then there would be Indian Health Service funding a year from now, or two years from now, that would catch up with them?

Ms. SHIELD. They are always behind because of the length of time it takes to get the construction. There would be funds.

Mr. GREEN. What you are saying is that the critical path is not the provision of the water and sewer lines; it is the provision of funds in the water and sewer line appropriations that is catching up.

Mr. ANDRADE. It has always been established that the three critical points should be matched together, the Bureau of Indian Affairs, the HUD commitment, and IHS commitment through its budget. This is a tripartite agreement between the three that each one keys the other to make the houses complete.

Mr. SABO. Thank you.

Mr. Cleveland?

We will insert Mr. Cleveland's testimony in the record. I don't believe he is here.

[The statement follows:]

PETER MacDONALD
Chairman, Navajo Tribal Council
Ex Officio Board Member

FRANK E. PAUL
Vice Chairman, Navajo Tribal Council
Ex Officio Board Member

ROY J. CLEVELAND
Executive Director

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Navajo Housing Authority

Position Statement

Opposing Termination of Department
of Housing and Urban Development
Indian Housing Program and
Related Support Services

April 27, 1981

P.O. BOX 387 Window Rock, Navajo Nation, Arizona 86515 Phone: (602)871-4114

PETER MacDONALD
Chairman, Navajo Tribal Council
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Executive Director

NAVAJO HOUSING AUTHORITY
MAY 1, 1963

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We are very concerned about the persistent rumors that the Department of Housing and Urban Development's (HUD's) Indian Housing Program will be terminated in the Fiscal Year 1982 Budget.

Before such drastic action is taken we ask that careful consideration be given to the final results of this action. An indepth view of the Navajo Nation is necessary before termination of HUD Housing Programs for the Navajo people.

The Navajo Housing Authority (NHA) was chartered by the Navajo Tribal Council in 1963 as a public agency of the Navajo Tribe of Indians. The specific purpose was to enable the Navajo Tribe to participate in low-income housing programs funded through HUD. Prior to 1963, the Federal Government did not have low-income housing programs designed to benefit Indians living on Indian Reservation. Housing Programs for others have been in effect since 1937. The Indian program is therefore 26 years behind other HUD programs.

It was determined in 1963 that there was an immediate need for 10,000 dwelling units on the Navajo Reservation alone. This is not surprising since the Navajo Nation contains 25,000 square miles, approximately the size of the State of West Virginia. See Appendix No. 1.

In 1963, there were few modern conveniences on the Navajo Nation except for few population centers. The Navajo people were required to haul water for drinking and wood for heat. Usually minimum of ten to as far as sixty miles, one way. They were also required to use either kerosene lamps or light from a wood fire for lighting, and modern plumbing was non-existent. Children were sent to boarding schools for their education nine (9) months out of each year. The Federal Housing Program offered to the Navajo people was utilized by the Federal Government as a panacea to the problems on the Reservation. HUD through its low-rent and mutual help housing programs expected the Navajo Housing Authority to provide job training for individuals and create job opportunities and work for minority contractors and sub contractors on the Navajo Nation. To construct decent, safe and sanitary housing, it was necessary to bring electricity water, sewer and sometime gas to communities in remote areas. In fact, the housing program was the vehicle used to build town and communities and bring civilization to isolated areas.

The current population of the Navajo Nation is 152,694. By the 1990 the project population will be 191,825. Based on the information supplied by the Department of Health, Education and Welfare, Indian Health Service (IHS), the birth rate of 1978 was 33.1 per 1,000 population among the Navajos. We feel the birth rate will not vary much in the next decade. See Appendix No. 2 and 3.

The total labor force of the Navajo Nation is 75,030 of which 29,507 persons are unemployed. The average per capital income is $2,500. The average family size in 1970 was 5 persons. The average total number of rooms per dwelling units is 2. See Appendix No. 4.

Our current housing inventory does not come close to meeting the housing needs on the Navajo Nation. Currently, there are 25,825 existing housing units. Of this total number only 7,537 units are considered in standard condition. The remaining 18,288 units are in substandard condition. Many of these units are in hazardous conditions due to decaying roofs and walls and lack of proper water and sewerage facilities. In addition, there are 12,243 units which need renovation work. 10,519 new housing units are needed immediately to meet the current demands. This does not take into consideration the future population growth which will also require housing. See Appendix No. 5 and 6.

We have been told that there is a backlog of 22,000 funded but unfinished Indian Housing units which represent a 5½-year supply at the 4,000 unit program level proposed in the January budget.

For your information, since its inception in 1963, the Navajo Housing Authority has completed 2,433 units and are occupied by approximately 12,165 persons. We have 203 units under construction. In addition, we have 1,782 units at various stages of design to be constructed. We are in the process of submitting housing applications for 1,740 additional units. See Appendix No. 7.

The Navajo Housing Authority employs 125 persons. The average Navajo family consists of 5 individuals. Therefore, 625 person (5 x 125) directly depend on the housing authority for their livelihood. If the Indian Housing Program is terminated one half the authority's staff will lose their jobs. Three hundred (300) people would be without an income to support their needs.

The authority estimates that approximately 40% of

the total construction cost of each dwelling unit is for labor. We estimate 35 individuals are required to build a conventional dwelling unit. The agreed upon plan has been to build 1,000 dwelling units per year on the Navajo Nation.

If the housing program is terminated 35,000 jobs will be lost (35 x 1,000). The present unemployment rate on the Navajo Nation is approximately 40 percent (75,000 available for employment with 30,000 unemployed). Adding the persons now employed in the Indian Housing Program Construction to the other unemployed, the unemployment rate will be in excess of 50 percent. Where will the Navajo people obtain employment? How will they survive? These questions must be answered before the Indian Housing Program is terminated.

The economic impact on the Navajo Reservation will be staggering. The present total average cost per dwelling unit is $71,500. You must remember this cost includes all water, sewer, streets, curbs, gutters and dwellings with required equipment. If our program is terminated $71,500,000 (1,000 x $71,500) will be directly lost. The money spent on the reservation turns over at least 3 times, therefore, the impact will be in excess of $200,000,000. It is incomprehensable that our government would terminate our program and yet make huge grants to foreign countries. The average Navajo income is only $2,500 now, far below the poverty level. We believe that the Treaty of 1868 between the United States and the Navajo Tribe of Indians was intended to assist the Navajo. The proposed termination, we believe, is contrary to the purpose and intent of the Treaty as well as the laws pertaining to Indian Self-Determination.

The present HUD Indian Housing Program involves three separate departments of the Federal Government, Department

of Housing and Urban Development (HUD), Bureau of Indian Affairs (BIA) and the Indian Health Services (IHS). The three departments work together to provide Indian Housing Programs. There is a written "Interdepartmental Agreement on Indian Housing" which sets forth each department's responsibility to the Indian Housing Program. See Appendix No. 8.

HUD provides the funding and technical assistance to build the dwelling units and all site improvements within the projects boundaries. BIA funds the building of all weather access roads to the housing project boundaries. IHS funds the water supply and sewerage facilities systems to the project boundaries. We have been told by IHS that the FY 1982 Budget proposes a zero budget for IHS water supply and sanitation facilities. See Appendix No. 9. The Navajo Housing Authority will lose 399 housing units by the proposed budget cut. See Appendix No. 10. This indicates that 1,995 persons (399 x 5) will still be homeless. We are processing housing applications for 1,740 additional housing units which will require adequate water supply and sewerage facilities systems. Should the proposed budget be adopted 8,700 Navajo will be denied the benefit of living in a house which is decent, safe and sanitary.

We have been told by the BIA that their Budget for roads has been reduced by $7,000,000 for FY 1982. The proposed budget reduction for roads will completely eliminate access roads for the 1,782 dwelling units currently under design. If the BIA does not provide access roads to our housing projects, HUD will not approve contract documents for the construction of the much needed homes. For the Indian Housing Program to build the so-called backlogged units, IHS and BIA must be funded. Without adequate water, sanitation facilities, and access roads,

HUD cannot spend funds to build houses. IHS and BIA must receive sufficient funding to clear the backlogged HUD dwelling units. It is important that HUD be allowed to maintain the current staffing level to clear the backlogged HUD Indian Housing Units.

We must have new housing for the Navajo people. We have demonstrated we can build the units and manage the project after construction. The United States has a responsibility to help us meet our housing needs. There is no other housing available to the Navajo which he can afford. The Navajo needs training and employment. How else will we ever be able to move into the mainstream of society and be self-supporting. Your serious reconsideration to continue Indian Housing Programs and the support services is urgently requested.

Respectfully submitted,

NAVAJO HOUSING AUTHORITY

Roy J. Cleveland
Executive Director

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

JAMES DUKES, PRESIDENT, NATIONAL ASSOCIATION OF NOISE CONTROL OFFICIALS

Mr. SABO. Mr. Dukes, President, National Association of Noise Control Officials.

Mr. DUKES. Mr. Chairman and Members of the Subcommittee, in the interest of saving time, I would like to offer my brief oral testimony and the written testimony of my colleagues to be included in the record of this hearing.

[The statements follow:]

Testimony of

George W. Fellendorf, Ed.D.
Executive Director

Hearing, Educational Aid and Research Foundation, Inc.
P.O. Box 57241, Washington, D.C. 20037

ABSTRACT

There is a growing body of research evidence which supports the conclusion that excessive environmental and occupational noise is hazardous to hearing. In addition, studies in the United States and abroad tend to support the contention that noise is detrimental to the health of humans in such other areas as blood pressure, heart disease, digestion, and mental health. Thus it is recommended that research into the health effects of noise be continued at the National Institutes of Health, Department of Defense and such other agencies as are appropriate, with the active cooperation of EPA in the interpretation and dissemination of the results of such studies.

Funding of regulatory activity in environmental noise at the federal level by EPA should cease. Appropriated funds should be focused upon stimulating state and local noise abatement programs and in dissemination of appropriate research reports and public information literature to state and local governments, citizen groups, civic leaders and educational institutions. Not more than 25% of any appropriated funds for federal effort in environmental noise abatement and control should be allocated for staff salaries, travel expense and similar Washington-based activities. At least 75% of all appropriated funds should be directed into support of state and local programs through selected EPA regional offices, and through professionally qualified organizations.

Mr. Chairman and Members of the Subcommittee, I am testifying today on behalf of the Hearing, Educational Aid and Research Foundation, Inc. (H.E.A.R.) which operates the National Information Center for Quiet. My purpose is to share with you some of the more recent developments on the health effects of noise and to make specific recommendations on how we as a nation may more effectively protect the hearing health of our children, our elderly, as well as those in between.

Health Effects of Noise

There is ample research evidence today of the detrimental effects on hearing of prolonged exposure to moderate levels of noise and to impact noise for shorter periods of time. It has been estimated that more than 25 million Americans are exposed daily to potentially damaging levels of noise in their homes, work-places or on the streets. Recent health statistics indicate that hearing impairment is the most common disorder in the United States today with more than 15 million men, women and children exhibiting some degree of hearing loss.

Children and youth are among those who are susceptible to hearing loss and the resulting interference with their education and communication. Studies of college freshmen by Dr. David Lipscomb, University of Tennessee, have shown that the levels of hearing loss in these youths approximate those found in adult populations in the 50-60 year old range. Dr. Lipscomb attributes a substantial portion of this condition to the pervasive noise environment in which youngsters are growing up in both rural as well as urban areas.

Among the most recent research results which have come to our attention from the National Institutes of Health are reports from the University of Michigan on the relationship between certain medication and noise. It has been found that users of many types of ototoxic medication are highly susceptible to permanent damage to their auditory mechanism in the presence of noise. Also impact and impulse noise have been found to be considerably more destructive to the hearing system than was previously thought to be the case.

Here in Washington, a study reported by the D. C. Environmental Health Administration revealed that the noise levels in a group of 19 discotheques frequented by young adults ranged from 85 to 115 dB. Patrons in the sample study spent an average of five hours in such environments thereby exposing themselves to levels of noise in excess of acceptable levels. (Walker, B. Perceived Effects of Levels in Discotheques of the District of Columbia, 1979).

There are health areas other than hearing loss, however, which have been shown to correlate with exposure to excessive noise. Dr. Ernest A. Peterson, University of Miami, has been experimenting with primates for years to demonstrate the impact of typical community-workplace noise on blood pressure. He reported to the Model Symposium on Community Noise in 1979 that a 30% increase in blood pressure resulted from several months of exposure to the types and levels of noise experienced by an industrial worker on a daily basis. In a recent communication, I asked him about the post mortem studies of these animals and he responded that while there was no evidence of structural changes, there was evidence of changes in the adrenal glands which he considered to be significant. Among the practical goals of this research may well be the determination of a profile of individuals who are at risk for health damage as a result of noise exposure. Such individuals can then be advised to seek job placement and living situations where they are not exposed to excessive noise levels.

Some internationally recognized authorities, who in the past have questioned the non-auditory effects of noise, have more recently come to acknowledge that such effects may well exist. Among the evidence that has influenced this recognition has been that reported by such researchers as Welch, who in 1979 critically reviewed a number of research studies on non-auditory health effects as found in foreign literature (Welch, B. L. Extra Auditory Health Effects of Industrial Noise: Survey of Foreign Literature). Welch states, "Cardiovascular morbidity of one kind or another has been found to be greater among people who work for prolonged periods under high intensity sound than among people who work under low intensities of sound in 40 different studies". He goes on to say, "No study involving appropriate measures and statistical analyses has been identified which failed to suggest an adverse cardiovascular effect of long-term employment under high intensity industrial noise".

Among the other studies of risk of heart and circulatory diseases as a result of noise exposure is one conducted in factories in West Germany by Ising and colleagues in 1977-78. (Ising, H. et al, Study of the Quantification of Risk for the Heart and Circulatory System Associated with Noise Workers, 1979). The results indicated significantly observable differences in the systolic blood pressure and noradrenaline among workers in noisy environments when they were wearing ear protectors as compared to when their ears were unprotected. These data are particularly informative because of the great care which the German investigators took to consider various parameters which were factored out in order to isolate the noise-related effects. Mosskov and Ettema in the Netherlands

also suggest that long-term exposure to noise is a risk factor for cardiovascular disease in daily living and working conditions. (Mosskov, J. I. and Ettema, J. H., Extra Auditory Effects in Long-term Exposure to Aircraft and Traffic Noise, 1977). They found that exposure to traffic noise caused decrease of systolic blood pressure, increase in diastolic blood pressure, changes in pulse pressure, heart rate and quotient of heart rate and respiratory rate and increase of respiratory rate.

It is clear that there is need for continuing research into the effects of noise exposure on the ear, the heart, blood pressure and the nervous system. However, there is evidence today which justifies alerting the public to the potential hazards of noise. This necessitates attention to ways and means of alerting the public to the hazards of excessive noise and possible remedies.

Public Awareness

The H.E.A.R. Foundation, Inc. has operated the National Information Center for Quiet (N.I.C.Q.) since September, 1978 under a contract from the Office of Noise Abatement and Control, EPA. The primary purpose of N.I.C.Q. has been to disseminate information in the form of reports, brochures, and films to state and local agencies, universities, consumer organizations and to individuals. Cooperating with the H.E.A.R. Foundation in this effort have been several national organizations; i.e., The American Speech-Language-Hearing Association, the National Association of Noise Control Officials, The Better Hearing Institute, the National Alliance for Quieter Communities, The Sertoma Foundation, and the American Council on Otolaryngology. Each of these organizations assigned a staff member to serve on the N.I.C.Q. Advisory Committee which meets periodically to consider ways and means of strengthening programs and services.

The operation of the National Information Center for Quiet since its inception in 1978, has exemplified the potential for cooperative attitudes and practices of several professional, service club, and consumer organizations, all of which include noise abatement among their concerns. It is this type of cooperation which we feel must be strengthened and continued under any extended noise abatement program funded by the Congress.

The cost benefits of cooperation among public and private agencies are many. For one thing, each of these organizations has existing avenues for dissemination of information to their

respective audiences. By being allied with the National Information Center for Quiet, each organization gains access to current and accurate information on health effects, public awareness efforts and related matters. Of equal or more importance, however, is the service which such organizations can perform for N.I.C.Q. by providing the same sorts of information from its own sources many of which would not be easily available otherwise. Both in the collection of information, and in its dissemination, therefore, the advisory committee consortium concept is a practical way of sharing information on noise abatement and control in a cost-effective manner.

The Sertoma Foundation, Optimist International, Lions International and Kiwanis International have been highly cooperative also. Their membership in local clubs throughout the country has served the function of a service-oriented, business-related local outlet for information on health effects of noise, specifically with reference to children. The Quiet School Program, a concept of the State and Local Programs Branch of the Office of Noise Abatement and Control, EPA, is designed to inform elementary and secondary aged children of the potential damage of noise to their hearing and health. To reach the children in localities throughout the country, the H.E.A.R. Foundation has worked with the service clubs and encouraged them to pick up the cost of printing the specially designed materials for children.

This service club cooperation illustrates how community businessmen and women can be encouraged to underwrite the costs and do the personal follow-up for distributing essential health related materials in their own communities. Local funds are being invested in serving local children and youth. The role of the federal government has been to design and produce samples of the materials to be distributed and, through the H.E.A.R. Foundation, to serve as a catalyst in helping bring together community leaders with school officials, teachers, and PTA's.

The practice described above is far different than the traditional approach under which the federal government has provided virtually all of the design, direction, leadership and funding. Under such circumstances, the local business and professional leaders have not viewed the problem, or the solution approach, as one which they "owned". Rather they tended to see it as a "Washington Project". When federal funding was no longer available, the concern for the problem, and the program to solve it, frequently dried up.

Considerable progress in these cooperative efforts has taken place in the past year or so. While many communities

have yet to even hear of the Quiet School Program and the innovative funding concepts described above, a growing number of places such as Minneapolis, Olathe, Norfolk, Naples, Des Moines and New Orleans have taken steps to get underway. It has been truly exciting to witness the levels of interest and cooperation between mayors' offices, speech and hearing clinics, professional organizations, businessmen, schools and consumer groups. What has been needed in almost every instance, however, has been input and guidelines from the National Information Center for Quiet and other similarly focused national agencies.

The task remains before us to identify and stimulate the cooperation of more non-government organizations. The manufacturers of automobile mufflers, the producers of quiet lawn mowers, the health insurance carriers, the noisy industries that have instituted successful noise abatement programs and many others are among likely prospects to provide continuing financial support to the national noise abatement program. Such cooperation must be sought at the national level even though the impact will be at the local level. The National Information Center for Quiet, or other national agency with similar goals, is needed to coordinate such efforts.

The H.E.A.R. Foundation supports the efforts of the Congress and the Administration to substantially reduce costs for the benefit of all of us. Obviously the environmental noise program must share in this worthwhile program to restore fiscal responsibility and stability to our nation. A well-planned reduction of 50-60% from the FY1981 environmental noise abatement and control budget for FY1982 need not destroy what has been built up and which has already begun to prove its effectiveness in the villages and cities of our nation.

In order to accomplish the long range goal of a quieter America for future generations, we would urge the restriction of investment in federal government staffing, travel and related costs to 25% of the appropriation and the allocation of not less than 75% of all funds appropriated for information collection and dissemination services and coordination with state and local agencies. We would urge the greater use of bona fide professional organizations and qualified, experienced contractors whose backgrounds bring to the task a long term dedication to prevention and amelioration of hearing loss and similar health problems associated with noise and stress.

More specifically, Mr. Chairman, we propose that language similar to the following be included in any enabling legislation related to environmental noise abatement and control in FY 82 and the years beyond:

1. No portion of the funds appropriated for environmental noise abatement and control shall be used for regulatory activity.

2. Not more than 25% of all appropriated funds shall be utilized for "salaries, expenses, and other costs" in the Washington Office of Noise Abatement and Control or such other EPA Washington office as may be designated responsibility for project direction.

3. Not less than 75% of all appropriated funds shall be used in the field for program activities heavily in non-governmental organizations directly related to creating a public awareness of the health effects of excessive environmental noise and in informing states, localities, educational institutions, and civic leaders of ways for reducing such effects; i.e.,

a. collection and dissemination of published information and reports on the health effects of noise,

b. dissemination of information on noise abatement and control procedures which are applicable at the state and local level,

c. perform an advisory role to states and localities and educational institutions to promote environmental noise abatement and control through the use of professional organizations and/or qualified private agencies,

d. work in cooperation with public interest groups, service clubs, businesses, professional organizations and similar non-governmental agencies to enlist volunteer leaders, as well as funds, for state and local programs,

e. design and stimulate the adoption of special curricula for children on protection of hearing health from the effects of excessive noise.

4. Research efforts shall focus upon coordination of public and private research on noise and its health effects and, where appropriate, dissemination of bibliographies and special reading lists of research results.

Summary

The insidious effects of excessive noise on the hearing and health of our children and upon the well-being of our elder citizens cannot be accurately predicted or measured with today's instruments. There are few who would deny, however, that such effects are not only possible, but surely present throughout the urban and the rural parts of our nation.

What we seek today, Mr. Chairman, are the resources and the mandated guidelines for their use, which will enable responsible professionals and consumer advocates to inform their fellow Americans of a potential danger to their health. We cannot do less than to provide the necessary, albeit limited, resources to permit this public awareness program to continue.

A program is possible whether the federal funding is six million, four million or two million. The quality of any such program, however, will depend not only upon the amount of funding, but also upon how it is invested.

The Hearing, Educational Aid and Research Foundation, Inc. is committed to continuing its interest and its role in environmental noise abatement and control because it is constitutionally dedicated to furthering the interests of all who now have, or who may have in the future, a hearing impairment.

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Jesse O. Borthwick
Executive Director
National Association of Noise Control Officials

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to present the views of the National Association of Noise Control Officials, NANCO, regarding the need for a continued yet redirected environmental noise control program within the U. S. Environmental Protection Agency.

On March 11, 1981, the Administration formally announced its decision to phase out the EPA Noise Control Program by the end of FY 82 since "the benefits of noise control are highly localized and the function of noise control can be adequately carried out at the State and local level without the presence of a federal program."

The announcement came as a shock to State and local noise control officials throughout the Country. While we agree that the primary responsibility for noise control should rest with State and local government, we completely disagree with the statement that "noise control can be adequately carried out... without the presence of a federal program." While certain elements of the EPA program could or should be phased out, others are essential to the continuation of noise control in the United States at the State and local level.

There are two major points we would like to make today. First, the noise regulatory program at EPA, which has done little more than generate preemptive regulations designed to shield industry from State and local noise control, should be abolished. Second, the technical and financial assistance programs established by the Quiet Communities Act should be maintained and strengthened.

STANDARDS AND REGULATIONS

Since the enactment of the Noise Control Act of 1972, EPA's Noise Program has focused heavily on standards and regulations. Over the last eight years the Agency has promulgated in-use noise emission standards for Interstate Motor Carriers (1974) and Rail Carriers (1975/1980). The Agency has also promulgated the following new product noise emission standards: Portable Air Compressors (1976); Medium and Heavy Duty Trucks (1976); Truck Mounted Solid Waste Compactors (1979); and Motorcycles and Motorcycle Replacement Exhaust Systems (1980).

In every case these regulations have been weaker than existing State and local regulations and few if any provisions have been made for their enforcement. In our opinion, these preemptive standards fail to protect the environment. To the contrary, they serve to protect the polluter by shielding motor and rail carriers and manufacturers of major noise sources from State and local control.

Assuming funding will not be available to maintain and strengthen these regulations and ensure adequate provisions for their

enforcement, we feel that all of the noise regulations promulgated to date by EPA should be abolished immediately, leaving control to States and cities. The only federal regulatory effort should be directed at aircraft/airport noise control, a truly national problem. Except for this, the limited funds which are available should be applied to assistance programs for States and cities.

It should be noted that the intial intent of these regulations was to protect industry from a multitude of State and local regulations which began emerging in the late Sixties. Today, through associations such as ours, State and local officials are communicating with each other and with representatives of industry and the scientific community. We feel that by working together we can reach a consensus on reasonable noise standards and regulations, thereby minimizing the need for federal preemption.

FINANCIAL AND TECHNICAL ASSISTANCE

In 1978, Congress recognized the failure of EPA's regulatory programs to reduce environmental noise and passed the Quiet Communities Amendments to the Noise Control Act. The amendments for the first time recognized that (1) noise control can most effectively be achieved through State and local actions and (2) the federal government's role should be primarily one of technical and financial assistance.

While Congress authorized 15 Million Dollars to carry out the provisions of the Act, the Office of Management and Budget recommended that EPA only receive President Carter's recommended appropriation of 12 Million in FY 80 and 13 Million in FY 81, essentially failing to fund the grants programs authorized under the Act. Even though shortchanged, EPA answered the call of State and local officials and redirected its noise program to establish a nationwide program of technical and financial assistance. As a result over the last two years, State and local programs have flourished.

State and local cooperative agreements, while very limited in number and level, have sparked programs to life. Approximately 23 communities have received grants averaging $10,000 to help launch noise control programs and provide technical assistance. For example, the City of New Orleans was awarded a grant to study highway noise and as a spin-off is drafting the City's first comprehensive noise ordinance; Pinellas County, Florida has received a grant to upgrade its existing ordinance; and Philadelphia received a grant to demonstrate existing noise levels and their impact on the urban community, resulting in a noise ordinance. More important are the 22 State grants. Averaging only $34,000, the majority of these State grant programs have been designed to support the development of local programs, such as in Ohio where the Department of Health is helping communities survey their noise problems and develop control programs. To date approximately 60 training courses have been held and over 250 communities have been assisted.

Another efficient assistance approach seeded by EPA is the Each Community Helps Others (ECHO) Program. Under the National ECHO program local noise officials volunteer their time one or two days a month to work with communities interested in developing or improving noise programs. Emphasis is on the transferability of skills and expertise. Over 165 communities have received this volunteer assistance and some 10 State ECHO programs are promoting this concept of peer support. For example, the states of New York and Minnesota as well as the Boston Metropolitan area are actively working under the ECHO program.

In addition, EPA has established several other exemplary programs which bring industry, educators, government and the public together in a non-regulatory approach to noise control. These include: regional technical assistance centers, the Noise Counselors Program which involves older Americans, the Quiet Schools Program, Buy Quiet, and the Neighborhood Self-Help Program. If you want to find waste in the EPA budget, you need not look at these programs. They should serve as models for other Federal programs to emulate, and yet OMB suggests they should be abolished. We fail to understand why.

While these programs may seem minuscule when compared to the overall EPA operating budget, State and local noise control programs across the Nation depend heavily on the valuable assistance provided. There is also a political consideration. Most State and local environmental agencies establish program priorities which are believed to reflect similar USEPA priorities, usually interpreted based on the magnitude of federal grant programs. States and cities may read the abolishment of the federal noise program as an indication that noise is not a problem worth addressing. We have already seen this type of reaction in several programs. It is extremely important that there be a National presence; without it, noise control in these United States could suffer greatly.

CONCLUSIONS

We recognize that times are hard and wholeheartedly support the President in his efforts to bring federal spending under control, eliminate unnecessary regulation, and transfer wherever possible responsibilities to State and local government. However, the Administration's proposal to eliminate funding for the EPA noise program, a program which is perhaps the most service-oriented in the Agency while comprising less than one percent of the Agency's operating budget, is a gross mistake. We strongly support Congressman Florio's bill which calls for 4.1 Million to carry out the nonregulatory provisions of the Quiet Communities Act. We recommend this Subcommittee increase the President's proposed budget from 2.2 Million to 4.1 Million (a level which still represents a 68 percent reduction from the FY 81 budget) to be in line with the pending reauthorization legislation, which we

understand is a bipartisan bill. We further recommend that the Subcommittee through the Appropriations Bill specifically direct EPA to cease work immediately on all regulatory issues.

If the Congress is intent on continuing the regulatory provisions of the Noise Control Act, adequate funding, above and beyond that required to continue the present program of technical and financial assistance, should be provided to maintain and strengthen these regulations and to ensure adequate provisions for their enforcement. An appropriation of 2.2 or even 4.1 Million cannot be split between these two program elements.

Joseph V. Brady, Ph.d.
Professor of Behavioral Biology
The Johns Hopkins University School of Medicine

I am submitting this testimony in an effort to urge this committee and the U.S. Congress to restore necessary funding levels to the EPA Office of Noise Abatement and Control. There is a crucial need for EPA to maintain its national focus in a coordinated fight against the growing noise problem in this country.

I have been a research scientist and teacher for 30 years with my major experimental efforts and contributions directed toward the study of environmental and behavioral influences on health-related aspects of physiology. Over the past several years, I have been particularly interested in the health effects of noise and have had an opportunity to review the existing research literature on that topic in great detail. I have also become familiar with the role of EPA in conducting and supporting that research and in coordinating the total Federal research effort.

Congress was correct in placing within EPA the responsibility for coordinating and conducting research on the health effects of noise. Within the limits of a very modest budget, EPA has done an excellent job in the health effects area. In many respects, the shortcomings of the overall EPA noise control effort are attributable to the fact that insufficient resources have been devoted to careful analysis and investigation of the health effects of noise. Adequate health effects information must serve as the foundation upon which any type of noise control program is based. A focused health effects program, spear-headed by EPA, is a crucial element in any strategy designed to ultimately provide needed relief from excessive and harmful noise.

EPA has developed detailed research plans which outline and prioritize research needs on the effects of noise. These plans have been scientifically critiqued and peer-reviewed. EPA has initiated several key studies in the very important nonauditory physiologic effects area, and the results to date

emphasize the importance of continuing this line of inquiry. EPA is also in the best position to translate these findings for the purposes of public education and community noise control program development. EPA is capable of providing the most time and cost effective investigation of noise effects. The momentum which EPA has developed in advancing this undertaking is of the greatest importance; to destroy it would be to do a disservice to public health and the quality of life in America.

Everyone recognizes the need for widespread reductions in government spending and consequently in the support of government programs. These reductions, however, should be distributed equitably across all program areas. The total elimination of the EPA noise abatement program serves no productive purpose. There is a national noise control program because there is a need for one. That need will not disappear with the elimination of the program. Noise has been a by-product of our technological advancement, and there is every reason to expect that the problem of noise will increase in the future. A reduction in noise can help provide for a healthier society, a more productive work force, and a stronger economy. It is clearly too much to expect that the state and local noise control programs will flourish or even survive without a Federal program focus.

Based on the potential magnitude and severity of the health effects of noise and on the capability of EPA to investigate these effects, EPA should be encouraged to maintain its role as the principal coordinator and sponsor of noise effects research. Section XIV of the Noise Control Act of 1972 should be retained and emphasized in future legislation. Section XIV provides for research, technical assistance, and public information. A national focus for these activities is crucial. Maintenance of these activities at a minimally adequate level would require an annual budget of 6 million dollars, at least 2

million of which should be devoted to health effects research.

By way of providing support for the much needed funding in this important area, I would like to present a brief review of some of the health effects of noise and discuss some of the more recent scientific findings which suggest that noise may be a more serious and widespread health problem than has been generally recognized.

Noise as a Health Problem

It is of course well known that exposure to excessive noise can result in substantial adverse consequences on health and well-being. The most clearly observable and measurable effect of noise is hearing loss. Approximately 20 million Americans are estimated to have hearing impairments according to Public Health Service data, and a large proportion of these impairments can be directly attributed to noise. More children than ever before are failing school screening tests due to noise induced hearing losses. There are, however, a number of other health effects of noise. Noise has been shown to disrupt sleep either by actually awakening the individual or by causing shifts from deeper to shallower stages of sleep. Noise exposure also results in communication interference and decreases in task and work performance. Noise has been associated with adverse effects upon individual and social well-being, and there is a well defined relationship between noise and subjective annoyance. These effects may well be viewed as symptoms or signals of noise-induced stress.

There is increasing scientific evidence indicating that noise is capable of producing adverse nonauditory physiological reactions and health effects. The most extensively documented effects pertain to elevations in blood pressure and other cardiovascular related problems. Determining the extent and magnitude of these effects is of the utmost importance given the

pervasiveness of high noise levels in our society and the prevalence of cardiovascular disease. Heart disease and stroke account for almost 50% of the deaths in this country each year. It is estimated that over 25 million Americans have high blood pressure, and complications of this hypertension include stroke, coronary heart disease, and chronic kidney failure. Hypertension is a contributing factor to the deaths of at least 250,000 Americans each year.

The scientific community world-wide has recommended that more attention be given to nonauditory physiologic effects of noise. The Third International Congress on Noise as a Public Health Problem (Freiburg, West Germany, 1978) emphasized the necessity for giving priority to this research. Since the previous International Congress in 1973, at least 123 reports of related research studies have been published in the international literature. These investigative efforts have focused not only on the heart and circulatory system, but also upon effects on vision, fetal development, the digestive system, the muscular system, and the nervous system, and the biochemical constituents of such bodily systems.

A committee (CHABA Working Group 81) of the National Academy of Sciences has recently recommended that investigation of the relationship between noise and medically significant physiological responses be accelerated, with cardiovascular measures as the initial focus.

The recent World Health Organization criteria report on noise has also emphasized the need for health effects research and pointed out that current national and international research efforts are inadequate given the potential importance and seriousness of the nonauditory health effects of noise.

It has long been recognized that noise can act as a general, biologic

stressor. The observed effects typify a generalized stress reaction characterized by sympathetic activation of the autonomic nervous system. The hormonal changes produced in animals and humans by exposure to intense sound are essentially the same as those elicited by other stressors and include increased levels of ACTH, glucocorticoids, and catecholamines. These relatively short-term effects of noise are well documented in both humans and animals. The major question at present is whether prolonged exposure to these conditions translates into effects of pathological and medical significance. The discussion which follows will concentrate on that portion of the literature which has examined the effects of chronic, long-term noise exposure.

The largest body of long-term data consists of retrospective, epidemiologic studies of industrial workers. At least 40 such studies have been reported, most of which were conducted in foreign countries. The most common observation reported in these studies is impaired regulation of blood pressure. Other signs and symptoms which have been reported as occurring more frequently and/or to a greater extent in noise exposed workers are: loss of cardiac pacing regulation which can be manifested as either tachycardia or bradycardia; various EKG anomalies; reduced stroke volume and/or cardiac output; accelerated pulse wave velocity; narrowing of retinal arterioles; blood pressure asymetries; and complaints of generalized chest pains and angina.

There are, of course, wide variations in the quality of this literature, and as is often the case with retrospective studies, many of these studies suffer from one or more methodological shortcoming. There is, however, a large amount of data, and its apparent consistency cannot be ignored.

Positive findings have been reported in eleven different countries and 18

different industries. Long-term, prospective data that would support a determination of causality, however, are lacking. But the magnitude and consistency of the associations and the established biologic plausibility of noise acting as a physiologic stressor suggest that a causal relationship may exist. It now seems quite likely that cardiovascular morbidity may be greater among people who are exposed to high noise levels in work situations for relatively long periods of time. In good conscience, this literature cannot be easily dismissed.

In addition to the industrial data discussed, the results of a number of other recent field studies, conducted in both occupational and residential settings, have emphasized the adverse cardiovascular effects of noise. A group of airport community studies in the Netherlands found evidence of an increased prevalence of heart disease and hypertension in noise-exposed populations as compared to low noise control communities. These effects could not be explained by age, sex, smoking habits, height, weight, or socioeconomic status. Two studies relating children's blood pressure to noise levels in schools and neighborhoods have reported significant noise effects on blood pressure. Increases were reported for both aircraft and street traffic noise. There was also evidence that the magnitude of the effects increased as a function of age and/or years of exposure. These studies also reported adverse effects on learning and behavioral development, replicating the findings of a number of other studies.

Several field experiments indicate that systematically varying noise exposure can influence physiologic response. These studies differ from laboratory studies in that they were conducted in naturally occurring settings and/or they involve exposure durations considerably longer than those employed in the typical laboratory investigation. In a carefully executed German

study, for example, significant differences in blood pressure and catecholamine levels were observed in the same individuals, in the same work environment, on days of high and low noise exposure. This study is particularly important because it involves comparisons of physiological parameters under different noise exposure conditions while keeping other circumstances the same in a real life setting. This approach overcomes many of the problems associated with retrospective and cross-sectional studies.

Other experiments sponsored by the U.S. Navy have shown that exposure to short bursts of noise at moderate levels for 30 days can produce elevations in cholesterol and cortisol. And a NIOSH sponsored study comparing health measures before and after the initiation of a hearing conservation program found reduced rates of medical complaints and disorders subsequent to the introduction of protective measures. Differences were not found in the control groups where protective measures had not yet been introduced.

EPA has initiated the first elements of a carefully devised and thoroughly reviewed program of research directed at assessing the extent and magnitude of the cardiovascular effects of noise. Animal research using an appropriate primate model has been undertaken to permit sophisticated and continuous measurement of noise exposure and physiological response, and to allow for maximum control over extraneous factors. The Phase I results, which were recently published in Science, revealed that prolonged exposure to environmentally realistic noise levels can produce significant and sustained elevations in blood pressure. The findings also showed that once these noise-induced elevations in blood pressure had occurred, the pressure remained elevated even during the relatively quiet portions of the daily noise exposure sequence. Moreover, the blood pressure showed no indication of returning to pre-exposure levels even after a full month of post-exposure quiet.

Significantly, these effects occurred in response to noise levels which produced no hearing loss in the test animals. These results have now been replicated in the recently completed Phase II of this study, and strongly support the suggestion that merely protecting against hearing loss may not be adequate to prevent serious noise-related health problems.

Extensions of these animal studies are being undertaken to assess the robustness of these findings and investigate the biochemical and physiological mechanisms involved. There are also a number of important questions to be answered regarding the interactive effects of noise and other environmental and behavioral stressors, and whether noise-related cardiovascular changes are more likely to occur under conditions which involve pre-existing compromises of an organism's physiological integrity.

To complement the animal research, EPA has recently initiated human experimental work taking advantage of the detailed and sophisticated procedures and experimental techniques now available for research monitoring of human physiological responses. These studies will examine the pattern of physiological response to noise, the pattern of change over time with repeated stimulation, and the interaction of noise with simulated work stress and resting baseline blood pressure.

EPA is also conducting an epidemiologic feasibility study for the purpose of providing detailed guidance for the design of a program of valid epidemiologic research on the cardiovascular effects of noise. An important element of this feasibility study is an extensive review and analysis of existing data by a team of epidemiologists, biostatisticians, biomedical scientists, and physicians.

There is a serious need to continue these investigations of the

cardiovascular and other physiological effects of noise. The animal and human experimental and epidemiological studies now underway are but the initial steps in a program of research which, if permitted to continue, can be expected to provide definitive information on the extent and magnitude of noise effects upon the cardiovascular system. EPA's research program in this area represents the most detailed and refined approach available at this time. The groundwork and blueprint for this research are presently in place, and the initial steps have already been taken with evident success. Other noise effects research is also needed. There must be a full assessment of the health and performance effects of chronically noise-disturbed sleep, of the effects of noise exposure on the behavioral development and school achievement of our children, of the costs to industry of reduced productivity and increased absenteeism attributable to work in high noise environments, and of the psychological, social, and economic handicaps imposed on individuals by varying degrees of noise-induced hearing loss.

The questions raised by these research areas are not simply topics of abstract scientific concern. They represent issues which impact upon our physical health, social fabric, and economic well-being. Excessive noise is not a problem for only a few Americans. It is estimated that nearly half the U.S. population is regularly exposed to levels of noise that interferes with such normal activities as speaking, listening, and sleeping. Recent public attitude studies conducted in major cities across the U.S. indicate that a substantial portion of the public feel that noise is a serious problem affecting the quality of their lives. In these studies, one third to one half of the respondents felt that noise was affecting their physical and emotional health and well-being. Moreover, recent Annual Housing Surveys conducted by the Bureau of Census in over 70,000 households have consistently shown noise to be the most frequently mentioned undesirable neighborhood condition by

homeowners and renters in all population groups including black and white persons. Noise was also one of the two leading reasons given by people wanting to move from their neighborhoods.

The nation needs a strong EPA noise program to provide a focus on this pervasive problem, to coordinate noise control activities, to conduct and coordinate health effects research, to provide technical assistance to states and localities, and to facilitate the dissemination of noise effects and control information to the public.

EPA has a responsibility to make the latest research results available to both the general public and to State and local officials in order to meet our nation's urgent need for noise control. In this regard, for example, the public is more likely to make informed decisions regarding the purchase of quieter consumer products or even the selection of a location to live when they have more detailed knowledge of the adverse health effects of noise. Our citizens clearly need more information in order to make intelligent decisions regarding their own personal noise exposures. Public officials also need more information to set in motion programs necessary for improving the quality of the noise environment. State and local officials need additional information on health effects and criterion levels in order to establish protective and cost-efficient policies for noise regulation. This essential health-related information must determine the degree of noise control which is needed and should be considered in the many routine administrative actions that touch each of our lives.

Thus, once again I urge this committee to devote the necessary resources for EPA to conduct a noise program to reduce the serious health problems related to noise. Such a program is in our nation's best interests.

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April 23, 1981

The American Council of Otolaryngology--Head and Neck Surgery

Testimony on Noise Abatement and Control
before

The Appropriations Subcommittee on HUD and Independent Agencies

I understand that the House Appropriations Subcommittee will be considering funding for the Office of Noise Control and Abatement of E.P.A. which under the current budgetary proposal funding is to be eliminated. As Chairman of the Medical Aspects of Noise Committee of the American Council of Otolaryngology - Head and Neck Surgery which represents approximately 6,000 practicing otolaryngologists and head and neck surgeons, the physicians who deal with diseases and affectations of the head and neck to include hearing loss, I would like to apprise the Committee through you of our great concern in this area. In addition to the health hazards of noise, which are only being recently examined in depth, of all the environmental pollutants, noise is the one which is most complained about, whether this be a barking dog, the roar of traffic noise near freeways, or jackhammers.

Several different agencies within the federal government deal with this problem: Labor (OSHA, MSHA), NIOSH, F.A.A. but under Section 14 of the Noise Control Act of 1972, the overall responsibility for coordination of rules in the environment outside of the work place was assigned to the Office of Noise Control and Abatement of the Environmental Protection Agency. Since its initial establishment there have been some delays in implementation due to political wranglings of one kind or

Founding Members
Otological Society • American Academy of Ophthalmology and Otolaryngology • American Board of Otolaryngology • American Otological Society • American Laryngological Association • American Academy of Facial Plastic and Reconstructive Surgery
American Society for Head and Neck Surgery • American Bronchio-Esophagological Association • American Rhinologic Society
Society of University Otolaryngologists • Otosclerosis Study Group • American Society of Ophthalmologic and Otolaryngologic Allergy

another, but this office has assisted the state and local governments in developing noise control ordinances which have served to quiet the environment. They have also funded research in the fields of the effects of noise on humans. Their greatest contribution, however, was to focus the attention of legislators and others who are in a position to resolve these problems (i.e. noise).

Is noise really a problem and is it worth spending money today when inflation is rampant and all reasonable people agree that budget cutting is necessary? I think the answer to this question is yes, and I will try to summarize the reasons. It has been known for many years, (in fact, since before the birth of Christ), that noise is a problem and the Sybarites of ancient Greece banned metal work involving hammering from the city limits. Pliney, the Elder, noted in his natural history that Egyptians living near the roaring cataracts of the Nile became hard of hearing due to the roar of the waterfall. These early observations (i.e. that noise can be harmful to humans) have been confirmed many times. In spite of this, it wasn't until The Federal Aviation Act of 1959 that any form of federal noise control legislation was introduced and then only to be appended to this aircraft bill. The Walsh-Healy Public Contracts Act of 1969 and the OSHA Act of 1970, the Noise Control Act of 1972 and then the Mine Safety and Health Act of 1976 all followed to bring us where we are today. All of these acts recognized the deleterious effect prolonged exposure to noise at certain frequencies had on hearing. There was no longer any question about the fact that noise at a given frequency, at a given intensity, for a given period of time, would result in damage to hearing, even though there was some disagreement over the exact length of exposure and intensity to cause damage. Although the resultant hearing loss may at first be temporary, if the noise is intense enough or the exposure is prolonged, the hearing loss will become permanent from which there is no recovery. Some might argue that hearing loss is a minor inconvenience and since it is not a fatal condition we should concern ourselves with more pressing "serious" problems. However, when you consider that more than 10% of Americans have a significant hearing loss and in one study 57% of all workers over age fifty had significant hearing loss, this becomes a "serious" problem. Since most hearing loss is due to industrial exposures and given the current litigious nature of the populace as well as the

increasing workmen's compensation awards for the workers, paying for the hearing loss these people suffer will probably cost more than implementation of regulations which would prevent the losses in the first place. At this point the prevention of noise induced hearing loss becomes cost effective and this is something management understands very well. However, this is not the matter with which we are dealing in this particular instance. Industrial noise is covered under the Labor Department (OSHA and MSHA). The point of this discussion is that noise can be damaging to humans.

I would like to introduce another concept. In the last 20 years, and more especially the last 10 years, the effects of noise on bodily functions other than hearing have received more attention. It is my opinion even though this has never been investigated that the hearing loss which occurs secondary to noise exposure may be a protective function; that is, the body chooses to sacrifice hearing rather than suffer the physiological effects on the body which may be greater and more serious. Specifically, it is known that each time the body is exposed even to a short burst of noise there is constriction of blood vessels, an increase in the heart rate, and a stimulation of the central nervous system. In other words, noise is a stress provoking agent.

There are many stress provoking agents in the environment, and it is well documented through the works of Dr. Hans Selye and others that stress results in unfavorable physiologic reactions within the body. The actual extent of these stress reactions in humans secondary to noise has never been fully documented but there is very interesting evidence available both in animals and in humans which indicate that these effects are not only present but are dangerous. Much of the work done on humans has been done in eastern Europe and Russia. A study that I participated in some years ago indicated that on prolonged exposure to intermittent noise, human volunteers develop a statistically significant elevation in their plasma cortisol levels (an indicator of stress) which drops when they were no longer exposed to noise. More significantly was the parallel rise in their blood cholesterol levels during the noise exposure which also drops with cessation of the noise. Scientific investigation is currently underway at the University of Miami (funded through the Office of Noise Control and Abatement) on the physiological effects of noise on primates,

especially its effects on blood pressure and the cardiovascular system. This work, which has not yet been completed, indicates that there are cardiovascular effects especially hypertension resulting from this prolonged exposure to noise. Since 80% of the high blood pressure that is diagnosed in this country is called essential; that is, we did not understand why the patient has it, any research which indicates another cause for hypertension is of significance. By this latter statement I do not infer that any or all essential hypertension is due to noise. We do not know that. But neither would I argue that it is not caused by noise exposure.

There is also animal work indicating that exposure of pregnant females to loud noise results in an increased number of stillbirths and congenital anomalies in the offsprings. Other studies indicate an increased incidence of admission to mental hospitals by people living in areas which lie under the approach path to airports. One such study was performed near Heathrow Airport in London.

Other studies show that soundproofing the cab of large trucks used in interstate transportation results in drivers who could drive further with less fatigue when compared with drivers of trucks with open noisy cabs. The productivity of workers in quieter factories versus noisier factories has been shown to be higher. Aside from the significant health effects of noise exposure, if productivity could be increased as noise decreased, the free enterprise system would find the advantage in lower noise levels; in other words, as with workmen's compensation it might pay for itself. As a physician, my primary concern is health and I don't like to dwell on the financial aspects of noise reduction, but the financial aspects are really what we are discussing. Everyone would be for a quieter environment if it cost nothing. I suggest that a quieter environment actually saves money. This message must be taken to the public, including labor and management, and this is one of the roles of the Office of Noise Control and Abatement.

Regardless of all these arguments noise is a public health hazard and it should be controlled. It is not within my professional expertise to make governmental decisions as to which agency of the government is best suited to affect these

controls. It seems logical that since most hearing loss from noise occurs in the work place it should be controlled by the Department of Labor. However, most noise regulations for the work place are predicated upon the person leaving the noisy work area upon completion and returning to a quiet residential area where any temporary hearing loss induced by the work noise can recover. Obviously if the residential areas are noisy, this cannot happen. Again an area for E.P.A.

I appreciate the fact that the time/noise relationships in residential areas are not as great as they are in the work place; that is, it's rare that anyone experiences eight hours of continuous noise at levels exceeding 90 decibels. However, as pointed out earlier (and there are numerous studies to support this), the intermittency of noise, especially if it's associated with other stressing factors such as fear of a low flying aircraft crashing into your home, or the stress resulting from sleeplessness due to a barking dog or a motorcycle or car without a muffler roaring up and down a quiet residential street, can disturb the tranquility, lead to emotional upset and cause at least transient elevations of blood pressure. Is this harmful? These questions are not completely answered yet. A goal that most strive for is a "little peace and quiet." It seems logical that a national focus for this goal would be the Office of Noise Control and Abatement.

Respectfully submitted,

Robert W. Cantrell, M.D.
Chairman, Medical Aspects of
Noise Committee
Fitz-Hugh Professor and Chairman
University of Virginia

RWC/srw

cc: Bobby R. Alford, M.D.
Harry W. McCurdy, M.D.

Mr. Chairman, Members of the Subcommittee:

The National Retired Teachers Association and the American Association of Retired Persons (NRTA/AARP) represent approximately 12 million dues-paying members who are over the age of 55. At a time when the average age in the United States is creeping steadily upward, older Americans, as a group, are becoming an ever more significant portion of our population. In this area, we are vitally concerned with the health, well-being, and living conditions of our constituents and their families. We are particularly concerned with the problem of noise in our cities, communities and neighborhoods. Our immediate concern is the level of appropriations for implementation of the Noise Control Act of 1972 as amended by the Quiet Communities Act of 1978, which would enable the Federal Government to continue to help older Americans escape the very real and present health hazards attendant to continuous exposure to unreasonably high levels of noise.

Mr. Chairman, NRTA/AARP is concerned about noise for a variety of reasons which lead to a cumulative and serious health threat to older Americans who should be enjoying their lives in peace and quiet and with a degree of safety from unwanted intrusions. We represent a group of citizens, many of whom for economic reasons are unable to maintain their quality of life and who are constantly subjected to exposure to excessive noise levels. For example, many older Americans live on fixed incomes in communities which are decaying and victims of urban blight--the symptoms of which include excessive noise. They are unable to flee those areas of urban blight due to low income levels and the skyrocketing costs of housing in unblighted communities and neighborhoods.

For the most part, a great number of older Americans have already experienced a sizable percentage hearing loss due to the aging process and due to the cumulative effects of lifelong exposure to excessive levels of noise in the workplace, as well as in our day-to-day environment. For those who have to live in noisy communities, high noise levels present health and safety concerns with respect to being able to hear fire alarms, warning signals, police and ambulance sirens and other sounds which allow for safety and safe passage on our streets.

Older Americans, as a group, also suffer from a much higher incidence of hypertension and cardiovascular disorders which are caused, in some instances, and aggravated in others, by excessive noise. While I am not qualified to discuss the medical and/or physiological causes of hypertension and/or cardiovascular problems, clearly, high noise levels induce sleeplessness, insomnia, and disorientation which exacerbate already existing disorders.

Mr. Chairman, the conditions I have just described exist in our nation's cities today. They exist and when taken as a whole create a set of conditions which most older people are simply unable to endure. In most instances, older people are unable to do anything about this set of conditions due to lack of information and assistance from States and units of local government. We need the protection from noise which can be provided by States and local governments but they, too, have a limited ability to help at this time. Assistance and leadership are needed from the Federal level as well, in order to bring about effective change.

Since the enactment of the Quiet Communities Act of 1978, the Environmental Protection Agency's Office of Noise Abatement and Control has been active in assisting States and local governments to develop their own noise programs. We agree that this is the most effective use of the taxpayer's dollar. We urge the committee to capitalize on the EPA State and local assistance portion of the Noise Abatement and Control Program until such time that the States and local governments can efficiently assume their proper role in noise control. Further, we need to continue the public education and information aspects of the program as well. Many older Americans can, and indeed will do something about their own noise problems within the context of their living conditions. But as of yet, they have been uninformed about those many things they can do to protect themselves from excessive noise. I am convinced that if they are provided with State and local program protection coupled with a viable public education and information program which originates in the continuation of the Quiet Communities Act, our people will act to protect themselves.

Mr. Chairman, we all can certainly agree that reductions in Federal spending are necessary. I am sure that we can also agree that the regulatory functions of the Noise Control Act have eaten up the lion's share of previous noise control budgets and should be drastically reduced if not terminated altogether. However, it is our belief that the State and local assistance elements of the EPA noise control program, which are only now beginning to show positive results, should not be subjected to elimination as planned by the Administration's recommended FY-1982 budget proposal. We would strongly recommend to this subcommittee that

these State and local activities be funded at the level of approximately $4 million as was recommended by the House subcommittee on Commerce Transportation and Tourism from whence the Act originates.

This would allow for an estimated 60% reduction in the present program while continuing to capitalize on the good work of the Agency in helping States and localities solve their own noise problems. Certainly, this is not too much to pay for a healthier environment for our nation's senior citizens as well as the general population.

STANLEY D. ZEMANSKY, CPPO
on behalf of the
National Institute of Governmental Purchasing, Inc.,

"BUY QUIET": A NON-REGULATORY, MARKET

APPROACH TO PRODUCT NOISE CONTROL

My purpose in submitting this paper is to provide you information on an innovative approach to product noise control that is non-regulatory, market-oriented, totally voluntary, extremely effective, and exceptionally economical from an administrative standpoint.

This program, "Buy Quiet" Program, is a cooperative effort of NIGP, the National League of Cities, and an increasing number of local governments and state agencies. Major funding for the administrative aspects of this program is provided by the U.S Environmental Protection Agency, Office of Noise Abatement and Control under section 14 of the Quiet Communities Act. In addition, however, participating local governments and state agencies are voluntarily contributing substantial amounts of their own time, effort, and money to this project because they believe that "Buy Quiet" is a realistic [illegible] their noise problems as they see them from a local prospective.

Back in the summer to 1979 when I first heard about this "Buy Quiet" Program, I thought to myself:

> This program has got to be one of the most idiotic, hairbrained ideas I have ever heard of. What business does the National Institute of Governmental Purchasing, (NIGP) which is a professional society of governmental purchasing agents, have in getting involved in an environmental crusade. We've got more pressing matters facing us, like training purchasing officers and improving purchasing systems.

I truly thought that Buy Quiet was one more experimental program in a long line of experimental federal government programs that never produce anything, and I assumed that it would go away as quietly as it had come.

I was wrong, and I am glad that I was. During the last 18 months I have seen this program grow from nothing but another pipedream into a stick of pure dynamite.

Cities, counties, and other governmental units are asking for quieter products, and services, and industry is responding to their requests. Consequently, many of our cities, counties, and neighborhoods are becoming healthier, safer places to live and work. I hope that the Buy Quiet Program will be allowed to reach the point at which there will no longer be any need for a formal network to assist cities, counties, and even private firms and private citizens in identifying and purchasing quieter products and services.

In the pages that follow, I want to provide you information on a program that:

- is generating an enthusiastic and substantive response from industry, and
- currently involves participation on a voluntary basis by a total of 304 state agencies, cities, counties, and other governmental units.

I will argue that the "Buy Quiet" Program, in spite of the fact that it has not been heavily funded, has been an overwhelming success to date; and, it should be continued.

James Kilpatrick, the syndicated columnist, summed up the concept of the "Buy Quiet" Program well. He said:

> Unlike the federal regulation (of product noise), which is complexity itself, this program is simplicity itself. It rests solidly upon the ancient law of supply and demand. Local purchasing agents create a demand for quieter (models of) garbage trucks (and other noisy products); and perceiving that demand, manufacturers undertake to supply (them).

As Raymond Hughes of the Shelby County, Tennessee Purchasing Department told Mr. Kilpatrick: "Cities and Counties that want quieter trucks ask for them; those that do not, don't".

The NIGP office, which essentially coordinates the "Buy Quiet" Program, provides interested purchasing agents and other local and state officials the information they need to purchase quieter equipment and services at competitive prices.

In most instances, officals who request such information receive what we call "product noise information supplements." Some of the supplements, such as the ones for lawn mowers and chain saws, contain suggested specifications which are being prepared at special NIGP government-industry conferences convened under the "Buy Quiet" Program. Other supplements, such as the ones for trash compactors can be used to modify current specifications in order to exclude "noisier" product models from consideration in future purchases. For the past six months, NIGP has been receiving from ten to twenty letters a day from government officials who want information that will help them "Buy Quiet." I cite as an example the text of a letter dated February 12, 1981, from Mr. Monroe Summers, Director of Communications for the City of Aspen, Colorado:

> Gentlemen:
> The city of Aspen is facing the prospect of purchasing a new fleet of busses in the near future. Local sentiment inclines us to pay close attention to noise abatement in our selection considerations.
>
> If you have comparative data which would help in our selection of diesel passenger coaches, we would greatly appreciate receipt of some.
>
> Thank you for your help.

Governments are not only asking for information; they are using the information we provide them to purchase quieter products and services. Among the items purchased to date with "Buy Quiet" information have been:

- Lawn mowers (e.g., the State of West Virginia)
- Chain saws (e.g., Shelby County, Tennessee)
- Brush chippers (e.g., the City of Milwaukee, Wisconsin)
- Trash compactors (e.g., Sacramento County, California)
- Front-end loaders (e.g., the Washington, DC., Surburban Sanitary Commission)
- Leaf and debris street vacuums (e.g., the City of Palo Alto, CA)
- Portable air compressors (e.g., the City of New York, NY)

This program and the concept behind it are building a momentum that increases in intensity everyday.

Workshops on "Purchasing Quieter Products and Services," which are to be conducted in 8 different locations this year provide purchasing agents and other officials information on how and why to Buy Quiet. They encourage the development of intergovernmental cooperative purchasing programs and feature demonstrations of "quiet" and "loud" models of various items of equipment. Technical and marketing representatives in industry serve as panelists to discuss such issues as how best to communicate government demands for "quieter" products to manufacturers and distributors.

Earlier, I said that the "Buy Quiet" Program is "generating an enthusiastic and substantive response from industry." This is a factual statement, not a statement of what we at NIGP, or I at Baltimore, would like to be the case. Industry is participating in our specification-development conferences, they are participating in our workshops, and most importantly, they are responding to government demands for quieter products. Manufacturers whose products at the present time are, in all honesty, rather noisy, are telling us in plain English that they intend to develop and market quieter products. I cite as a case in point the following statement made by Mr. Paul Seltzer of the Toro Corporation in a letter dated November 13, 1980:

> ... It is our intent to design quieter models of commercial duty lawn mowers to help make our communities, a more desireable place to live, work, and play...

I also cite as an example of industry's enthusiastic response to the "Buy Quiet" concept a more recent observation by Mr. Jack Ehlen of the McCulloch Corporation, a well-known manufacturer of grounds care and garden equipment:

> ... The idea underlying this program is fantastic-it's the American way of bringing about needed product improvements! I can assure you that we will do everything in our power to compete in the rapidly expanding marketplace for quieter chain saws...

The American Society for Testing and Materials, which is U.S. industry's primary mechnism for the development and dissemination of voluntary consensus standards, is cooperating fully with NIGP on the "Buy Quiet" Program.

Earlier I also said that the "Buy Quiet" Program currently involves participation on a voluntary basis by a total of 304 state agencies, cities, counties, and other governmental units. This is only a partial count, because every day we learn, directly or indirectly, that another city or county has made a formal commitment to use information provided through the "Buy Quiet" Program to obtain quieter equipment or quieter contractual services. A representative sample of the governments who are currently purchasing quieter products and services under the "Buy Quiet" Program is attached.

Perhaps the most important point I can make regarding the actions taken by 300 plus governments who are participating in the "Buy Quiet" Program is that they are voluntary, self-supported financially, and based strictly on local perceptions of need. No government is being forced to participate in the "Buy Quiet" Program. Moreover, the costs of attending the "Buy Quiet" Workshops and conferences, and the staff time that is required to develop or modify purchase specifications are paid for by the participating governments-not the "Buy Quiet" Program.

In conclusion, speaking for the hundreds of governmental purchasing officials throughout the nation, I respectfully request that the committee give every consideration to appropriating funds in the amount of 6.0 million for the continuance of a program which in my opinion, offers the most sensible and cost-effective approach to reducing equipment noise. When I note (1) the considerable impact of the "Buy Quiet" Program thus far (2) the relatively short period of time it had been underway (18months) and (3) the exceptionally moderate amount of funds which have been provided for its administration, there is no doubt in mind that we should maintain a formal system for coordinating such a common-sense, industry-supported approach that uses the normal market mechanisms to obtain quieter products and services.

Moreover, the concept itself -- which is voluntary as opposed to compulsory, and market oriented as opposed to government oriented--is extremely effective and could be applied in may other areas across the private sector. Energy conservation and several aspects of products safety come to mind immediately.

If the "Buy Quiet" Program is permitted to reach maturity, the purchasing of quieter products by local governments, state agencies, citizens, and private firms will one day soon be a matter of course. Please don't throw out this healthy baby with the regulatory bathwater.

Thank you very much.

Sincerely

Stanley D. Zemansky, CPPO
City Purchasing Agent
CITY OF BALTIMORE, MARYLAND
AND PRESIDENT OF
National Institute of Governmental Purchasing, Inc., 1980-1981

Shelby Official Says 'Buy Quiet'

QUIET is the goal of a Shelby County official and he wrote columnist James Jackson Kilpatrick. See Page 5.

ACTIVISM, it seems, mellows with age and quiet times give a chubbier Sam Brown a chance for reflection. Page 5

MEMPHIS PRESS-SCIMITAR, THURSDAY, JANUARY 8, 1976 PAGE 5

James Jackson Kilpatrick

Reaction From Memphis To Noise Level Column

WASHINGTON: Back in November I unloaded a curmudgeonly column complaining about a new national regulation governing the noise levels of garbage trucks. I said it was a petty, stupid, nit-picking regulation, destructive of state and local responsibilities, and all of those comments stand.

But I return to the topic because of a letter from Memphis. There is indeed a better way of coping with the problem: It is the way of the marketplace in a free economy.

The letter comes from Raymond Hughes, deputy purchasing administrator for Shelby County, Tenn. The answer to the noise problem, in his view, lies in the "Buy Quiet" program initiated by the National Institute of Governmental Purchasing and the National League of Cities.

UNLIKE THE FEDERAL regulation, which is complexity itself, this program is simplicity itself. It rests solidly upon the ancient law of supply and demand. Local purchasing agents create a demand for quieter garbage trucks; and perceiving that demand, manufacturers undertake to supply it.

Mr. Hughes sums up the procedure succinctly: "Cities and counties that want quieter trucks ask for them; those that do not, don't."

The Buy Quiet plan was launched about 18 months ago. In this period, the National Institute of Governmental Purchasing has begun to establish product specifications not only for garbage trucks, but for many other pieces of machinery also. Shelby County, for example, sought bids on 10 "quieter" lawnmowers.

"We had no trouble in obtaining a sufficient number of bids," Mr. Hughes reports, "and the prices we paid were no higher than before. We plan to follow the same approach in future purchases of jackhammers, garbage trucks and other noisy items."

New Orleans has undertaken some pioneer efforts in this direction. An environmental report from the National League of Cities advises that such cities as Chicago, Milwaukee, New York, Pittsburgh and Austin also are purchasing quieter models of lawn equipment, air compressors and pavement breakers. In Iowa, the Scott County Purchasing Association is working with the city of Davenport and nine other units to buy quiet products only. Forty purchasing units in north-central Texas have established a purchasing cooperative. In Minnesota, the league identifies Minneapolis, St. Paul and Bloomington as "Buy Quiet" cities. Some of the programs also embrace such indoor noisemakers as vacuum cleaners and typewriters.

Surely this approach is infinitely preferable to the heavy-handed one taken by the Environmental Protection Agency in the matter of garbage trucks. If you recall, the EPA went at this essentially local problem with the politesse of a Black Angus bull. The feds roared in with reports, studies, consultants, experts, statisticians and bureaucrats of high and low degree. We had draft regulations, comments upon the draft regulations, promulgation of revised regulations, and in October of last year a final regulation. The EPA's idea of how to get quieter garbage trucks is to threaten manufacturers with a $25,000 fine and a year in prison, or both, if henceforth they market a truck that produces noise in excess of 79 decibels.

IF WE BELIEVE in the marketplace system, why do we not give the system a reasonable chance to work? Instead of imposing uniformity by federal decree, why do we not try variety for a change? One of our cherished principles is "local responsibility." Why not abide by that principle? Let our cities decide for themselves whether they want their local parks mowed by lawnmowers that go putt-putt-putt, or by mowers that go KAVOOM, KAVOOM, KAVOOM.

To be sure, there is a place for national regulation of products that might be truly dangerous to the public health or safety. Even the most dedicated friends of free enterprise stop short of condoning botulism in the vichyssoise. But a decent respect for federalism ought to teach us that national regulation should be the last resort, not the first.

MEMPHIS PRESS-SCIMITAR, TUESDAY, NOVEMBER 18, 1980

This Noise Regulation Is Just Pure Garbage

WASHINGTON — Consider, if you please, the garbage truck. It is being driven by Big Brother now. And therein lies an instructive tale of how we have rumbled into the mess we are in.

On Oct. 1 a new regulation of the Environmental Protection Agency came into effect. It mandates a certain level of permissible noise on the part of compacting garbage trucks. The regulation arises from the Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978. In one nice, neat bundle this matter ties many odds and ends together.

Sen. John Danforth, R-Mo., the leading antagonist of the EPA's regulation, has mused aloud: How could anyone vote against bills to promote "noise control" and "quiet communities"? It was politically impossible. Under pressure from consumer activists (and from some business spokesmen also), the House voted 356-32 and the Senate 75-5 in favor of the 1972 act. The 1978 bill passed by voice vote, without an apparent dissent.

IN RETROSPECT, the two pieces of legislation may be seen as classic examples of federal expansion at the expense of state and local responsibilities. The 1972 law had a grand purpose and a large verb. The act was to free the people from noise that "jeopardizes health and welfare," to jeopardize is to expose to imminent danger, to imperil. The act gave the EPA broad powers to regulate "major sources" of noise.

Now, it would seem to many of us, perhaps, that a garbage truck does not truly jeopardize or imperil public health. Compared to jet planes and police sirens, a compactor scarcely qualifies as a "major source" of noise. Indeed, a survey by the EPA's own consultants of 2,600 persons in 24 urban neighborhoods turned up only four complaints of garbage truck noise.

Nevertheless, the EPA conjured up some impressive statistics. The agency solemnly found that 19,650,000 persons are regularly exposed to excessive noise levels because of the refuse vehicles. Federal regulation, it was concluded, would reduce that number to 6 million persons by 1991. Cities can't be trusted to deal with this peril by local ordinance. After all, the sleep of 13.8 million persons was being disturbed nightly. Only the federal government could protect our repose.

Thus came the regulation. As of Oct. 1, no garbage compactor may be sold in interstate commerce if it creates noise in excess of 79 decibels. The noise level is to be defined by testing a compactor on a level concrete pad 150 feet in diameter, free of rain, snow or gravel, with microphones placed 7 meters distant from a warmed-up engine, the wind velocity not in excess of 19 kilometers an hour. And so forth, and so forth, and so forth.

IT IS NEEDLESS to dwell upon the reports to be made, the forms to be filed, the records to be kept. These you can imagine. The act provides for a fine of $25,000 a day, or one year in prison, or both, for any manufacturer whose garbage truck produces 80 decibels of noise. For a second offense, the penalties may be doubled. As of July 1982, the regulation mandates a futher reduction to 76 decibels.

Metaphorically speaking, if you will forgive me, this is garbage. Pure garbage. The EPA regulation runs to 23 pages. An accompanying analysis runs to 300 more. Enforcement of the act will impose added costs upon purchasers of the trucks of $21.3 million a year. That is for starters. The EPA defensively puts the costs at 50 cents per household per year.

Costs and benefits to one side, this petty, stupid, nit-picking regulation based almost entirely upon gauzy conjecture as to "sleep and activity interference" — offers one more instance of a bureaucracy gone berserk. Such cities as New York and San Francisco have coped with the issue by local ordinance. Other cities have imposed curfews against refuse collection before a certain hour. This is simply not a national problem. Maybe an incoming conservative Congress will look at such excesses, and quietly dispose of the trash.

APPENDIX

PARTIAL LIST OF

GOVERNMENTS COMMITTED TO PURCHASING

QUIETER PRODUCTS AND SERVICES

City of Austin, Texas

City of Baltimore, Maryland

City of Chicago, Illinois

City of El Segundo, California

City of Los Angeles, California

State of Maryland

City of Milwaukee, Wisconsin

Metropolitan Government of Nashville
Davidson County, Tennessee

City of New Orleans, Louisiana

North Central Texas Council of
Governments, Regional Purchasing
Officers Committee (which includes approximately 30 governments
in the Dallas-Ft. Worth area)

Northern Virginia Regional Purchasing Officers
Committee (which includes Fairfax County, Arlington County, Londoun
County, the City of Alexandria and several other governmental units).

City of Pittsburgh, Pennsylvania

Prince George's County, Maryland

Sacramento County, California

St. Petersburg, Florida, City of

Shelby County, Tennessee

Scott County (Iowa) Purchasing Association
(which includes 12 governments in eastern Iowa)

Twin Cities Public Purchasing Association (which inclues the City of

St. Paul, Ramsey County, the City of Bloomington, Anoka County,

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the State of Minnesota, and approximately 30 other governmental units.)

The State of Virginia

The State of West Virginia

The City of Palo Alto, California

The Washington (DC) Surburban Sanitary Commission

Morgan Downey, Director
Governmental Affairs Department
American Speech-Language-Hearing Association

Mr. Chairman, I appreciate this opportunity to present the views of the American Speech-Language-Hearing Association concerning appropriations and the continuation of the functions carried out by EPA's Office of Noise Abatement and Control. ASHA has been closely involved in the development of the Noise Control Act of 1972, its subsequent amendment in the Quiet Communities Act, and in the implementation of its mission, particularly in regard to public information and through its members in regard to research activity. ASHA Members are speech-language pathologists and audiologists who provide professional services in hospital speech and hearing clinics, university outpatient clinics, rehabilitation centers such as Easter Seal agencies, Veterans Administration hospitals, public schools and in private practice. Our 36,000 members are concerned with the systems, structure and function that make human communication possible and they look to their professional society for the facilitation of scientific and professional knowledge about the effects of delay, misdevelopment, and disturbance in human communication and the identification, evaluation, and rehabilitation of individuals with speech, language and hearing disorders. The nature of our human communication system and the interrelationships of speech, language and hearing are exceedingly complex. They depend upon very active research covering a number of different areas and it is only logical that our professional requirements include at least a Master's degree in speech-language pathology and audiology, a year of supervised clinical practice and the passing of a National Examination. Individuals who meet these requirements are eligible for ASHA's Certificate of Clinical Competence or for state licensure in 30 states. ASHA Members deal daily with individuals who have impaired

communication ability. All too frequently, they see individuals who are inflicted with a noise-induced hearing loss and have to devote professional time and expensive rehabilitative services to the remediation of problems which could have been prevented. The American Speech-Language-Hearing Association believes strongly that whenever possible effective preventive measures should be undertaken to spare individuals the tragedy of a loss of communication ability and spare society the great expenses that are incurred in providing services to such individuals and in the loss of productive individuals from the work force.

In this regard, we have fought for the OSHA Noise Control Standard for workplaces and for federal and state efforts to control noise pollution.

Public Demand

There should be no question that the American public desires control and remediation of noise pollution. The effects of noise are easily forgotten when individuals are not immediately exposed to it. But noise exposure creates serious social and health problems.

- A Kew Gardens, New York man whose complaints of stereo noise in the apartment above had gone unheeded over many months shot the occupants of the offending apartment before shooting himself.

- In a similar instance in Chicago, no charges were filed against a 54-year-old man who fatally shot a neighbor over a quarrel over the neighbor's loud-playing stereo.

- Norfolk, Virginia was reported to be as noisy as a major ghetto on Manhattan according to a noise impact evaluation conducted by the Norfolk Health Department Division of Environmental Protection. Norfolk has a noise level equivalent to a city with a population density exceeding 63,000 people per square mile when, in fact, its density is 5,600 people per square mile. There is so much noise that were it an industry, an average citizen could bring a legal action based on the standards of the Occupational Safety and Health Administration. An attitudinal study of some 680 households found 37% of the families identified noises as the primary pollutant. All of the city's public schools were impacted by noise, but it was particularly severe in 17. Noise was causing the loss of up to one hour per day in teaching time, interfering with the teaching process, and causing potential damage to children's hearing.

- A community group called Big Screechers demanded and got lubrication on tracks on elevated subways in New York

City. The study of the effects of the noise from the elevated subways "may have uncovered a very serious health hazard" according to a local transit official. Acoustical experts reported that 250,000 New Yorkers who live and work in buildings near the city's elevated trains are assaulted by noise at a level that aggravates and disturbs the normal flow of life. Residents report that the trains block out what they can say and hear. They end up reading lips or screaming when a train passes.

- According to a story in the New York Times (June 30, 1980), "at least a million and a half residents in the New York metropolitan area are exposed everyday to noise that is permanently damaging to their hearing...there is mounting scientific evidence that exposure to noise - especially unexpected, uncontrollable noise - is linked not only to loss of hearing, but also to high blood pressure, nervous disorders, learning problems, insomnia, underweight newborn babies, and perhaps even some forms of heart disease."

- In a national survey, the U.S. Census reported that street noise was the most mentioned undesirable

neighborhood condition with over one-third of all people mentioning noise.

- The U.S. National Research Council estimated that over 40,000,000 U.S. residents are disturbed by traffic noise and some 14,000,000 by airplane noise. Some 12,000,000 are said to be contemplating moving because of noise.

- Dr. Clifford Bragdon with the City Planning Program at the Georgia Institute of Technology reported in 1978 that the HUD Annual Housing Survey reported that 24% of the respondents reported noise as a primary undesirable neighborhood condition. Noise has been the highest undesirable condition reported since 1973.

It is apparent then that there is widespread popular concern with the problems of noise pollution which reflects itself in legislative and regulatory decisions designed with the goal of alleviating this undesirable situation. To efficiently accomplish this goal, however, requires an extensive amount of research within the scientific community, coordination of research among various agencies conducting research, and the prompt and efficient communication of information among public and private groups seeking to solve a problem. It is, therefore, important that there be agreement on standardized units of measurement,

comparable methods for obtaining and analyzing objective data, and cost benefit considerations will require a more accurate data base for important regulatory and legislative decisions. Whether it is the United States Air Force considering noise as it affects pilots in the military or a city trying to regulate a noise from more powerful transistorized radios, everyone must know precisely where the noise limits should actually be set. It is extremely relevant to designers and users of noise sources as well as to land use planners and to ourselves as recipients of offending noise.

Health Effects of Noise

Mr. Chairman, some individuals and organizations continue to promote the opinion that noise does not create adverse health effects. Very clearly, this is wrong. The effect of noise on hearing loss is extremely well documented. In Mandate for Leadership published by the Heritage Foundation, the section on the EPA's noise activities states, "Regulations should be limited to the statutory minimum, since available health effect studies indicate no evidence of health problems." It also implies that activity by the EPA has been based on attitudinal survey data as opposed to solid scientific information. We disagree with these conclusions. The effects of noise are well documented and very distubing. For the Committee's consideration, I have included an ASHA Report, Noise as a Public Health Problem, Proceedings of the Third International Congress, which was held in Freiburg, West Germany, in September 1978. In addition

to a very thorough discussion of the international activities designed to deal with noise as a public health hazard, it includes discussions of noise-induced hearing loss, noise and communication, nonauditory physiological effects induced by noise, the influence of noise on performance and behavior, noise disturbed sleep, community response to noise, wildlife and noise, and the effects of interactions between noise and other physical and/or chemical agents. Gerd Jansen of West Germany reported the following information:

> Suitable epidemiological research has not yet come forth with concrete results that would describe an illness caused by noise-produced stress. On the other hand, it has not yet been possible to determine that noise does not play a role in the pathogenesis. As long as an unequivocal proof of the complete innocuousness of noise, particularly in this area, has not been provided, we must reckon with the potential pathogenicity of critical levels of noise pollution.
>
> Such precautions are justified since it has become known that maintenance workers with jet power plants (where admittedly the confrontation with noise is quite extreme at levels of between 130 and 150 dB) suffer symptoms such as gastrointestinal complaints (gastritis), vomiting, or severe headaches of long duration. Admittedly, these were not regular occurring symptoms, but appeared in clusters. These

> facts led us to think that through exposure to noise irritation above a certain fixed limit over a long period of time, physiological equilibrium is no longer guaranteed. Until there is proof to the contrary, we must assume a danger to health. ... It can, though, be assumed on the basis of several studies that noise is to be regarded as a risk factor for certain changes of the circulatory regulation and thus fits the definition of "dangerous to health"; in other words, we cannot rule out the possibility of danger to health when the level of approximately 100 dB is exceeded.

Recently, Science magazine (March 1981) reported an experiment concerning two rhesus monkeys who were exposed continuously to realistic patterns and levels of noise for nine months which average U.S. workers are exposed to. The monkeys exhibited sustained elevations in blood pressure that did not return to normal after the noise had ended. This occurred without any changes in auditory sensitivity. The carefully controlled study was described by its authors as buttressing, "the argument for cause-effect relationship between the two variables" (noise and blood pressure).

An article by Miller, "Effects of Noise on People," (Journal Acoustical Society of America, 1974) reported that:

> There is clear evidence to support the following statements about the effects on people of exposure to noise of sufficient intensity and duration.

- Noise can permanently damage the inner ear with resulting permanent hearing losses that can range from slight impairment to nearly total deafness.

- Noise can result in temporary hearing losses and repeated exposures to noise can lead to chronic hearing losses.

- Noise can interfere with speech communication and the perception of other auditory signals.

- Noise can disturb sleep.

- Noise can be a source of annoyance.

- Noise can interfere with the performance of complicated tasks, and, of course, can especially disturb performance when speech communication or response to auditory signals is demanded.

- Noise and other acoustical considerations can reduce the opportunity for privacy.

- Noise can adversely influence mood and disturb relaxation.

In another article by Mills on "Noise and Children: A Review of Literature" (Journal Acoustical Society of America, 1975), it was reported that, "Levels of noise which do not interfere with the perception of speech by adults may interfere significantly with the perception of speech by children as well as with the acquisition of speech, language, and language-related skills. Although substantially more research is required, some results suggest that exposure to sufficient levels of urban noise for extended periods or during critical developmental periods may have deleterious effects on auditory discrimination and possibly reading skills of children. It is not clear if these possible deficits in listening and reading are temporary and will be overcome by maturation and schooling, or whether these effects are permanent and not amenable to remedial measures."

In addition, in one of the studies partially funded by EPA/ONAC, a review of European literature revealed substantial evidence that long-term work under high-level industrial noise exposures is associated with chronic changes in cardiovascular function, particularly an impaired regulation of blood pressure, mostly manifested as an increased prevalence of hypertension in middle and later decades of life.

Federal Investment in Noise Abatement

The question naturally arises why should the federal government be involved in this area, even admitting the hearing loss and other deleterious health effects of noise pollution. The answer is a simple one.

While a particular noise source may be considered local, the manufacturing and distribution of those noise sources occurs on a nationwide if not international level. In addition, the federal government has some special responsibilities to bear in this area because of its own responsibilities, i.e., regulation of air traffic, interstate highways, railroad traffic (all of which are sources of noise), and because of the high level of involvement of various federal agencies in related problems. In addition to the Environmental Protection Agency, the other agencies involved with problems of noise, hearing loss, and communicative disorders which include hearing loss are:

Department of Transportation

Federal Aviation Administration

Department of Labor (OSHA)

Department of Housing and Urban Development (Noise exposure standards for new home construction)

Department of Defense (Hearing protection noise abatement)

National Aeronautics and Space Administration (aircraft noise)

Department of Commerce (National Bureau of Standards)

Department of the Interior (Noise control for the mining industry)

Department of Agriculture (Noise abatement of recreational vehicles in federal outdoor recreation and wilderness areas)

General Services Administration noise emission limitation for selected equipment at federal building construction (GSA procurement specification)

Department of Health and Human Services (National Institute of Neurological, Communicative Disorders and Stroke, National Institute for Occupational Safety and Health, Medicare, and Medicaid)

Department of Education (Education of handicapped children, Rehabilitation Services Administration)

Veterans Administration

Mr. Chairman, curtailment of EOA/ONAC noise abatement activities may simply result in a greater duplication of research activity, lack of coordinated approach and much greater federal or state expenditures in the future. Let me give just a couple of examples.

- With the aging of the population, the pressure on Medicare and Medicaid to provide services to persons suffering a hearing handicap continue and can be expected to grow. An additional number of hearing impaired individuals whose hearing could have been saved by adequate noise abatement programs will only increase such pressure.
- In 12 years, the Veterans Administration has paid out some $821 million for compensation for hearing loss. This may just be expected to increase as veterans along with the rest of us are exposed to high level of noise in the workplace and in the environment.
- Occupational hearing loss claims from federal employees have increased dramatically from 500 in 1969 to over 8,000 in 1976. The claims in this area come from shipbuilding (Longshore and Harbor Workers Compensation Act),

air base workers and treasury agents. According to a study done of occupational hearing loss, workers compensation under state and federal programs, done by ONAC federal claims may be expected to rise from the present total of 2,300 to 6,000 by 1987 while state claims go from 6,000 to 15,000. Benefit totals also rise quickly and by 1987, annual state benefits could be $66 million compared to almost $90 million for federal claims. Over the decade, total benefits are estimated at $480 million for the federal program and $356 million for the state programs for a grand 10-year total of $836 million for all claims.

- According to the National Committee for Research and Neurological and Communicative Disorders, $13 billion is spent annually on the rehabilitation and care of persons with hearing impairment.

- According to Human Communication and Its Disorders, 1969, the annual direct cost for hearing impairments included $28 million for vocational rehabilitation, $1,200,000 for the preparation of professionals providing rehabilitation, $3,600,000 for community speech and hearing centers, $6 million for speech and hearing clinics, $80

million for private medical care, and $132 million for hearing aids and maintenance. (1969 figures unadjusted for inflation).

It must be agreed that the cost to society in strictly financial terms are significant. When one takes into account the loss of productive workers, additional burdens on families required to deal with an individual with a hearing impairment, the cost to the entire society becomes overwhelming. For this reason, noise abatement activities should be vigorously pursued which have a definite cost benefit. The cost benefit analysis, however, should not be so short-sighted as to look simply at the federal expenditure side of the ledger but should include all of the above listed expenditures which society has to bear for individuals with this handicapping condition.

Future Needs for Research

Mr. Chairman, the relationship of noise to hearing loss is undisputed. Its relationship to other health problems is becoming clearer every day. The level of federal research dollars in noise is miniscule when compared on the one hand to the federal, state and local expenditures that are devoted to dealing with persons who have already suffered a hearing impairment and miniscule when compared to other areas of federal health research. The Proceedings of the Third International Congress on Noise as a Public Health Problem called for research to be continued in many areas. Here are some of their suggestions:

1. Sorting out the effects on hearing of noise from those due to aging, disease, and accident.

2. Having isolated the effect of noise, separating sociacusis from industrial-noise-induced losses.

3. Effects of perception of intermittent noise and the interactions of noise, reverberation, and hearing impairment.

4. Interactions between ambient noise levels and demographic variables on spontaneous voice levels.

5. Speech processing techniques for communication systems operated in noise or for hearing aid users when listening in noise.

6. Long-term exposure to normal life noises, such as traffic noise, under normal conditions.

7. Epidemiological studies of the effects of noise in specific groups to evaluate the influence on vegetative functions and other risk of health impairment. This is to determine what groups are bad risk groups in relation

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to noise exposure. Data on these groups may serve in deriving criteria and guides for environmental health.

8. Exploration on the effect on vegetative functions of combinations of several environment stressors is necessary to evaluate the risk to health of certain situations and of the contribution of noise.

9. The relationship of result of animal studies in predicting man's reaction to noise.

10. Auditory response relations need to be developed before it will be possible to propose criteria for standards relating to long-term exposure to noise.

11. Development of methods suitable for measurement of noise effects on daily activities.

12. Determination of the task variables sensitive to noise, allowing the shift from investigation of noise to facts on single tasks or on unrelated battery of tasks to those psychological/mental functions vulnerable to noise.

13. Standardization of performance measures which would allow different studies to relate more meaningfully to each other.

14. Determination of long-term exposure to noise on performance.

15. Determination of short-term effects of exposure to noise.

16. Investigation of different types of noise, in particular low level noise and meaningful noise.

17. Investigation of noise interraction with other environmental factors on performance.

18. A closer connection with real life situations needs to be achieved by seeking out work situations that embody those tasks in which the laboratory tests have proved noise sensitive in evaluating the effects of noise reduction either via ear plugs or engineering controls on performance efficiency.

19. Identification of risk groups, for example, of those categories of people who might prove more sensitive to

noise and prone to develop inadequate behavior or strategies in noise.

20. An understanding of the mechanisms underlying noise effects in fitting the facts obtained within a theoretical framework which could then allow a generalization of the particular findings to all or at least certain classes of situations.

21. Research on the effects of noise on sleep.

22. Studies on the effects of noise disturbed sleep on performance.

23. Home studies, particularly when noise level changes occur for roads, railroads, airports.

24. The establishment of acceptability or desirability criteria for community noise exposure and reaction studies.

25. The influence of the timing of the combination of noises to the sensory absorption of information process in the irritation threshold of individuals.

26. The effect of noise on the sensory absorption process under conditions of multisensory influx of stimulation and other influences, such as the consumption of pharmaceuticals.

27. A closer examination of the actual process of damage in the area of sensory cells, the effects of noise on the organ controlling the sense of balance, and the possibilities of selective hearing on the development of early warning signs for the start of hearing impairment.

28. Research into the influence of noise caused loss of hearing on communicative behavior and the development of specific aids to hearing.

29. Epidemiological study of damages within a special group of the general population such as children, elderly, and the sick.

30. Research into combination effects of noise to the heart, circulatory system, and the indocrine system.

31. Influence of noise stress points with specific informative contents on the autonomic functions.

32. Analysis of the central nervous autonomic coupling to sensorial conversion of noise.

33. Research on the absolute number of impulse noise which best correlates to the risk of hearing in industrial settings.

34. Studies on the relationship of noise induced hearing loss on adults to determine whether it is partially applicable to infants and children.

35. Data on the short and long-term effects of noise on the development of speech, language and listening related skills such as reading among children.

Coordinating Role Is Essential

The above research was primarily that described by the international community as what was needed to continue work. Responsibility for this must be shared with the entire international community. It is clear that the United States should bear some of the responsibility in this area.

A function related to research is that of coordinating and exchanging the international information. As Edith Gulian of Cambridge University in England stated for the International Congress:

> A great deal of research has been carried out all over the world about noise effects on performance. Even a quick survey of the literature shows, though, that there is no systematic and concerted effort toward the understanding of these effects and that the majority of these studies are done haphazardly, without a long-range perspective. The methodology, the tasks, the evaluation, and even what is called noise differ from one study to another. To achieve results in the evaluation of noise effects and behavior, we need a consensus on these variables. This consensus can be reached only by coordinated program of research where investigators from different countries and within the same country agree on the main issues at present and work toward their clarification.

Mr. Chairman, the American Speech-Language-Hearing Association believes that this important role of coordinating national and international research can be a primary activity for the Environmental Protection Agency Office of Noise Abatement and Control. We encourage this Committee to provide full support for the activities of ONAC which are so important in preserving the hearing of our citizens as well as their health.

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Testimony of the
NATIONAL ASSOCIATION OF NEIGHBORHOODS

To the
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON HUD AND INDEPENDENT AGENCIES

On the
NOISE CONTROL ACT OF 1972
As Amended by the Quiet Communities Act of 1978

Mr. Chairman and Members of the Subcommittee:

The National Association of Neighborhoods is a unique multi-issue membership organization composed of over 1,000 block clubs, neighborhood organizations, city-wide neighborhood coalitions and individual citizens. Since 1975, the members of the N.A.N. have united to address specific issues that affect the quality of life in their neighborhoods. During the past several years, a growing number of our members and numerous other neighborhood organizations have begun to grapple with an environmental pollutant that has special significance for urban neighborhoods; that is, unnecessary and unwanted noise.

The National Neighborhood Platform, developed by hundreds of neighborhood leaders from across the country, recognizes this problem and the neighborhood response to it when it states that:

> "... Noise is a growing health problem which degrades life in our neighborhoods....
>
> ... A healthy environment is essential to our well-being. We believe that our environment must be protected by strong measures of state, local and neighborhood control."

Noise affects not only the well-being of individual neighbors, but also threatens to damage the overall quality, fabric and vitality of the neighborhood, itself. Excess noise can serve to initiate or hasten the decline of a neighbor-

hood thereby making it unattractive for the present neighbors and for the investment of needed resources. The extreme level of noise generated by industry and jet traffic in the Ironbound neighborhood in Newark, New Jersey is a prime illustration of a neighborhood, at times, literally besieged by noise.

The effort, "to promote an environment for all Americans free from noise that jeopardizes their health or welfare," was initiated in 1972 with the passage of the Noise Control Act, which was primarily concerned with regulation. Since 1972, under the Noise Act, EPA has been promulgating and enforcing regulations on noise control. This success of this effort has been, at best, questionable. The enactment of the Quiet Communities Act in 1978 was a major departure from the traditional EPA "regulation as usual" approach to achieving quiet communities. This new approach, which emphasizes the rendering of technical assistance to state and local governments and community-based organizations has, over the past three years, proved to be immensely successful. The Quiet Communities Act (implemented by the Office of Noise Abatement and Control) has proven to be a workable alternative to the mere enforcement of federal regulations. It is the judgment of the N.A.N. that it is time to intensify and expand the efforts which were initiated by the passage of the Quiet Communities Act.

By utilizing the resources and the philosophy embodied in the Quiet Communities Act, the N.A.N., through its Quiet Neighborhood Self-Help Project (see attachment), has been instrumental in developing cooperative, constructive partnerships between neighborhood organizations, state and local noise control programs and the federal government. The efforts of the following neighborhood organizations involved in our national network demonstrate that this type of productive action can result in quiet communities and achieve these results in the absence of onerous federal regulation:

- In Philadelphia, a concerted effort among elected officials, the Department of Health and several neighborhood organizations is producing better, more enforceable regulations for Philadelphia's Noise and Vibration Control Ordinance. Together, they are choosing the type of noise control program and regulations that will meet the needs of the community.
- The residents of a noisy Newark neighborhood and the neighborhood leaders of the Ironbound Community Health Project are taking a two-pronged approach to noise control in their neighborhoods. They have successfully negotiated with several industries and a disco in the neighborhood to reach mutually agreeable solutions to several disturbing noise problems. Now, they are working with local and state officials to develop a workable, comprehensive noise control program for Newark. Their hard work is being rewarded by a quieter neighborhood.

From Citizens Against Noise in Hawaii to Project Traffic in Sarasota, neighborhood organizations are conducting noise awareness campaigns to educate themselves, their neighbors, their elected officials, and the business sector to noise problems. In addition, they are often the motivating forces in bringing these various interests together to develop solutions to those problems. And all of this is accomplished through the rendering of technical assistance rather than through enforcement of federal regulations. These examples demonstrate that the most effective mode of operation for EPA is as a catalyst for quiet and not as a heavy-handed federal regulator.

The N.A.N. is also recommending that EPA's Buy Quiet Program be enacted as separate and distinct statute of the Quiet Communities Act

> "The Buy Quiet Program is a new concept in noise control. Its aim is to induce industry to develop and market quieter products by organizing a 'market for quiet.' The initial thrust of the program is to

organize the public sector market by forming government purchasing cooperatives and by working through professional purchasing organizations. Participating states and local governments recognize that noise is a legitimate value concept in product procurement and agree to include noise in their product specifications. The program works through use of noise reduction incentives (rather than compulsion) and relies upon cooperative (rather than adversary) communication links with industry."

"Buy Quiet: A Non-Regulatory Market Approach to Noise Control," by Dr. David Mudarri

The Buy Quiet Program extends beyond the realm of technical assistance to states and local governments and should have its own statutory integrity. Such a statute would highlight the fact that EPA wants to deal with noise product control through the working of the market rather than through federal regulation. In addition, a strengthened Buy Quiet position within the Agency would enable EPA to more effectively deal with both the private and public markets. Finally, the concept of organizing a market for quiet, and building in other incentives in lieu of regulating manufacturers can possibly be coupled with markets for energy efficiency, safety and other health and pollution related issues associated with the use of industrial and consumer products. Proposed (see attachment) Buy Quiet statutory language has been drafted with these considerations in mind. There is also enclosed some written material on the Buy Quiet Program and concept.

The N.A.N. is requesting that there be $6 million appropriated for the implementation of the Quiet Communities Act and the Buy Quiet Program. The appropriation of this $6 million should clearly specify that it is to be used only in support of state and local noise control activity. Such a clear statement of intent by the Subcommittee is necessary to prevent the use of these funds by the regulatory arm of EPA.

Thank you Mr. Chairman.

American Public Health Association
Testimony on
EPA - Office of Noise Abatement and Control
Submitted to
U. S. House of Representatives
Committee on Appropriations
Subcommittee on HUD and Independent Agencies
Submitted April 29, 1981

The American Public Health Association, representing over 30,000 public health professionals believes that excessive noise that affects man's health, productivity, and well-being exists in many industrial, community, and home environments.

The problem of excessive community noise is documented by communities that are acting to curtail excessive community noise such as that emanating from aircraft and airports, highway vehicles, instruments, and many other similar sources. These actions have been prompted by residents who have found that their privacy, rest, and sleep have been disrupted by the presence of excessive intruding environmental noise. Several studies of community noise have reported psychological and physiological effects, speech interference, and effects on community behavior as a result of exposure to community noise.

These observations, together with the prospect that continual technological developments in our society will create still more severe noise conditions (supersonic transport, high speed rail transportation), require that additional positive steps be taken now to cope with such problems and ultimately to gain control of them. There is a dire need for a cooperative effort between federal, state, and local governments in the control of nuisance noise. The federal government should continue to provide a leadership role in research, establishment of base criteria and measurement techniques, training of state and local personnel, conducting demonstrations, instituting public education programs, and in providing funds to help institute local noise control programs. The state and local governments should, in cooperative effort, have primary responsibility for regulatory programs to prevent and control excessive noise. Local governments, where capabilities exist, should adopt ordinances and codes and institute adequate and efficient monitoring and regulatory programs under guidelines set forth by the federal and state governments and with cooperative backup service provided by those agencies. The American Public Health Association, consistent with its aims to develop and preserve a healthy environment for the nation, believes that the following federal programs and activities for attainment of greater understanding and control of noise should continue to be funded through the EPA Office of Noise Abatement and Control.

Research

Recently there has been a great deal of research undertaken to determine the effects of noise on people and to determine methods of controlling noise emission to reduce adverse effects on individuals

and populations. A great deal of this effort has been instituted through federal grants. The American Public Health Association fully supports intensive and continuing research into the effects of noise on human beings and methods of controlling noise at its source. EPA must continue its capability to perform such research.

Education

Educational programs to create greater public awareness of the effects of noise problems must be undertaken. Public recognition is needed to (a) stimulate municipal agencies to enforce anti-noise ordinances more effectively; (b) sensitize city planners to take account of potential noise problems in the development of plans to protect new communal areas; and (c) create citizen damand for quieter communities and equipment.

In response to the dire need to educate the American public about noise, the federal government, through the Environmental Protection Agency, has instituted training programs and conferences designed to train and to inform technicians and the public in regard to community noise management and control. The American Public Health Association fully supports this effort and urges continued commitment to EPA.

Technical Guidance

The American Public Health Association also encourages Congress to allow the Environmental Protection Agency to continue its present program of helping states and local governments to establish state and local codes, standards, and enforcement programs for the control of community noise.

Prevention and control of excessive noise requires the support and participation of all citizens and of all levels of governments - local, state and federal. It is essential that the EPA Office of Noise Abatement and Control continue to receive funds adequate for the maintenance of its functions related to research, public information and technical guidance.

Mr. DUKES. Mr. Chairman, my name is James Dukes, President of the National Association of Noise Control Officials and the Administrator of the City of San Diego Noise Abatement and Control Program.

I am here to highlight the testimony furnished by this group relative to the U.S. Environmental Protection Agency appropriation for the Noise Abatement and Control Program as administered under the Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978.

I am speaking on behalf of the National Retired Teachers Association, American Association of Retired Persons, the National Urban League, the American Public Health Association, the American Speech-Language-Hearing Association, the National Institute of Governmental Purchasing, the Hearing, Educational Aid and Research Foundation, the National Council on Otolaryngology, Dr. Joseph Brady, of Johns Hopkins University, the National Association of Neighborhoods, and the National Association of Noise Control Officials.

Mr. Chairman, we have witnessed in recent years a notable rise in the awareness of community noise among citizens at State and local levels and a significant increase in the ability of the State and local governments to control noise. This recent progress has been primarily the result of the assistance of the Environmental Protection Agency to State and local officials.

The EPA's most valuable contribution has been in providing assistance regarding disseminating public information, delineating health effects of noise, technical assistance with measurement and enforcement, the purchase of quietest products and facilitating exchange of information concerning experience and enforcement among communities.

Mr. Chairman, this group comes before this deliberative body today in support of phase-out participation of the U.S. EPA noise control. In the past, EPA has expended the largest share of the resources for the purpose of designing regulations; these regulations have not proved as valuable to the national noise control effort as simple guidance to State and local governments, community organizations, who are better equipped to develop regulatory plans in concert with their need and limitations.

We support the Administration's objective of regulatory reform. Consequently, we anticipate broader responsibilities for State and local governments. With these responsibilities in mind, we support the fiscal year 1982 authorization for the noise program recommended by the House Subcommittee on Transportation, Commerce and Tourism, for $4.1 million.

Funding of regulatory activity in environmental noise at the Federal level by EPA should cease, in our opinion. Appropriated funds should be focused upon estimating State local noise abatement programs and in dissemination of reports and public information literature to State and local government, civic leaders and educational institutions. Not more than 25 percent of any appropriated funds for Federal effort in environmental noise abatement and control should be allocated to staff salaries for travel and Washington-oriented activities.

The remaining 75 percent, in our opinion, should be allocated for the use of State and local governments and self-help programs.

We applaud the President's objectives to return regulatory controls to the State and local governments, and sincerely believe this transition funding will greatly facilitate this effort.

Mr. Chairman, this concludes my testimony and my colleagues', and I would welcome any questions you or any other subcommittee members may have.

Mr. SABO. Are there questions?

Thank you for your testimony. We appreciate your being here today.

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

WILLIAM J. HASKINS, DIRECTOR, SOCIAL SERVICES & HUMAN RESOURCES, NATIONAL URBAN LEAGUE, INC.

Mr. HASKINS. Mr. Chairman, Members of the Committee, thank you for allowing this time for the National Urban League to make its position known relative to the re-authorization of the Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978. The President of the National Urban League, Vernon Jordan, has often made reference to the fact that "being black can be hazardous to your health."

The fact that blacks and minorities are concentrated in ghetto areas where they are exposed to excessive noise throughout this country is no accident.

The ideal living conditions created by the great architects of this country were developed based on an economic and social structure, which designated the use of desirable areas to white residents and relegated less desirable areas to blacks and other minorities.

It is not an accident that blacks have traditionally lived near railroad tracks and other inner city noise where they are exposed to hazardous levels of noise.

In my family, I have an uncle who is 77, an aunt who is 74, a sister who is 56 and a cousin who is 56. All have serious hearing defects which were attributed to the fact that we all lived together within 50 yards of the railroad, which ran past our back yard.

It is without doubt in my mind that innercity youngsters exhibit short attention spans and are unable to concentrate because of their exposure to distracting sounds, illustrating a direct correlation between their daily environment and the levels of noise to which they are exposed.

While there are probably very few minorities in this country who have heard of the Quiet Communities Act, this key piece of legislation and its re-authorization can have an impact on the hearing of minority citizens for generations to come.

As you know, noise is essentially and especially an urban problem. As you also know, noise can create serious health problems for those who are exposed to levels that are excessive. Over 90 million Americans are exposed to excessive levels of noise which are harmful, every day of the week.

The desire for a "quieter" community is especially being heard among all urban dwellers and has become a problem of poignant concern to every citizen exposed to excessive levels of noise, as evidenced in noise surveys taken across this country. It is human nature of man to seek refuge in habitats that exist above the drone of noise and danger at various times in his daily existence. Excessive noise not only serves as a precipitating factor for various health disorders, but also can affect the maintenance of social order in the communities, when stress levels are such that they create outbreaks of violence and foster mental illness. It becomes, therefore, more evident that the need for quieter communities is essential to quality human growth.

Tools were needed to assist States and urban areas under the auspices "Quiet Communities Act" in order to put State and local programs in place—and these tools were provided by the Environmental Protection Agency, whose Federal assistance and leadership was essential in stimulating the creation of those programs.

The National Urban League which I represent is fortunate to have come together and work effectively with the EPA in developing programs that reach those individuals who are most affected by urban noise. The EPA's noise office has been consistently willing and able to offer the assistance needed to alleviate the impact of noise on the innercity dwellers.

During the early days of the new Administration, we have received clear signals that the noise program is to be phased out of existence by October, 1982. It is obviously evident that the importance of the noise program which affects the quality of human existence has been grossly underestimated by the administration thus far. While it is the regulatory side of the noise program which we find to be expendable, we do not concur that the State and local assistant adjunct is expendable at all.

The leadership of the EPA has made possible the successful and rapid development of several State and local problems. If it were not for this assistance, it is my contention that far fewer State and local programs would exist. The evidence that so many more programs are needed is testimony to the fact that the assistance program should be retained.

The knowledge of the effectiveness of State and local noise control programs has been evidenced, yet the essential Federal responsibility of assisting States and local programs in developing capabilities and capacities to effectively deal with noise issues and problems needs to be recognized.

It is a well known fact, Mr. Chairman, that blacks, principally urban blacks, suffer from a higher incidence of hypertension, and cardiovascular disorders than their white counterparts, some of the causative factors are directly related to the stress and tensions of innercity urban living where excessively high noise levels are commonplace.

Due to economic reasons, innercity residents are virtually walled in to this environment. They, therefore, need help in alleviating these unhealthy and intolerable conditions. The National Urban League feels that the payoffs are tremendous for the relatively small Federal investment in State and local noise programs. Once States and communities are capable of dealing with those problems

by themselves, it will be time for the Federal noise program to come to an end. And every reasonable projection indicates that this will not be possible until at least 1985.

Mr. Chairman, we are not unrealistic people. We know that the budget needs to be reduced and that Federal spending needs to be controlled. But the Administration's request of $2.2 million for the entire EPA Noise Control program, down from $13 million in fiscal year 1981, can be easily recognized as being extremely detrimental to the health needs of the Nation, which should be paramount in the mind of Congress and the executive branch.

We, supporters of noise control and abatement efforts, believe that at least $4.1 million is needed for the maintenance of the EPA noise control and abatement programs. Small programs such as the State and local assistance program under the Quieter Communities Act are needed in order to stimulate States and cities to act. Without that presence, progress made in the last three years will simply dissolve and we will be back where we started.

Mr. Chairman, I strongly urge you and the Members of this Subcommittee to act favorably on the re-authorization of the Quiet Communities Act, especially those sections of the act that deal with the abatement and control of noise at the local level. The Quiet Communities Act has a place and it has a mission that is clear.

It also has an infinite lifespan. When cities can effectively deal with their noise problems and are free of excessive noise levels which are hazardous to the health and well being of each and every one of us—and especially the urban poor who have no recourse—the end of that lifespan will have been reached. That time has not yet arrived.

Mr. SABO. Are there questions?

Mr. GREEN. No questions, Mr. Chairman.

Mr. SABO. Thank you, Mr. Haskins.

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

DR. G. DENNIS COOKE, PROFESSOR OF BIOLOGICAL SCIENCES, KENT STATE UNIVERSITY, AND PRESIDENT, NORTH AMERICAN LAKE MANAGEMENT SOCIETY, EAST WINTHROP, MAINE

Dr. COOKE. Mr. Chairman, Members of the Committee, I have submitted to you written testimony, and I intend to summarize that with the hope there will be a few moments to answer questions you might have.

I am Dr. Dennis Cooke, Professor of Biological Sciences, Kent State University, and President of the North American Lake Management Society. The purpose of my testimony is to urge you to consider our request to restore funding to the Clean Lakes Program of the Environmental Protection Agency. We suggest that the appropriate and possible source of those funds might be some construction grants.

Our position is simply this, that our Nation's lakes and reservoirs are deteriorated. They are filled with silt, weeds, algae—

much of this from erosion, fertilizers, sewage treatment plants. There are about 40,000 lakes in the U.S.—and reservoirs—100 acres in size or greater. These represent our sources of all fresh water. These are what maintain our cities, agriculture, recreation. These are places where people are now building homes and are deteriorating very rapidly.

The Clean Lakes Program of the EPA had a very simple function, and that was simply to classify, diagnose and to implement protection and restoration programs. It is a very small program in EPA—a non-expanding, ecologically sound program. There are only 15 staff members nationwide. It is a program that requires local initiative and a 50/50 matching from the States or from the local community. Perhaps best of all, it has a sunset provision in it, and that is, its goal was to attain clean waters within 25 miles of every major urban area in the U.S., and at that point to terminate this program.

The benefits are very clear. The measured benefits alone, for every dollar spent of Federal money, at least $8 have been returned in benefits. The money has been spent in such a way that of every dollar spent, at least 57 percent has been implementation and restoration, the rest on classification and diagnosis. This, we feel, is an excellent track record.

Currently, there are about 200 projects underway, at least half of which will not be completed if the zero budget which has been recommended continues. We will have situations such that there will be dredges in a lake but no control of erosion on the sand, or a lake may be only partially restored. The public's expectation is not for this.

It has been alleged the States are prepared to take over this program, or something like that. There is abundant evidence to show this is simply not true. There is a history to this which may explain, in fact, why it is not so.

It was not until 1979 that the Agency itself backed this program. Prior to that, the States had no real belief that this program would continue, and in 1979, began to get many signals from EPA it would. At that point, they began to implement the necessary authorization for funds and for regulations to carry this through, but that has only been a year and a half ago.

We now know there are 32 States which provide no matching funds whatsoever for Clean Lakes programs. Of those 32, there are 21 of the States which have no other program within that State, itself, to protect our public lakes and reservoirs. This simply means if we go to zero budget, this will probably be zero management and zero protection of these lakes. It is clear this is not the public expectation.

The request for funds continues to go up. For 1981 alone, there are twice as many requests as there are appropriations for those requests.

Simply summarized, we believe the public wants clean water, that we need it to maintain agriculture, industry, recreation, home construction, and that the sources of those moneys are there, and it is our recommendation that we continue this program, and we respectfully request the committee to consider bringing money

back to the Clean Lakes Program, possibly from the Construction Grants program.

I will stop at this point and ask if you have questions or comments about this.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I. Introduction and Purpose of Testimony

I am Dr. G. Dennis Cooke, Professor of Biological Sciences at Kent State University and President of the North American Lake Management Society. The purposes of the Society, which I represent, are to promote the protection, management, and restoration of lakes and reservoirs. We provide information to our members about research and development in the ecology of lakes and watersheds, encourage public support, and give guidance to private and public lake protection and management projects. The Society is growing at a rate of 30 new members per month, and is composed of laypersons, lake managers, consultants, industry representatives, officials of public agencies, and university scientists.

The purposes of this testimony are to inform you of the EPA's Clean Lakes Program, to describe some of its accomplishments and benefits in protecting and restoring our Nation's public freshwaters through a low cost-local initiative program, and to urge you in the strongest terms to reinstate the program into the 1982 budget at a level of $15 million. The Society takes this position, in part, because we know that many of the States are not ready to assume the roles of the Clean Lakes Program in protecting and restoring their public lakes. We suggest that the best source of these funds is the construction grants program.

II. The Clean Lakes Program and the State of Our Nation's Lakes

There are about 40,000 public lakes greater than 100 acres in area in the United States. At least one-third of them are degraded with silt, weeds, and algae. More lakes are added to the list yearly from the combined effects of erosion, treatment plant discharge, storm run-off, and toxic substances. We cannot replace these lakes. They are a national heritage which, once destroyed or degraded, will require billions of dollars to restore and protect. The impact of this pollution on Americans increases as recreational facilities, particularly those in urban areas, become increasingly degraded and as the travel costs to cleaner waters increases. Drought has become severe in several regions of the United States, emphasizing our dependence upon freshwater for the existence of our cities, industry, and agriculture. It is simply imprudent to fail to be absolutely certain that these extremely valuable freshwater

resources receive adequate and lasting protection and management. At this time, no other federal and few state agencies are able or prepared to do this.

The purposes of the EPA's Clean Lakes Program are clear: Classify lakes with regard to their degree of degradation, conduct feasibility studies for pollution control and lake improvements, and implement projects to bring about control and restoration. The program has a "sunset" provision: Terminate this program when there is a clean public lake within 25 miles of every major population center and when the States are prepared to carry out continual management and protection. The program is a strictly voluntary and non-regulatory one, which emphasizes local citizen participation and requires local or state matching support. It has been carried out with a small (15 USEPA employees nationwide), non-expanding staff. The Clean Lakes Program is a bargain, returning $8.31 in measured benefits for every federal dollar spent ("Economic Benefits of the Clean Lakes Program. An Assessment of Economic Benefits of 28 Projects in the Section 314 Clean Lakes Program." 1980. EPA 440/5-80-081).

The policies of the Clean Lakes Program are in strict accordance with our best understanding of lakes and watersheds, and it is the only federal program I know which insists upon support of projects in which the total lake environment is the management unit. This is significant because lake problems, and their solutions, differ fundamentally from those of streams and rivers. Sound, defendable, ecological principles are applied to the operation of projects, and funding preferences are given to projects where a coordinated approach (with other agencies and programs) is emphasized. Not only is the Clean Lakes Program a bargain to the millions of lake users in the United States, but the ecological principles employed in its management bring about lasting improvement and protection of our public lakes.

III. Results and Benefits of the Clean Lakes Program

To date, 47 states have participated, and $70 million have been awarded. The results have been dramatic and the Program has the full endorsement and support of the citizens who have benefitted.

A case by case summary of the projects is inappropriate. I have enclosed a representative sample, that of Medical Lake, Washington (Capsule Report. "Restoration of Medical Lake." 1980. EPA 625/2-80-025). The lake is 15 miles from Spokane, Washington, and for decades has been plagued with so much algae that most contact recreation was halted, and the lake would not support a game fishery due to dissolved oxygen problems. A new technology, developed largely with

EPA support, was used to sharply lower the phosphorus concentration in the lake and thus control algae growth. This technique is so effective that the EPA's pilot lake treatments at Twin Lakes, Ohio have remained in excellent condition since the time of their treatment in 1974. Recreational uses on weekends at Medical Lake have increased from fewer than 100 persons to about 1,000, and property values have consequently increased. The lake is now able to support a trout fishery, stocked by the Washington State Department of Game. This success story is typical of the benefits achieved from this federal-local interaction.

Costs and benefits of 16 urban area and 12 non-urban projects have been analyzed as being representative of the "return on investment" from the expenditure of public funds to protect and improve public lakes and reservoirs ("Economic Benefits of the Clean Lakes Program." EPA 440/5-80-081). The benefits were substantial, with a return of $9.64 for every federal dollar spent on an urban lake and $6.19 for non-urban lakes. Many benefits are of course intangible, including the value of citizen participation, the aesthetic improvement, the heightened awareness of environment, and the value to the biota of the lake. As travel costs increase, Americans will increasingly turn to local recreation, and the long-term benefits to these persons are incalculable.

IV. Current Status of Clean Lakes Program Projects

Projects are divided into Phase I (diagnostic-feasibility studies) and Phase II (implementation) efforts, plus the state lake classification work. About 87% of the Program's funds are expended, on a 50-50 matching basis, for Phase II.

At present, there are about 116 Phase I and 114 Phase II projects for which funds have been committed. The implications for zero 1982 funding for the Clean Lakes Program are grim. The expenditures for Phase I will essentially be money wasted in the sense that the projects may never come to fruition, and all the users of the lake will have is a report about its status and problems, and a recommendation for protection and restoration. Without financial support and technical expertise, actual implementation will probably never occur. The Phase II projects will be, in some cases, completed and lake improvement will occur. Many, however, will justifiably require supplementation and all will require technical expertise. If these are not available, projects half completed may be useless. For example, what good is a partially dredged lake if watershed control of erosion is not also accomplished?

V. Can the States Take Over?

There is abundant evidence that only some states are prepared or willing to take over the task of public lake protection, management, and restoration at this time. Some of the states with many lakes and a large water recreation industry, such as Michigan and Ohio, may be less and less able to do so under current economic conditions. We need to continue to have this small but highly effective source of federal support for the states.

A history of the Program is instructive. The Clean Lakes Program was included in the 1972 Federal Water Pollution Control Act as Section 314 for good reasons. Solutions to lake problems are complex, often covering several political boundaries, involving many disciplines, and requiring continual support and expertise. Except for a few northern tier states, most states were not, and are not now, ready to administer such a program, nor ready to enact legislative authority and the necessary appropriations. The States in 1972 welcomed Section 314 as a foundation to build programs, but EPA at the time was so involved with construction, effluent standards, etc. that no appropriations from Congress were solicited. Congress nevertheless recognized the need for the program and authorized $4 million in FY 75, and added $15 million in FY 76 and FY 77 and $3 million in FY 78. The negative role of EPA at this time did not encourage states to build their own programs. In 1978 EPA began to assist the states in developing programs and sought funds from Congress in 1979. This action finally prompted some states to initiate programs, believing that they had federal support. Now these states which have become responsive to the needs of lake users once again face the task of development of legislative and regulative authority without necessary federal guidance, expertise, and support. A zero appropriation simply pulls the rug out from under these embryonic state efforts, and in many cases essentially ends lake management and protection.

At this time, 32 states do not provide matching funds for Clean Lakes grants, requiring local government to do it even though the lake or reservoir to be improved and protected is open to all. While some states may offer in-kind technical services, few have the expertise, resources, or intent to do this, and again the greatest burden is placed upon users in closest proximity to the public lake. In every case, should the burden of public lake protection and management be shifted to state and/or local sources, the expertise of the Nation's best scientists in this discipline will be missing.

The following states, as of August, 1980, have no Clean Lakes Program participation, or provide no state financial support for Clean Lakes projects, or have no other special

state programs to assist local governments in lake protection and management ("Clean Lakes Program Guidance Manual." 1980. EPA 440/5-81-003):

1. Alabama
2. Colorado
3. Delaware
4. Illinois
5. Indiana
6. Kansas
7. Kentucky
8. Louisiana
9. Maryland
10. Mississippi
11. Missouri
12. Montana
13. Nebraska
14. Nevada
15. New Hampshire
16. New York
17. Ohio
18. Oklahoma
19. South Carolina
20. Tennessee
21. Texas

The majority of states on this list are there because the state does not offer any financial assistance. Some of these states have recently started to develop the institutional frameworks to administer a program and to provide some technical guidance. They need the federal program to complete this development.

Despite the low level of state financial, legislative, and technical support, the public demand for the Clean Lakes Program is increasing. This strongly supports the belief that Americans want and need clean lakes and reservoirs for recreational, domestic, and industrial purposes, and that they expect federal help in the form of the Clean Lakes Program. The public demand, measured as applications for support, is now double the FY 1981 appropriation to the Program. At this writing 25 eligible projects have not been funded.

VI. Summary

Public demand for acceptable recreation is very high and is increasing. Clean lake and reservoir waters are at the heart of this demand. The EPA's Clean Lakes Program now has more requests for funding than there are funds available. The Program has been successful, has not generated a bureaucracy, is entirely voluntary and without complicated regulations, and has brought great benefits and pleasure for the money expended. There have been well over $8.00 in measured benefits for every dollar spent. Our Nation's lakes have suffered tremendously from cultural pollution and at least one-third of them are degraded. Many others are now deteriorating. This Program is an example of the best in federal involvement with the state and local problems of our citizens. At this time only a few of the states are able to take over this work.

The North American Lake Management Society proposes that funds to continue the work of the Clean Lakes Program should be from construction grants. If 0.06% of these funds are appropriated for Clean Lakes, it would restore funding to about the current level and will maintain our essential efforts to protect, manage, and restore these priceless public treasures. We ask that the Committee make this recommendation.

Thank you for your consideration.

QUESTIONS ASKED OF EPA CONCERNING THE CLEAN LAKES PROGRAM

1. In the subcommittee hearings EPA stated that the States would be taking over the responsibilities of the Clean Lakes Program. In a follow-up question, Congressman Boland asked, "Are the States willing and able to take on Clean Lakes?"

In February, the Association of State and Interstate Water Pollution Control Agencies invited States to submit testimony on the impact of budget cuts on environmental programs. Despite elaborate clearance proceedures, some twenty States provided testimony. Here is what they said about Clean Lakes:

Connecticut "Under the Section 314 Clean Lakes Program, the Connecticut DEP lakes management program has been able to make significant progress in the past two years. Accomplishments include an inventory of the trophic classifications of seventy major recreational lakes, the prioritization of lakes for grant purposes, ... A reduction in funding will hamper future program development. Activities which would be immediately jeopardized are the development of restoration/preservation projects for five phase I studies which have been completed or will be completed by the end of 1981, and the development of additional Phase I studies. Connecticut would not continue the program in the same manner without federal funding."

Vermont "The State of Vermont has used the 314 program extensively to address aquatic nuisance problems within the state. With the termination of Section 314 funds the program will proceed with such resources as can be made available at the State and local level. Severe budget restriction in the State have precluded the State from increasing its share of funds in the recent past and we do not expect this to alter significantly in the foreseeable future. Severe limitations will be placed on our efforts,..."

Colorado "Until this grant became available, all of Colorado's efforts, because of limited resources, were directed towards the study of streams. The availability of these funds has given us the opportunity to assess the quality of some of our lake and reservoirs. Plans can then be formulated to correct the further degradation of these bodies of water. One of the five [plans] is expected to advance to Phase II in 1981. To withdraw funds, at this time, would leave us no way of implementing them."

South Dakota "In regard to the effects of the proposed 0 FY'82 funding levels for 208 and 314, the most immediate affect will obviously be no new starts in correcting non-point source pollution problems. This is unfortunate from the standpoint that much hard work has been done in order to get several projects to the point of proceading either into project formulation or implementation, and major commitments obtained form local residents will now be for naught. Also, the momentum that has been successfully developed in the nonpoint source control activities will be lost. ... A number of projects now in progress will not finish implementation activities for 2 or 3 years."

2. What level of funding is needed to complete existing Clean Lakes projects?

This question has two answers. The simple answer is that $26,078,000 would be required over the next three years to complete the exisiting implementation projects. See chart below.

It is tougher to answer this question if one includes all the cities and communities that undertook a Phase I diagnostic/feasibility study in good faith ...as the first step toward a restoration grant. In order for EPA to meet the demands of those cities and communities who have already committed their own local financial resources in the form of a Phase I study, approximately $50 million will be needed.

FUNDS NEEDED TO COMPLETE EXISTING CLEAN LAKES IMPLEMENTATION PROJECTS

STATE	PROJECT NAME	DATE AWARDED	FUNDING REQUIRED TO COMPLETE
ME	Cobossee 2	7/80	$ 125,000
ME	Sabattus Pond	4/80	50,000
CT	Bantam	5/80	200,000
CT	Warramug	12/79	100,000
MA	Cochituate	8/76	200,000
MA	Dunn Pond	1/81	200,000
MA	Lashaway	1/81	50,000
MA	Nutting	5/77	100,000
MD	Loch Raven 2	1/81	8,620,000
VA	Rivanna Reservoir	1/81	2,000,000
IL	Frank Holton	3/77	500,000
MN	Clearwater Chain	5/80	100,000
MN	Long Lake	12/76	200,000
MN	Moore	5/80	20,000
MN	Phalen	1/77	50,000
WI	Elk Creek	1/81	25,000
WI	Little Muskego	1/76	2,000,000
WI	Marinuka	5/80	50,000
WI	Upper Willow	5/80	100,000
MI	Lansing	4/76	170,000
CA	Gibraltar	4/78	1,000,000
CA	Tahoe	1/81	3,218,916
WA	Ballinger	3/78	200,000
WA	Moses	8/76	2,500,000
WA	Sacawawea	1/78	300,000
WA	Vancouver	8/78	4,000,000

North Carolina "North Carolina has a lakes classification grant. This grant will allow us to build a base for detailed study and restoration. If there are not study and restoration funds, the objective of Section 314 cannot be met."

Utah "If funds are cut for such programs as 208 and Clean Lakes, the State is not in a position to fund the continuation of these programs at the previous levels. ... [Three phase I] studies have just been initiated. There has been significant local support and participation in developing work plans to address these very difficult water quality problems. Without federal support, there is no question that such studies would not be initiated."

Kansas "...Kansas, as a semi-arid plains State, has a relatively small number of man-made lakes, and programs to protect and/or restore these lakes have a high degree of public support. Six Clean Lakes Projects are now underway in Kansas. Continuation of the program will benefit many people, will contribute to water pollution control, and is relatively inexpensive."

Iowa "This program (Section 314-Clean Lakes) has...been closely coordinated with our nonpoint funding programs. Beyond actual projects for lake restoration, the Clean Lakes Program has fostered the first comprehensive review of water quality in Iowa's lakes as well as establishing a priority system for determining which work to fund based on public benefit, water quality impact and potential effectiveness of restoration. As a part of our overall soil control/water quality effort and as an actual implementation activity, we strongly support this activity.

3. How much funding would be required to complete the goal of the Clean Lakes Program?

The Clean Lakes Program established a goal to protect at least one lake whose water quality is suitable for contact recreation, or to restore a degraded lake to that condition within 25 miles of every major population center. Of the 280 Standard Metropolitan Statistical Areas (SMSA), 64 have ongoing lake restoration projects. An additional 63 SMSA communities have the first phase of a restoration project underway.

In order to achieve the stated goal, 153 new implementation projects need to be initiated. The total cost over the next five years to achieve this goal would be $123.3 million. The chart below explains:

Cost of implementing the ongoing Phase I recommendations	$31.5 million
Cost of Diagnostic/feasibility studies and restoration projects for the remaining 153 SMSAs	$91.8 million
Total	$123.3 million

Note: Federal costs are estimated to be $100,000 for a diagnostic/feasibility study, and $500,000 for an implementation award.

Mr. SABO. Mr. Green, have you questions?

Mr. GREEN. How many lakes and how many dollars does it take—still—that they have to have to achieve the target?

Mr. COOKE. Our understanding in current dollars, about $120 million, which we can project over a number of years. To complete what we currently are doing—I say we, what EPA is doing currently now—would be about $20 million.

Mr. GREEN. And over how many years?

Mr. COOKE. We should be able to complete this in three or four years.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. SABO. Thank you for your testimony.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

JACK LETTS, PRESIDENT, FAIRBANKS MORSE PUMP DIVISION OF COLT INDUSTRIES, AND PRESIDENT, WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

JOHN SCHEER, EXECUTIVE DIRECTOR, WWEMA

Mr. SABO. Mr. Letts, we will include your statement in the record at this point. We ask that you summarize.

[The statement follows:]

STATEMENT BY THE WATER AND WASTEWATER
EQUIPMENT MANUFACTURERS ASSOCIATION, INC.

TO THE HOUSE SUBCOMMITTEE ON
HUD AND INDEPENDENT AGENCIES

May 8, 1981

Mr. Chairman and members of the subcommittee, I am Jack Letts, President of Fairbanks Morse Pump Division of Colt Industries and President of the Water and Wastewater Equipment Manufacturers Association, Inc. (hereinafter - WWEMA). Accompanying me here today is John Scheer, WWEMA's Executive Director. We are here today to discuss the views of WWEMA concerning appropriations for the (FY) 1982 Construction Grants Program. WWEMA is an association of more than 200 corporations that develop technology, manufacture and supply equipment, materials, and services to the water and wastewater industry. Equipment manufacturers currently employ approximately 25,000 people and provide equipment which accounts for approximately 20 percent of the total dollars spent under the Clean Water Act's municipal Construction Grants Program and an equal amount to industry.

The Clean Water Act of 1972 motivated WWEMA's members to allocate more resources to the pollution abatement industry. Traditional suppliers of wastewater equipment invested in larger and more efficient facilities. New and more cost-effective technology became available. In short, our industry and investors responded in the best tradition of free enterprise to fulfill the goals of the law established by Congress.

Since 1972, Congress has consistantly appropriated less than the authorized level of funding. The result has been a lack of continuity and predictability in the program. This has caused a reduction of approximately 25 percent in the number of suppliers since 1976. The outlook for the industry is getting worse. Business opportunity in water and wastewater equipment in 1979 and 1980 was less than one half of the level of 1977 and 1978 when compared in real dollars. Many leading manufacturers have withdrawn completely from the marketplace with others withdrawing from major segments of the business. The result is a rapid turnover of equipment suppliers in the industry, resulting in reduced equipment quality and technical innovation.

Congressional funding certainty is nearly as important as the level of dollars appropriated. Yearly appropriation approval is often delayed to very late in the budget process. This contributes to additional program uncertainty and inability for equipment manufacturers to plan properly.

Specifically, WWEMA recommends the following:

1. That Congress appropriate $2.4 billion for FY 1982. Also, that Congress set a deadline for the end of funding of the Construction Grants Program. This end date should be consistant with the needs to meet the requirement of the Clean Water Act in constant 1980 dollars.

2. A reduced level of funding from the authorized level previously passed by Congress should be approved only if the eligible project categories are limited and based on present population.

3. WWEMA urges passage of Two-tier funding legislation as an incentive for fast-moving states. "Two-tier" encourages state and local efficiency in the Clean Water Program.

4. WWEMA opposes the rescission of the EPA Construction Grant funds for 1980 and 1981, which is being proposed by the Administration. Congress, in its past appropriations for the program was far below authorized levels, causing industry to withdraw much of its expertise and resources. Now with the rescission request, industry is being asked to again lower its resources and commitment to this program.

5. Gradually eliminate federal funding for new planning (Step I) and designs (Step II) to streamline and expedite the review process. Continue federal funding at the 75 percent level for Step I and II projects that have already been approved.

6. Reduce EPA project review to a monitor and audit role.

7. Reduce the Federal share of funding to a maximum of 50 percent for Step III. This should be accomplished on a graduated basis over a 3 year period.

8. Examination of long term alternatives to the Construction Grants Program such as "loan programs".

9. Extension of Innovative/Alternative program through FY 1982 and beyond. (See Annex A)

WWEMA asserts that the Clean Water Act's municipal Construction Grants Program has done a great deal of good in reducing this nation's water pollution. We believe EPA's administration has been reasonably good considering the legal complexity and economic uncertainty surrounding the program. In the overall consideration of the Clean Water Program by Congress, WWEMA respectfully suggests that an examination be made of the much broader national benefits being derived from the program. These benefits have been addressed in the following Government reports:

- President's Commission on Clean Water
- Annual reports by the President's Council on Environmental Quality
- Benefits of Air and Water Pollution Control prepared by the President's Council on Environmental Quality

This latter report (Annex B) attributed the benefits of water pollution control to range from $6.5 to $25 billion annually, with the average cost benefit around $12 billion annually. Predictable Congressional appropriation and minimum legislative changes, will go a long way toward streamlining the Construction Grants Program and making it more cost-effective. Thank you for the opportunity to present WWEMA's position.

[CLERK'S NOTE.—The Committee has received Annex A and Annex B attached to the prepared statement, and has included them in its files.]

Mr. LETTS. Mr. Chairman and Members of the Subcommittee, I am Jack Letts, President of Fairbanks Morse Pump Division of Colt Industries and President of the Water and Wastewater Equipment Manufacturers Association, Inc. (WWEMA). Accompanying me here today is John Scheer, WWEMA's Executive Director. We are here today to discuss the views of WWEMA concerning appropriations for the fiscal year 1982 Construction Grants Program. WWEMA is an association of more than 200 corporations that develop technology, manufacture and supply equipment, materials, and services to the water and wastewater industry. Equipment manufacturers currently employ approximately 25,000 people and provide equipment which accounts for approximately 20 percent of the total dollars spent under the Clean Water Act's municipal Construction Grants Program and an equal amount to industry.

The Clean Water Act of 1972 motivated WWEMA's members to allocate more resources to the pollution abatement industry. Traditional suppliers of wastewater equipment invested in larger and more efficient facilities. New and more cost-effective technology became available. In short, our industry and investors responded in the best tradition of free enterprise to fulfill the goals of the law established by Congress.

Since 1972, Congress has consistently appropriated less than the authorized level of funding. The result has been a lack of continuity and predictability in the program. This has caused a reduction of approximately 25 percent in the number of suppliers since 1976. The outlook for the industry is getting worse. Business opportunity in water and wastewater equipment in 1979 and 1980 was less than one-half of the level of 1977 and 1978 when compared in real dollars. Many leading manufacturers have withdrawn completely from the marketplace with others withdrawing from major segments of the business. The result is a rapid turnover of equipment suppliers in the industry, resulting in reduced equipment quality and technical innovation.

Congressional funding certainty is nearly as important as the level of dollars appropriated. Yearly appropriation approval is often delayed to very late in the budget process. This contributes to additional program uncertainty and inability for equipment manufacturers to plan properly.

Specifically, WWEMA recommends the following:

One, that Congress appropriate $2.4 billion for fiscal year 1982. Also, that Congress set a deadline for the end of funding of the Construction Grants Program. This end date should be consistent with the needs to meet the requirement of the Clean Water Act in constant 1980 dollars.

Two, We recommend a reduced level of funding from the authorized level previously passed by Congress only if the eligible project categories are limited and based upon present population.

Three, WWEMA urges passage of two tier funding legislation as an incentive for fast moving States. Two tier encourages State and local efficiency in the Clean Water program.

Four, WWEMA is opposed to rescission of the EPA Construction Grants fund for 1980 and 1981, which has been proposed by the Administration and this Committee has also voted in favor of that.

Five, we recommend the elimination of Federal funding for new planning, that is step one, and step two, in an effort to streamline and expedite the review process. However, we recommend that Federal funding at the 75 percent level be continued for step one and step two projects that have already been approved and started.

Six, we recommend reducing EPA's project review role to one of monitoring and auditing.

Seven, we recommend that you reduce the Federal share of funding to a maximum of 50 percent for step three. However, we feel this should be accomplished on a graduated basis over a three-year period.

Eight, we would recommend examination of long-term alternatives to the construction grants program, such as loan programs for States or municipalities.

Finally, WWEMA recommends an extension of the innovative alternative program through fiscal year 1982 and beyond.

WWEMA asserts that the Clean Water Act municipal Construction Grants program has done a great deal of good in reducing this Nation's water pollution. We believe that the EPA's administration has been reasonably good, considering the legal complexity and economic uncertainties surrounding the program.

In the overall consideration of the Clean Water program by Congress, WWEMA respectfully suggests that an examination be made of the much broader national benefits being derived from the program. These benefits have been addressed in the following government reports: The President's Commission on Clean Water, annual reports by the President's Council on Environmental Quality, and specifically the report titled "Benefits of Air and Water Pollution Control" prepared by the President's Council on Environmental Quality.

We have attached that report as annex B. It attributes the benefits of the water pollution control to range from $6.5 billion to $25 billion annually, with an average cost-benefit of around $12 billion annually.

Finally, WWEMA believes that predictable Congressional appropriation and a minimum of legislative changes will go a long way towards streamlining the construction grants program and making it more cost effective. We thank you for this opportunity to present WWEMA's position. If you have any questions we will be happy to answer them.

Mr. SABO. Has the Administration's revision of the program been introduced yet?

Mr. SCHEER. Yes, it has. You are talking about the amendments.

Mr. SABO. Yes.

Mr. SCHEER. I believe it was introduced on the Senate side by request through Senator Chafee, and is still looking for sponsors on the House side.

Mr. SABO. Which indicates some lack of enthusiasm. I have a tough time understanding the proposal that you limit the grant program to building for the current population, particularly if you

are in an area which is growing in population. Do you understand the rationale for that?

Mr. LETTS. The opposite is that projections are high subjective frequently, and if we start from the premise that the Federal funding levels are going to be reduced, the analysis then becomes how can we get the most water cleaned for the moneys that will be available, and there is a considerable feeling that often building plants and programs are on the basis of many years into the future are ultraconservative, to build a plant that was only suitable——

Mr. SABO. I think they are matching for trunk sewage in total——

Mr. SCHEER. The Administration's request?

Mr. SABO. Yes.

Mr. SCHEER. I believe the Administration's request limits the categories to advance secondary and advance waste water as well as interceptors, those four categories.

Mr. SABO. Including interceptors?

Mr. SCHEER. Including interceptors.

Mr. SABO. Do they limit the reimbursement on interceptors to those that serve current population? It would seem to me there is a different case between interceptor and plant.

Mr. SCHEER. Mr. Chairman, they are recommending the limitations of funding on all categories based on present needs only, regardless of categories.

Mr. SABO. You can hardly expand an interceptor.

Mr. Green?

Mr. GREEN. I think the argument for basing it on current population has always been the manager's theory that you shouldn't subsidize sprawl.

Mr. SCHEER. I think that is the reasoning behind it.

Mr. SABO. I spent numerous years in the Minnesota Legislature sitting on the Sewer Subcommittee as we struggled through our governing system for our sewer system, and that was in the sixties. We were really served until then by the fact that the area in the thirties had built the original system with the capacity to serve for that long, and it didn't really become a critical issue on the question of expansion until the sixties.

The thought was, what would have happened if they had built the system in the thirties and served the population of the thirties? It would have been utter chaos.

Thank you for being here.

ENVIRONMENTAL PROTECTION AGENCY

WITNESS

ROB ARNER, FUND RAISING TASK FORCE CHAIRMAN, NATIONAL ASSOCIATION OF OIL RECOVERY COORDINATION

Mr. SABO. Mr. Rob Arner, Fund Raising Task Force Chairman, National Association of Oil Recovery Coordination.

Mr. Arner, welcome to the committee.

Mr. ARNER. I appreciate this opportunity to testify on the Used Oil Recycling Act of 1980, which amends the Solid Waste Disposal Act. Without appropriation under Subtitle D of the Resource Con-

servation and Recovery Act, the States and the District of Columbia, of which I am the coordinator, will be unable to fully promote used oil recycling.

The National Association of Oil Recovery Coordinators is made up of representatives of 47 State governments and persons interested in the recovery and recycling of used oil and other petroleum products to conserve this valuable national resource and to preserve our environment. I have been delegated by the assembly to chair a committee to promote national legislation which reduces our dependence on foreign oil. Our organization is playing a major role in informing people who change their car oil why they should return it for recycling.

The present Administration's budget revisions reflect the philosophy that the private sector, not the public sector, shall solve our energy problems. Certainly there are going to be reductions in the very modest programs for conservation information and financial assistance to State and local governments. But used oil recycling is special, since the Federal Government has also neglected returning its own oil. Our ignorance in not saving this valuable resource is documented by the situation here in Washington where each day 2,100 gallons of this hazardous substance is dumped. The tragedy is that Government and industry has yet to combine in a cooperative abatement campaign. The economics are at hand, but a modest push by Government is needed.

The National Association of Oil Recovery Coordinators wish to inform you of this waste and point up the need for more frugal management of our scarce resources.

If hazardous waste is a priority and conservation is a priority, then why shouldn't the Federal Government promote a program that would save its own oil?

We are asking for a very small appropriation. $2 million is not too much for the saving of oil and prevention of damage to our waterways. It is a wise investment.

The Environmental Protection Agency must begin showing progress in reducing hazardous wastes. Oil recovery is an ideal candidate. We, the National Association of Oil Recovery Coordinators, are not asking for any massive program. We have a law without funding. We wish your consideration to commercialize an industry through simple and relatively cheap publicity.

Mr. Chairman, I will consider myself successful this afternoon if the next time you change your oil you worry as to whether it is going to be recycled or is going to contribute to a further spoiling of our environment and water supply.

Mr. SABO. What would the $2 million be used for?

Mr. ARNER. The bill authorizes $5 million. The $2 million would be used by States to promote public education programs, to continue the work that has been done by the Department of Commerce and EPA authorized under the Act, to establish a director of collectors. The collector is the reason why major oil companies have not yet gone into the endeavor, because of the poor association of these operators. Also the monies would be used to review current technologies in doing house inventories.

Basically the breakdown would be $40,000 per State ongoing.

Mr. SABO. Mr. Green.

Mr. GREEN. I think I have noticed recently that the Sears chain was promoting a recycling effort.

Mr. ARNER. That is correct.

Mr. GREEN. If the private sector is going to be doing that, do we need public spending?

Mr. ARNER. In my dealings with the district energy office, 12 percent of the government's own oil is being recycled. GSA statistics right now I have gotten state that in fiscal 1978, 9,000 gallons of oil were saved; in fiscal 1979, 43,000 gallons were saved; in fiscal 1980, 24,000 gallons were saved. There is much more oil within the government itself.

Mr. GREEN. We don't need this program to have that happen, do we?

Mr. ARNER. This program is vital for both the public and private sector to alert people as to the nature of disposing of used oil, and since the government has had many impediments to the whole industry, Federal Trade Commission labeling to impeding the rerefining industry, there needs to be some push.

Mr. GREEN. Couldn't one Executive Order, or one administrative order within GSA and one in the Defense Department essentially deal with that problem?

Mr. ARNER. Yes, that is true. I am saying the private sector is helping, but there needs to be coordination with the government to have a vital campaign. Most definitely the private sector is taking the lead, and Sears has 600 stores, that was in the Wall Street Journal, May 5th, concerning that program, but if this whole industry is going to become viable, become commercialized, it needs some organization from Government to regulate the collectors.

Mr. SABO. Thank you.

Mr. ARNER. Thank you.

ENVIRONMENTAL PROTECTION AGENCY

WITNESSES

A. GORMAN PINKSTON, PRESIDENT, NATIONAL UTILITY CONTRACTORS ASSOCIATION

RON BUCKHALT, DIRECTOR, GOVERNMENT RELATIONS

Mr. SABO. Mr. A. Gorman Pinkston, President, National Utility Contractors Association.

Welcome to the Committee, Mr. Pinkston.

Mr. PINKSTON. Mr. Chairman and members of the subcommittee, my name is Gorman Pinkston. I am a ditch digger and small businessman from Portsmouth, Virginia, here today as President of the National Utility Contractors Association.

NUCA has 2,400 member firms across this Nation involved in sewer, water and underground utility construction work. We appreciate this opportunity to express our views on the Administration's fiscal year 1982 funding plans for the Environmental Protrection Agency's Construction Grants program.

First of all, $2.4 billion isn't enough. Not when this Nation is facing some $120 billion in identified clean-up needs and an im-

pending water supply crisis. I have a piece of paper here which shows a good example. This is some of the pipe that is existing in the ground today. This piece happens to come from Rochester, New York.

Furthermore, the Administration is apparently holding that $2.4 billion hostage to a series of so-called reforms in the program. Zero funding would have a catastrophic impact on the programs; these hastily conceived reforms would cripple it.

We strongly and respectfully urge this Committee to consider the budget request independent of these program changes. Program reforms would best be discussed during the normal legislative process prior to renewal of the act next year.

Let me add that NUCA is not opposing reduced appropriations for the Construction Grants program at this time. As businessmen and Americans, we support President Reagan's economic recovery package, including Federal spending reductions, corporate and personal tax relief and regulatory reform.

We have accepted the cuts. We expect reforms.

But the proposals attached to the $2.4 billion request are not reforms. They are just a string of recommendations to further reduce Federal expenditures for this program which Congress once wanted to fund at $5 billion a year.

These changes would even seem to be contrary to the Administration's philosophy of greater State and local delegation of authority, since they increase Federal controls by limiting funding to urban area treatment plants and interceptors, and remove a State's flexibility to fund collection systems if needed. Collector systems make up 93 percent of the cost of a rural system versus only 13 percent of an urban system.

As I mentioned, zero funding would destroy the program; the proposed reforms would cripple it. Particularly if they follow in the heels of the $1.7 billion rescission, which this Committee recently approved.

Permit me to address that rescission request because it does have a tremendous impact on this program. Again, we are not actively fighting this request in the light of our support for the Reagan economic package, but, we would urge Congress to review the rescission in order to seek a more equitable distribution or a readjustment of the cuts. This rescission would leave Washington and Arizona totally without funds and severely curtail activities in 11 other States that would lose all of their unobligated 1980 balances. Michigan, Minnesota, Illinois, California and Oregon are among these States.

Outlays for this program peaked at $4.3 billion last year. The construction industry, support elements and manufacturers are geared up. States have finally begun to move and accept management responsibilities. Progress is now visible as more and more projects come on line.

The program has to be continued. Few resources are as precious as the water we drink.

But, we must come up with a better method of continuing this program and adequately financing it to meet our Nation's massive needs.

In that light, we would like to suggest that the answer may be in an alternate funding mechanism and plan that gradually turns the program over to the States and local communities, who certainly can best determine their own clean-up needs.

Today, it takes from seven to nine years to complete an EPA project from design to construction. A great deal of that delay is due to excessive regulations and reviews, and the Federal presence.

The money is there because that is where the Federal government gets it from in the first place.

Therefore, we would like to ask this Committee to fund a study of alternate funding plans and how such a plan could be implemented to insure a gradual and smooth transition over a five-year period.

In my hometown of Portsmouth, Virginia, there are 35,000 water meters which register an average of 7,500 gallons a month. That is 90,000 gallons a year. Twenty cents per 1,000 gallons would produce more than $600,000 for the city of Portsmouth each year at an average charge of $18 per meter.

This is just one possible solution and one which would also encourage conservation of this vital resource. I am sure the right experts could come up with a number of options for consideration. NUCA would be happy to conduct this study.

Of course, any plan should also focus on returning clean-up responsibilities to the States with EPA assuming a regulatory and monitoring role.

If America is to finish the job of cleaning up its water, we must move boldly ahead. This program cannot afford business as usual with its starts and stops, fluctuating funding levels, and the massive regulatory burden that has been placed upon it. A study of this sort should be able to be conducted for $250,000, I would think.

Gentlemen, we appreciate your time today. We do have a number of other specific recommendations to improve the program and would like to submit them for the record, along with a study that analyzes the environmental and economic impact and advantages of the clean water programs.

We would like to suggest that the committee at least include the executive summary in your report. The program can work, it has worked.

We thank you.

Mr. SABO. Thank you. I am not sure I understand what you are saying. Can I summarize it by saying that you like the President's program except you would like to see us put more than $2.4 billion into this program?

Mr. PINKSTON. We would like you to, yes, but we will accept the $2.4 billion, but we can't live with the reforms that are included in it. Reforms are virtually eliminating the rural areas. They are funding mainly the larger sewer treatment plants and some limited interceptors in the urban area without giving consideration to the rural areas.

Mr. SABO. Mr. Green, any questions?

Mr. GREEN. No.

Mr. BUCKHALT. We are quite upset by the fact that some States will be out of money. I understand your colleagues on the other side

of the House have done something in that regard. I am not certain exactly what has happened, but I understand last night there was some action in the HUD and Independent Agencies Subcommittee on the rescission as far as making it apply more equitably, and I would urge the Committee, if at all possible, to look at that and see if we can help out, say, Washington State and Arizona being the two hardest hit, and I am sure those who follow us will have more suggestions on that idea.

Mr. SABO. Thank you. We appreciate your being here today and appreciate your testimony.

[The information follows:]

[CLERK'S NOTE.—Additional material has been received and is on file with the committee.]

our position

NATIONAL UTILITY CONTRACTORS ASSOCIATION

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The National Utility Contractors Association, representing more than 2,500 firms involved in the construction of clean water facilities, supports President Reagan's economic recovery plan which includes Federal spending reductions, personal and corporate tax relief, and regulatory reform.

We believe that special and parochial interests, however worthy, should not be placed above national needs during this economic crisis. All sectors of society must be prepared to accept sacrifices.

Massive Federal borrowing and deficit spending have driven up interest rates; the National debt is nearly one trillion dollars; we see substantial waste and duplication in existing Federal programs; social engineering is threatening the competitive free enterprise system; and double-digit inflation is eroding the financial fabric of our nation.

We applaud the Administration for recognizing the need to continue the water clean-up drive launched in 1972. This program offers vital long-term economic benefits and provides environmental facilities essential to our Nation's health.

Because of economic priorities, we accept the need for proportionate short-term funding cut-backs in environmental activities and welcome regulatory reforms to speed-up the grants process, eliminate unnecessary regulations and improve the overall performance of EPA's Construction Grants Program.

The Administration initially proposed a $1 billion recission for this program in FY 1981 and is discussing further reductions of up to $700 million with Congress. Additionally, they wish to reduce appropriations to $2.4 billion in subsequent years. This compares to authorized levels of $5 billion and President Carter's FY '82 request for $3.6 billion.

We would expect that when economic conditions permit, consideration will be given to restoring adequate funding for this important program. Few needs are as basic as the water we drink.

The most recent Federal water clean-up study indicates it will cost $120 billion, not counting storm water control, to meet the objectives of the Clean Water Act.

However, we must oppose carry-over Carter Administration recommendations that would place restrictions on states utilization of clean water allocations and their right under existing law, to establish priorities consistent with local needs. We strenously object to the Administration proposals to withhold all funding in FY '82 unless these recommendations are adopted.

Zero funding, even for one year, would have a catastrophic effect on the program and most severely punish those states who have obligated their funds in a timely and efficient manner.

We would hope that the Administration remains consistent in its support of greater delegation of authority to states and less bureaucratic interference in the decision-making process. States and communities must have the flexibility to advance their water clean-up programs consistent with local needs, resources, and cost-effectiveness.

No community can achieve the goals of the Act without the ability to collect and treat wastes and distribute clean water. States should have the option to chose the pollution abatement methods most cost-effective for their communities, whether it be collectors, interceptors, waste treatment plants or other clean-up processes.

In addition to perserving the rights of states to assess their own priorities, we believe a number of other steps should be taken to improve the program, including:

1. Funding levels authorized under Section 205 of the Clean Water Act should be consistent to permit states to maintain the Administrative ability to manage the program;

2. Congress should consider multi-year appropriations to provide greater continuity and to remove funding uncertainties;

3. Deadlines should be established and enforced for each step of the grants process. Funds should not be awarded to a project that cannot start construction on a timely basis;

4. Recognizing that each month of delay increases a project cost by 1%, we urge an immediate review of all program rules and regulations and revocation of those adversely effecting program performance and costs.

5. Eliminate non-water quality requirements such as MBE and WBE requirements, cultural and historical reviews, unnecessary alternate technology studies, and unrealistic wage rate determinations that don't accurately reflect true prevailing wages.

6. Categories III A and III B, IV A and IV B and V, covering collectors, interceptors infiltration and inflow correction rehabilitation and combined sewer overflow, must remain eligible for funding;

7. Costly advanced waste treatment plants should not be mandated unless special needs prevail and emphasis should be on achieving secondary levels of treatment across the nation and a greater state role in determining the levels of treatment needed.

8. A study of alternate and/or self supporting funding mechanisms for the Clean Water Program should be started immediately;

9. Permit states the option of using less than 75% of the Federal share on a project;

10. Consider eliminating funding for steps one and two but permit states who need such funds to draw against their 75% step three grant;

In summary, NUCA stands behind President Reagan's economic recovery package but opposes tinkering with the Law's eligibility criteria to eliminate collectors, interceptors and other essential cost-effective elements. That recommendations should be dropped as should the suggestion that the 1982 $2.4 billion authorization be held in abeyance until that recommendation is accepted.

The Nation's Clean Water Program has had visible environmental and economic achievements. Each billion dollars provides in excess of 50,000 jobs and many communities across America have restored the chemical, physical and biological integrity of their waters. But many others continue to have severe water quality problems threatening both the economic and physical health of their community. These problems must be addressed.

Clean Water.....Let's finish the job!

3/20/81

Environmental Protection Agency

WITNESSES

CLINT WHITNEY, EXECUTIVE DIRECTOR, CALIFORNIA WATER RESOURCES CONTROL BOARD

ERNIE TRAD, DIRECTOR, DIVISION OF CONSTRUCTION MANAGEMENT, NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROBBI SAVAGE, EXECUTIVE DIRECTOR, SECRETARY/TREASURER, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

Mr. Sabo. Clint Whitney, Executive Director, California Water Resources Control Board; Ernie Trad, Director of the Division of Construction Management, New York Department of Environmental Conservation; and Ms. Robbi Savage, Executive Director and Secretary/Treasurer.

We will enter your statements in the record.

[The statements follow:]

THE CLEAN WATER ACT IS A SUCCESS IN CALIFORNIA BY VIRTUALLY ANY STANDARD APPLIED. OVER 2 MILLION POUNDS OF POLLUTANTS ARE BEING REMOVED FROM CALIFORNIA WATERS EACH DAY AS A DIRECT RESULT OF THE CLEAN WATER ACT. THAT'S NEARLY 3/4 BILLION POUNDS PER YEAR. CONTRARY TO RECENT REPORTS THAT THE NATIONAL PROGRAM IS A FAILURE DUE TO SEWAGE TREATMENT PLANT FAILURES, THE VAST MAJORITY OF CALIFORNIAS TREATMENT WORKS ARE WORKING SATISFACTORILY AND PROVIDING MAJOR WATER QUALITY BENEFITS. AS A RESULT OF THE CLEAN WATER ACT AND THE CONSTRUCTION GRANTS PROGRAM, 45% OF ALL MUNICIPAL DISCHARGES IN CALIFORNIA PRESENTLY MEET SECONDARY TREATMENT EFFLUENT STANDARDS OR BETTER. BY 1983 WHEN PROJECTS NOW UNDER CONSTRUCTION ARE COMPLETED, 70% OF THE MUNICIPAL DISCHARGES WILL MEET SECONDARY TREATMENT STANDARDS. IF THE CONGRESS AMENDS CURRENT LAW TO PERMIT LESS THAN SECONDARY TREATED EFFLUENT DISCHARGES TO THE OCEAN, CALIFORNIA WILL HAVE ACHIEVED 90% COMPLIANCE WITH THE MAJOR GOAL OF THE ACT.

IN SPITE OF CALIFORNIA'S SUCCESS HOWEVER, MUCH WORK REMAINS:

- $100 MILLION IS NEEDED TO CORRECT SEVERE PUBLIC HEALTH HAZARDS;
- $600 MILLION IS NEEDED TO CORRECT SEVERE WATER QUALITY PROBLEMS; AND
- $1.3 BILLION IS NEEDED TO MEET PRESENT FEDERAL WATER QUALITY OBJECTIVES (ASSUMING NO SECTION 301(H) WAIVERS)

GIVEN THE ABOVE NEEDS, CALIFORNIA RECOMMENDS CONGRESS APPROPRIATE SUFFICIENT FUNDS IN 1982 AND SUBSEQUENT YEARS TO MAINTAIN THE PRESENT MOMENTUM TOWARD THE WATER QUALITY OBJECTIVES OF THE CLEAN WATER ACT. TO REDUCE THE APPROPRIATION TO ZERO IN FISCAL 1982 WOULD HAVE SIGNIFICANT ADVERSE IMPACTS ON CALIFORNIA. AT BEST, SUCH A DECISION WOULD DELAY VIRTUALLY ALL THE PROJECTS NOW UNDERWAY TO ONE DEGREE OR ANOTHER. THIS WOULD ADD COSTS, DISRUPT THE FLOW AND MOMENTUM OF WORK AND PUT MANY CONSTRUCTION CONTRACTS IN JEOPARDY. AT WORST, SUCH A DECISION COULD SO COMPLETELY DISRUPT THE PROGRAM THAT STATE AND LOCAL MATCHING FUNDS WOULD DRY UP

FOR LACK OF CONFIDENCE IN FUTURE FEDERAL PARTICIPATION. INDEED, CALIFORNIA IS ALREADY FACING SERIOUS DIFFICULTY WITH ITS $2.9 BILLION SAN FRANCISCO PROJECT DUE TO THE UNCERTAINTY OF FEDERAL FISCAL PARTICPATION.

THE SOLUTION, IT SEEMS, IS FOR THE CONGRESS TO INSTITUTE APPROPRIATE PROGRAM REFORMS BY WHICH TO ACHIEVE MORE POLLUTION CONTROL FOR EACH DOLLAR SPENT, THEREBY PERMITTING A REDUCTION IN THE ANNUAL APPROPRIATION TO THE PROGRAM. IT APPEARS THE PRESIDENT'S CONSTRUCTION GRANTS PROGRAM REFORM PROPOSAL IS INTENDED TO ACHIEVE THIS PURPOSE. CALIFORNIAS RECOMMENDATIONS WITH RESPECT TO THAT PORPOSAL ARE AS FOLLOWS:

- REVISION OF THE ALLOTMENT FORMULA -

  CALIFORNIA IS OPPOSED TO THE PROPOSED ALLOTMENTS FORMULA FOR THE FOLLOWING REASONS:

  1. CALIFORNIA WOULD RECEIVE 6.2% LESS FEDERAL MONEY THAN FROM THE PRESENT FORMULA (ASSUMING A $2.4 BILLION APPROPRIATION);
  2. CALIFORNIA ADVOCATES REVISING THE PRESENT FORMULA TO PUT GREATER WEIGHT ON POPULATION AND CATEGORY I PROJECTS (SECONDARY TREATMENT) AS FOLLOWS: 50% SECONDARY NEEDS, 25% ALL OTHER NEEDS AND 25% POPULATION.
  3. THE PROPOSAL DOES NOT TAKE INTO ACCOUNT POPULATION SHIFTS TO THE SUN BELT STATES, THEREBY FAVORING THE NORTHEASTERN STATES IN SPITE OF MIGRATION FROM THOSE STATES.
  4. IF CALIFORNIA'S PROPOSED FORMULA (2 ABOVE) IS NOT ADOPTED, THE PRESENT FORMULA SHOULD BE RETAINED OVER THAT PROPOSED BY THE ADMINISTRATION.

- LIMIT FUNDING ELIGIBILITY TO CATEGORIES I, II AND IVB

  DETERMINATION OF PRIORITIES SHOULD BE RETAINED BY THE STATES. CONGRESS SHOULD DETERMINE THE ALLOTMENT LEVEL OF EACH STATE BASED ON NEEDS AND THEN LET THE STATE DECIDE ITS PRIORITIES FOR MEETING THE GOALS OF THE ACT. FOR EXAMPLE, WHY SHOULD CONGRESS PROHIBIT FEDERAL PARTICIPATION IN PROJECTS

DESIGNED TO REHABILITATE DELAPIDATED INTERCEPTORS, OR PROHIBIT THE BUILDING OF NEW COLLECTOR SYSTEMS OR TREATMENT WORKS FOR COMBINED SEWER OVERFLOWS (THE ADMINISTRATION'S PROPOSAL) IF THOSE PROJECTS WILL ACHIEVE THE GOALS OF THE ACT? TO LIMIT DECISIONS TO ELEMENTS OF A SEWER SYSTEM RATHER THAN THE QUALITY RESULTS INTENDED, MAY LEAD TO EXPENDITURES FOR PROJECTS WHICH WILL NOT MAKE A MAXIMUM CONTRIBUTION TO CLEAN WATER.

- ALLOW GOVERNOR TO REDUCE FEDERAL PARTICIPATION BETWEEN CATEGORIES

  CALIFORNIA SUPPORTS THIS PROPOSAL. THIS FEATURE WILL GIVE STATES MORE FLEXIBILITY IN ESTABLISHING PRIORITIES AND WILL LEAVE FUNDING OF LOWER PRIORITY ELEMENTS OF PROJECTS TO STATE AND LOCAL DISCRETION.

- REVISE THE ADMINISTRATIVE SUPPORT FORMULA (SECTION 205G)

  CALIFORNIA SUPPORTS THIS PROPOSAL SINCE IT IS BASED ON NEED AND PROVIDES FUNDING STABILITY YEAR TO YEAR.

- NO FUNDING FOR RESERVE CAPACITY

  WHILE CALIFORNIA BELIEVES THERE ARE ACCEPTABLE ARGUMENTS ON BOTH SIDES OF THIS PROPOSAL, IT SUPPORTS THIS CHANGE. THE FEDERAL PROGRAM SHOULD PROVIDE FOR CLEANING UP PRESENT CONDITIONS. IT SHOULD BE A STATE AND LOCAL RESPONSIBILITY TO PROVIDE FOR FUTURE GROWTH.

- EXTEND THE INNOVATIVE/ALTERNATIVE PROGRAM

  CALIFORNIA SUPPORTS THE CONTINUATION OF THIS PROGRAM. CALIFORNIA HAS BEEN A LEADER IN UTILIZING GRANT FUNDS FOR THIS PURPOSE. CALIFORNIA ALSO SUPPORTS THE PROPOSED STATE OPTION PROVISION OF THIS SECTION.

CALIFORNIA STRONGLY URGES THE CONGRESS TO APPROPRIATE FEDERAL FUNDS FOR THE CONTINUATION OF THE CLEAN WATER PROGRAM FOR FISCAL YEAR 1982. THE LEVEL OF APPROPRIATION SHOULD BE CONSISTENT WITH AN ORDERLY CONTINUATION OF THE CONSTRUCTION AND REGULATORY WORK ALREADY IN PROGRESS AND WITH ADDRESSING PUBLIC HEALTH AND SERIOUS WATER QUALITY PROBLEMS.

CALIFORNIA BELIEVES THE CLEAN WATER ACT HAS BEEN A RESOUNDING SUCCESS AND ONLY MODEST AMENDMENTS TO THE ACT ARE NECESSARY TO IMPROVE THE STATES ABILITY TO ACHIEVE AND MAINTAIN WATER QUALITY GOALS.

My name is Robert F. Flacke, Commissioner of the New York State Department of Environmental Conservation. I appreciate the opportunity to appear today before the Subcommittee on HUD-Independent Agencies, to discuss what the impacts of a zero fiscal year 1982 appropriation under the Clean Water Act would mean to the Construction Grants Program in New York State.

Introduction

New York State recognizes and applauds the major efforts of the new administration in Washington toward reduced Federal spending. We further recognize the need of the National Water Pollution Control Program to bear its fair share of such reductions. However, zero funding for FY'82 represents more than a fair share and would leave a severe effect on New York State's efforts to meet national water quality goals, particularly when combined with the requested rescissions for FY'80 and '81. Management of an effective Construction Grants Program requires uniformity and consistency of law, regulation, and policy as well as assurance of availability of funding years. Zero funding for FY'82 coupled with the proposed rescissions would cause an immediate slowdown and, in some cases, termination of municipal efforts to solve the water pollution problems. Excessive reduction in funding at a time when it is most needed would only serve to negate past investments of State and Federal dollars in efforts to improve water quality.

More specifically, the proposed rescission and zero appropriation for FY'82 will impact New York State in:

- Continuing existing pollution problems affecting both the environment and public health;
- Increased incidents of non-compliance and decreased effectiveness of enforcement action;
- Deferred projects - 136 in New York State - would lead to inflation, re-analysis and revision or termination;
- Imposing large unanticipated financial burdens on communities which have planned budgeted and incurred debt for the purpose of completing facilities with smaller service areas that will not generate adequate revenue to provide for proper operation and maintenance;
- Abandonment of partially completed, inoperable facilities;
- Jeopardizing the Federal court order compliance dates for New York City projects;

- Providing present and future uncertainties in staffing levels required to carry out the delegated functions of the Section 205g Construction Management Assistance Grant;
- Increasing unemployment levels in the State's labor force and negatively impacting the construction industry.

Fiscal Cuts

A zero appropriation for FY'82 combined with the proposed rescission would this fall essentially close down the Construction Grants Program in New York State until a FY'83 appropriation is available. Even then, without a stable flow of projects in the pipeline, the effects would continue to linger. One only has to look back one decade to 1972 to see that what happened when a 16 months funding hiatus occured and it took years to overcome the resulting inertia.

New York State's fiscal year 1980 and 1981 funds have been programmed for specific projects that would now have to be deferred because of the rescissions. In the next few years many large high priority projects are scheduled for funding, most particularly New York City's Red Hook and North River projects currently under federal court order to correct discharge of 210 million gallons per day of untreated wastewater. Reduced appropriation levels could mean that the projects deferred this year would be delayed for many more years as these large projects use essentially all of New York's allocation for the next several years. In fact, the federal share of some of these projects will exceed the annual allotment to the State, necessitating phasing over a number of years. Many of the deferred projects would not be built due to the long delays while others would have incomplete and uneconomical systems. Even the completion of the New York City projects for which we have already expended hundreds of millions of dollars could be jeopardized.

Many large urban projects throughout the nation are in need of large sums of federal aid at a time when State allotments are shrinking. The Administration's intended reform of the program includes a proposal to focus funding on projects in urban areas that will result in significant water quality improvements. If construction of these projects is to be accomplished, it is obvious that a new mechanism for funding large urban projects is sorely needed.

Many New York State communities have invested a great deal of time and money in solving their water pollution problems. Their investments have relied on the continuation of present funding levels through the Construction Grants Program to enable them to shoulder the burden of proper treatment. The high costs of inflation and the sudden reduction in funding levels would produce an immediate and devastating effect on their efforts. They would, in many cases, not be able to complete their programs and would lose faith in government efforts to meet water quality goals. From a water quality standpoint, the continued pollution resulting from such lack of progress would tend to diminish our past accomplishments.

The impacts of such cuts would also be detrimental to our business community. At a time when our State is devoting increasing efforts to establishing a stable atmosphere for industry, the proposed cutbacks would counteract these endeavors.

Additional burdens would become immediately evident within our own agency, affecting implemented programs and policies. With a zero appropriation there would be no money for a FY'82 Section 205g Grant to the State for management of the Construction Grants Program under the terms of the present delegation agreement. Program management funds will be needed several years after the termination of appropriations simply to manage on-going projects until they are administratively closed out. Faced with fluctuating budget levels, adjustments in staff levels, lay-offs, loss of qualified personnel, all to the detriment of achieving program objectives, states may find it necessary to return the management of the grants program back to the Federal government. However, such action would certainly result in increased cost to the taxpayers.

Other program areas within our agency would also be affected to the point of restructuring procedures, policies, and work loads due to increases that may be expected in the areas of non-compliance and resulting enforcement needs.

Program Cuts

Along with targeted reductions of Federal funding levels, significant reforms to the program are proposed. One of these proposed reforms would focus on the wastewater treatment program on the larger cities and SMSA's where significant public health and water quality benefits would accrue. Such a reform would remove the flexibility of states to address their priority water-quality related problem areas and transfer this authority to the Federal level. Small communities within the State which are experiencing water pollution problems would be required to fend for themselves in resolution of these problems. Unfortunately, the smaller communities, with lesser financial resources than larger urbanized areas, would not be able to assume this responsibility alone.

A current proposal of reducing the federal share from the present 75% funding level to 50% would have an immediate impact to the State and municipalities. New York State's present Environmental Quality Bond Act authorizes the State to fund one-half of the non-federal share of eligible project costs for wastewater treatment. If the federal share is reduced to 50%, this would mean that both the State and local shares would be doubled. This action would quickly wipe out the state's capability for a continuing match of the Federal grants.

A legislative proposal to eliminate the eligibility of such items as collection sewers, infiltration/inflow analysis, sewer system rehabilitation, and combined sewer overflow correction would result in the termination or deferral of on-going and future projects. For on-going projects, some of these items are essential for completion of a fiscally sound total treatment system. Unless a transition period is provided, many communities could be incapable of completing their system as planned. Treatment plants would be completed with capacities that would never be utilized and leave taxpayers within the reduced service areas with undue financial burdens.

Summary

While New York State is willing to accept its fair share of budget cuts, a zero appropriation for FY'82, coupled with the FY'80 and '81 rescissions, is a severe blow to our construction grants program at a time of increasing need for federal funds. In addition to the budget cuts, imposition of the proposed reforms on on-going projects will virtually halt the state's program.

Therefore, a minimum of $2.4 billion is recommended for FY'82, with a transition provision, to provide for an uninterupted continuation of the construction grants program. This is essential to provide federal funds to municipalities to complete on-going projects as planned and to initiate new projects which would proceed in accordance with enacted reforms.

In order to finance the cost of large urban projects which require a federal share in excess of a state's annual allotment of funds, a new mechanism for allocating federal grants to these projects is essential. This need is particularly acute now that we are faced with decreased annual appropriations for the construction grants program.

Association of State and Interstate Water Pollution Control Administrators

Mr. Chairman, Members of the Subcommittee:

My name is Robbi J. Savage. I am the Executive Director and the Secretary/Treasurer of the Association of State and Interstate Water Pollution Control Administrators, (ASIWPCA).

The Association of State and Interstate Water Pollution Control Administrators is an independent, nonpartisan organization of State Administrators of the water quality program. ASIWPCA members represent the State organizations which on a day-to-day basis implement the Clean Water Act and frequently other environmental legislation.

All 50 States, 6 Interstate Agencies, 3 Territories and the District of Columbia are represented within the Association.

The views of more than 40 State Administrators responsible for the implementation of the Federal Water Pollution Control Act, as amended, are incorporated in this statement. This information has been gleened from survey responses, Association positions, state testimonies developed specifically for use by the ASIWPCA, and individual communication with the membership. It is our intent to provide this Subcommittee with specific examples of the probable impacts of the budget reductions as proposed by the Administration for the national water quality program.

> The proposed cuts in the budget for fiscal year 1982 (FY82) for programs embodied in the Clean Water Act, are of concern to ASIWPCA, not only because of their severity, but also because of the swiftness with which they are to take place.

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In most States, the FY82 operating budget requests were based on federal funding levels proposed by the Carter Administration. These budget requests, reflectings those original numbers, are now being considered by State Legislatures across this country. As of this date, many States are still unaware of all the details of the Reagan Administration's proposal, let alone the ultimate funding levels for the U.S. Environmental Protection Agency's programs.

This makes informed decision-making for Governors and State Legislators virtually impossible. Yet, State leaders must forge ahead to develop their economic strategies, armed only with obsolete data and promises of potential funding, if federal program reforms are enacted by Congress.

> ASIWPCA is concerned that the proposals to drastically cut or eliminate water quality related programs do not adequately reflect probable impacts of those reductions at the State and Local levels. States see the federal funding support for the programs being obliterated, yet few, if any, program reforms are being enacted to lessen the State and Local burden. Reforms and Reductions must come as a package if the national water quality program is to survive.

TITLE II, CONSTRUCTION GRANTS PROGRAM

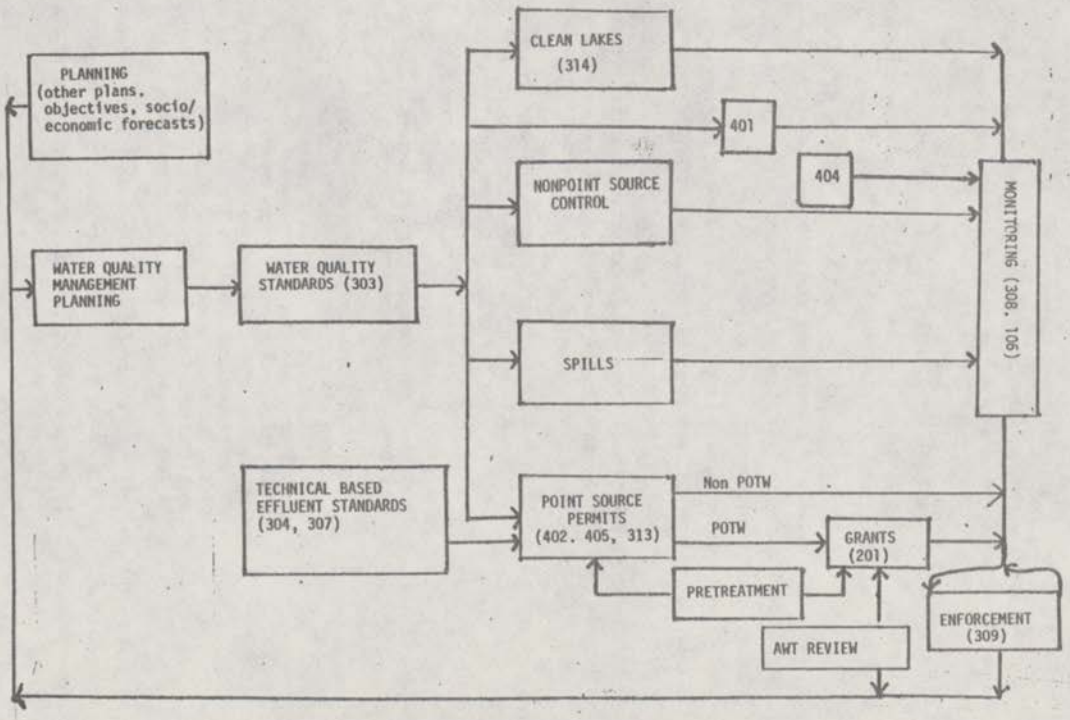
The Construction Grants Program under Title II of the Clean Water Act provides financial assistance to local governments to construct sewage treatment facilities, expand existing capacity, and where necessary, upgrade the level of wastewater treatment to achieve compliance with the requirements of the national water quality program. This cost share program is only one part of the total water quality program (see attachment A), but it is indispensable to the achievement of the objectives of the Clean Water Act. It is also the foundation upon which the local government's strategy for compliance is based.

The Construction Grants Program is also necessary to provide future financial self-sufficiency of wastewater treatment in the nation. Through this program, local governments are assisted financially now and are required to adopt programs to assure the future revenues needed for longer

Association of State and Interstate Water Pollution Control Administrators

ATTACHMENT A

NATIONAL CLEAN WATER PROGRAM



term operation and management, including the replacement of present treatment works. These purposes suggest that the construction grants program is an investment program with a high level (75%) of federal participation.

Since the 1977 amendments, the construction grants program has been the subject of intensive study and evalution (General Accounting Office, Congressional Committees, interest groups, state officials and the U.S. EPA). Each of these reviews has been a well intentioned effort to improve the quality of projects and the administration of the program. However, each study has identified and focused attention on specific problems, undesirable practices, inadequate management and control, and other types of deficiencies. Each study has presented case histories of specific projects to demonstrate a particular deficiency. All this interest and activity has led to the emergence of a negative attitude by many concerning the need, value and justification for the program. Let us put the results into a proper perspective. For example:

- The vast majority of projects in the program are good projects which will result in improved water quality. Very few projects can be used to demonstrate failure of the process.
- Most projects in the program are cost effective, meet local needs and garner sufficient support at the local level to assure implementation.
- Efforts by program managers(Federal, State and local) to improve the program, its results, process and timeliness should be viewed as a normal shake-down or refinement process. In a program the size of the construction grants program, the Congress should expect and demand a continuing effort to improve program performance. This is a positive activity which leads to enhanced program efficiency. It is also a demonstration of the interest and dedication of those involved in the management of the program.

Because of the complexity of the process and the long lead time necessary to develop a project for construction, the program must be managed. However, proper management can be done only so long as the process is predictable and stable.

The funding history of the program directly shows the level of uncertainty and the impact of this uncertainty on obligations. (see Attachment B)

FISCAL YEAR	PROGRAM FUNDING BILLION $	FUNDS OBLIGATED BILLION $
1973	2.000	1.532
1974	3.000	1.444
1975	4.000	3.616
1976	9.000	4.814
1977	1.480	6.664
1978	4.500	2.301
1979	4.200	3.872
1980	3.400	4.384
1981	3.700	4.200 *

* estimated

President Reagan has proposed a zero appropriation for construction grants for FY82, unless certain program reforms are enacted by Congress. The impacts of a zero appropriation will have a devastating effect of the management of the program, not only in fiscal year 82, but on into the outyears.

STATE IMPACTS...No funding for the program in FY82 will bring the municipal construction grants program to a halt in more than 40 states, according to information gathered by ASIWPCA. The reasons for this are quite clear. After years of program uncertainty and a sufficient number of program difficulties, States are moving past the many obstacles that have plagued this program and are moving into a stronger management mode. As a result of this improved management, States, with few exceptions, will have low unobligated balances, because there are enough projects in the "Pipeline" to exhaust the remaining FY80-81 funding by mid-FY82. Thus the funding rescissions of $1.7 Billion as requested by the Administration will cause an additional hardship.

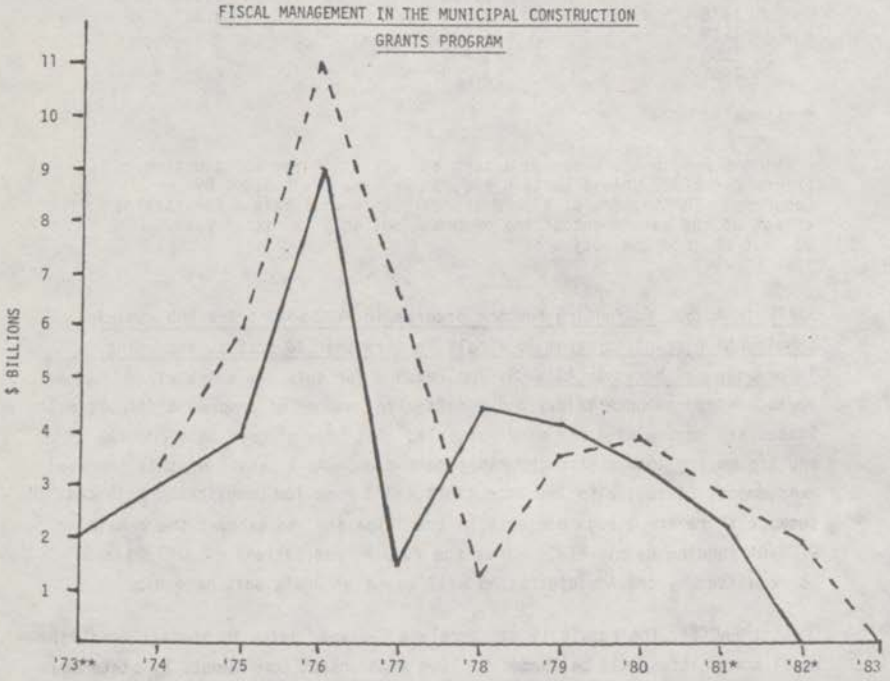
LOCAL IMPACTS...The result is not merely a 1-3 year delay in project funding. Local communities will be forced to live with unkept commitments by state and federal officials, which will erode the credibility of this program even further. Local governments themselves have made commitments which they will unable to keep.

ATTACHMENT B

Association of State and Interstate Water Pollution Control Administrators

ASIWPCA

FISCAL MANAGEMENT IN THE MUNICIPAL CONSTRUCTION GRANTS PROGRAM



* Projected

** beginning of the fiscal year

— — — Unobligated Balance at the end of the fiscal year

——— National allotment to the States

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- Commitments have been made in anticipation of funding. Bonding issues have been passed and land acquired. Local planning for infrastructure (highways. buildings, drinking water) has been made with the understanding that §201 funding would be available at 75% match. Major midcourse corrections would be required with hard trade-offs to meet statutory requriements. For example, South Dakota currently has 70 communities which entered into the program. raised 25% local match, passed bond issues. and bought the land for new facilities (which is not grant eligible). Any reduction in the federal funding level will jeopardize the completion of these facilities.

- Credibility and Momentum..."Zero" funding for FY82 virtually destroys the credibility of the program. There is no stability upon which to plan rationally at the Local level. Projects in planning and design exceed the funding available for construction. There is no incentive for local communities to take further action. For example:

  --Louisiana: Any FY81 funds left over will go to grant increases. not new projects.

  --Pennsylvania: Cannot continue to fund all projects in the pipeline through to completion.

- White Elephants...Construction of many projects, particularly SMSA's, is segmented. With no appropriation, some of these projects cannot be completed. This will not only result in continued public health and water quality problems but also abandonment of partially complete, inoperable facilities.

  --Kalamazoo and Battle Creek, Michigan: Cities are in the middle of construction, with no FY82 funds available. plants cannot be completed. Operating efficiencies will not come close to meeting required effluent limitations. Battle Creek has no possibility of funding at $2.4 Billion in FY83 or beyond.

- Inflation...Inflationary cost increases resulting from project deferrals will hit local communities particularly hard. For example:

  --Salt Lake City: Inflationary costs exceed the funding available even at $2.4 Billion for State allotment.

Had communities been on notice of such action several years ago, they could have planned accordingly. A "Zero" appropriation has caught them unprepared. For example:

--Alexandria, Louisiana: Received a FY81 grant for interceptors. They are scheduled for a FY82 grant for the plant.

--Massachusetts: 14 communities under sewer moratorium.

- Fiscal Self-Sufficiency...Local communities are capable of meeting their financial responsibilities over the long term, but they cannot offset the President's proposed budget for FY82 to meet the Act's requirements. Financial planning takes deliberation and time. For example:

  --Ft. Meyers, Florida: Presently in violation of Water Quality Standards. They have survived examination of their proposed Advanced Waste Treatment and are ready for construction in FY82. This is of particular interest locally because they are under sewer moratorium. Despite careful planning and much patience, they are facing an unanticipated dilemma.

- Obsolescence...With no funding, plans for design and construction will be shelved until such time as an appropriation is available. By that time, some of these plans will be out of date, particularly with reduced funding in FY83.

State Management Under 205(g)...Most water quality activities mandated by the Clean Water Act involve direct State administration and enforcement, an approach consistent with President Reagan's philosophy of Federalism. If sufficient resources are not available to manage these federal programs, many States will be forced to return many of their delegated responsibilities back to the Federal Government. For example,

if the Construction Grants Program is zeroed out in FY82 resulting in zero federal support for state management under 205(g) we know of at least 5 States that will run out of management funds by the beginning of FY82:

- Arizona--zero prior to end of FY81
- Washington
- New Hampshire
- Vermont
- South Dakota

Example:

> Witn the recission and a zero appropriation, Arizona will loose its management money for FY 81... The State will not be able to manage its program through FY 82 without substantially reducing program activities.
>
> Connecticut estimates that $1.1 million of 205(g) for construction grants management will be taken by the recissions.

In addition, we know of at least 10 other states whose programs may come to a virtual standstill later if no funding is appropriated. These states include:

- Georgia
- Idaho
- Iowa
- Maine
- Maryland
- Michigan
- Mississippi
- Montana
- Nebraska
- Rhode Island

This means that nearly 1/3 of the States may be forced to turn back delegated functions of the construction grants management to the U.S. Environmental Protection Agency because of inadequate funding.

Urban v. Rural Funding

The goal of the Clean Water Act is to make the nation's waters swimmable and fishable by 1983. As a result, most State efforts in the early stages of the program concentrated on the largest discharges. This is because clean-up of these sources produced the most dramatic improvements in stream quality. Now many States need to focus their attention on the smaller communities which have for years been unable to make the state's priority lists.

Example:

In Minnesota, even at a $2.4 billion funding level, the outstate (rural) program will be nearly halted. The Minneapolis/St. Paul project is so large and costly that funding of this project will demand the totality of several years funding. Further, 174 of the 190 communities which have now received funding commitments have been notified by the State that they can no longer honor the agreements.

Most small communities use septic systems and many States, utilizing their §208 funding, have discovered vast numbers of malfunctioning septic tanks. There is evidence of groundwater contamination, effluent ponding in neighborhood yards, and even direct discharge of sewage into streams

and roadside ditches. Yet, these communities are again being told that they must wait to solve their water quality problems. These communities are in a sense, being placed "on hold", one more time. And, with the dramatic cuts envisioned in the House Budget Resolution adopted just yesterday, states will be placed in the position of having to enforce Federal and State statutory requirements against small communities, knowing full well that these communities are unable to afford remedial activities and hence will have no means of compliance.

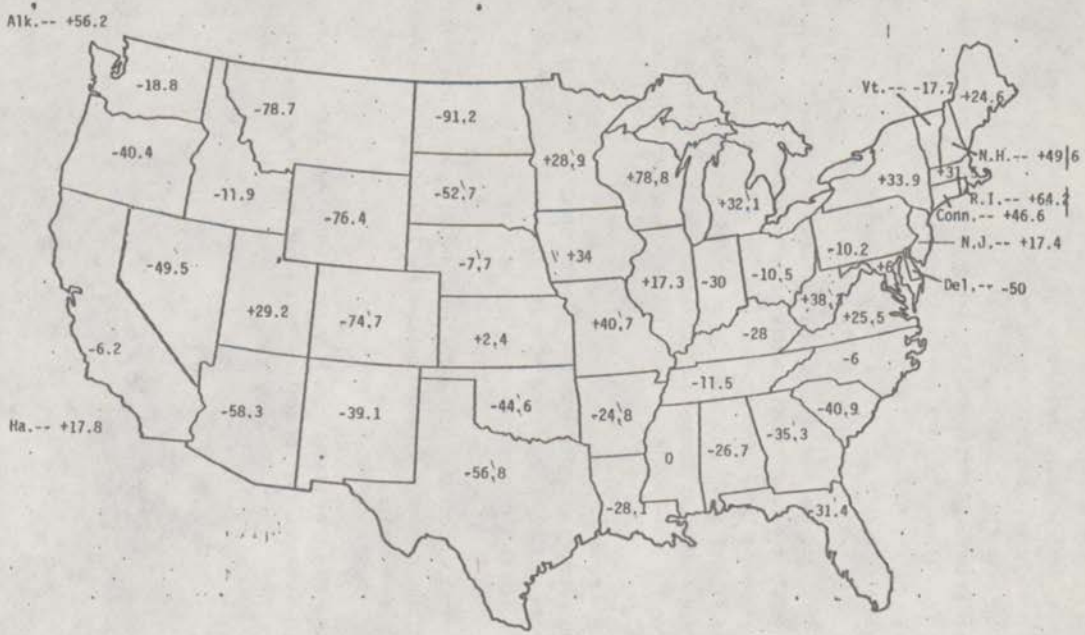
When both large and small projects pose significant water quality problems, as is frequently the case, the trade-offs between human health, water quality improvements and, in some cases, baseline politics, come into play. This situation is exacerbated by the Administration's Reform Package which emphasizes a water quality based program while calling for an urban industrial focus. In many states, these two approaches are incongruous.

A secondary plant discharging into the mainstem Missouri River may have little impact on the quality of the receiving waters because of the enormous pollutant loadings already contained in this massive water body.

This same plant, discharging into a small stream in an upper Iowa tributary may significantly improve the water quality and provide additional uses for the stream reaches.

ASIWPCA maintains that States must have the authority to make their own determinations on how best to achieve State water quality standards.

Association of State and Interstate Water Pollution Control Administrators



The Administration proposes to revise the allotment formula for construction grants. This map indicates the % change from the existing formula (as updated by the 1980 Needs survey and 1979 population figures) the Administration's proposal on limiting eligibilities and population coverage would have on State funding.

[CLERK'S NOTE.—The balance of ASIWPCA's testimony is on file with the Committee.]

Mr. WHITNEY. Thank you, Mr. Chairman. You have had a long day. Rather than summarize or go through those statements, we thought we might give you the opportunity, if you so desire, just to talk about the program a little bit. There are a number of points that we have in our statements that I think would come out in such a discussion. The impacts of zero appropriation for 1982 particularly, but also the Administration's reforms and other matters.

If I might begin by throwing out a statement or two about the possibility of a zero appropriation in 1982. We are concerned about that to say the least, not because we don't believe that it is the Congress prerogative to curtail the program at any point, but we don't see the logic, since it doesn't appear that it is either the Congress or the Administration's intent to stop the program in that they are calling for a $2.4 billion appropriation in future years, why you would want to zero it out in any given year in the interim.

Mr. SABO. Do you know what the assumption is, in what passed the House yesterday?

Mr. WHITNEY. No, I do not.

Ms. SAVAGE. Yes, it is zero.

Mr. WHITNEY. I misunderstood your question. It is a zero.

Ms. SAVAGE. A zero with no language that would allow—it would be a zero unless reforms were instituted and then the 2.4 would follow that. In the House the Gramm-Latta, there is no language like that. It was precluded.

Mr. SABO. So $2.4 billion is not in the budget authority any place in the budget resolution.

Ms. SAVAGE. No, and the Senate expects to pass that today.

Mr. SABO. The same?

Ms. SAVAGE. The Gramm-Latta amendment, yes, so it would be zero across the board.

Mr. WHITNEY. Obviously that has an impact in a couple of ways. One, many of the projects that are segmented projects and dependent on funding from year to year for various segments of a large project, we have a number of them in California, San Francisco, Los Angeles County, Los Angeles City, it would disrupt that, cost us more money with inflation and those kinds of things, but just as importantly, if there is no authorization, then there can't be any administrative money, 205(g) money as we call it.

Therefore, we are a fully delegated State and have about 150 personnel. We would have no funding to retain that personnel for that year's hiatus if the reforms are not passed.

Mr. SABO. I assume at this point even if "reforms," were passed, there still won't be any money unless some budget amendment is adopted.

Mr. WHITNEY. That is right. That is our understanding.

Ms. SAVAGE. There is some talk, Mr. Domenici apparently indicated a willingness to consider a budget waiver if in fact no budget authority is included in the concurrent budget resolution as we get to reconciliation, but at that point we are going to be into the end of summertime and early fall before the States would have any idea if they were going to have funding or what that level of

funding might be. I think the very strong feeling in the House is against budget waivers.

Mr. WHITNEY. We obviously would have no choice but to plan for the worst and hope for the best, and the worst is giving our program back to EPA if we can't sustain it for that year at the State level in our case.

Various States have various degrees of delegation of the program. We have already, as a matter of fact, had to give back part of our program due to insuffient funding because the 205(g) money was tied to the appropriation heretofore until last year, and then it was changed to the authorization, which was much better from our point of view. So we have got some problems with zeroing it out for one year.

If you want to curtail the program, sunset it, all of those things, we think, are reasonable policy choices that you should make, but we don't think it is very orderly to do it in this fashion.

Mr. TRAD. I am Ernest Trad with the New York State Department of Environmental Conservation. I am representing Commissioner Flacke, who couldn't make it today.

We believe the State recognized and, I think, applauds the efforts of the Administration to reduce Federal spending, but we recognize further that the water pollution control program is willing and I guess should take its fair share, but we feel with the rescissions proposed for fiscal years 1980 and 1981 fund, coupled with a zero appropriation for 1982 it is really devastating for New York.

The rescissions would cost us $177 million from currently appropriated funds which are already appropriated for projects. We had anticipated conservatively around $300 million for fiscal year 1982 with identified projects on our multiple year priority list that could use that money.

Mr. GREEN. What appropriations level would that assume?

Mr. TRAD. The $300 million?

Mr. GREEN. Yes.

Mr. TRAD. We assumed that the appropriation level would be somewhere in the neighborhood of between $3.4 billion and $3.7 billion. I believe the previous Administration was recommending $3.7 billion, and the current year's appropriation is $3.4 billion.

Mr. GREEN. At the $2.4 billion plus the new formula.

Mr. TRAD. That is $2.4 billion with the new formula? Is that the 13? We applaud that, too. I think it is optimistic. We are as you know from New York adversely impacted by the 1980 census. Part of the allocation formula reflects population, so as I say, our estimates are somewhat more conservative. There are several projects in New York State. We have been segmenting or phasing projects since 1973 because of the shortage of Federal funds and because of the impoundment, and many of those projects still require funds to complete.

We could end up with jeopardizing the completion of some of those projects leaving those that are fortunatly remaining with the service area to bear a high financial burden than would otherwise be the case if you could finish the projects as planned.

We have two large projects in New York which are actually under construction. There is the North River water pollution control plant. There is $400 million already constructed in the ground,

the foundation and the two interceptors. There is nearly $800 million required to complete that. That is under a Federal court order, and the Federal share for that project was anticipated over the next two years, 1982 and 1983, which is about $600 million.

There is another project under the same Federal court order in Red Hook, in the Blin Navy Yard. Step 3 grant for construction is anticipated to be made next February, which is nearly——

Mr. SABO. What do the Federal judges do?

Mr. TRAD. What do they do?

Mr. SABO. Yes.

Mr. TRAD. We will find out probably if we don't have the money. I don't know.

Mr. WHITNEY. Obviously there is not much that we can do to enforce. We are a party to a consent decree in Los Angeles, and we will be impacted by $66 million in violation of that consent decree. I think all bets are just off at that point. There is not much the judge can do except throw a few public officials in jail, I suppose, but I doubt he would do that, so I think our program just goes into a hiatus at that point.

Mr. TRAD. There are a couple of other large New York projects not under court order that are in very bad disrepair, and the city has given us an estimate on the Coney Island project and the Owls Head project of nearly $700 million more which they would like to proceed with construction on.

Of course, that is a lttle bit further ahead in the future. We are ready to be built now, reconstructed, rehabilitated, whatever needs to be done now, so the city's need in the 1980 needs survey together with the States, I think they have the largest need I guess EPA identified preliminarily of any metropolitan area in the country. So the needs are there. They are not vanishing just because we are changing the definition.

Mr. WHITNEY. From California's perspective, this program has worked awfully well. We have never left any money on the table in the entire time. We got caught in the rescission simply because we had two uncertainties facing us. The city of San Francisco, which we have been fighting with for about 12 years to bring them to a point where we could get going on their projects, we have proceeded on construction there, but we were holding back some allocations or I should say commitments of money so that we could fund part of that $2.9 billion project. It is a very large project there in San Francisco.

The other uncertainty was the happenings back here in Washington, quite frankly. We didn't know whether we would have to try to see our way through a short period of very little funding to try to keep our staff intact and our program intact. It turns out that it appears we may have to do that, but our saving back a little bit of that money to see us through turned out to work against us, because it was taken away.

We would have allocated that money in 1981. We have two years to allocate that money and we would have made that just as we have in all previous years. So we have never left any money on the table. We are taking out nearly three-quarters of a billion pounds of pollutants a year in California, and while you are hearing a lot of verbage about how this program isn't working because sewage

treatment plants aren't working that we built already out there, the vast majority of plants in California are working, and we have made a significant impact on the waters of California. So I think that from our point of view, there is very little you have to do to the act to make it effective.

Also, from our point of view, it appears that you are making these changes that you want to make in this program awfully complicated. You want to tinker with the eligibilities. You want to tinker with the priorities. You want to tinker with this, that and the other thing in there.

Why don't you just cut the money down and let us deal with it under the rules that we have now. Our priority list in California, and I presume many of the other States, if not all of them, are based on the highest need being public health, the second highest need being major water quality impacts. That is the system that politically we have to live with in our States. I don't think you need to worry that we are going to fund some turkey project way down on the list out of sequence with the public health and major water quality priorities. So if you want to cut the program to $2.4 billion or 1.8 or any other number, do it, but don't complicate it by injecting the Federal Government in the Beam of EPA usually, and getting involved in our priority system. That has been under 216 of the Act a prerogative of the States that we feel strongly ought to be in the State.

We think that that is consistent with the Administration's point of view, even though their reform package appears to be inconsistent quite frankly with that, so you know we have no problem with you cutting down the money. Once you get past a certain point, then we feel you ought to be informed as to what the impacts are.

For example, in California just to see our segmented projects through 1982, we need $140 million just to keep those projects on schedule. That happens to be only two projects, San Francisco and Los Angeles County. Our normal allotment for a year under the assumption of $2.4 billion is only $190 million, so we are talking about a problem that we began to solve a long time ago, and because we couldn't have multi-year funding in the program, we broke up the projects so that we could anticipate building them in segments.

Now if you go to a zero or some point below which we are impacting that, we are between a rock and a hard place, and I think the worst thing that will occur is the lack of credibility this program will have with local governments. California is the father of Proposition 13, and believe me, we see funds that used to be set aside for the maintenance and operations of sewer plants, all of a sudden we are finding that money now going to build streets and other social priorities in the communities. It is not being held aside for the operation and maintenance of sewage treatment plants. That is what they are collecting them for.

These local jurisdictions have a heck of a problem trying to come up with the bucks to match the 87½ percent that the Federal and State puts in in California. I know it varies from State to State.

San Francisco right now, on May 13, has a deadline to sign a contract for $150 million for an outfall. They are asking us, "Can you assure us of the funding for the southwest treatment plant

which that outfall is for, for future years?" We say, "Of course we can." They say,"We are not going to sign the contract for the outfall because we don't want this albatross. We don't want the outfall there and not be able to build the sewage treatment plant next year."

It is a dilemma for the locals and they come back to us and say,"Forget the whole thing. We are just not going to comply. When you guys get your act all together, come back and see us, we will be glad to talk to you then." The uncertainties of it are just devastating on the local jurisdictions.

Ms. SAVAGE. In your State, Mr. Sabo, you are hardest hit by some of the things that are going on. For example, in your State because of the St. Paul and Minneapolis projects, the State has already had to call 174 project managers out of the 190 and tell them they can't be funded now even at the $2.4 billion. There are all those local mayors out there that have been planning and fighting with their councils for the last five years that now just have to take a back seat to the entire situation even at $2.4 billion. We did include, as you saw, your specific State and you have your State's testimony. The association requested testimony from each State, and in the package that we have for you here, and I would like to just bring your attention to a couple of things that are in it——

Mr. SABO. Our Governor supports the President's program.

Ms. SAVAGE. I know that. I am very well aware of that. We had to work to get information in your State. First off I would like to call your attention to the fact that more than 40 States had a hand in putting together the Association's testimony. The Association is made up of all 50 States in the interstate commissions, so I feel that 40 States representative in the testimony is a fair representation.

The first chart is an examination of the program. What we try to point out in this chart is simply that the Construction Grants program, and we tend to be known as a Construction Grants association, is not the only part of the program, and we need to be dealing not only with the non-point source program, as was funded under 208, and both are now requested as zero, but this shows you how everything fits together, the planning and construction of municipal facilities and how you have to work your compliance schedules and work with your enforcement people to get clean water if that is ultimately our result and that was our assumption was a clean water act.

We show on page four the funding level, and it is frankly shown on the chart on page five why States are having such a difficult time managing this program. The yoyo effects of funding is impossible for a decent manager at the State level to predict or in fact manage. If it is zero, of course, it won't be a problem.

Mr. WHITNEY. If I might inject a thought there on this. People tend to think that the grants are the be-all and end-all of this program. It is important to note that even if you could zero out the funding for 1982, we still have MPDES permits to enforce out there with or without money, and our next step would simply be to put connection bans and moriatoriums on all these cities, and the

political heat from that is going to be very great. So our regulatory program will become supreme.

The stick will become more important than the carrot, as it were, without money.

Ms. SAVAGE. There is the map that follows, page nine, and pages seven and eight we show you that there are five States that will run out of 205(g) money, which is the management money, and the Administration's position is with the rescission and the zero funding that the States will not be affected in their management money by this rescission. We find that that is not the case. In fact, in California's case when the rescission was in fact enforced, their 205(g) money went back. Arizona was the same situation and Washington and Connecticut. So a number of the States will not have money to manage their staffs.

Subsequently, they will have to fire their staffs, and if the Government gets around to funding in 1983, there won't be a program out there, and I suspect that many States will not be of a mind to implement any program.

We tried to give you a map explaining at the end of page nine what the Administration's allotment formula would do graphically.

Now in New York's case they don't do too badly, but when you look at western Mississippi, there are only two States that make out even close to where they are at the present funding levels. Most of them are significantly impacted, interestingly, Nevada and Texas and Montana, so the sunbelt States don't do well at all, the larger growing States, and the Great Lake States and the New England States work out fairly well.

On page eight, the example is Minnesota, by the way. They did an estimate, and there was excellent testimony out there by a super group of people.

We would also like to explain a little bit what we heard the other witnesses talking about, the Garn amendment, for example, that passed last night in the appropriations subcommittee. That is a redistribution of the rescission package. It is still a $1.7 billion rescission, but they will direct it. It is $1 billion out of 1981, and then all the Talmadge-Nunn money, and if you are familiar with Talmadge-Nunn, it is something that was appropriated five or so years ago to 27 States. That money has not been spent in total. Mr. Garn's amendment, which did pass and it looks like it may well pass the Senate, full committee, basically takes $1 billion out of 1980, the remaining amount out of 1981 and leaves the Talmdage-Nunn money alone, returning something like $34 million to West Virginia and a certain number of States that still have that remaining money.

That is controversial within our Association, inasmuch as 27 States got it and some didn't, and what not, but the ultimate effect will be that the faster moving States will do better under this proposal than the slower moving States, because if you have 1980 money still in your allotment, it will probably be taken from you. So the distribution will be different.

Like I say, we are not going to take a position on it because it is controversial.

Mr. TRAD. Can I interject something on the Garn amendment? New York, for example, opposes that because we lost another $39

million, and totally because the largest part of our fiscal year 1980 and 1981 funds are going to be obligated in the last quarter of the federal fiscal year. There are three projects that require $222 million federal dollars by September 30 of this year. Two of them are North River and Red Hook. The third one is Rochester, New York, $270 million combined sewer pollution abatement project. Time is running against us. Money happens to be available to us today. Three months from today it shouldn't be available. Planning is almost impossible.

Mr. SABO. How many States improve and how many lost under the Garn amendment?

Mr. TRAD. We lost.

Ms. SAVAGE. Twenty-seven gain.

Mr. SABO. Well designed to have a majority.

Ms. SAVAGE. When you look at the committee a little closer it is like 13 or 14.

Mr. TRAD. It increases our losses under the rescissions though to $216 million in New York, and without the Garn amendment we had 136 projects in New York State that would just have to come to a halt with the rescissions at zero appropriation.

The same thing will happen that happened in 1972 and 1973. Those projects are going to have to be reevaluated, redesigned. If they are built they are going to be built at a higher cost or they are not going to be built at all, so it is a losing proposition.

Ms. SAVAGE. I want to point out one thing and this is more procedural. Apparently under the rules of the budget reconciliation, the Senate is calling for deauthorization of the Clean Water Act authorization funding level for fiscal year 1982. They say that that is procedural, that it has to be there because if we are going to zero out the program the budget says so, then we have to deauthorize the act, change the funding level within the Clean Water Act to a zero.

The net effect of that is a little on the frightening side since we are trying to figure out how it is all going to fit together, but it does certainly affect 205(g) inasmuch as 205 (g) is based on two percent of the authorized level. If they deauthorize the authorized level a zero is a zero is a zero no matter what appropriations do.

Mr. SABO. My understanding is the amendment adopted yesterday follows that same procedure.

Ms. SAVAGE. Absolutely. To follow on to that the authorizing committees will take that number budgeted at zero and deauthorize the number of $5 billion already existing in the law in fiscal 1982. The procedures seem to be getting so complicated that even if the President says, "These are great reforms, I love them, fund the program at $5 billion," procedures may not allow us to do it, because it is getting so complicated and somewhat out of hand.

On the water program, we have given you some suggestions on reforms, on how we think it ought to go. Also included in your package are legislative positions and the NGA, the Governors' association preliminary recommendations on the program, those having been put together by a number of my members who also serve on the NGA representing their governors. We are very consistent in our positions.

If we can help you in any way, to tell you what the States will be under the various funding scenarios, we will be available for any help that you might need. It is a complicated process.

Mr. SABO. Mr. Green, any questions?

Mr. GREEN. No, thank you.

Mr. SABO. Thank you for being here and explaining the chaos that the Federal government is going to experience.

Ms. SAVAGE. It changes daily.

Mr. SABO. The Committee has received written testimony from a Member of Congress and a number of public witnesses, which we will insert in the record at this point.

The committee is adjourned.

[The information follows:]

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF HON. JAMES J. FLORIO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

I appreciate the opportunity to submit a statement for the record regarding the fiscal year 1982 appropriation for superfund.

In a year of fiscal austerity, I am asking you to appropriate the full 250 million dollars that was originally planned for fiscal year 1982.

There are unique reasons why this appropriation should not be subject to the 20-percent cut requested by the Reagan Administration.

The Superfund is financed largely by a tax on organic chemicals, certain inorganics, and oil, together with a small contribution from general revenues. The amount of the tax was set to produce a specific amount of revenue over each of the five years authorized by the Act.

In 1982 the tax will raise an estimated 298 million dollars. The present administration has requested an appropriation of 200 million dollars, 172 million of which is to come from taxes, and 28 million from general revenues.

This means that for fiscal 1982 alone there will be an accumulated surplus of 126 million dollars in the fund, in addition to an estimated 63 million dollar surplus from fiscal 1981.

These monies are placed in a dedicated trust fund which can be used for no other purposes than those permitted in the Act. There is no reason to accumulate a surplus when there are so many state and communities around the country who desperately require these funds to help clean-up hazardous waste sites, prevent further contamination of groundwater supplies, and respond to chemical spills. As of March 31, 1981 the Environmental Protection Agency had 9,194 potential hazardous waste sites on its inventory of sites which need further investigation or remedial action.

Cutting the amount appropriated from the Superfund does not save the taxpayer's money. It only serves to build up a large surplus in the trust fund. This is a result which neither the authors of the law nor the industry which is paying the tax expected.

All concerned parties intended that the tax money be used as quickly as possible to undertake response, clean-up and remedial actions. Our past experience at such places as Love Canal has taught us that the longer we wait, the more expensive the remedy becomes. In the long run, money will be saved, and the public health and environment better protected, by fully using the money in the trust fund as it becomes available.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF PETER KARALEKAS, MEMBER, AMERICAN WATER WORKS ASSOCIATION

DEAR EDDIE: I'm writing to call your attention to the proposal that a portion of the EPA drinking water research budget be earmarked by the Congress for the American Water Works Association Research Foundation. In my opinion, this idea has substantial merit and I would appreciate your giving it some consideration.

As you know, the EPA budget is slated for an increase in fiscal year 1982 expressly for drinking water research. The Foundation is seeking part of those funds to launch a research program that would involve the utilities in projects that

serve actual needs. There are several advantages to this approach. In the first place, it would ensure industry participation in the cost of the projects. The staff estimates that two million dollars of federal funds would actually buy about four million dollars of research if the utilities are involved. That's a good buy for the taxpayer. In addition, industry people know what their problems are and are better equipped than the federal government to develop practical solutions. Some federal seed money would be an incentive to the utilities to become more active in research and development.

I hope you will agree that this proposal makes good sense from the viewpoint of both economics and technology. You have my thanks for your attention and consideration.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF THE CALIFORNIA SOLID WASTE MANAGEMENT BOARD

STATE OF CALIFORNIA—THE RESOURCES AGENCY EDMUND G. BROWN JR., Governor

STATE SOLID WASTE MANAGEMENT BOARD
1020 NINTH STREET, SUITE 300
SACRAMENTO, CALIFORNIA 95814

EFFECT OF PROPOSED ELIMINATION OF FUNDS
FROM SUBTITLE D, SOLID WASTE DISPOSAL
ACT AMENDMENTS OF 1980

The California Solid Waste Management Board is opposed to the concept of cessation of funds in FY 82 for Subtitle D, Solid Waste Disposal Act Amendments of 1980. Our reasons are summarized as follows:

Violation of 42 USC 6916(d). The reauthorization of RCRA was preceded by extensive scrutiny of the program as implemented through mid 1980. The resultant Act was the product of thorough and broadly based compromise among industry, government and the public. Subtitle D was thus supported partly in recognition of States' needs, and partly in consideration of national priorities, such as sound energy and materials use. Congressional findings in this regard are stated at 42 USC 6941. To eliminate the federal solid waste management program at this time would unwisely negate the consensus achieved by Congress last October, when the act was reauthorized. That consensus recognized the need to appropriate funds for an integrated program to manage both hazardous and non hazardous wastes. That consensus created a multiple waste management program of practical utility.

Congress saw fit to link Subtitle D appropriations to overall RCRA appropriations with a percentage not to exceed 25%. The proposal to eliminate Subtitle D funding, therefore, should be put before the respective House and Senate authorizing Committees. The proposal should be considered as an amendment to the 1980 RCRA reauthorization, not as amendment to the budget, so that its merit can be tested in the specific forum of waste management issues and not in the general forum of budget reductions. Otherwise, funds should be appropriated to implement the Solid Waste Disposal Act Amendments of 1980, as Congress intended.

Non-Hazardous Waste Problems are Significant

Not every state is plagued with extremely serious toxic waste problems, yet each state, including those which do have toxic waste problems of great magnitude, is faced with a garbage crisis of serious dimensions. California, for example, annually discards some 46 million tons of non-hazardous wastes at a cost of $600 million dollars a year. This amount of discarded material is recoverable; it represents the annual equivalent of 70 million barrels of oil in our state alone. Litter clean-up boosts the costs to Californians to $700 million a year. Compounding this problem is the fact that a fourth of California's landfills will close within 10 years. Replacement facilities must be found, but their costs are substantial and formidable barriers of public opposition stand in the way. Another aspect of the non-hazardous waste problem is the threat to the environment from improperly disposed wastes. Gas migration, groundwater contamination, public safety and public health are involved.

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California has been using the Subtitle D program to face these problems. This has been a learning experience for us in that, although our State's program predated the federal one, we actually have a long way to go before the problems will be solved. Our RCRA planning project is bringing unity and consistency to our multiple local solid waste programs. Our permit program has been enhanced, we have started a data base, and the dump inventory, now 1/3 complete, has resulted in significant compliance with disposal standards. To stop these programs now would be tantamount to wasting the funds already invested, because State funding for these purposes is dependent upon federal leadership.

The Proposed Program Elimination is Premature

EPA delayed Subtitle D by withholding funds and deferring its rulemaking during the Carter Administration. It proposed, however, a gradual, orderly transition of program management from the federal level to the States, over a 5-year period of which 2 years are left. The Solid Waste Disposal Act Amendments of 1980 validated that strategy by its reauthorization of Subtitle D.

Our entire program has been oriented to the 5-year transition. We are committed to development of program self-sufficiency within the previously established limits. To terminate the program now will result in unmet needs because there is no way our state and local budget processes can be compelled to assume the full burden at this time. California, after all, is well-known for its severe tax reductions. These are now being implemented such that solid waste issues are of lesser priority than other public needs like police, fire, education and health care. Since we cannot redirect scarce funds on short notice, we must consider terminating the solid waste program or seek new revenue sources. The latter are generally thought of in terms of user fees. Because Californians regard fee hikes as surrogate taxes, such additional revenues are extremely unpopular and certainly not likely to win support on short notice.

Eliminating Subtitle D Means Eliminating the Potential to De-regulate Certain Rules While Still Meeting Congressional Intent

Industry has long sought a "degree of hazard" approach to Subtitle C, for all wastes do not have the same potential to harm people or the environment. At the same time, though, industry has conceded that the public has a good point in desiring some level of regulation. We have found the waste management industry to be highly receptive to rules that make sense.

Subtitle D is a less stringent regulatory program than Subtitle C, quite adequate for regulation of certain kinds of wastes. Energy production wastes, mining wastes, sludges and so forth, may be better served by Subtitle D than Subtitle C. Indeed, the amended Act recognizes this possibility by de-regulating these wastes for the time being. We believe it is government's duty to provide some kind of assurances to the generators and disposers of such wastes that they will not drift about in a twilight zone of regulatory and legal uncertainty. Furthermore, we are extremely concerned about the implications of the exclusion of hazardous wastes in "small" quantities from the Subtitle C program. Subtitle D is the only control vehicle for these excluded hazardous wastes at present. It may make sense, administratively, to delete them from Subtitle C, but it is certainly unwise to absolve them from all controls. Eliminating Subtitle D would, however, have that effect.

Vulnerability to Litigation

Thus far, through Subtitle D, our State has imposed restrictions on many disposal facilities. Most facility owners and operators have cooperated with our program and spent money cleaning up their discrepancies. If we fail to impose these rules equally on all affected parties, we run a real risk of litigation by virture of arbitrary application of regulations. We believe California's waste management industry deserves fair treatment: either everyone plays by the rules or no one does. Since many of our State's facilities have complied, it would be both unfair and unwise to end Subtitle D before completing even half of the facility inventory.

Concurrently, the public has come to expect our Board to apply the rules. We cannot, in good conscience or sound financial judgment, say, "It really doesn't matter anymore." Californians demand the abatement of open dumps, and may apply the citizen suit provision of the Act to ensure the end of open dumping. Failure to follow through on the dump inventory and regulatory compliance is an open invitation to a citizen suit against the State and EPA, and it places the affected facility operator in grave jeopardy. The amount of money lost to citizen suits could easily dwarf the budget "savings" from the elimination of Subtitle D.

Conclusion

Elimination of Subtitle D funds at this time is unsound for a number of reasons. We therefore urge the full implementation of 42 USC 6916(d), which ties Subtitle D on a formula basis to the rest of the Solid Waste Disposal Act Amendments of 1980.

Your attention to our point of view is greatly appreciated. We would be pleased to supply further information if so requested.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF THE AMERICAN CONSULTING ENGINEERS COUNCIL

STATEMENT TO THE

HUD & INDEPENDENT AGENCIES APPROPRIATIONS SUBCOMMITTEE

The American Consulting Engineers Council is an organization of approximately 3700 private engineering firms engaged in a wide range of disciplines to provide professional engineering services to private clients, local governments, states and federal agencies. ACEC member firms provide engineering services directly to many of the agencies under the jurisdiction of this subcommittee, as well as to grantees under assistance programs of those agencies. Such engineering services range from the planning and design of Veterans' Administration hospitals, performance of flood prevention studies and fire safety building evaluations for the Federal Emergency Management Administration, the planning and design of community facilities under HUD Community Development Block Grants, and the planning, design and construction management of wastewater treatment systems under the EPA Construction Grants Program.

For many years, ACEC, and its member firms, have been concerned about the waste and efficiency, overlapping regulations and resulting delays which occur in virtually all direct federal procurment and federal grant assistance programs. This is true particularly of many programs under the jurisdiction of the HUD & Independent Agencies Appropriations Subcommittee.

ACEC therefore has enthusiastically supported the efforts of President Reagan and his Administration to reduce waste and inefficiency in federal programs, to cut to more realistic levels federal expenditures as a means of curbing national inflation and to deregulate federal requirements on state and local governments, particularly in the Administration of federal assistance programs to state and local governments to meet federal mandates and requirements.

In this context, we would like to offer the following comments on the fiscal year 1982 appropriation request by the Administration as it pertains to the programs under the jurisdiction of the HUD & Independent Agencies Subcommittee.

At its annual meeting in Las Vegas, Nevada on May 6, 1981, the American Consulting Engineers Council unanimously passed a resolution supporting the Administration's Economic Recovery Plan including federal spending reductions, personal and corporate tax relief, grant and regulatory reform and increased reliance on private enterprise. The resolution also supports Congressional and Adminsitration efforts to foster further economy, efficiency, and integrity in the federal government and offers to actively assist the Administration and Congress in achieving these objectives over the coming months. As such, the American Consulting Engineers Council supports the budget requests submitted by the Administration and urges the Subcommittee on HUD & Independent Agencies to approve the funding levels for Fiscal Year 1982 as requested by the Administration.

More particularly, ACEC would like to comment on the Appropriation request for the Environmental Protection Agency for Fiscal Year 1982 as it realtes to the Construction Grants Wastewater Treatment Programs. ACEC supports the Administration's intention to fund this program at a reduced level of $2.4 billion for the next five years beginning in FY'82. ACEC also supports the efforts of the Administration to reform the Construction Grants Program by amendment of the Clean Water Act this year.

It is over the issue of the amendment of the Clean Water Act, however, that ACEC point of view differs somewhat from the Administration's.

It has been ACEC's consistent position, since 1977 Amendments to the Clean Water Act were first introduced, that what was necessary to achieve the objectives of the Act, i.e. to clean up the nation's waters and do so with a minimum of red-tape and paperwork, was to simplify the Act. The 1977 Amendments and the regulations developed by EPA to implement those Amendments made the Act far more complicated. The result has been to stretch out the process of planning, design and construction of municipal wastewater treatment plants to their current average of eight to ten years. The increased complexity also produced an increase in federal, as well as state and local, cost to achieve the same objectives.

The basic philosophy stated by President Reagan of defederalizing grant assistance programs, deregulating such programs and cutting federal expenditures are all objectives which ACEC can wholeheartedly support. However, the proposed "reforms" which have been imposed as a condition for the $2.4 billion appropriation in FY'82 for the Construction Grants Program are in consistent with those general objectives, in that they do not go far enough. The "reform" merely cuts federal eligibility and gives the states less flexibility to carry out the requirements mandated in the Act with fewer resources. As such they are inconsistent with the overall intention of the Administration's basic objectives. Rather than deregulating, they, in fact, increase federal requirements by restricting federal funds to specific water pollution control activities, treatment plants and the interceptors associated with them.

In 1980, ACEC at its semi-annual meeting in Indianapolis, Indiana, passed a resolution urging the reauthorization of the Clean Water Act and suggesting that Congress and the Administration take a serious look at alternative means of federal assistance, such as block grants or loans, revision of the definition of secondary treatment to provide more flexibility to respond to local water quality conditions and increased stability and predictability in the program. This would permit states and localities to more consistently plan wastewater treatment priorities and thereby reduce the completion times of local treatment systems.

Fundamental to this resolution was the concept that funding for the Construction Grants Program must continue on a stable and consistent basis no matter what the level.

ACEC believes the Administration's "reform" package to cut federal expenditures for the Construction Grants Program misplaces the reductions and as a result distorts the ability of states and local governments to flexibly respond to wastewater treatment conditions. In a further resolution passed by the ACEC Executive Committee passed in May, 1981, ACEC urged that the Congress consider elimination of Step I, Planning, and Step II, Design, from federal eligibility, reduce the federal share over a period of three years to fifty percent, and make a fundamental change in the allotment formula by awarding block grants to the states. The states could then determine the priority in water quality results of the projects to be funded based on the most reasonable technology.

ACEC believes that these reforms when carefully examined will achieve the objectives postulated by the Administration, i.e. defederalization, deregulation and reduction of federal expenditures, without imposing the additional requirements and the additional complexity inherent in reducing federal eligibility for specific kinds of wastewater treatment projects. The pollution control problems in all parts of the country are not the same. Eliminating federal eligibility for combined sewer overflows, collector sewers, multi-purpose projects, and other treatment alternatives eliminates the flexibility of states and localities to plan, design and

respond to the pollution problems most specific to their own local situation. However, the states must be accountable for producing specific precommitted treatment results consistent with their five-year priority plan as a condition for receiving such block grants.

ACEC therefore urges the Subcommittee on HUD & Independent Agencies Appropriations to appropriate $2.4 billion for FY'82 consistent with the President's budget request and to indicate that such appropriation is contingent on the passage of appropriate remedial legislation, not necessarily limited to the reforms requested by the Administration.

ACEC appreciates the opportunity to submit this statement and offers its assistance to the Subcommittee on HUD & Independent Agencies Appropriations in developing future policy relating to the funding of EPA and the other agencies within its jurisdiction.

Department of Housing and Urban Development

STATEMENT OF HARRY EARLY, GOVERNOR OF THE PUEBLO OF LAGUNA

TESTIMONY OF HARRY EARLY BEFORE
THE SUBCOMMITTEE ON HUD INDEPENDENT AGENCIES OF THE
HOUSE COMMITTEE ON APPROPRIATIONS
REGARDING THE BUDGET FOR INDIAN HOUSING PROGRAMS

May 18, 1981

Mr. Chairman and Members of the Committee, my name is Harry Early, and I am Governor of the Pueblo of Laguna.

I wish to express my gratitude for this opportunity to appear before you to discuss the budget for Indian housing programs in Fiscal Year 1982. Because the Reagan administration has proposed the complete elimination of all Indian housing program funds for FY 1982, these hearings concern not merely the annual budget, but the future of the entire program. In a few moments I will discuss at some length the direction I believe the Indian housing program should take in the 1980's. But first let me present for you a brief sketch of the status of Indian housing as of today.

Federally funded Indian housing is of great importance to many Indian tribes, including the Pueblo of Laguna. The Bureau of Indian Affairs has identified some 59,600 substandard units currently occupied in Indian country. Census Bureau statistics indicate that 49 percent of all Indians live in substandard housing -- that is, housing which lacks indoor plumbing or is seriously deterioriated structurally. These figures are in fact gross underestimates of the need for better housing on the reservation because they do not include those Indian families who live near a reservation and who likely would return to the reservation if decent housing were available.

All of us readily can appreciate that adequate housing is a basic necessity of life for a family. But what we also must understand is that adequate housing is an even more critical necessity for the life of the Indian reservation. The future of Indian tribes rests with the growing number of college-educated young people who wish to return to reservations to help their people. We cannot realistically expect these young people to return to -- or, more importantly, to remain on -- the reservation if adequate living conditions are not available. Without the Indian housing program, the prognosis for the Indian reservation is very bleak.

The proposed elimination of the Indian housing program is based on a widely recognized need to curtail federal spending. Quite clearly, the federal budget can be brought under control only if everyone is willing to make some sacrifices, but the sacrifices should be shared equally. Indian programs have been slated to absorb 3 percent of the national budget cut, while accounting for only .4 percent of the total federal budget. Overall, the proposed budget cuts would eliminate 34 percent of Indian program funding. Indians are willing to pay their fair share of the price for balancing the budget, but the imposition of such a severe and disproportionate burden on the American Indian is neither fair nor justified.

The Indian housing program in particular has been targeted for extinction because some 22,000 units currently are backlogged in an administrative preconstruction pipeline. The great majority of these units, however, -- some 16,000 of the units -- were reserved less than sixteen months ago and realistically could not be expected to be under construction as of this time. In fact, the Indian housing program fares well when compared with the low income housing program. For example, 67 percent of all Indian housing program units reserved more than 16 months ago have reached the start of construction, while only 49 percent of all low income housing units reserved during the same period have commenced construction. Eliminating the more efficient program is hardly an effective approach to balancing the federal budget.

In any event, the "pipeline" argument is largely a red herring. Housing construction by its nature always requires substantial lead time before production. At any given moment, an active housing program will always have a significant number of units at all stages of development, including the administrative process.

Furthermore, housing programs are not initiated or terminated by the simple opening or closing of a valve. Without a steady and uninterrupted flow of housing funds, the pipeline and thus the program will evaporate. The funding hiatus proposed by the Reagan administration is not the mere elimination of a surplus, after which a moderated flow of funds can be reestablished easily. Rather, the termination of funds -- even for a year -- is a wholesale dismantling of the program which will necessitate months or years to rebuild.

The Indian housing program has been justifiably criticized over the years for a number of deficiencies centered largely on mismanagement and inefficiency. Much of this criticism would find ready acceptance on Indian reservations. Yet, none of this criticism assumes, even for a moment, that the crying need for shelter which prompted the creation of the Indian housing program has been satisfied. The criticisms do suggest that better approaches to the problem should be tried. I would like to spend the balance of my time discussing the ways in which a creative restructuring of the Indian housing program could solve or ameliorate many of the legitimate criticisms of the program, while continuing to serve a very real need.

One approach can be dismissed out of hand. The commonly assumed alternative to existing federal economic programs is a resort to the free market. Those who understand the conditions on an Indian reservation will readily understand that laissez-faire economics alone will never produce adequate housing on the reservation. Most Indian reservations have had a cash economy for less than a century. Indians on a reservation have minimal or no capital to invest and traditionally have great difficulty securing credit.

Indian families generally have very little disposable income with which to attract private enterprise. The reservations also lack transportation and other facilities necessary to attract outside investment. Indian reservations realistically cannot be expected in the next few years to develop or attract a private sector capable of constructing millions of dollars worth of housing.

We must assume that housing on Indian reservations can be built only with a significant degree of federal involvement. Yet, we can and should restructure the nature of federal involvement in a direction which simplifies the administration of the Indian housing program, eliminates unnecessary regulation, and responds to the diverse needs of different tribes.

Because tribes have differing needs and administrative capacities, I propose the use of four different development methods for Indian housing.

-- For tribes with a large need and substantial administrative capacity, I propose a comprehensive block grant approach.

-- For tribes with a large need, but only limited administrative capacity, I propose a "transition approach" which would allow them gradually to move to the block grant approach.

-- For smaller tribes with relatively small needs and some capacity, I propose an "umbrella agency approach."

-- Finally, for very small tribes with essentially no administrative capacity, I propose a direct federal development approach.

Now let me discuss each of these in some detail. Tribes whose previous experience with HUD housing programs has been successful and whose population size and qualifications demonstrate superior administrative capacity would be invited immediately, i.e., in Fiscal Year 1982, to participate in the Comprehensive Indian Housing Program. Under this development approach, tribes could use annual or perhaps biennual housing block grants as a tribal housing finance resource as well as a construction funding resource. Tribes would assume full control and responsibility for the provision of a wide variety of housing assistance to Tribal members under the provisions of a new set of eligible housing activities. The federal government's role would be substantially diminished.

Applicants invited to participate in the Comprehensive Indian Housing Program would perform the following kinds of housing assistance activities:

-- 100 percent housing construction grants to very low income families;

-- partial housing construction grants and loans;

-- housing maintenance and repair grants and loans;

-- interest and other subsidies;

-- investment in publicly secured bonds and notes, the yield and principal of which would be used to provide eligible housing assistance;

-- provision of loan guarantees or other security for invididual home loans;

-- establishment of a revolving fund for housing payments;

-- direct and indirect housing planning, design, inspection and administrative costs;

-- payment of wages, etc., for tribal force account work crews involved in building or rehabilitating tribal housing;

-- provision of on- and off-site infrastructure development as determined by the tribe with HUD's concurrence;

-- acquisition and resale of HUD-assisted and other housing units on the reservation or underwriting the costs of acquisition by individual families;

-- establishment of tribal minimum property standards that would not exceed existing minimum property standards, but which would require units built according to acceptable construction performance standards, location near a potable water supply, adequate sanitary sewage treatment, energy efficiency, interior wiring even where power is not currently available, and construction on soil which will accept the weight and effluent of the unit; and

-- hiring of contractors for building or rehabilitating housing.

The Comprehensive Indian Housing Program obviously rests on different premises from the existing Indian housing program. A key change is the recognition that the notion of mutual help families' "buying" their homes and repaying the government for the construction costs does not occur as a practical matter. Housing payments most often go entirely toward the operating costs of Indian Housing Authorities and the federal government is never repaid. We should acknowledge this reality and finance the Indian housing program as a direct grant program.

The Comprehensive Indian Housing Program also assumes greater autonomy for tribes to determine the best ways to serve the needs on each reservation, and less involvement by the federal government in detailed decision making. Yet, the tribes would be subject to regulation. Distribution of funds among categories of need would have to be equitable and in accordance with a tribal strategy which takes into consideration all categories of need. Frequent inspections by a qualified independent inspector of all construction and rehabilitation would be required. Housing payments would be related to income and construction or rehabilitation cost. Excessive construction costs would be subject either to recapture or deduction from subsequent grants. HUD would set a total average per unit construction cost within which tribes would operation. The choice of nonstructural amenities, however, would be left to the tribes or the individual families rather than being regulated from Washington. Finally, tribes would be required to establish housing agencies with sufficient management capabilities to ensure the timely completion and occupancy of HUD-assisted units.

Tribes with large housing needs but without the administrative capacity to participate in the Comprehensive Indian Housing Program would be placed in a three- to five-year transition period. During this period, they would participate in the current program, perhaps at reduced funding levels. In the meantime, these tribes would assume greater control over the development of small scale projects. The Annual Contributions Contract would be with the tribes rather than the Indian Housing Authorities. Tribes would be required to establish a housing agency or staff, which might or might not include the Indian Housing Authority Board. The federal government's only concern would be that a competent tribal housing delivery system existed, regardless of the form. Tribes could petition HUD field offices for relief from existing program requirements, such as the Minimum Property Standards, Davis-Bacon, and Indian Preference.

Smaller tribes with relatively small housing needs (e.g., 100 units) should not be required to establish a continuing housing development capacity or to go through the elaborate transition process outlined above. Rather, these tribes shcould establish umbrella or joint housing agencies with other tribes of a similar size. Individual tribes would sign contracts with the joint housing agency for the provision of specific services to the tribe. Individual tribes, however, would be legally and administratively responsible for running their housing programs. They would control the disbursement of funds to the joint agency upon receipt of billings for work accomplished. Tribes could advance modest sums to the joint agency to cover development start-up costs. As with the "Transition" method, tribes which participate in joint agencies could petition HUD field offices for relief from existing program requirements such as the minimum property standards and Davis-Bacon.

Finally, 100 to 150 tribes are estimated to be so small and so isolated that none of the above methods, including the formation of joint housing agencies, is appropriate. These tribes generally need only 25 to 50 units at most, and cannot support an elaborate administrative structure. I propose that HUD provide the needed units to these tribes directly. Under this approach, HUD would consult with the Tribal Council to determine the number of units needed, their location, and the desired design. HUD staff would be responsible for designing the units, either through in-house capability or an outside contractor. HUD also would contract for construction and supervise inspection and acceptance of the work. The Tribal Council would act on behalf of individual beneficiaries in the final acceptance and occupancy of the units.

Regardless of the development method used, Indian housing projects require continuing management and maintenance services. I propose that management and maintenance funding be consolidated into management block grants. Funds would be allocated annually based on a variety of factors such as the number and type of occupied housing units, the area's average utility costs, and the amount paid by the housing recipients. The funds could be distributed to the tribes as part of their general revenue sharing allocation, through another entitlement program such as the consolidated BIA program, or through a separate annual management block grant.

The essence of this proposal is to recast the role of the federal government in the Indian housing program. Where tribes have the necessary administrative capability, or can develop the necessary capability, a large portion of the management decisions now split among three agencies -- the BIA, HUD and IHS -- would be transferred to the individual tribes, eliminating much unnecessary complexity in the administration of Indian housing. Furthermore, the overly restrictive minimum property standards and other federal regulations, many of which are inappropriate to the Indian reservation or dictate housing amenities which are inconsistent with Indian culture, would be eliminated or subject to waiver in appropriate cases. Yet, the federal government would retain a role in assuring the quality of housing construction. The federal government also would retain a much more comprehensive role in administering Indian housing programs for smaller tribes without the necessary administrative capacity. The proposed program thus provides greater flexibility to meet local needs, eliminates much unnecessary administrative complexity and regulation, and carefully targets federal involvement to those areas where it is most needed.

The proposal I have laid before you obviously is a substantial restructuring of the Indian housing program. Unfortunately, limited time prevents me from presenting more details concerning the administration or benefits of my proposal. Needless to say, I stand ready at all times to consult further with this Subcommittee or other appropriate federal agencies in order to build an Indian housing program which will serve the needs of the tribes while eliminating

many of the problems which have subjected the program to justifiable criticism.

Let me assure you, as one who knows about Indian housing first hand, that the housing conditions on many reservations are deplorable. If these conditions are to be improved, we must have continued federal involvement for many years to come. Many of the calls for reform of the Indian housing program are legitimate, but we should respond to them critically, constructively, and creatively. I urge this Subcommittee to reject the Reagan administration's call for the wholesale elimination of Indian housing programs and to appropriate the funds necessary to finance the proposal I have outlined for you today.

Thank you very much.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

STATEMENT OF HARVEY MOSES, SR., EXECUTIVE DIRECTOR, COLVILLE HOUSING AUTHORITY

Colville Confederated Tribes

P. O. Box 150 - Nespelem, Wash. 99155 (509) 634-4591

April 22, 1981

The Honorable Edward P. Boland, Chairman
House Appropriations Subcommittee on HUD
and Independent Agencies
2426 Rayburn House Office Building
Washington, D.C. 20515

Re: Indian Housing Program

Dear Mr. Boland:

We have learned that the House Appropriations Subcommittee on HUD and Independent Agencies is considering the transfer of approximately one-half of HUD's 1981 Indian Program budget authority to the Comprehensive Modernization Program. The Subcommittee's deliberations undoubtedly have been affected greatly by the Administration's current efforts to eliminate totally the Indian Housing Program. Due to the misleading cost comparisons of Indian housing to general public housing offered by the Administration, the continuing need for public housing on Indian reservations, the dire lack of alternatives available to tribes and Indian people, and the evident success of Indian Housing authorities in attaining cost-efficient management capability, we respectfully urge that your Subcommittee fully restore HUD's 1981 Indian Program budget authority and that the Subcommittee restore HUD's 1982 Indian Program budget authority to the levels requested by the previous Administration.

The Administration's Cost Comparisons of General Public Housing to Indian Housing Are Unfair and Misleading

In its effort to eliminate totally the Indian Housing Program, the Administration has presented to various Congressional committees comparisons of the cost of the Indian Housing Program to non-Indian public housing intended to show that the Indian Program has not been cost-effective. In fact, the Indian Housing Program has proven to be cost-effective and we invite fair comparison with the costs of non-Indian public housing. However, the Administration's arguments are misleading and we strongly object

to the specific comparisons and conclusions which the Administration has tendered.

The Administration asserts that the unit cost of Indian housing far exceeds the unit cost of non-Indian public housing. We ask that the Committee consider the following:

1. The Administration has stated that one home under the Indian Housing Program ultimately costs the taxpayers approximately $175,000. However, we understand that this figure was obtained by a statistical process involving amortization over a 25 year period, and that no similar figure was prepared for public housing generally, so that a fair comparison is impossible.

2. A fair comparison of Indian housing to public housing must not neglect that public housing is mostly urban housing in high-density projects. These projects have economies of scale and location which are impossible in Indian country.

3. A unit cost comparison with public housing is unfair unless the Committee recognizes that much public housing consists of one-bedroom elderly units, whereas Indian housing is predominantly for families, and a substantial portion of Indian housing units have from four to five bedrooms. (Approximately 75 percent of the homes constructed by the Colville Housing Authority have three bedrooms or more.) Obviously, the unit cost will be necessarily greater for the Indian Housing Program, although the cost per occupant may not be.

4. We understand that the Administration supplied cost figures for public housing which did not include the amount of federal operating subsidies, whereas the figures for Indian housing included the amount of such federal outlays.

5. The Administration cost figures for Indian housing included Alaska Indian housing costs. The Alaska program is extremely unusual in its short construction season and in the stupendously high costs of labor and supplies. The inclusion of Alaska Indian housing costs in the Indian housing figures is unfair and misleading without consideration of these factors, because the pro-

portion of Indian housing to public housing in Alaska is high due to the demography of that region.

6. The Administration has asserted that the Indian Housing Program is behind schedule on some 22,000 units. According to our information, the Administration actually has identified units within the normal pipeline process and labeled those as being behind schedule. The intended conclusion, that the Indian Housing Programs is not cost-beneficial, is obviously not warranted by this mischaracterization.

7. Finally, most Indian reservations are remote from contractors, skilled labor pools, and sources of supply. The Colville Indian Reservation is 120 miles from Spokane, Washington, from where contractors, subcontractors and supplies must be brought to carry out construction. The Colville Reservation encompasses more than one million acres of land in which there are four population centers (Nespelem, Inchelium, Keller and East Omak). Construction at Keller or Inchelium requires use of Nespelem as a distribution point from which supplies and workers must travel across mountain passes or by ferry across Lake Roosevelt.

The Elimination of IHS Sanitation Facility Money Would Actually Waste Federal Funds

The Administration has also eliminated the request for Indian Health Service sanitation facility monies for this year. Under current practice, IHS does not contribute to Indian housing projects until the houses are already under construction. As a result, IHS requests its funding for Indian housing projects anywhere from 18 months to three years later than HUD's requests for budget authority for the same housing. If the Administration's plans concerning IHS sanitation facility money are carried out, it would be impossible to construct some 13,000 units for which HUD already has budget authority for 1978 to the present. To the extent that this would affect work already under way, the proposed elimination is hardly cost-beneficial.

The Need Continues

The continuing need for new federally funded housing on Indian reservations should be obvious and should not require documentation. However, we note that a 1980 survey concerning the

Colville Indian Reservation projected a need of 1,000 additional units by 1985, based on projected increases in reservation employment and the clear trend of young, smaller families moving back to the reservation. Even if such a family could afford the enormous down payments and mortgage payments required in the private market, it would be hard pressed to obtain financing to build on Indian trust land, due to the near-impossibility of pledging trust land as collateral. The Colville Housing Authority's waiting list now has the names of some 230 applicants, and the list grows with each passing week. These families should not be denied the benefits of the nation's public housing programs.

Any Cost Disparity Between Indian Housing and General Public Housing is Justified

Although the Adminstration has failed to demonstrate that the unit cost of Indian housing is greater than for public housing generally, many factors would justify any disparity in costs if indeed a disparity exists. Many costs are entirely beyond the control of the Indian housing authorities. In particular, there are pre-development costs which are unique to Indian housing. First, there certainly would be additional expense where a housing project is dependent upon the coordinated efforts of three separate federal agencies. Moreover, many Indian projects must be developed on allotted land, often on scattered sites, which must be leased to the housing authority. The checkerboard pattern of land tenure on Indian reservations, a confusing tangle of ownership and jurisdiction inflicted upon Indian people by the many radical shifts in federal Indian policy over a century, present problems of site selection, title examination, lease acquisition, utility easement acquisition and road access which have no counterparts in non-Indian public housing. The victims of conflicting and changing federal Indian policies should not be blamed; if the unit cost of Indian housing is in fact greater due to these factors, the elimination of the Indian Housing Program would penalize the tribes for problems which they did not create and resulting costs which are beyond their power to control.

The hard truth is that Indian housing authorities generally have no alternatives to the HUD Indian Program. This should be contrasted with the options available to non-Indian public housing authorities. State and local governments have tax bases and other means of funding public housing which are simply not available to tribes.

Indian Housing Authorities Have Developed Cost-Efficient Management Capability in a Remarkably Short Time

Within a span of ten years, the Colville Housing Authority has made great strides in capability in terms of producing many units of housing, on time, for the least cost possible. The Colville Housing Authority has produced a housing project every year with the result that there are now more than 400 units either occupied or under active construction. Nor can it be said that the Colville Housing Authority is or ever has been behind on construction; to the contrary, the Housing Authority has done everything possible to expedite each project. No project has ever been extended. Each one has been completed prior to the projected date of completion, sometimes by as much as four months. The Housing Authority also has administered the pre-development phases in an efficient and expeditious manner. The target dates established by HUD upon initial approval of each project have always been met by the Housing Authority, and any rescheduling that has occurred during these pre-development periods has been made to accommodate the needs of agencies other than the Housing Authority. The current project illustrates this efficiency. The Colville Housing Authority applied for the current project on March 1, 1980. Bids were opened on March 10, 1981, and the construction contract was signed on March 31, 1981. Again, we invite a fair comparison with any non-Indian public housing authority.

Management capability of Indian tribes to construct and operate low income housing projects has grown at a tremendous rate. This has been done in a much shorter time than has been available to non-Indian public housing authorities. Tribes across the country have developed administrative structures which now have an expertise which will be lost and expensive to regain should the Indian Housing Program be eliminated. The five board members of the Colville Housing Authority and I collectively bring to our work more than 42 years of experience in Indian housing. The loss of this experience would be anything but cost-beneficial.

Federal Indian Program Funds are Joined By Substantial Tribal Contributions

Finally, it should not be forgotten that federal Indian housing funds are joined by tribal contributions. We refer here to tribal funds and services separate and distinct from BIA services or federal funds which have passed through the tribes. Much of the housing constructed by the Colville Housing Authority

is on tribal land. The Colville Confederated Tribes have provided survey assistance, legal counsel, road construction, office space and has contributed toward staff wages, utilities and transportation costs.

Budget Cuts Should Be Equitable and Fair

A transfer of one-half of the Indian Program funding to non-Indian programs would be a devastating blow to Indians whose tribes have struggled to achieve a satisfactory level of safe and decent housing on their reservations. Certainly, all must recognize that the current atmosphere entails a push for greater fiscal accountability which cannot and should not be resisted. Much can be done to streamline federal agency procedures. Moreover, budgetary cutbacks appear inevitable, and all who depend upon federal support must bear this burden. Reasonable cutbacks in the Indian Housing Program are not objected to, but the transfer of one-half of its funding to non-Indian housing programs is manifestly unjust and inequitable. The benefits of general public housing programs such as the Comprehensive Modernization Program will not reach Indians who live on reservations far from urban centers. The Indian people were once the sole possessors of the entire country; their lands have been reduced to a small fraction of their former size, and the tribes are now dependent upon the United States for support. How will the Government justify turning its back on them?

We appreciate this opportunity to comment on the Indian Housing Program and respectfully request that this letter be made a part of the official record of the budget revision proceedings of your Subcommittee concerning this matter.

Very truly yours,

COLVILLE HOUSING AUTHORITY

Harvey Moses, Sr.
Executive Director

HM:SJS:gg
cc: Honorable Bob Traxler
Honorable Lewis Stokes
Honorable Lindy Boggs
Honorable Martin Olav Sabo
Honorable Bill Green
Honorable Lawrence Coughlin
Honorable C.W. Bill Young
Loie Brooks, National American
Indian Housing Council

COMMENTS OF THE COLVILLE HOUSING AUTHORITY
CONCERNING FUNDING FOR INDIAN HOUSING PROGRAMS

We appreciate this opportunity to submit comments concerning funding for the Indian Housing Program. We understand that the Administration proposes to eliminate totally the Indian Housing Program and has presented to the Committee comparisons of the cost of the Indian Housing Program to non-Indian public housing intended to show that the Indian Program has not been cost- effective.

The Indian Housing Program has proven to be cost-effective and we invite fair comparison with the costs of non-Indian public housing. However, the Administration's arguments are misleading and we strongly object to the specific comparisons and conclusions which the Administration has tendered.

The Administration asserts that the unit cost of Indian housing far exceeds the unit cost of non-Indian public housing. We ask that the Committee consider the following:

1. The Administration has stated that one home under the Indian Housing Program ultimately costs the taxpayers approximately $175,000. However, we understand that this figure was obtained by a statistical process involving amortization over a 25 year period, and that no similar figure was prepared for public housing generally, so that a fair comparison is impossible.

2. A fair comparison of Indian housing to public housing must not neglect that public housing is mostly urban housing in high-density projects. These projects have economies of scale and location which are impossible in Indian country.

3. A unit cost comparison with public housing is unfair unless the Committee recognizes that much public housing consists of one-bedroom elderly units, whereas Indian housing is predominantly for families, and a substantial portion of Indian housing units have from four to five bedrooms. (Approximately 75 percent of the homes constructed by the Colville Housing Authority have three bedrooms or more.) Obviously, the unit cost will be necessarily greater for the Indian Housing Program, although the cost per occupant may not be.

4. We understand that the Administration supplied cost figures for public housing which did not include the amount of federal operating subsidies, whereas the figures for Indian housing included the amount of such federal outlays.

5. The Administration cost figures for Indian housing included Alaska Indian housing costs. The Alaska program is extremely unusual in its short construction season and in the stupendously high costs of labor and supplies. The inclusion of Alaska Indian housing costs in

the Indian housing figures is unfair and misleading without consideration of these factors, because the proportion of Indian housing to public housing in Alaska is high due to the demography of that region.

6. The Administration has asserted that the Indian Housing Program is behind schedule on some 22,000 units. According to our information, the Administration actually has identified units within the normal pipeline process and labeled those as being behind schedule. The intended conclusion, that the Indian Housing Programs is not cost-beneficial, is obviously not warranted by this mischaracterization.

7. Finally, most Indian reservations are remote from contractors, skilled labor pools, and sources of supply. The Colville Indian Reservation is 120 miles from Spokane, Washington, from where contractors, subcontractors and supplies must be brought to carry out construction. The Colville Reservation encompasses more than one million acres of land in which there are four population centers (Nespelem, Inchelium, Keller and East Omak). Construction at Keller or Inchelium requires use of Nespelem as a distribution point from which supplies and workers must travel across mountain passes or by ferry across Lake Roosevelt.

The Administration has also eliminated the request for Indian Health Service sanitation facility monies for this year. Under current practice, IHS does not contribute to Indian housing projects until the houses are already under construction. As a result, IHS requests its funding for Indian housing projects anywhere from 18 months to three years later than HUD's requests for budget authority for the same housing. If the Administration's plans concerning IHS sanitation facility money are carried out, it would be impossible to construct some 13,000 units for which HUD already has budget authority for 1978 to the present. To the extent that this would affect work already under way, the proposed elimination is hardly cost-beneficial.

The continuing need for new federally funded housing on Indian reservations should be obvious and should not require documentation. However, we note that a 1980 survey concerning the Colville Indian Reservation projected a need of 1,000 additional units by 1985, based on projected increases in reservation employment and the clear trend of young, smaller families moving back to the reservation. Even if such a family could afford the enormous down payments and mortgage payments required in the private market, it would be hard pressed to obtain financing to build on Indian trust land, due to the near-impossibility of pledging trust land as collateral. The Colville Housing Authority's waiting list now has the names of some 230 applicants, and the list grows with

each passing week. These families should not be denied the benefits of the nation's public housing programs.

Although the Adminstration has failed to demonstrate that the unit cost of Indian housing is greater than for public housing generally, many factors would justify any disparity in costs if indeed a disparity exists. Many costs are entirely beyond the control of the Indian housing authorities. In particular, there are pre-development costs which are unique to Indian housing. First, there certainly would be additional expense where a housing project is dependent upon the coordinated efforts of three separate federal agencies. Moreover, many Indian projects must be developed on allotted land, often on scattered sites, which must be leased to the housing authority. The checkerboard pattern of land tenure on Indian reservations, a confusing tangle of ownership and jurisdiction inflicted upon Indian people by the many radical shifts in federal Indian policy over a century, present problems of site selection, title examination, lease acquisition, utility easement acquisition and road access which have no counterparts in non-Indian public housing. The victims of conflicting and changing federal Indian policies should not be blamed; if the unit cost of Indian housing is in fact greater due to these factors, the elimination of the Indian Housing Program would penalize the tribes for problems which they did not create and resulting costs which are beyond their power to control.

The hard truth is that Indian housing authorities generally have no alternatives to the HUD Indian Program. This should be contrasted with the options available to non-Indian public housing authorites. State and local governments have tax bases and other means of funding public housing which are simply not available to tribes.

Within a span of ten years, the Colville Housing Authority has made great strides in capability in terms of producing many units of housing, on time, for the least cost possible. The Colville Housing Authority has produced a housing project every year with the result that there are now more than 400 units either occupied or under active construction. Nor can it be said that the Colville Housing Authority is or ever has been behind on construction; to the contrary, the Housing Authority has done everything possible to expedite each project. No project has ever been extended. Each one has been completed prior to the projected date of completion, sometimes by as much as four months. The Housing Authority also has administered the pre-development phases in an efficient and expeditious manner. The target dates established by HUD upon initial approval of each project have always been met by the Housing Authority, and any rescheduling that has occurred during these pre-development periods has been made to accommodate the needs of agencies other than the Housing Authority. The current project illustrates this efficiency. The Colville Housing Authority applied for the current project on March 1, 1980. Bids were

opened on March 10, 1981, and the construction contract was signed on March 31, 1981. Again, we invite a fair comparison with any non-Indian public housing authority.

Management capability of Indian tribes to construct and operate low income housing projects has grown at a tremendous rate. This has been done in a much shorter time than has been available to non-Indian public housing authorities. Tribes across the country have developed administrative structures which now have an expertise which will be lost and expensive to regain should the Indian Housing Program be eliminated. The board members of the Colville Housing Authority and its Executive Director collectively bring to their work more than 42 years of experience in Indian housing. The loss of this experience would be anything but cost-beneficial.

Finally, it should not be forgotten that federal Indian housing funds are joined by tribal contributions. We refer here to tribal funds and services separate and distinct from BIA services or federal funds which have passed through the tribes. Much of the housing constructed by the Colville Housing Authority is on tribal land. The Colville Confederated Tribes have provided survey assistance, legal counsel, road construction, office space and has contributed toward the wages of the Executive Director and his staff, utilities and transportation costs.

In conclusion, the Administration's proposed elimination of the Indian Housing Program would be a devastating blow to Indians

whose tribes have struggled to achieve a satisfactory level of safe and decent housing on their reservations. Certainly, all must recognize that the current atmosphere entails a push for greater fiscal accountability which cannot and should not be resisted. Much can be done to streamline federal agency procedures. Moreover, budgetary cutbacks appear inevitable, and all who depend upon federal support must bear this burden. Reasonable cutbacks in the Indian Housing Program are not objected to, but the total elimination of the Indian Housing Program is manifestly unjust and inequitable. The benefits of general public housing will not reach Indians who live on reservations far from urban centers -- how will the Administration justify leaving them out?

SELECTIVE SERVICE SYSTEM

STATEMENT OF CHARLES L. BOYER, CHAIRPERSON, NATIONAL INTERRELIGIOUS SERVICE BOARD FOR CONSCIENTIOUS OBJECTORS

Mr. Chairman and Members of the Committee: We appreciate this opportunity to present testimony to you today. I am Charles Boyer, a minister in the Church of the Brethren, Peace Consultant to its Commission on World Ministries, and presently Chairperson on the Board of Directors of the National Interreligious Service Board for Conscientious Objectors.

NISBCO is a nonprofit service organization formed in 1940 to respond to the needs of conscientious objectors and all individuals concerned with rights of conscience. We represent a broad coalition of 49 religious denominations, national religious groups and ethical organizations. A list of these organizations and denominations is attached to this statement. NISBCO provides information and counseling services to conscientious objectors already in the military, to those facing induction, registration or recruitment, and to individuals concerned about the increasing militarism in our society.

In an official statement on conscription adopted by our Board of Directors at a meeting March 5, 1981, we stated, "The National Interreligious Service Board for Conscientious Objectors is generally opposed to peacetime military conscription. Many of its constituent groups are unalterably opposed to all forms of conscription."

As an organization which is opposed to conscription and serves the needs of conscientious objectors, NISBCO has acted as a representative of conscientious objectors to the Selective Service System and has maintained an intense concern with the policies and procedures of Selective Service. It is out of this concern that we have critically examined Selective Service's appropriations request for FY82, and we conclude that this request reflects funding for procedures that are at this time inappropriate and not in the best interests of the United States.

NISBCO is disturbed by current developments in Selective Service policy, particularly the revival of the registration process. We view draft registration as an unjustified infringement on the rights of American youth. At this time, draft registration will neither appropriately "send a signal" to the U.S.S.R. nor enhance the security of our nation. NISBCO maintains the belief expressed in our official 1978 statement on conscription, that "the security of our citizens does not depend upon military forces, but upon the strength of our moral, economic, social and political institutions and upon awareness of the global interdependence of the human family."

In NISBCO's view, registration for the draft cannot be separated from the draft; registration is the initial stage of the conscription process. The Solicitor General Wade H. McCree, Jr. admitted this point in January, 1981, stating in a legal brief filed on behalf of the government in the Supreme Court Case Rostker v. Goldberg, "Registration, thus, is the first step in the conscription process...registration is an integral part of the process of conscription." Further, it seems obvious that taking the initial step of registration increases the likelihood of inductions proceeding, which increases the probability of our country's involvement in some armed conflict.

As evidenced by the debates and demonstrations which have accompanied the reinstatement of registration, draft registration is a controversial and potentially divisive issue in this country. Two major court cases, Wolman v. U.S., questioning the legality of Selective Service requiring social security numbers, and Goldberg v. Rostker, challenging the constitutionality of male-only draft registration, have emerged from the situation. In addition, a comprehensive registration program raises the problem of prosecution of non-registrants. According to the Selective Service System's figures, during the July registration period at least 100,000 young men have not registered and for the initial January registration the number of non-registrants is much higher. Surveys by other groups, such as the Boston Globe, indicate larger numbers of non-registrants. Even accepting the government's figures as accurate, prosecution and punishment of 100,000 young men would obviously present severe social, financial and logistical difficulties.

Our concern with the inappropriateness of draft registration at this time is increased by the fact that President Reagan has consistently stated his opposition to peacetime conscription and his view that peacetime registration is currently an undesirable program.

In a letter to Senator Mark Hatfield last May, President Reagan expressed his firm opposition to draft registration on practical and moral grounds, claiming

> I believe this proposal is an ill-considered one, and should be rejected. Advanced registration will do little to enhance our military preparedness...Indeed draft registration may actually decrease our military preparedness by making people think we have solved our defense problem--when we have not.

Mr. Reagan further comments

> But perhaps the most fundamental objection to draft registration is moral. Only in the most severe national emergency does the government have a claim to the mandatory service of its young people. In any other time, a draft or draft registration destroys the very values that our society is committed to defending.

Throughout his campaign Mr. Reagan was consistent in his opposition to peacetime registration, and he remains officially opposed to conscription and registration. Since the President campaigned and was elected on the pledge to cut federal spending and limit government intervention in the lives of American citizens, it seems

appropriate that the costly government intrusion of registering young men to be drafted, which the President has consistently criticized, should be abolished.

NISBCO's concern with the Selective Service System's actions extends beyond disapproval of the registration process. Currently, we see Selective Service taking further measures which greatly increase the system's readiness to proceed with inductions.

According to testimony given by Selective Service Director Dr. Bernard Rostker at a hearing before the Senate Subcommittee on HUD-Independent Agencies April 1, Selective Service is preparing for revitilization of their system through the measures of:

--the recruitment and training of standby local and appeal board members;

--the development of the management and ADP system to control the claims-adjudication systems;

--the development of an Alternative Service Program to complement the induction program.

Further, Selective Service now proposes to begin an initial medical screening process to eliminate the 2 to 4% of registrants obviously mentally or physically incapable of being inducted. As Senator Mark Hatfield pointed out in hearings before the Senate Subcommittee on HUD-Independent Agencies April 1, this action would represent the initial step in a classification process, and therefore exceed the activities outlined in the initial budget appropriations which Congress approved.

It is our concern that measures such as the formation of draft boards, the creation of a bureaucratic Alternative Service Program, and the beginning of classification facilitate a return to conscription. By "revitalizing" the system right up to the point of actually issuing inductions, Selective Service greatly increases the probability that the draft will be reinstated even in the absence of an immediate military threat to the nation.

Continued registration, active prosecution of non-registrants, formation and training of local draft boards, development of a bureaucratic Alternative Service Program and the beginning of classification; these are the programs for which Selective Service is requesting funding. It is NISBCO's conviction that these procedures are contrary to the best interests of all citizens of this country.

A return to conscription, beginning with draft registration, is unnecessary considering that there seems no imminent military threat to the nation and that significant steps are being taken to improve our volunteer forces. Registration and plans for inductions are clearly inconsistent with the public policies of President Reagan. Further, registration and inductions are harmful to citizens of this country, because money is spent needlessly, individual rights are violated, political divisions are created, and the possibility of military intervention is increased.

For these reasons we urge that the appropriation provided Selective Service in the FY82 budget be significantly lowered from the 21 million, 174 thousand dollars they have requested. Specifically, funds designated to be used for continued registration,

formation and training of draft boards, development of an Alternative Service Program, and initial medical screening should be cut from this amount, so that the appropriation given to Selective Service more accurately reflects the policies of America's leadership and their mandate from America's citizens.

Attachment 1a

CONSULTATIVE COUNCIL MEMBERS

NATIONAL INTERRELIGIOUS SERVICE BOARD FOR CONSCIENTIOUS OBJECTORS

*American Baptist Home Mission Society
American Ethical Union
*American Friends Service Committee
*American Lutheran Church, The
Assemblies of God, General Council
Association of Bible Students, The
Association of Evangelical Lutheran Churches
Association of Fundamental Gospel Churches
*Christ's Sanctified Holy Church
Christian Churches (Disciples of Christ)
Church of Christ
Church of God General Conference
Church of God, Anderson, Indiana
Church of God (Seventh Day) Salem, W. Va.
*Church of the Brethren
Church of Jesus Christ, The
Church of the Gospel
Council for Humanist and Ethical Concerns
Dunkard Brethren
Emmanuel Association
Episcopal Peace Fellowship
Evangelical Covenant Church of America, The
Fellowship of Ethical Pacifists
Fellowship of Reconciliation
First Divine Association in America, Inc.
Free Methodist Church of North America
Friends United Meeting
Full Gospel Tabernacle
*Jewish Peace Fellowship
Lutheran Church in America
*Mennonite Central Committee
Molokan Advisory Council
National Council of the Churches of Christ in the
U.S.A., Dept. of Religious and Civil Liberties
National Federation of Priests' Councils
Pax Christi
Pentecostal Fire-Baptized Holiness Church
Presbyterian Church, U.S.
Reformed Church in America
Committee on International Justice and Goodwill
Seventh Day Adventists - National Service Organization
Sojourners Fellowship
Synagogue Council of America
Unitarian Universalist Association
*United Church of Christ
Board for Homeland Ministries
*United Methodist Chruch, Board of
Church and Society
United Pentecostal Church, Inc.
*United Presbyterian Church, U.S.A.
United State Catholic Conference
Division of World Justice and Peace

Attachment 1b

CONSULTATIVE COUNCIL MEMBERS

NATIONAL INTERRELIGIOUS SERVICE BOARD FOR CONSCIENTIOUS OBJECTORS

World University Roundtable
Young Men's Christian Association, National Council

*Represented on NISBCO Board of Directors

National Consumer Cooperative Bank

STATEMENT OF RONALD D. UTT, ASSOCIATE CHIEF ECONOMIST, CHAMBER OF COMMERCE OF THE UNITED STATES

STATEMENT
on
PRESIDENT REAGAN'S PROPOSAL TO TERMINATE THE
NATIONAL CONSUMER COOPERATIVE BANK
for submission to the
SUBCOMMITTEE ON HUD - INDEPENDENT AGENCIES
of the
HOUSE COMMITTEE ON APPROPRIATIONS
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
Ronald D. Utt*
May 6, 1981

The Chamber of Commerce of the United States, on behalf of its more than 120,000 members, welcomes this opportunity to support President Reagan's proposal to terminate the National Consumer Cooperative Bank.

SUMMARY

The Chamber has endorsed the President's Program for Economic Recovery in its entirety, including the proposal to terminate the National Consumer Cooperative Bank. Substantial and comprehensive reductions in the federal budget and federal lending programs must be made in order to free scarce resources for more productive uses. Because the National Consumer Cooperative Bank largely duplicates existing government programs and offers only partial and secondary support in meeting the needs of certain low income groups, its continued existence represents a wasteful use of scarce public resources.

Specifically, the Bank's activities:

- Duplicate an already extensive collection of government housing support programs, including programs designed specifically to finance housing cooperatives.
- Offer unfair competition to the small businesses by providing subsidized loans to food and other retail-oriented cooperatives.
- Provide subsidized loans to non-low income individuals. This represents unnecessary federal assistance to an income class capable of funding its own cooperative enterprises.

*Associate Chief Economist, Chamber of Commerce of the United States.

EXCESSIVE GROWTH IN FEDERAL LENDING MUST BE CURBED

Over the last decade, the growth in federal lending activities -- consisting of both direct loans and loan guarantees -- has increased at a rate higher than the excessive growth rate in federal budget outlays. Whereas budget outlays increased 78% over the period 1975 to 1980, outstanding government direct loans and loan guarantees increased by 96%.

The high rate of growth in government credit assistance has led to increased federal encroachment upon the pool of credit resources available for funding private sector capital investment. Over the decade of the 1970's, funds advanced and guaranteed through federal credit programs averaged 14.3% of total funds advanced each year in U.S. credit markets. However, this participation rate has risen steadily over the past few years, from 11.9% in 1977 to 17.8% in 1979 and to a record 23.2% in 1980. When the borrowing needed to fund the deficit is added to that required to support the credit programs, the federal participation rate in credit markets increased in 1980 to 35.7% of the total volume of funds raised in U.S. credit markets.

This proportionately greater growth in federal credit assistance poses two main problems to the American economy. First, the growing share of credit extensions accounted for by government coincides with a period of deliberate credit restraint on the part of the Federal Reserve. As a consequence, unassisted sectors of the private market bear a disproportionate burden of monetary restraint. Second, since the cost and availability of funds are a critical component of a business firm's decision to invest in new plant and equipment, continued government encroachment upon credit resources will serve to discourage needed private sector investment.

Recognizing that the recent excessive growth of federal lending activity has adversely affected needed private sector capital formation and created inequities among borrowers during periods of restrictive credit policies, President Reagan has proposed significant reductions from the volume of lending support proposed by the Carter Administration. Whereas the Carter budget proposed that outstanding guaranteed loans increase in FY 1982 by 16.2% and that outstanding direct loans increase by 12.2%, the Reagan budget has reduced these rates of growth to 10.5% and 7.7%, respectively. The elimination of the National Consumer

Cooperative Bank is part of this package of reductions.

The U.S. Chamber fully endorses the Administration's efforts to reduce the growth in federal lending, including the termination of the National Consumer Cooperative Bank.

THE BANK'S LENDING ACTIVITIES
DUPLICATE THE PROGRAMS OF OTHER AGENCIES

Loan support of housing cooperatives currently comprises a significant portion of Bank loan activity. According to recent Bank testimony, about half of the Bank's loan commitments have been allocated to eligible housing cooperatives.

At present, the government already operates an extensive collection of multi-billion dollar programs that are specifically designed to support the housing market by offering mortgage credit assistance to eligible homebuyers and developers of multi-family units. The Department of Housing and Urban Development, the Veterans Administration and the Farmers Home Administration, together with the government-sponsored enterprises -- the Federal National Mortgage Association, the Federal Home Loan Bank System and the Federal Home Loan Mortgage Corporation -- engaged in a total of $124.7 billion in mortgage lending and guarantee support during FY 1980. Given this level of support, it is questionable whether a seventh, distinct agency is needed to supplement this high level of credit assistance.

Although such support ranges over many sectors of the housing market, there already exist programs designed specifically to assist in the financing of housing cooperatives. The Federal Housing Administration's (FHA) Section 213 mortgage insurance program provides insurance for the blanket mortgage needed to finance the acquisition of a multi-unit building for cooperative ownership, while FHA's Section 203(n) program provides insurance for the loans used to acquire individual units in a cooperative building.

Inasmuch as the purpose of the bank is to provide loan support to credit worthy cooperatives, it appears that these existing FHA insurance programs already meet that objective. If the housing cooperative or the individual buyer satisfy FHA underwriting standards, they should be eligible for FHA mortgage insurance. Such insurance, backed by the full faith and credit of the U.S. government, provides the cooperative buyer with easy access to private sources of credit.

Given the existence of these programs, there is no reason to establish a second federal entity to perform essentially the same task at considerable extra expense to the taxpayer.

FEDERALLY-ASSISTED COOPERATIVES HAVE AN UNFAIR COMPETITIVE ADVANTAGE OVER SMALL BUSINESSES

After housing, the remainder of the Bank's lending is directed to cooperatives selling food and other consumer goods and services. As such, the Bank has been using subsidized credit to support entities which directly replicate the services provided by other retail establishments and compete head-on with small businesses which are heavily concentrated in the retail sector.

Over the last year when assisted cooperatives were receiving loans with interest rates that averaged 11.6%, according to Special Analysis F of the Federal Budget, the small businesses that they competed with were dependent upon short-term borrowing from commercial banks. Since this type of loan typically carries an interest rate equal to the prime rate plus approximately two points, the average borrowing rate for small businesses during 1980 was about 17.3% or 570 basis points greater than the average loan available to assisted cooperatives. Combined with the tax concessions, this is a substantial subsidy and very nearly guarantees their success in head-to-head competition with small businesses.

During 1980, when borrowing costs soared to record levels, total business failures rose to 11,742, the most in thirteen years. Following Dun & Bradstreet's sectoral and liability size breakdown, the single largest number of failures occurred in the retail trade sector among firms whose liabilities were between $25,000 and $100,000.

Failure in this group increased a staggering 48% from 1979 to 1980. Thus, at a time when adverse market forces were contributing to a rash of small business bankruptcies, the government was initiating a program that would put these same businesses under further stress by establishing subsidized cooperatives that would compete directly with them.

Such a policy is particularly unfortunate in that recent research indicates that the small business sector is the most dynamic segment of the American economy and has been responsible for a substantial portion of the jobs created over the past

decade. According to a 1979 MIT study, two-thirds of the jobs currently created are accounted for by firms with less than twenty employees.

Compared to small businesses, cooperatives already receive a significant implicit subsidy in the form of federal income tax concessions. Data from the Small Business Administration indicate that for the period 1966-1972, taxes amounted to 64% of total small business income compared to 41.9% for all non-farm, non-financial corporate income. As for access to credit markets, the same SBA data indicate that more than half the total funds raised by small businesses were generated internally.

It is apparent, then, that cooperatives already receive a valuable subsidy in the form of tax concessions, and that whatever credit problems they have are shared with the small businesses they compete against. Further subsidies in the form of below market interest rate loans merely tilt the advantage even further toward cooperatives and make it that much more difficult for small businesses to get started and prosper.

BANK'S PROGRAMS PRIMARILY SERVE NON-LOW INCOME INDIVIDUALS

Against these two important negatives -- the wasteful and costly duplication of existing federal programs and the unfair competition that subsidized cooperatives offer to small businesses -- must be considered the constituency that the Bank serves and the benefits that are received by this group.

Cooperatives have a long history of providing useful services to members. The success of the many existing co-ops is a tribute to the significant role that they play in our economy. In urban areas, food co-ops coexist with the traditional food stores and offer their members financial savings in return for volunteer work. They have accomplished this without government loans, grants or technical assistance.

While the existence of alternative forms of business enterprise are desirable in that they increase choice and competition, it is not at all clear that the promotion of this objective should be the financial responsibility of the federal government. Competition is desirable, but competition created by explicit subsidies is not. Such competition creates unnecessary hardship for small business

while draining financial resources from the hardpressed taxpayers and other, more pressing national objectives.

In an effort to make its lending activities conform more closely to observed social needs, the Bank intends to devote 35% of its lending to cooperatives serving low income persons. (At the close of FY 1980, only 6% of its loans were directed to low income groups.) Two basic problems become immediately apparent when the Bank's goals are expressed this way.

First, it means that 65% of the loans will be going to assist non-low income individuals or, alternatively, to individuals who possess both the skills and financial resources necessary to start and sustain their own cooperative. At their most basic, cooperatives, particularly food co-ops, rely on volunteer labor, bulk purchases and coordinated distribution to attain cost savings. Additional savings come from minimal overhead and elimination of inventory carrying costs.

In the event that capital is required to expand the co-op's level of services, such capital requirements should be met by drawing on the financial resources of the members. If the co-op is providing cost savings to its members and if expanded services offer even greater savings, then the members should be willing to make their own capital contribution to the co-op since such a contribution is, in essence, an investment that will yield a return in the form of cost savings on expected purchases of consumer goods and services. There is simply no reason why the government should have to provide the capital to assist non-low income individuals to take advantage of such opportunities since they possess the skills and financial resources to make such investments on their own.

Low income individuals, in contrast, may not possess the skills necessary to organize and effectively maintain a cooperative and thus may require some technical and educational assistance to help them through the formative stages of such an enterprise. In the event that a capital infusion was required at some later stage to help the cooperative to achieve the further indentifiable benefits that could not be obtained with just volunteer labor, then some outside assistance would be needed at this stage as well.

It is questionable, however, whether this small, potential need requires the existence of a wholly-separate government sponsored agency with a large staff

and a costly appropriation. Low income individuals already receive food assistance in the form of food stamps, housing assistance through a variety of HUD programs and medical assistance through medicaid. While cooperatives could provide further assistance in these areas, it would be a source of secondary assistance. In an era of budget stringency, such indirect, secondary assistance of this form does not justify a separate government agency.

When unique opportunities to assist the poor through cooperative forms of enterprise arise, the necessary financial assistance can be obtained through Community Development Block Grants (CDBG) if the local community chooses to allocate its funds in this manner. Use of CDBG funds has the advantage of economizing on delivery systems, assuring that assistance to cooperatives conforms to local needs and other community development programs, and placing the planning and allocative decision in the hands of those best able to determine the most efficient use of scarce funds.

CONCLUSION

The U.S. Chamber recommends that this Committee accede to President Reagan's request to terminate the National Consumer Cooperative Bank. As this statement has demonstrated, the lending activities of the Bank directly and indirectly duplicate the services and benefits provided by other government programs. In an age of scarce resources, such duplication cannot be justified. Moreover, by offering subsidized loans, activities of the Bank have the potential of offering unfair competition to many hard pressed businesses.

NATIONAL CONSUMER COOPERATIVE BANK

STATEMENT OF THE NORTH AMERICAN STUDENTS OF COOPERATION

NASCO
NORTH AMERICAN STUDENTS OF COOPERATION

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Offices at 4312 Michigan Union, Ann Arbor, Michigan

TESTIMONY IN SUPPORT OF CONTINUED FUNDING OF THE NATIONAL CONSUMER COOPERATIVE BANK--FY82

The North American Students of Cooperation is a non-profit membership organization of student cooperatives. It provides educational and technical services to its members and to student groups working to start cooperatives. NASCO is the focus of communications for student co-ops in the United States; through it co-ops throughout the country are linked.

NASCO presents this testimony in support of the NATIONAL CONSUMER COOPERATIVE BANK on behalf of the 10,000+ students now living in cooperative housing and using cooperative retail outlets on our nation's campuses. These students have made prudent use of the Co-op Bank, and very strongly support the continued funding of the Bank in 1982. They have found the Bank to be a viable lending institution, which provides them access to the major debt capital any business needs to start or to expand and improve its services---and does so within the financial and legal parameters of cooperatives.

Continued funding for the National Consumer Cooperative Bank will be a wise allocation in the 1982 federal budget. The Co-op Bank is a postive alternative to big government at a time when we must decrease federal spending and increase the self sufficiency of local business. An adequately funded Co-op Bank offers the private sector a chance to meet human needs through cooperatives, which will provide substantial savings both to the individual consumer and the government. As in the case of the highly successful Bank for Cooperatives---the farm co-op bank upon which the Consumer Co-op Bank was modelled---the Consumer Co-op Bank will be independently owned by the cooperatives which use it, NOT returning to the federal government for funding year after year.

Student cooperatives actively support and use the Co-op Bank. For 100 years, since the first campus co-op---the well known Harvard Co-op---students have been obtaining housing and consumer goods and services through student cooperatives. By owning their own businesses, students have provided the services that meet their unique needs, while contributing to the economy of their college or university town and developing essential business skills in an actual business setting.

Since its opening in Spring, 1981, the Co-op Bank has actively served student cooperatives. Five student housing cooperatves and several consumer goods cooperatives serving large student populations have received market rate loans from the Co-op Bank. All of these loans are being repaid in timely fashion.

In many cases, these co-ops would have been turned down by local lending institutions, simply because banks do not understand the stucture of consumer cooperatives and are traditionally biased against providing loans to student-affiliated organizations.

In addition to making wise use of the Bank, these student cooperatives are actively investing in stock so that the Bank WILL be independent in a short period of time. All the co-ops that have received loans have purchased stock; numerous others have pledged their intent to do so.

CASE STUDY: University Students Cooperative Association

Perhaps the best way to understand the use made of the Co-op Bank is to look at one major co-op that has done so.

Students have unique housing needs. They experience high turnover and short periods of residency. These patterns require experienced, specialized management, which only university housing offices and student cooperatives provide. Further, students, being inexperienced in the housing market, are consistently discriminated against in the private market. First and last months' rents along with sizable damage deposits are common requirements in campus-area apartments. Even with these requirements, private property managers serving students commonly maintain their properties in LESS THAN CODE condition. Again, only student-owned cooperatives are dedicated to providing high quality off campus housing for students at less than market rate. These lower rates often allow low income students to stay in school, and middle income students stay off government-provided financial aid.

The University Students Cooperative Association has provided University of California--Berkeley students with low cost group housing since 1936. Now serving 1300 students, and having to turn away another 700 students each year, the USCA drew a $150,000 loan from the Co-op Bank for furnishings for their newest apartment building.

Clearly this loan, to be repaid at market rate, will benefit students for many years, and will strengthen a viable cooperative providing a much needed service to the Berkeley campus community.

SUMMARY

The National Consumer Cooperative Bank is one of the best conceived programs in the federal budget. 1) It will be self sufficient and 100% independent of the federal treasury in a short period of time. 2) It fights inflation by fostering private enterprise---strengthening local economies, creating jobs, and providing essential consumer services at the lowest possible cost, thus keeping lower income consumers off of federal welfare programs.

Maintaining the Co-op Bank supports exactly the self-sufficient, growing ecnomy this country needs.

NATIONAL CONSUMER COOPERATIVE BANK

STATEMENT OF PETER W. HUGHES, FOR THE NATIONAL RETIRED TEACHERS ASSOCIATION AND THE AMERICAN ASSOCIATION OF RETIRED PERSONS

May 15, 1981

The Honorable Edward P. Boland
Chairman
Subcommittee on HUD-Independent Agencies
House Appropriations Committee
H-143 Capitol Building
Washington, D.C. 20515

Dear Congressman Boland:

We would like to submit our views on the National Consumer Cooperative Bank and request that our comments be included in the record for the House Appropriations Subcommittee on HUD-Independent Agencies hearing of May 7, 1981.

The National Retired Teachers Association and the American Association of Retired Persons urge this Subcommittee to provide the Bank with funding through the end of FY82. We believe that it is more fiscally responsible to fund the Bank for another year in order to enable it to be self-sufficient soon thereafter rather than take action to immediately dissolve the Bank, which will cost the government millions of dollars. These appropriated funds are not subsidies because within a year when the Bank is solvent, it will begin to repay the Treasury with interest.

The Associations support funding for this Bank because it provides financial, technical and self-help assistance to non-profit cooperatives. Cooperatives, through group purchasing, can often make products and services available at lower prices. For older person living on reduced and fixed incomes, cooperatives can provide them with the needed relief from high rates of inflation for their basic necessities, such as food, housing and drugs.

We urge this Subcommittee to provide the Bank with the short-term funding it needs to make it posible for the Bank to shift out of government control to the private sector.

Sincerely,

Peter W. Hughes

PWH:BMW

Mildred Moore
President, NRTA

Olaf J. Kaaso
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NATIONAL CONSUMER COOPERATIVE BANK

STATEMENT OF THOMAS R. STITT, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION OF HOUSING COOPERATIVE

National Association of Housing Cooperatives
1012 Fourteenth Street, N.W., Suite 805, Washington, D.C. 20005
(202) 628-6242

May 7, 1981

The Honorable Edward Boland
Committee Chairman on HUD-Independent Agencies
H143 Capitol
Washington, DC 20515

Dear Chairman Boland:

This letter is in support of full funding for the National Consumer Cooperative Bank in fiscal 1982. As long as the Co-op Bank receives adequate funding during its early years, it will become a self-sufficient, owner-operated business. Like the Farm Credit System, after which it was modeled, the Co-op Bank will repay its initial federal investment with interest.

The Co-op Bank has proven to be an invaluable source of credit and technical assistance for housing cooperatives. During its brief period of activity, the Bank has launched a new era of cooperative housing development. It has been able to preserve and generate unique homeownership opportunities for thousands of low, moderate and middle income American families.

The Co-op Bank is not inconsistent with President Reagan's economic policies. Consumer cooperatives are in the best tradition of American self-help enterprises. In fact, a task force on housing policy commissioned by President Reagan and chaired by former HUD Secretary Carla Hills recommended that cooperatives be explored as a way of facilitating tenant ownership of multifamily housing developments.

On behalf of NAHC's 100,000 member families, I encourage the Chairman and Members of the Subcommittee to continue adequate funding for the National Consumer Cooperative Bank.

Please include this letter in the Record of today's hearings on fiscal 1982 appropriations.

Sincerely,

Thomas R. Stitt

Thomas R. Stitt
Executive Director

TRS:mbs

National Consumer Cooperative Bank

STATEMENT OF THE COOPERATIVE LEAGUE OF THE U.S.A.

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON HUD AND INDEPENDENT AGENCIES
May 15, 1981
STATEMENT OF THE COOPERATIVE LEAGUE OF THE USA

The Cooperative League of the USA, representing over 40 million Americans belonging to co-ops, urges the Subcommittee to recommend a minimum of $63 million in FY 82 appropriations for the National Consumer Cooperative Bank. In 1978, after three years of study, Congress created the NCCB:

> To provide for consumers a further means of minimizing the impact of inflation and economic depression.
>
> * * *
>
> The Congress finds that user-owned cooperatives are a proven method for broadening ownership and control of the economic organizations, increasing the number of market participants, narrowing price spreads, raising the quality of goods and services available to their membership, and building bridges between producers and consumers, and their members and patrons. The Congress also finds that consumer and other types of self-help cooperatives have been hampered in their formation and growth by lack of access to adequate cooperative credit facilities and lack of technical assistance. Therefore, the Congress finds a need for the establishment of a National Consumer Cooperative Bank . . . as a means of strengthening the Nation's economy.

If the Co-op Bank is to fulfill this mandate, and remain a strong, viable institution, able to repay the federal investment, it must receive this small additional funding.

While we understand the urgent need to reduce Federal spending, we believe that expenditures to purchase NCCB stock is both merited and consistent with a policy of fiscal restraint. The Co-op Bank helps people help themselves rather than depending upon government handouts or services. Further, cooperatives lessen the demands on government to perfect the economy through regulation. Cooperatives stimulate price competition and maintain a high level of responsibility to their employees and members. The Co-op Bank is exactly the type of institution we should be promoting in these difficult economic times.

The Co-op Bank is not a Federal grant program. Loans from the Title 1 are at market rates to credit worthy cooperatives. Government investments in NCCB stock will be repaid with interest as the Bank becomes a private, shareholder-owned institution. In one year of operation, the Bank is already ahead of schedule in becoming self-sufficient. With over $400 million in loan applications on file, further funding will accelerate the Bank's growth, strengthen its portfolio, and help ensure a speedy redemption of the government's stock.

In the last few months, the Congress has reaffirmed its commitment to the NCCB. The Senate Banking Committee rejected legislation to revoke the NCCB's charter and the House, following the farsighted recommendations of this Subcommittee, rejected one and reduced another of the Administration's proposed recissions. A $63 million appropriation for stock purchase, which brings total NCCB capitalization to $200 million, is well below the $86 million originally included in the House Budget Committee's recommendation and $137 million in the Carter Budget. We believe to achieve the goals set by the Congress and maintain the Bank's stability, this $63 million must be appropriated. Funding below that level may jeopardize the NCCB's ability to function as a truly national institution or to have the impact Congress intended.

NATIONAL SCIENCE FOUNDATION

STATEMENT OF DR. D. ALLAN BROMLEY, PRESIDENT, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Mr. Chairman and Members of the Committee:

Introduction

Thank you for the opportunity--and challenge--of presenting our views during your hearings on the NSF budget request for Fiscal Year 1982.

I shall comment briefly on the state of science and technology, including science and engineering education. Also, while I do not plan to discuss specific budget amounts for various NSF programs, several general comments and recommendations are offered for your consideration.

But first, let me say just a few words about the American Association for the Advancement of Science--or the AAAS as it is commonly known. We have as members about 132,000 scientists and engineers; as affiliates we have about 283 other scientific, engineering and technical societies and organizations--with a total membership of around 5 million. AAAS publishes the journals Science and Science 81, the latter with a circulation of about 750,000. The Association is also active in a broad variety of public policy and public understanding of science activities.

Need for a Revitalized Economy

Mr. Chairman, the country needs a revitalized economy with substantial economic growth. I believe the overwhelming majority of scientists and engineers in the United States support this objective.

The U. S. economy has stagnated over the past decade. Although men and women of good will and great intellectual competence might disagree on the causes, the fact is that productivity gains have not kept up with our competition in other industrialized countries.

In order to reestablish the desired growth for our national economy, it is likely that a number of incentives will be required like some of those discussed in the context of the Reagan economic program. Some of these incentives will impact research and development programs in a favorable manner. An example is the proposal for accelerated depreciation for capital equipment used in industrial R&D, recently announced by the Administration as a part of its program.

A robust national effort in research and development is fundamental to a strategy for economic growth.

The role of research and development has received increasing attention by economists seeking to understand the reasons for economic growth. At the 1977 annual AAAS Colloquium on Research and Development it was reported that technological advance, or the growth of knowledge, has been second only to labor supply increases as a major source of economic growth over both short and long periods since 1929.

It is not at all difficult to identify truly impressive examples of the high payoff of R&D. The rate of return on hybrid corn R&D is estimated at over 700 percent; all agricultural R&D investments are said to have a median rate of return of about 100 percent.

My colleague at Yale, economist William Nordhaus, at that time a member of the Council of Economic Advisors, told the AAAS in 1977 that most analysts are convinced that "the role of research and development and technological change in the economy is paramount." Yet, despite this major consensus it does not follow that the private sector allocates optimal resources to R&D in all areas of national interest. Two major reasons explain this and provide a basis for large-scale federal support of R&D.

A rationale for public support of research and development

First, there is the fact that the overall benefits to the nation of much--but not all--long-range R&D exceed the benefits to the organization that paid for it. Competitors benefit from corporate R&D investments by using to their own benefit the new knowledge generated. Further, consumers benefit from lower prices, so that the benefits of successful R&D do not flow solely to increased corporate profits. As a result, and as it has been demonstrated over time, there is good reason to believe there is and will continue to be underinvestment by the private sector in R&D--and especially in basic research.

A second major reason for the special role of the Federal Government in R&D arises from the highly risky nature of R&D investments. One cannot be sure that any one research effort, or any small group of such efforts, will pay off. However, like life insurance, probabilities of success almost become certainties when the aggregate of R&D projects is very large. Private investment in R&D--particularly of a long-term nature--are frequently discouraged by high risk considerations.

This leads to a clear conclusion that federal support of R&D has been and will continue to be an important investment in the future. The overall benefits appear to be large. It is our responsibility in the scientific and engineering communities to bring this relationship to the attention of decision-makers and to the general public. We feel R&D should be supported on its merits as a long-term investment, not because of pressure from a special interest group.

The amount of U. S. investment in research and development has been and remains substantial--although there are problems.

When one looks at total R&D spending in the United States, very large numbers are encountered. For the current year, the national R&D effort--public and private--comes to about 68 billion dollars--or about 295 dollars per person. Yet, such large numbers cannot be examined in isolation. For example, as recently noted in the Science and Technology report of the Commission on an Agenda for the Eighties, "the sheer size of the U. S. economy results in larger R&D expenditures than those of other countries," but "taking these data in comparative perspective raises serious concerns about international economic competition."

What are some of these comparative perspectives? Let me mention several.

- While other nations have experienced real growth in R&D, the apparent increases in the U. S. reflect only inflation. In constant dollars we have been on a flat plateau since the mid 1960's.
- As shown on page 10 of Science Indicators for 1978, there is a stunning lack of investment in the advancement of knowledge by the U. S. compared to our major European allies and Japan. (Appendix 1)
- This observation relates directly to the fact that, as a percentage of GNP, total R&D spending in the U. S. has declined steadily since the middle to late 1960's--while the comparable number for Japan, West Germany and the U. S. S. R. has increased substantially.
- Investment by U. S. industry in research as a percent of sales decreased by about one-third between 1968 and 1980.
- In terms of international trade and economic competition, it may be worth noting that in recent years Japan has only allocated about

two percent of government R&D to defense, West Germany about 12 percent, and France 30 percent--compared to about 50 percent (and rising) for the U. S.

Such comparisons provide a disturbing insight about what has been happening to our investment in the future. But let me state my views in another way as well. As a consequence of enlightened, generous support by the American taxpayer, we still have, overall, the strongest scientific and technological establishment in the world. Continuing strength depends upon these factors:

- Modern, competitive facilities,
- Imaginative, creative people in a broad variety of scientific and engineering fields, and
- An adequate flow of our best young people into our scientific and engineering enterprise.

Above and beyond the statistical trends I noted earlier, however, as I look at these three factors I am troubled. We have severe problems and out world lead is in jeopardy; indeed, in some areas we have already lost our lead. What, then, specifically is wrong?

- In many areas and places our facilities are obsolete and non-competitive;
- We have current shortages of the right kinds of people; and
- The flow of young people into science and engineering is ominously inadequate.

But, I will return to these points a little later, so please bear with me.

In summary, despite large levels of R&D funding, our R&D investments are declining relative to others. Despite the lack of a statistical linkage

between the leveling out of real growth in R&D since the late 1960's and our productivity slowdown, we feel confident in pointing to the need for continuing investment--public and private--in R&D for the long-range well-being of our nation. Given the technological successes of some of our international competitors we can ill afford to follow a policy of "no-growth" in R&D over the long term.

Science and engineering education is an integral part of our scientific and technological structure in the U. S.--and there are reasons to be concerned.

In discussing science education, first let me refer to a resolution on "Science and Engineering Education" which was adopted in early January, 1981 by the AAAS Council during our annual meeting. (Appendix 2)

Please note that we call for a full measure of effort to reverse the damaging decline of science and engineering education. Also, we point to the need for a new national commitment to excellence in science and engineering education. A basic reason for these positions can be succinctly stated: To expect scientific and technological progress while abandoning efforts at improving science and engineering teaching in our schools is illogical and a disservice to the Nation's interests.

Beyond this general concern, it may be useful for our discussion if we divide the total educational spectrum into three broad categories: graduate, college, and pre-college.

Turning first to graduate education, I think we can say without much question that U. S. graduate science education still sets goals and standards and is substantially ahead of anything else in the world. The problem, however, is that this strenght is in jeopardy because we find ourselves working with instrumentation that is technically obsolete and usually one or two

decades old. The result is that all too often we no longer are competitive with the instrumentation enjoyed by our major international competitors. So the strength is there, but it is in serious danger.

We find "peaks" and "valleys" when we turn to the second major component --the college area. We have "peaks" of excellence and, unhappily, we have "valleys" of lesser quality. However, if we average the college spectrum in this country, I believe, on the basis of all the evidence available to me, that we would be essentially competitive with a similar average taken in any other country in the world. The spread in quality in our country is considerably larger, however, because we do not have the degree of centralized control over college education that exists in most of the rest of the world. Yet, there are serious problems looming here: faculty members in the sciences and engineering are being drawn away to industry in large numbers because of far more attractive salaries. We may well be seriously damaging our capability to educate the next generation of scientists and engineers in a number of important fields.

When we come to pre-college education, we are in the middle of an area where I am most distressed, and where I feel that we in the U. S. have fallen seriously behind the rest of the developed world. There are severe problems in the quality and quantity of science education being given to those few who choose to take it at all. But even more deplorable is that a very large fraction of our students go through this entire period of their educational life without ever being exposed to anything significant in science and technology.

Among the high costs of this situation is that it will be very difficult for the oncoming generation of people to function effectively in a society characterized by increasing technological sophistication and content. To

the extent that these future citizens find it impossible to understand the issues involved, let alone participate in their resolution, the possibility and potential for alienation are all too evident.

I feel that it is terribly important for us to bear down on this question of federal support for science education. I think the Congress acted wisely when it amended the NSF organic act in 1972 to stipulate that the NSF should "initiate and support basic scientific research and programs to strengthen scientific research potential and science education programs at all levels . . ." (emphasis added).

It is not very realistic to expect each State to "reinvent the scientific and technological wheel." Also, budget pressures will operate against them staying current with the latest advances on an individual basis. I think it is important to note that the NSF has never "dictated" to schools what they should teach; rather their purpose has been to serve as a resource for the States and individual school districts to use material as they see fit in local educational programs.

One last problem in the pre-college area is worth mentioning. Comparable to the college faculty move to industry, a significant number of the better qualified science teachers have also left for higher pay in industry. This presents a severe challenge in an area already beset with difficulties. NSF has in the past played a very important role in "upgrading" teachers of science at these school levels and things could only become worse if the NSF moves out.

In concluding this section I would argue that federal funds for improvements in science and engineering education have the same investment character as those for R&D. We must support such work to ensure our future.

Structuring good R&D budgets at the national level and within the private sector remains an art--not a science.

While, as I noted earlier, there are substantial resources allocated to R&D in the United States, there also are fiercely competing demands for them. In sorting out these demands and working out allocations that make sense, NSF and other institutions must cope with a number of factors--each of which could provide the basis for extensive debate. I will mention only these:

- Government supported versus private R&D;
- Basic research versus applied;
- Problem-oriented versus disciplinary research.

Knowledgeable experts have disagreed in the past and will disagree in the future on the best allocation of R&D resources. However, our non-centralized, multi-faceted decision-making system in this country has done a rather creditable job of allocating resources in the past. And given its unique position as a "balance wheel" in the panoply of science and engineering institutions in this country, NSF has in the past done a good job in allocating its resources. However, from what we know about the proposed budget for NSF, this traditional process was not followed in its preparation. Consensus building in decision-making is central to our Nation's scientific and technological strength; we should be cautious about adopting alternative strategies which disregard the views of major participants.

Reactions to the President's NSF Budget Request

As I said at the beginning, I do not plan to discuss specific budget numbers. Even if I were so inclined, which I am not, we have not had the time to examine every budget element. Having said this, I am prepared to give my general impressions about the budget request.

At the aggregate level, the magnitude of the reductions will not permanently damage the scientific and engineering enterprise in the United States. This judgment is based in part on reports that R&D in other federal agencies has been impacted less than research in NSF by the budget revisions. In the current economic environment, it is incumbent on all sectors of the society and our economy to undertake belt-tightening. Scientists and engineers are willing to participate along with other citizens.

We expect this growth slowdown to be temporary, and that there will be increased investment in research and development programs by the Federal Government in the years to come. This expectation stems from our belief that there will be a rediscovery over the months ahead of the value of research and development in helping solve the nation's economic problems. Please note that R&D can make a contribution to the solution of these problems but cannot alone assure their solution. R&D, to use terminology found in the mathematics classroom, provides a necessary but not sufficient contribution to the solutions that we all desire.

However, we are very puzzled and concerned about a number of the proposed sharp reductions or eliminations. Among these are:

- Science education--Earlier I stated our views on the importance of this area as an investment in the future. I view the adequate support of effective science education programs to be of the highest priority.
- International programs--Of particular concern are the zeroing of U. S. contributions to the International Council of Scientific Unions (ICSU) and the International Institute of Applied Systems Analysis (IIASA). Both are broad-guaged endeavors to foster

international cooperation in science. Moreover, as foreign science becomes more advanced and more competitive, it is imperative that as a matter of self interest we maintain close contact so as to know what is going on.

- Programs aimed at solving science entry problems for minorities and women--In keeping with a long-standing policy, the AAAS supports the full utilization of human resource potential in the pursuit of science. Programs to increase access to science and engineering by all--including women, minorities and the physically handicapped--are necessary if we are to draw on the talent of the entire population in the search for solutions to the problems which confront us all.
- Social and behavioral sciences--The continuing support of the physical sciences and engineering in the President's budget requests for agencies such as NSF and DOE is a recognition of their fundamental role in attacking many of the major problems now facing our society. But it bears emphasis that in many of these problems, clearly identified in the public mind with science and technology--energy, the environment, health care delivery--to name only a few, the physical sciences and technology are largely in hand; it is an adequate understanding of the social science and behavioral aspects that we lack and that stands in the way of effective progress.

For this reason, while recognizing that priorities must be drawn, we believe that the brutal reductions suffered by the NSF social science programs--and even more important, the shock wave of uncertainty and confusion that they have already engendered in these social science and behavioral communities--will have a very serious negative impact

on the effectiveness of our national response to many of our most pressing problems.

It may well be that a new balance among the sciences may be called for as we move forward to address these and other problems; but we would urge that a more gradual transition to this new equilibrium--whatever it may be--would have the great advantage of preserving at least those aspects of the social and behavioral sciences that will be absolutely essential in the future.

- Intergovernmental science and technology--While the Federal Government as early as the 1940's accepted the fact that research and development were central to national concerns, the realization that there was a comparable potential for State and local governments came much later in the 1970's.

  NSF has played a key catalytic role in bringing about greater and more effective use of science and technology by State and local governments. Such activities have not been seen as federal "interference;" rather, they are viewed by those affected as supportive, imaginative, and important to strengthening State and local government. To eliminate these programs without any transition would destroy these fledgling capabilities--the kinds of capabilities I might add that took nearly 70 years to devise in the Agricultural Extension Service.

- Instrumentation--I referred earlier to the serious condition our graduate laboratories are falling into because of obsolete instrumentation. This must be corrected before too much time elapses if we are to maintain our quality standards of research excellence.

Deferral of this initiative carries with it a very high risk of losing our lead on a number of research frontiers. Besides the graduate problem, however, we face comparable inadequacies at the college undergraduate level and in high school teaching facilities. The NSF has provided limited but effective support for these areas in the past; total withdrawal would only exacerbate an already serious problem.

Finally, let me emphasize and reiterate the peculiar need in R&D for reasonable stability in funding patterns. This applies equally to programs in science and engineering education. "Stop and go" approaches, strong oscillations, and discontinuities are very inefficient; one can end up with partially completed projects of little use. Once research teams are disbanded and dispersed, it is quite impossible to reassemble them.

Recommendations for Action

Let me restate one of my opening remarks: given the need for significant, dramatic economic initiatives, research and development clearly cannot escape temporary reductions--or slowdowns in growth--at least this year. This does not in any way change the "case for R&D," but we must balance priorities in light of the larger economic issue. Therefore, I would not suggest large increases in the proposed NSF budget total for Fiscal Years 1981 and 1982.

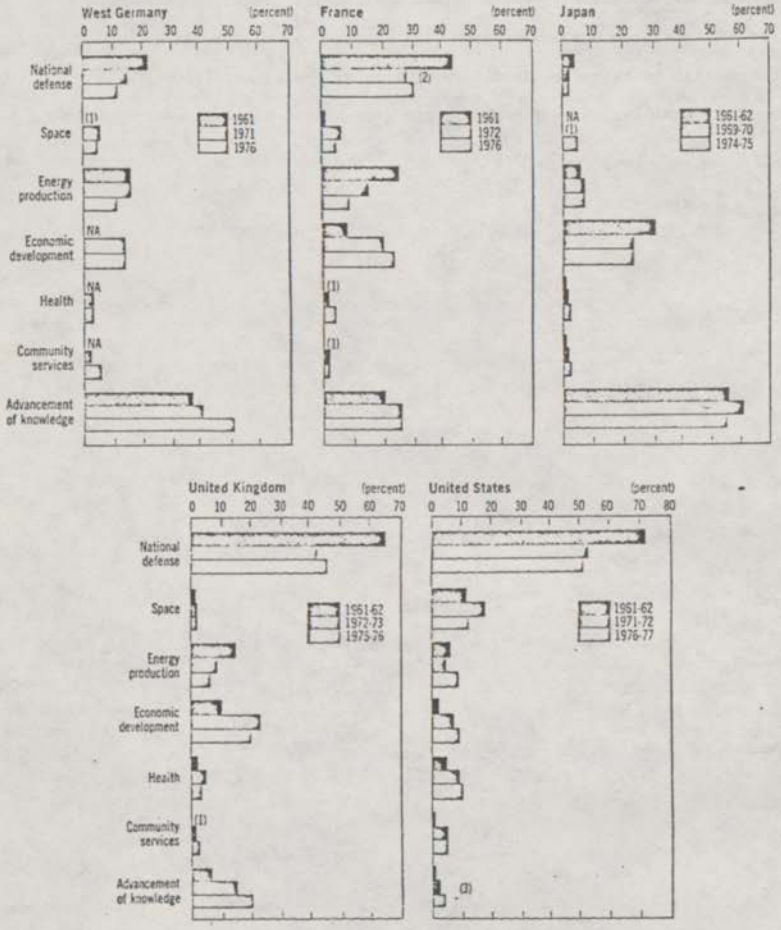
Yet, as I pointed earlier, there appears to be a number of local "disaster areas" within the overall NSF requested levels. I hope the Congress will undertake a close review of these "areas" and consider redirecting the resources necessary to bring some relief. It is, I

think, quite possible to agree with and support the President's overall economic objectives, yet differ on the exact composition of program elements.

In conclusion, I would like to reemphasize our belief that during the months ahead the fundamental worth--in particular, the long-term investment character--of research and development will become even more evident. We expect this will be reflected in future actions of the Administration and Congress, and that the current pause in R&D growth will be temporary.

Figure 1-5

Estimated distribution of Government R&D expenditures among selected national objectives, by country: 1961-77



[1]Less than 0.5 percent.

[2]Later estimates indicate that this amount was about 22.0 percent.

[3]General University funds are not included in the "Advancement of knowledge" category for the United States.

REFERENCE: Appendix tables 1-5 and 1-6.

Science Indicators—1978

Appendix 2

Resolution on

Science and Engineering Education

Whereas the advancement of science and engineering depends fundamentally on both the quality of education and an informed citizenry, and

Whereas the American Association for the Advancement of Science has a responsibility to foster excellence in the education of scientists and engineers while enhancing understanding of science and technology by the public at large, and

Whereas the scientific and engineering communities have long been concerned that serious and worsening deficiencies exist in science and engineering education, including precollege science education and college science education for citizens, and

Whereas a Cabinet-level report to the President of the United States notes that for the past fifteen years there has been a shrinking of our national commitment to excellence and international leadership in science, mathematics, and engineering, and

Whereas the American Association of Engineering Societies has adopted a position statement on engineering education and an action program,

Therefore be it resolved that the Board of Directors and Council of this Association

(a) Pledge this Association, in partnership with its affiliated science and engineering societies, to a full measure of effort to reverse the damaging decline of science and engineering education in the United States;

(b) Urge the President and the Congress of the United States to address the need for a new national commitment to excellence in science and engineering education for all Americans;

(c) Direct the president of the Association to convene a consultative conference of heads of affiliated societies with the aim of advancing science and engineering education in the United States in the 1980s; and

(d) Direct that a major theme of the 1982 Annual Meeting of the AAAS be "Toward a National Commitment to Educational Excellence in Science and Engineering for All Americans."

Adopted by the Council of the
American Association for the
Advancement of Science
7 January 1981

National Science Foundation

STATEMENT OF F. THOMAS JUSTER, DIRECTOR, INSTITUTE FOR SOCIAL RESEARCH

Mr. Chairman and Members of the Committee: I appreciate the opportunity to present this statement. My name is F. Thomas Juster. I am Director of the Institute for Social Research and Professor of Economics at The University of Michigan, and I would like to address a few comments to the crucial role of the National Science Foundation in the support of a particular type of basic social science research.

As all of you know, the progress of scientific inquiry in any discipline, whether in the social or natural sciences, depends on the interplay of conceptual/theoretical work and empirical measurements. Social science generally deals with the behavior of individuals, households, business establishments and public bodies in the real world. It attempts to construct generalizations about behavior on the basis of a theoretical framework, then to test those generalizations or theories against actual behavior. The observation of behavior is crucial to this process, since without the insights provided by measurements of behavior, theoretical developments are likely to become sterile and increasingly removed from behavioral relevance and thus from any useful applicability to policy issues.

The relationship between measurement and theory in the social sciences has changed substantially over the years. The change has enormous potential for putting the social sciences on the same kind of solidly tested and reproducible knowledge base that is presently attributed to the natural sciences. I refer to the development of scientifically oriented data bases, designed with the analytical needs of the respective social science disciplines in mind, and firmly grounded in the theoretical structures of the discipline.

As an historical generalization, theory and measurement have proceeded along separate paths in much social science research. Theories developed in the usual way--observation of events in the world leading to conceptualization and to formal theoretical modeling, then to an attempt to find implications of the theoretical structure with empirical and hence testable content. Measurement, on the other hand, has often been obtained in connection with administrative rather than scientific needs. For example, the Decennial Census (a widely used empirical research tool in economics, sociology, and political science), the National Income and Product Accounts (an important data base widely used by economists), the Current Population Survey (a data base used by both sociologists and economists), and electoral records of voting behavior (used mainly by political scientists). All have the common characteristic that they are first and foremost designed with administrative needs or legal mandates in mind, rather than for scientific inquiry.

The scientific shortcomings of these data bases do not prevent their use. While the Decennial Census contains very little information about the individuals or households that comprise the population, what little information exists is extensively used for analysis that the Census was not explicitly designed for. The National Income and Product Accounts, even though designed with a general conceptual framework in mind, often provides measurements that do not fit the theoretical models of economists, but the data are stretched and used for that purpose because no

other good alternative exists. The Current Population Survey, like the Decennial Census, contains a good many variables that are imperfect measures of what economists and sociologists need for testing of their theoretical structures, and they are used for that purpose even though the measures are admittedly imperfect. Voting statistics merely catalogue the vote division for various offices, without any background information whatever; and while the Census Bureau has carried out larger samplings of voter turnout and registration pursuant to the Civil Rights Act of 1964 that do provide limited further demographic information on individuals, candidate choice cannot be included in the information. And so on.

Although science can develop by the interaction of theory with measurements designed for administrative needs, that is surely not how the natural sciences reached their present stage of development. Although I am not a natural scientist, I assume that the reason why physicists know as much as they do about the atom is that it is possible to measure relevant characteristics of molecular structure with the aid of particle accelerators. Astronomers would not have reached their present understanding of the universe without the aid of sensitive measuring devices able to pick up electronic waves or to see into outer space. It could be argued that, although there are important and inherent differences between the social and natural sciences, one of the main reasons why the social sciences are less precise than the natural sciences is that social scientists are forced to use other people's data, often poorly suited for their purposes, while natural scientists almost always generate their own data and do so with scientific objectives in mind.

The National Science Foundation plays a crucial role in this arena. For the last decade or so, the Social and Economic Science Division of the NSF has begun to support the collection of large-scale data bases, designed by social scientists, and widely used both by the designers of the data base and by the scholarly community generally. These data bases have several common characteristics: they often have a longitudinal character (in that the same households or individuals are observed at different points in time), and they require a considerable institutional capacity to produce--they simply cannot be generated by individual academic scholars working at universities, although of course such individual scholars in large numbers put them to intensive use. Most importantly, while the funding necessary to generate such large-scale data bases is quite small by comparison with support necessary for corresponding laboratories and observatories in the physical sciences, it nonetheless represents a major fraction of the limited funds available for basic social science research.

It seems to me highly probable that, if the budget for the Social and Economic Science Division is reduced from the present level of $34 million to the recommended level of $10 million, the very high cost of these data bases will mean that NSF support for them will be virtually eliminated. As a simple illustration, one proposal now before the Social and

Economic Science Division has alternative budget totals coming to between $1 and $2 million, depending on the scale of the data collection effort. It is hard to imagine that the NSF could reasonably allocate 20 percent of a restricted social science budget to a single project, however worthwhile.

Many of the data bases in question have been generated by various colleagues of mine at the Institute for Social Research and The University of Michigan. It might be helpful if I gave you some flavor of the kinds of data that we have been collecting, and the kinds of uses to which those data are or might be put.

The National Election Studies

Studies of voting behavior have been conducted by my colleagues at the Center for Political Studies at ISR since 1948. The earlier studies were largely supported by private foundations, and were severely hampered by the limitations of sample size and content imposed by the modest budgets of most private foundations--even splicing foundation support together barely sufficed for these studies to proceed, and the persistent diversion of energy to the accumulation of piecemeal support represented a major toll. The National Science Foundation began to contribute at least some support to these collections as early as 1970, and about five years ago decided that the National Election Studies were clearly enough a "national resource" that more routinized funding, along with an extension of control to representatives of the national research community, was warranted. Under the new arrangements, experimental work on measurement development, as well as the specific content of each new survey, is in the hands of a Board of Overseers drawn from a number of major universities in the country; the data themselves are collected, processed and distributed by the Institute for Social Research. Demonstrated rates of use of these materials is enormous by any standard. Requests for the basic data tapes from the 1978 study alone had been filled for 99 universities and colleges by the end of 1979, and most of these institutional disseminations are exploited by multiple intramural investigators. The list of analytic uses of the data is lengthy and varied. Most centrally, they comprise the main basis for developments of political theory concerning the determinants of voting behavior, voter perceptions of issues, candidates and parties, coalition formation, the role of the media or of economic fluctuations in electoral processes, and the nature of political representation.

Additionally, they are heavily used by a number of other social science disciplines, including social psychologists studying processes of attitude formation, sociologists interested in drifts in societal values, and the like. A recent compendium of tangible scholarly products heavily or completely dependent upon the data base that has been generated since 1975 alone shows 49 books, 143 journal articles or book chapters, 79 other professional papers and 47 dissertations. And these counts are known to be partial.

It is self-evident that scholarly work of this intensity and substantive scope could never be sustained by mere administrative voting records, or even by the crude combination of such records with imperfectly matched census data on the rough demographic composition of voting jurisdictions. Without such fuller data of the kind supplied by the National Election Studies, our understanding of political processes could not remotely resemble the current state of the art, and to the extent that the functioning of a democratic society rests on an understanding of its electoral and political processes, these data seem to me to be indispensable. Indeed, there are very few of the developed nations of the world in which some major running investment in such basic research has not come to be made in the past two decades. Although I have not seen the proposal, it is my understanding that my colleagues are about to present a continuation proposal to the NSF, with costs surpassing $1 million annually.

Panel Study of Income Dynamics

At the end of the 1960s, the then Office of Economic Opportunity of the DHEW initiated a longitudinal study of family income, with the intent of trying to follow the process of work, wage-rate change, family splits and combinations, and the effects of attitude, opportunity and habits on material well-being.

The study--known as the Panel Study of Income Dynamics (PSID)--has followed the economic fortunes of a nationally representative sample of American families annually since 1968. Since the PSID also follows all sample individuals in the original families who leave home (and thus is a self-replacing sample), it is an unbiased sample of families each year. Further, since the PSID originally oversampled poor and minority households, it provides a large enough subsample to permit separate analyses by race and status.

Starting a few years back, the cost of continuing the PSID was divided betweeen the DHEW and the NSF, with the intent of eventually transferring the principal fiscal responsibility for the study to the NSF on the grounds that it had become a general national resource for the analysis of labor supply, labor market problems and demographic change rather than a resource of specific concern to the DHEW (now the DHHS).

These data are a unique source of information relating to a range of household behavioral issues. As you may know, inferences from successive cross sections of the population are apt to be quite different than inferences from analysis of a longitudinal panel where the same individuals are followed through time. In particular, economic life involves dynamic processes in which past history has a great deal to say about current behavior, and much past history simply cannot be obtained reliably from retrospective data.

The analytical insights that have been obtained from these data are of considerable importance. The PSID has been invaluable in testing theories about individual economic and social behavior which assume that people act in response to some lifetime utility functions. For instance, workers might trade off job security for high wages when taking jobs, or consumption behavior might be a function of expected lifetime income (permanent income) rather than of current income. Since the PSID follows the same individuals over time, economists and sociologists have been able to make more direct and reliable inferences about such processes than are possible from cross-sectional data. Sociologists and demographers have used the PSID to examine processes which take a long time to play out, such as the long-run consequences of teenage fertility, the dynamics of poverty and welfare, the interaction between women's employment and fertility patterns, and the process of family formation. In many of these analyses, the unique design of the PSID--the fact that it follows all family members--permitted the testing of key assumptions about these behaviors. The PSID has also allowed the exploration of theories which involve predictions of relatively infrequent but important events, since it provides both before and after measurements of the conditions and behavior surrounding such events. For instance, it has been used by economists and sociologists to study job changes, job quits, return migration, retirement, the causes and consequences of marital dissolution, and the short- and long-run causes of unemployment.

For studies of dynamic processes, life-time utility functions and rare events, it is necessary to have repeated observations of the same people, and an extra year of data on the same people is considerably more valuable than are new cross-sectional data. Every year that the life of the Panel is extended will therefore both expand its range of possible topics and decrease many of the statistical problems encountered in past studies based on longitudinal data (e.g., small sample sizes, sample selection bias, etc.).

The availability of the PSID data has also had a major impact on the development of methods for conducting social science research. Using the PSID, econometricians have developed and applied new statistical techniques for eliminating bias due to omitted explanatory variables (heterogeneity), for estimating the extent of causal linkages between past and present behavior (state dependence), and for separating out year-to-year change from measurement error.

Finally, the unique design of the PSID produces an increasing pool of families newly formed by offspring, with reliable current and past information on both parental families and siblings. Every year, the number and representativeness of these new families increases. In four more years, for example, there would be almost 3,000 such families with over 1,000 sibling pairs, and large enough subsamples of blacks and of women to permit race and sex comparisons. These families will provide unique opportunities for research topics such as family formation, sex role stratification, social stratification, and fertility.

Nonmarket Activities and Time Use

Among economists, attention has been focused on the market behavior of individuals, households and firms. But from the point of view of the well-being of individuals and households, the way in which people use nonmarket time is extremely important: people spend only a small fraction of their available time in the market working for pay, by far the largest fraction of time in a variety of other pursuits ranging from household production and leisure to various biological maintenance activities.

Starting in 1965, the NSF began to support a series of studies designed to measure and analyze nonmarket uses of time. The first study was conducted as part of a multinational study; the second, conducted in 1975-76, represented major methodological advances (in particular, incorporating multiple samples of time use for a 24-hour period for each respondent, and including both respondents and spouses in the sample design). In 1980, a panel follow-up of the individuals interviewed in 1975-76 was funded by the NSF, and a major new cross-sectional study is pending approval by the NSF.

The importance of this data base is harder to assess than the two cases discussed earlier, since the analysis of household nonmarket behavior is still in its infancy among social scientists. On theoretical grounds, one can make a strong case that this will become an extremely important resource for social science. The argument simply is that well-being is generated by the application of all resources available to the household, not just by the use of resources devoted to the market, that the basic resource available to individuals is time, and that the combination of available time and wealth accumulated from past uses of time represents the right way to analyze household maximizing behavior. Theoretical developments point in that direction, and what seems needed is development of a data base appropriate for the testing and modification of theory.

Although there has been only modest use of these data for analysis, several interesting and potentially important insights have already been obtained. One is a by-product of the original aims of the study, and illustrates the well-known proposition that the most important scientific developments often come as a surprise. The measurement of nonmarket time is accomplished by collecting a complete diary of an individual's activities on the day prior to the interview. As part of that diary, people working for pay on the market report their work hours in a context where we get very precise measures of the time actually spent at work. Comparing the conventional estimates of hours spent at work (which come from sources like the Current Population Survey) with the estimates obtained from the time diary, there is a considerable discrepency: people actually spend about 15 percent less time at the work place than they report in conventional survey measures of hours worked. Comparing these 1975 results with data from the 1965 study, it turns out that a similar discrepency existed there as well, but the discrepency was substantially

smaller--perhaps five percent rather than 15 percent. Since the two data points are 10 years apart, and since there is a 10-percentage point difference in the error of reporting work hours between 1965 and in 1975, it follows that about a percentage point a year of the widely noted slowdown in labor productivity might well be attributed to nothing more than a simple error in the measurement of labor input! If that is true, much of the extensive discussion about the reasons for the productivity slowdown is beside the point--the slowdown is nowhere near as severe as the official measures suggest.

The second interesting analytic point, which also relates indirectly to market rather than nonmarket behavior, is the way in which households rank the intrinsic satisfaction obtained from activities of various kinds--data that we obtained as part of an attempt to value nonmarket activities. Conventional economic theory argues that well-being is derived from a combination of money income plus leisure time--the idea being that people would rather engage in leisure activities than work, but they work because that is the only way to obtain the income needed to enjoy leisure. But the preference ranking among activities on the time-use study indicates that market work has one of the highest intrinsic satisfaction scores of any activity--higher than virtually all leisure activities. Thus market work appears to be highly valued for its own sake, in addition to the income earned from it. That insight may provide a significant part of the explanation for the rapid growth in labor force participation, particularly among women, observed over the last decade. Theories which attribute rising labor force participation rates to an attempt to keep pace with inflation, or with an increasing differential between productivity in the home and in the market, may simply be wrong or seriously incomplete, since it appears that rising participation in the labor market might be explained by the fact that work itself plays an important role in the satisfaction that individuals derive from the use of their time.

These three illustrations of data bases supported by the NSF obviously comprise only a subset of the possible data bases that would add significantly to the growth of knowledge in the social sciences. In fact, they comprise only a subset of the data bases that my colleagues at the Institute for Social Research have obtained with NSF support, and of data bases that they would like to obtain if support were forthcoming. And of course, ISR is only one institution.

Although the actual use of scarce NSF resources has not yet been determined, I find it hard to believe that the peer review process within NSF would place a high enough value on the generation of expensive data bases to permit continued support of these activities by the Foundation in a period of very significant budget constraint. It is not that reviewers do not regard these efforts as important--they clearly do. But if they have to choose between eliminating 10 major analysis proposals in order to accommodate one data base proposal, and if the proposals to be eliminated include, as they often will, those from scholars with impeccable

credentials and demonstrated high productivity, it will be very difficult to make the case that analysis projects should be shut off from support in order to facilitate the development of data bases that will eventually produce richer theoretical structures and important applications to policy. That is especially so since the generation of data bases is clearly an intermediate product in the scientific enterprise--without them, one cannot make consistent and continual progress, but the benefits are long delayed in time, and one can always "make do" with data obtained for some other purpose.

It is not my intent to downgrade the relative importance of the array of theoretical, methodological and empirical analyses that comprise the typical proposal supported by the NSF. Rather, it is to point out that an extremely important sector of NSF activity, which involves relatively few individual projects and very high project costs compared to the norm, would be in grave danger of elimination if the cuts recommended by the Administration were implemented in the NSF budget.

Moreover, elimination or sharp curtailment of these data-base oriented projects would have a severe institutional impact, quite apart from their substantive impact on the rate of progress in the social sciences: most data-base projects involve a research institution rather than an individual scholar in a university setting. Research institutions are relatively fragile enterprises, and once weakened or disbanded, they cannot easily be recreated. Even a temporary hiatus in NSF support for projects of the sort described in this memorandum would have a major impact on an organization like the ISR, especially when there can obviously be no guarantee that any cessation of support will be temporary.

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NATIONAL SCIENCE FOUNDATION

STATEMENT OF SANDRA J. NEWMAN, ASSOCIATE RESEARCH SCIENTIST, INSTITUTE FOR SOCIAL RESEARCH

Mr. Chairman and Members of the Committee:

My name is Sandra J. Newman. I am an Associate Professor in the Graduate Program in Urban Planning and an Associate Research Scientist at the Institute for Social Research, both at the University of Michigan.

I appreciate the opportunity to submit this statement on the proposed 1982 Research and Technology budget for the Department of Housing and Urban Development. I will direct my comments to the proposed cutback in the line item: "Consumer and Equal Opportunity Research," under which most research on the housing needs of elderly Americans is funded.

One victim that has already fallen in the wake of this proposed cutback is a carefully considered and sorely needed study on the housing adjustments of the elderly. Is such a study needed? Haven't the elderly been studied a great deal? The answer to both questions is "yes." Even though there have been many studies on the elderly, there have as yet been none of sufficient rigor or appropriate scope and focus to address one of the urgent policy needs of the coming decades: providing decent housing for the rapidly growing population of elderly Americans.

Funding for this vital study would represent a minute fraction of the budget of the Department of Housing and Urban Development. As you know, the entire budget for the Office of Policy Development and Research (PDR) within HUD represents about one half of one percent of the budget of the entire Department; the line item that encompasses research on the elderly (as well as the handicapped, public housing tenants, and other "special users") represents less than 10 percent of the PDR budget, as proposed.

Nearly a million additional nursing home beds will be needed over the next 20 years if alternatives cannot be identified.[1] About one million elderly people are already homebound, and 20 percent have serious disabilities.[2] On both cost efficiency and humanitarian grounds, alternatives to institutionalization are critical. The current Congress clearly acknowledges this: after many years of debate, Congress seems ready to act on legislation to make home health care a real option.

Health care, then, is one requirement for sustaining independent living. Another critical factor is the housing unit itself and whether it is or can be made adequate for the changing needs of its aging occupants. Unfortunately, we are not well-enough informed about the effects of aging on housing and living arrangements to develop sound housing policy for the elderly. We do know that as people age, they are likely to experience a number of important changes that can affect their well-being--loss of occupation or income, deteriorating health, and widowhood. Comparable major changes at younger ages--changes in family size or composition, spells of unemployment, or job change--often precipitate decisions to change housing or living arrangements. But among the elderly, moving to a different residence is very unusual: only about 6 percent of the population 65 or older move each year compared to more

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[1] Older American Reports, Vol. 5, No. 10, March 11, 1981, p. 7.

[2] Ibid.

than 20 percent for the total population. That older people rarely move is highly correlated with two other factors about which little is known: in neighborhoods with high proportions of older residents, the housing units themselves tend to be old and of comparatively poor quality, and the neighborhoods tend to be fragile, with high vacancy rates, low property values, and abandonment. At the beginning of the 1970s, there were one and a half times more older persons on waiting lists for subsidized housing than available units.

What happens to these elderly people? Do their residences become increasingly ill-suited to their needs? Do they take some actions to make their housing units more suitable? We do not know the answers to these questions. Neither do we know if the actions that are taken are the most efficient in terms of private and social costs, or whether the private market provides an adequate mix of housing-related services to facilitate efficient housing adjustments. One key problem among older people may be an inability to manage or maintain their housing units, and supportive services may simply be unavailable in the private market. Alternatively, the housing units themselves may be inadequate, or there may be serious problems in linking up the elderly with the proprietary or non-proprietary service providers who do exist, or the real problem may be inadequate resources.

Part of what we need to know, then, is whether there are impediments to housing adjustments. Clearly if impediments exist, we must identify them before we can develop strategies to eliminate or minimize them. We also need to know something about the timing of housing adjustments so that, if government needs to play a role, its activities can be targetted to the most appropriate point or stage in that process.

The serious imbalance in housing demand and supply in many areas across the country demonstrates the need to understand the timing of housing adjustments. We currently face a serious housing problem in rapidly growing areas in which single-family housing is expensive and in too short a supply to meet the intense demand expressed by young families. This imbalance has prompted some to argue for a government policy encouraging "timely" adjustments--in this case, residential moves--by older residents to free up larger housing units for young families. But what does "timely" mean? What events trigger housing adjustments in the first place, and with what time lags? How critical is health status, social support, household composition, and economic status in the adjustment process? We have only the most superficial information on the general motivations for residential moves made by the nominal fraction of the elderly who do move each year, and we have no information about how well these adjustments work out over time. Older people may actually want to move but may be prevented from doing so by a variety of different barriers. Or, older persons may strongly prefer to remain in their own homes.

Existing sources of data cannot answer these housing policy questions. Most data sets are based on specialized samples and do not support the generalization of findings required for national policy design. The subjects covered in existing information are also highly specialized and narrow; the health surveys of the National Center for Health Statistics, for example, contain no housing information, and the Census Survey of Residential Alterations and Repairs contains no health information. The Annual Housing

Survey (AHS), too, has several serious drawbacks. First, it does not follow households over time if they move out of sampled housing units. Therefore, the only way to study the elderly who do move is by asking respondents to recall past events. Such reports are particularly subject to error when collected from the elderly. Furthermore, fully 25 percent of all AHS elderly respondents were coded "other" on a question concerning why they made a move in the past year.[3] And the AHS has other inadequacies for the present study: no reports on health and health care, on home maintenance and room use changes, or on the timing and sequencing of events and housing adjustment responses.

Information that already exists may be useful in debates on the adequacy of existing programs to meet the housing needs of the elderly; regrettably, the more fundamental set of questions concerning the appropriateness of current or alternative strategies cannot be answered with these data. Such complex questions require high quality research that can rarely be undertaken in short order and rarely comes at bargain rates. The need for this research is not the result of haphazard and rushed decision making, or "firefighting" an immediate concern of a past administration. It grows out of many years of study, and most immediately out of a carefully prepared and documented research agenda on the housing needs of the independent elderly developed by prominent gerontologists and allied social science researchers and practitioners.

This study illustrates an important paradox in applied research: quick turnaround research to meet immediate problems is sometimes obsolete before it is completed, but carefully designed, longer-term studies that attack basic as well as immediate concerns usually remain useful for many years. In fact, it is partly because of the inefficiencies of many small-scale and quickly executed studies that the need for the current research arises.

Eliminating this research does not erase the need for it. The evidence for its restitution seems compelling.

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[3] Special tabulations, 1976 National Annual Housing Survey data.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF BRUCE Q. RADO, CHAIRMAN, EARTH RESOURCES DATA COUNCIL

Mr. Chairman, members of the Subcommittee:

I am Bruce Q. Rado of the Georgia Department of Natural Resources and Chairman of the Earth Resources Data Council. I am submitting this testimony on behalf of the Council of State Planning Agencies Earth Resources Data Council, in cooperation with and in support of the National Governors' Association's Committee on Energy and Environment.

I appreciate the opportunity to share with you state perspectives on issues related to satellite remote sensing and the operational system. In order for the members to understand why the states are concerned about this issue, I would like to provide a brief history of state involvement as users of Landsat technology.

History of State Involvement

States have long supported the concept of an operational land remote sensing system. The technology promises to be cost-effective, time saving, and reliable. These characteristics are increasingly important at a time when states are expected to perform added responsibilities as resource managers. A major impediment to increased state use of remote sensing data has been the risk of investing in systems which may not be functional after a few years.

In June 1978, The Intergovernmental Science, Engineering and Technology Advisory Panel (ISETAP), completed a major study of Landsat from the perspective of state and local governments under the direction of Governors Lamm of Colorado and Busbee of Georgia,

and State Representative Tom Anderson from Michigan. This report surveyed the extent of state use and recommended that an operational commitment was needed for data continuity and compatibility. ISETAP was established by the National Science and Technology Policy Act of 1976 to advise the Director of the Office of Science and Technology Policy, Executive Office of the President, on scientific and technical issues of concern to state and local governments. ISETAP is composed of state, regional and local government officials.

The National Governors' Association (NGA) adopted a resolution supporting the ISETAP report, and urging the Federal government to establish an operational Landsat Information System.

In September 1978, the Council of State Planning Agencies, in consultation with the National Governors' Association, appointed the Earth Resources Data Council to serve as the nucleus of a State-Federal communication and advisory network on remote sensing and natural resources data issues. Surveys and recommendations prepared by the Data Council during the past year and a half have continued to affirm State support of a Federal commitment to an operational civilian land remote sensing system. The Earth Resources Data Council is composed of State planning and program officials from each of the ten standard federal regions. Members maintain contact with appropriate state officials in their regions, and use this informal network to obtain the necessary feedback and perspective on important natural resource issues.

The findings and recommendations reported in this testimony were developed by the Earth Resources Data Council, in cooperation with the National Conference of State Legislatures' Natural Resources Information Systems Task Force. The NRIS Task Force is composed

of State legislators and key legislative staff concerned with natural resource management issues.

States as Users of Land Remote Sensing Data

State officials know that responsible management of this nation's environment and natural resources is as important to the future of the state and its development as it is to the nation as a whole. In addition, both State and Federal legislation and regulations have recognized the important management role of states and have increased the authority and responsibility of state governments in this area. It must be recognized that states are full partners with the federal government in natural resource and environmental management.

Adequate data are essential if states are to meet their responsibilities as resource managers. Current activities to trim the federal budget and relax regulatory controls will put even more responsibilities on the states.

Prior to 1978, only four states had developed operational capabilities to analyze and apply Landsat data. In 1978, the NASA Regional Applications Program was developed to allow for cooperative state/NASA demonstration projects. Due to this program, 25 states have engaged in demonstration projects, and 22 additional states are in the process of developing operational Landsat analysis and applications capabilities. As a result of these pilot projects, states are finding Landsat applications to be advantageous from the standpoint of cost and effectiveness. States are applying Landsat data to enhance their management capabilities in the areas of water resources, agriculture, forest and range lands, fish and

wildlife, and other land resources. In particular, Landsat technology is demonstrating usefulness in crop inventory, mineral exploration, geologic mapping, flood mapping, damage assessment, and land cover inventory. These projects provide specific user need information to NASA which helps to guide future research and development activities.

State recommendations

The revised FY 82 budget proposes elimination of funds intended to build Landsat D3 and long lead time parts for D4. In addition, the budget proposes to cut funds completely for the Technology Transfer Program (Regional Remote Sensing Applications, Application System Verification and Test, and User Requirements and Awareness Programs) by the end of FY 81.

The guiding rationale for this proposal is that these activities are more appropriately handled by the private sector. The Earth Resources Data Council does not necessarily disagree with this view. However, the particular approach presented may preclude states continued use of satellite remote sensing data in meeting their responsibilities as managers of the nation's natural resources.

Who operates the system is not the important issue with States. States are most concerned with the performance of the system -- its cost and efficiency in satisfying state requirements and whether the transition to the private sector will be orderly in terms of satellite and sensor availability.

Two issues of most concern to states are data continuity and technology transfer.

o Data Continuity

To date, the states have invested over $27 million in developing

capabilities to analyze and apply Landsat data. These investments were made on the assumption that current Landsat data be available throughout the 1980's.

The revised FY 82 proposal eliminates $104.3 million intended to build Landsat D3 and to fund long lead time parts for Landsat D4. These are the satellites which were to have provided data continuity through the next decade. There is no firm indication at this point that a private sector satellite can or will be launched within this time frame, or that a private sector satellite will be able to immediately provide data which is compatible to that being currently used.

Landsat D1 and D2,currently under construction, have a 65% probability of providing single satellite coverage through 1988. However, should there be an unsuccessful launch or premature craft deterioration,major gaps in data would jeopardize the states' financial investments as well as prohibit future investments due to the high risk conditions created. In addition, such gaps could adversely impact state programs which currently use Landsat data, especially those related to agriculture.

To alleviate this situation, we recommend that Congress appropriate $10 million to the FY 82 NASA or NOAA/NESS budgets to fund long lead time parts for Landsat D3. In the event that Landsat D fails prematurely, or if Landsat D1 or D2 has an unsuccessful launch, Landsat D3 should be completed as quickly as possible, providing no private sector alternative is available.

o Technology Transfer

In order for the private sector to assume full responsibility for satellite remote sensing activities, there must be a reasonable demonstration that a visible user market exists. While the private sector has responsibility and skill in market development, such activity will probably not occur unless there is some initial assurance that the technology is marketable. The technique development and application testing provided through NASA's Technology Transfer Program is providing the necessary assurances for an orderly transition to the private sector. In addition, NASA's Technology Transfer projects have involved private industry service firms in working with user organizations and thus have played an important role in increasing the overall commercialization of Landsat technology. This involvement of private industry acts as a multiplier of project results.

The testing and evaluations conducted by the states indicate that the nation is on the verge of realizing major returns on its investment in the Landsat system. The technology shows great potential for enhancing management and productivity of our agricultural, timber, water and mineral resources. The elimination of the technology transfer program at this stage would seriously interrupt the development and testing necessary to assure the private sector that a solid base of support exists. We therefore recommend that the Congress and the Administration approve the increase specifically earmarked for the Technology Transfer Program (i.e., Regional Remote Sensing Applications Program, Application System Verification and Test, and the User Requirements and Awareness Programs), recommended by the House Subcommittee on Space Science and Appli-

cations and the House Committee on Science and Technology.

Landsat remote sensing technology promises to make a major contribution to our ability to deliver rational and sound resource policies. We trust that these recommendations will prove helpful to you during your budget deliberations.

In closing, I would like to stress that States are most anxious for the Operational Land Remote Sensing System to be cost-effective and successful. The States are prepared to join with other user segments to be active, constructive participants in this effort.

I would like to thank members of the Committee for the opportunity to present the views of State governments on this important issue.

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