# PUBLIC WORKS AS A COUNTERCYCLICAL TOOL



## HEARING

BEFORE THE

## JOINT ECONOMIC COMMITTEE
## CONGRESS OF THE UNITED STATES

NINETY-SIXTH CONGRESS

SECOND SESSION

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# CONTENTS

## WITNESSES AND STATEMENTS

TUESDAY, JUNE 17, 1980



## SUBMISSIONS FOR THE RECORD

TUESDAY, JUNE 17, 1980



## APPENDIX

# PUBLIC WORKS AS A COUNTERCYCLICAL TOOL

TUESDAY, JUNE 17, 1980

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
*Washington D.C.*

The committee met, pursuant to notice, at 10:09 a.m., in room 457, Russell Senate Office Building, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Present: Senator Bentsen; and Representatives Brown and Rousselot.

Also present: John M. Albertine, executive director; Deborah Matz and Mayanne Karmin, professional staff members; Stephen J. Entin and Mark R. Policinski, minority professional staff members; and Betty Maddox, administrative assistant.

## OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

First: I would like to welcome the very distinguished witnesses that we will have testifying this morning.

For the past year, we in the Congress have made an all-out effort to try to achieve a balanced budget for 1981—at least in accordance with economic assumptions as they were at the beginning of the year. One of the reasons this effort has been so pervasive is because this country has been shocked by rapid inflation and the policymakers are trying to bring it under control.

For the past few months, however, the annualized inflation rate has dropped. Currently, housing starts have fallen, and the unemployment rate has increased dramatically.

At this point, the interest of Congress may be shifting, although I just left a meeting of the Finance Committee, where we were talking about further cuts that had to be implemented in accordance with the budget resolution, and we were talking about some very deep and serious human concerns. We were talking about medicare, medicaid, payments on social security, day-care centers—things that concern so many Americans.

As this recession deepens, the likelihood of Congress passing stimulative measures increases. It is important, particularly in these times, that the countercyclical programs which are passed be as timely, as targeted, and as cost effective as possible.

The local public works program was passed in 1976 and 1977. It expended $6 billion. There isn't any disputing that thousands of jobs were created and that many beneficial projects were built, but recent studies have raised questions about the timing of the program, its effectiveness in employing the unemployed, its ability to target areas

most affected by the downturn, and its overall impact on the Nation's economy. I am particularly concerned about an OMB study that was released in November that concluded that:

One: For the most part, countercyclical public works programs are implemented during the recovery, and are thus procyclical;

Two: Their impact on unemployment is minimal and, in fact, only 2 percent of the local program costs were expended in wage payments to the unemployed; and

Three: That the duration of employment on public works projects, which is about 4 weeks, is too short to provide meaningful skills for training.

We are talking about a sacred cow when we get into this kind of a subject, one that has been of intense interest to Congress for generations. I'm hoping that these witnesses this morning can assess these findings, shed some light on how well public works responds as a countercyclical device, and discuss whether it is advisable to attempt to utilize this type of program to mitigate the effects of the current recession.

One of the major obstacles to resolving the Economic Development Administration reauthorization conference has been concern over inclusion of a countercyclical public works title. I am going to see to it that all of the conferees receive copies of today's testimony. So if you gentlemen want to try to influence the conferees, here's your opportunity. Mr. Hall, would you proceed first?

## STATEMENT OF ROBERT T. HALL, ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT, DEPARTMENT OF COMMERCE

Mr. HALL. Thank you, Mr. Chairman. If I may, I will briefly summarize my 22-page prepared statement for a few minutes, and then we can move into the questions and answers.

Senator BENTSEN. Let me interrupt, so that the people in the audience can know something about the background of each of these panelists.

We have Mr. Hall, who is the Assistant Secretary for Economic Development of the U.S. Department of Commerce. We have Mr. Roger Vaughan, assistant vice president, Citibank. We have Mr. Arnold Cantor, assistant director of economic research for the AFL–CIO; and we have Mr. Patton, senior vice president and director of operations of Helmsley-Spear, Inc.

Among the witnesses today, we have conflicting views, and I think that will help.

Proceed, Mr. Hall.

Mr. HALL. Thank you, Mr. Chairman. I will just summarize briefly my testimony and focus on the many important issues that you have noted in your opening remarks. I will be reporting data that we have on the operation of rounds I and II of the local public works program.

I should point out that we have a major evaluation underway. The final results and analysis of that evaluation will be available by late summer; therefore, in many of the critical areas you and others have noted, we just have preliminary, yet not complete information.

Senator BENTSEN. Let me state some ground rules here. I know some of you were told 5 minutes, but you can each take 10 minutes

to summarize your prepared statements. That will still give us plenty of time for questions.

Mr. HALL. Thank you, sir.

The local public works—LPW—program, rounds I and II, was a $6 billion program. There were $2 billion in round I which was basically launched under the previous administration, and then there was a $4 billion round II, which was launched under this administration.

Overall, some 10,616 projects were involved, a little more than 2,000 in the first round and 8,554 the second round.

In designing the second round, we tried to examine the benefits and pitfalls of round I. I think it is important to cite what we saw as the objectives of the countercyclical program. They were:

One: To stimulate the national economy and to strengthen local economies through the infusion of public works funds;

Two: To generate employment opportunities, particularly in the construction trades and related services; and

Three: To construct or rehabilitate useful public facilities.

I think in evaluating any program, you ought to, at the outset, delineate what the objectives are, and then you can rate the effort on the basis of what you set out to do. In terms of looking at round I, we identified some weak areas that needed to be strengthened. So we had six policy objectives within the three general principles in designing round II.

One: To maximize the countercyclical stimulus by starting construction as soon as possible and shortening the period within which the construction would take place;

Two: To target funds to the areas of highest unemployment;

Three: To reduce inequities in the funding allocations under the previous round;

Four: To maximize the use of decisionmaking by local officials in the selection of the projects;

Five: To make the program more predictable by providing information to the local authorities as to what their appropriate share of the funds would be, so that they would not be developing unnecessary and expensive project proposals;

Last: To try to reduce overall program inefficiencies by reducing the applicant's and the Federal Government's workload from such projects.

In terms of going to the heart of the interests of this committee, we did, in round II, achieve most of these objectives—or else made great strides toward achieving them, particularly the targeting of funds to the areas of greater unemployment. There is information in my prepared statement that describes this in more detail.

In terms of the general program results:

First: In addition to the countercyclical nature of the stimulus, as I indicated, one of our areas of concern was the provision of useful public facilities. I want to note that about 50 percent of the LPW projects involved new construction and about 2,000 or so involved rehabilitation of existing structures. Many other projects involved demolition and other types of activities.

Our analysis of the projects shows, Mr. Chairman, that over 50 percent of the projects served basic economic development infrastructure needs—water and sewer facilities, transportation improvements,

site development—the kinds of projects we would do under the regular public works program of EDA.

About 18 percent of the projects were general governmental structures: office, police, fire, and other public safety facilities.

About 17 percent of the projects were for education, housing, social services, and community welfare needs; and about 14 percent of the projects were designed to enhance the quality of life in terms of cultural or recreational types of activities.

A second feature of round II that was very prominent and important was its assistance to minority business enterprises—MBE's. I am sure you are aware of the requirement that 10 percent of each project's funds go to minority contractors or subcontractors.

This was quite a challenge, and we think we effectively met the mandate of the Congress in this regard. At this time, I would like to report that at least 15 percent of the funds are going to bona fide minority contractors or subcontractors. This results from very rigorous program administration. We anticipate that, in the final analysis, the percentage might go even higher, a record that exceeds most other governmental efforts to bring minority contractors in to the mainstream of construction and related industries.

In terms of LPW's countercyclical characteristics, there are several factors that must be considered in assessing a program's ability to function as a countercyclical stimulus. These include:

One: The program's job-creation potential, including the types of workers and industries affected.

Two: The time required to initiate and terminate a program's stimulus-producing activities. This goes to the point you raised, Mr. Chairman, about the importance of actual implementation, resulting in countercyclical rather than procyclical activity.

Three: The question of whether the program stimulates activities that would have been carried out within the same time period without LPW program.

Four: The program's fiscal relief to State and local governments during periods of recession.

Five: The assessment of the program's inflationary impacts, if any, particularly at the local level.

We will be providing much useful data for future policymakers in the major evaluation we have underway. We will be able to report on this to the Congress at the end of the summer.

Going back to my first point about a countercyclical program's job creation impact, there are three types of employment generation. One is direct onsite employment. We are estimating that LPW will provide some 96,000 persons-years of direct employment. Indirect employment, that is, employment in the service industries that provides equipment and supplies for the actual construction is estimated to amount to some 66,000 person years. Finally, we estimated that the economic stimulus, as measured by induced employment, will amount to between 193,000 and 222,000 person-years of employment.

Overall, the $6 billion in public works funds are estimated at this point to be generating between 355,000 and 383,000 person-years of employment. In terms of unit cost of this employment, direct employment costs about $62,000 per unit. If you combine the direct, onsite employment with the indirect, you are talking about $37,000 per unit cost. If you are talking about the total of the three tiers of employment,

you are talking about a cost of between some $15,000 and $17,000 per job.

It is clear that a major emphasis of the program was to maintain and create employment in the construction industry. It is fair to say that most of the onsite employment went to those in the industry who move from job to job. Only 13 percent of the workers who were hired for LPW were immediately unemployed before being employed in LPW.

I would like to point out that minority employees made up about 20 percent of LPW employment. This corresponds favorably with about 10 percent in the construction industry overall. As a result, there was certainly a greater penetration of minority workers in the construction industry through the LPW program. We also made significant inroads in terms of the instructions from the Congress in order to target as much employment as possible for veterans.

In terms of program timing, which is certainly a critical issue, both rounds I and II were mounted sometime after the recession. The data on this are contained in my prepared statement. Generally the projects got underway quickly. As you recall, there was a 30-day period in which EDA had to get the guidelines and procedures out, a 60-day period in which EDA had to reach a decision on the application, and a 90-day period within which the grantees had to start construction.

I should note that round II was enacted on May 13. We got our planning targets out in June. We funded our first project on July 21, and some 71 days later, Senator, we had completed the approval of 8,554 projects and the obligation of $4 billion in a 72-day period.

Administratively, the Federal Government and State and local governments can move the projects. Most of the projects did start their construction within 90 days. Therefore, in terms of the timing issue, I would suggest the critical point is when the program is enacted and when the funds are made available. Once that is accomplished, the administrative steps and the construction cycle can rapidly commence.

There is another critical issue concerning programs of this sort which involves substitution of the funds. Our studies are indicating that substitution didn't occur to as great a degree as some anticipated. Indeed, findings to date indicate that once net leveraging and net substitution are taken into account, the $6 billion did create $6 billion worth of construction. Indeed, for every dollar spent under the LPW program, there was a dollar and 1 cent of actual net construction. In fact, we had an additional $60 million of net effort.

In terms of inflationary impact, I think I would just point out that even though the program had a considerable effect in the construction industry and construction employment overall, it was a relatively small part of the overall national construction effort and thus was not inflationary at the national level. But in some localities, we have indications that there was a little pressure on the supply of equipment and materials, and hence possibly some inflationary pressure on costs. We will have better information on that when our microanalysis is completed in August.

I have gone through a rather extensive piece of testimony, Mr. Chairman, and I will conclude by saying that certainly the efficacy of public works as a countercyclical tool is a current issue. I would

67-217 O - 80 - 2

also suggest that one must not only look at public works as a countercyclical tool—one must look at the whole array of countercyclical efforts.

It goes back to my initial point. We have to identify objectives and goals to be achieved. Different countercyclical efforts in terms of employment objectives will reach different categories of the unemployed, with different kinds of effects.

I would hope that the Congress, in its deliberations, and the Joint Economic Committee, in looking at countercyclical measures, will consider the total array of possible countercyclical measures and the relative values of the various targets and objectives.

That concludes my remarks.

Senator BENTSEN. Thank you, Mr. Hall.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF ROBERT T. HALL

I am pleased to be here today to participate in this hearing on "Public Works as a Countercyclical Tool" by discussing the Economic Development Administration's most recent experience with that concept: the $6 billion Local Public Works (LPW) Program funded during fiscal year 1977. As you know, there were two separate rounds of the LPW program: a $2 billion Round I Program (LPW I) largely implemented by the previous Administration; and the $4 billion Round II program (LPW II) proposed and implemented by the Carter Administration as part of its fiscal year 1977 economic stimulus package.

To place my remarks in context, I will begin by briefly giving the background of LPW I and then providing a more detailed description of the LPW II effort. Then I will share with you tentative findings of evaluations of both rounds of the program. These evaluations, which are being conducted by private consulting firms and EDA staff are scheduled for completion late this summer. At that time EDA will prepare a summary report on the various components of the LPW evaluation together with the individual studies for distribution to the Congress and other interested parties. Today, however, I will share with you findings to date which, despite their preliminary nature, provide insights into the potential benefits and costs of countercyclical public works programs.

LPW I BACKGROUND

The Local Public Works Capital Development and Investment Act (LPW I) was passed by Congress over President Ford's veto on July 22, 1976, as Title I of the Public Works Employment Act of 1976. In an effort to improve upon earlier countercyclical programs, Congress attempted to accelerate implementation by requiring that EDA prepare regulations and procedures for carrying out the program within 30 days of enactment of the legislation and approve or deny projects within 60 days of receipt of applications. In addition, grantees were required to commence on-site construction activity within 90 days of project approval.

Under this program, EDA awarded 2,062 grants totalling $2 billion for State and local government public works projects that would stimulate employment. Funds were allocated among the States based on severity and magnitude of unemployment, and within States, projects were selected on the basis of a relatively complicated scoring formula that considered the area unemployment rate, number of unemployed in the project area, ratio of labor costs to total project costs, per capita income of the applicant jurisdiction, long-term project benefits, type of applicant, and the relationship of the project to local plans. Because of statutory requirements, within each State, projects in areas with an unemployment rate higher than the national average (then 7.8 percent) competed for 70 percent of the State's allocation, while projects in areas with unemployment rates below the national average competed for the remaining 30 percent of the State's allocation. This legislative requirement targeted substantial assistance to areas with relatively low unemployment rates, thereby limiting the program's employment and other impacts in areas of greater distress.

The 2,062 grants, which were selected from 22,000 eligible applications totalling more than $20 billion, were approved by EDA between December 27, 1976, and early February 1977 in accordance with the mandated project approval deadline.

LPW II PROGRAM OBJECTIVES AND STRUCTURE

While EDA was processing the LPW I applications, the Carter transition team was in the process of designing an economic stimulus package. This two-year stimulus package, which was announced in January 1977, included a $4 billion Local Public Works Program intended to:

Stimulate the national economy and distressed local economies through the infusion of Federal public works funds;

Generate employment opportunities, particularly in construction trades and related industries and services; and

Construct or rehabilitate useful public facilities.

Following President Carter's announcement of support for an expanded LPW Program, we at EDA worked closely with the House and Senate Public Works Committees to design an improved program that would meet six policy objectives:

Maximize the countercyclical stimulus effect of the program by starting construction as soon as possible and shortening the periods within which the construction would take place;

Target funds to areas of highest unemployment in each State in order to reach the areas of highest economic distress and to minimize effects on wages and prices;

Reduce LPW I funding inequities among different areas and types of governmental units;

Place maximum emphasis on local decisionmaking in the selection of projects;

Make the program more predictable by allowing eligible applicants to know in advance how their projects would fare, thus avoiding unrealistic expectations and excessive application submissions, as well as facilitating State and local planning; and

Increase the program's efficiency by reducing the administrative workload on LPW applicants as well as EDA.

Other considerations that guided us in formulating the LPW II procedures included the need to achieve equity by taking into account LPW I funding in distributing LPW II dollars and the desirability of using the 20,000 non-funded LPW I applications to the greatest extent possible. After comprehensive hearings and consideration of the Administration's recommendations, legislation and appropriations for LPW II were passed by the Congress and signed into law by President Carter on May 13, 1977, just over 100 days after he proposed the program.

Like LPW I, the new statute, the Local Public Works Employment Act of 1977, outlined a timetable for implementation, allowing 30 days for the publication of regulations, 60 days for decisions on applications, and approval for on-site labor to begin within 90 days. Based on EDA's LPW I experience, however, several changes were made in the implementation of LPW II. These changes included the elimination of the LPW I requirement that, within States, 70 percent of the funds go to areas with unemployment rates above the national average, and 30 percent to areas with rates below the national average—a requirement which had proven overly advantageous to areas with unemployment rates below the national average. I will discuss the effect of this modification on targeting assistance to high unemployment areas in a few minutes when I report on preliminary program results. As in LPW I, funds were allocated among the States according to a formula that distributed 65 percent of the funds on the basis of the number of unemployed in each State and 35 percent on the basis of each State's unemployment rate. However, Congress modified the LPW I approach by raising the minimum allocation for a State from one-half of one percent to three-quarters of one percent. This meant that under the $4 billion LPW II program the minimum State funding level was $30 million, versus $10 million under the $2 billion LPW I effort.

The LPW II legislation also contained several provisions included by the Congress as secondary objectives. In recognition of discrimination against minorities in the construction and supply industries, at least 10 percent of each LPW II grant was required to be expended with a minority business enterprise. In addition, hiring preference was to be given to disabled and Vietnam-era veterans, and all materials used on the projects were to be produced, mined, or manufactured in the United States. Buildings were to be designed and constructed to insure access to the handicapped and to the elderly.

In addition to the changes I have already outlined, both the law and procedures were modified under LPW II to permit the development of sub-state allocations called planning targets. Within their planning target amount, local governmental units could set their own project priorities. These planning targets were calculated using the same 65/35 formula that divided funds among the States and reflected

any funding received in Round I. Planning targets in amounts greater than $75,000 were determined for three categories of applicants: (1) "primary cities" with populations normally greater than 50,000; (2) jurisdictions in the balance of counties with primary cities; and (3) jurisdictions in counties without primary cities. These changes over the LPW I approach resulted in the following general improvements:

The targeting of funds to areas of greater unemployment (e.g., 72 percent of LPW II funds went to areas with rates above the national average versus 63 percent in LPW I);

The distribution of a greater proportion of funds and projects to areas with the largest numbers of unemployed persons (e.g., cities over 50,000 with 45.9 percent of the nation's unemployed population received 46 percent of LPW II funds versus 38 percent of LPW I monies);

A wider participation by different types of government (e.g., all 50 State governments received funds under LPW II versus 15 under LPW I, while over 900 county governments received funds under LPW II versus 190 under LPW I); and

More funds were leveraged from other sources ($1 billion in LPW II versus $160 million in LPW I).

We established planning targets for thousands of State and local jursidictions in mid-July, and by September 30, 71 days later, we had processed and approved 8,554 LPW II projects totalling approximately $4 billion.

## GENERAL PROGRAM RESULTS

Since the purpose of this hearing is to consider the use of public works as a countercyclical tool, I know that the committee is most interested in those impacts of LPW that indicate its effectiveness or potential effectiveness in producing a countercyclical stimulus. However, as I noted previously, this was not the only objective of either Round of the Program. Consequently, before presenting the available data on the countercyclical properties of LPW I and II, I think it is important to describe briefly the other impacts of these programs.

*Provision of useful public facilities*

First, the principal characteristic that differentiates public works programs such as LPW I and II from other countercyclical programs is the long-term benefit of the increased capital stock. Of the 10,616 projects funded under LPW I and II, nearly 50 percent or 5,203 provided new structures. The program also repaired or rehabilitated over 2,000 existing structures. Other types of LPW projects include demolition and construction, additions, and miscellaneous activities. The projects met a wide variety of local and State needs, from roads and water systems to municipal buildings and recreation areas. Of the 10,616 projects receiving funding under LPW:

51 percent of the projects served basic economic infrastructure needs such as utilities, transportation or site preparation;

18 percent of the projects were general governmental structures, offices, police and fire buildings;

17 percent of the projects met education, housing, social service or community welfare needs; and

14 percent of the projects were designed to enhance the quality of life through satisfying the cultural and recreational priorities of LPW applicants.

*Aid to minority business enterprises*

An additional major benefit of the LPW Program was its impact on minority contractors and suppliers. In response to the enactment of the unprecedented 10 percent MBE requirement, EDA launched an intensive management effort to ensure that at least $400 million of the $4 billion appropriation went to minority contractors and suppliers. From the outset, it was recognized that implementation of this requirement would be a challenging task. Prior to the LPW program, only a small percentage of the public works funds expended by Federal, State, and local governments went to minority firms. As a result, few possessed the experience, capital, credit, or bonding capacity to compete successfully as prime contractors. In addition, few non-minority prime contractors were accustomed to working with minority subcontractors or suppliers, and most had no desire to abandon established relationships to work with firms with which they had no experience.

Because of these inherent obstacles, we are particularly pleased that the minority business requirement will not only be met, but exceeded. Confirmations of contracts and contract amounts, signed by the minority firms, have been filed and processed for 93 percent of the LPW projects. These reports confirm that at least 15 percent, or $600 million, of the $4 billion of LPW II funds will go to minority businesses, a figure that may go even higher when all data are received and assessed.

COUNTERCYCLICAL CHARACTERISTICS

Now let me turn to those aspects of the LPW evaluation in which you are most interested: those that indicate the program's utility as a countercyclical tool. As you know, there are several factors that must be considered in assessing a program's ability to function as a countercyclical stimulus. These include:

A program's job creation potential, including the types of workers and industries affected;

The time required to initiate and terminate a program's stimulus-producing activities (that is, whether a program can produce impacts during an economic contraction and early phases of the succeeding economic recovery);

The extent to which a program stimulates activities that would have been carried out within the same time period in the program's absence;

A program's fiscal relief to State and local governments during periods of recession; and

A program's inflationary impacts, particularly at the local level.

As I indicated earlier, the comprehensive evaluation of the LPW I and II experience is not yet completed; therefore I cannot provide definitive data at this time. However, I can share with you preliminary data related to each of the factors just cited based on our on-going evaluations of LPW I and II.

*Employment generation*

One of the three major objectives of the LPW Program was to generate employment opportunities for workers in construction and related industries. Based on actual direct employment data through December 1979, it is projected that LPW I and LPW II, through their 10,616 projects, provided employment for over one million persons in the construction industry, representing an estimated 96,000 person-years of on-site (direct) employment. In addition to direct employment, LPW generated jobs in supply industries (indirect jobs) and industries affected by increased private sector consumption (induced jobs). At this time, we are using a multiplier developed by the Rand Corporation to estimate these secondary job impacts. Adding the indirect and induced employment estimates to the direct employment impact results in a total LPW employment generation estimate of between 355,000 and 384,000 person-years. Thus, the total cost per person-year of employment under LPW I and II is estimated to be between $15,000 and $17,000, while the cost per person-year for direct jobs is estimated to be just over $62,000. The cost per direct and indirect person-year is just under $37,000.

As I noted previously, projections based on December 1979 data indicate that LPW produced employment for over a million persons in construction. Of these, 67 percent were skilled workers, 29 percent unskilled workers and 4 percent had administrative, clerical or service jobs. On average, the duration of on-site employment was approximately three-and-a-half weeks. Total wage payments to on-site workers amounted to an estimated $1.6 billion of the combined LPW I and LPW II total of $6 billion, amounting to an average labor intensity of 26.9 percent.

In connection with the estimation of the number of employment opportunities created by the LPW program, the evaluation results also present a detailed picture of the characteristics of those employed on projects. The LPW experience provided construction jobs primarily to workers with strong ties to the construction industry. For workers with an unbroken history of construction employment, an LPW job provided continuity of employment. For 13 percent of the workers who were unemployed before LPW hire, the program provided a point of re-entrance into the active portion of the construction labor force. Of these two types of workers, nearly all those with strong attachments to the construction labor force were employed in construction after the LPW job.

LPW provided jobs to workers who experienced both frequent and protracted unemployment in the year before LPW hire. Although only 13 percent were unemployed immediately prior to their LPW jobs, nearly 35 percent of all workers were unemployed at least once in the year before LPW hire, while 15 percent

were left jobless two or more times. One-quarter of all LPW workers were unemployed more than 10 percent of the year, while 18 percent of all workers were jobless for more than 20 percent of the year. These findings, which are comparable to the employment experiences of all construction workers during the period involved, hold true for all LPW workers—both male and female, white and nonwhite, skilled and unskilled, and white-collar and blue-collar.

LPW also provided numerous job opportunities to the target group of veterans, especially Vietnam-era veterans. The program resulted in the hiring of Vietnam era veterans in numbers which significantly exceeded their representation in the construction labor force of 1978. The LPW experience also showed that an exceptionally high level of minority employment can be achieved by utilizing minority business enterprises as construction contractors on program projects. As a result of the LPW II 10 percent minority business requirement, minority workers were hired to work on LPW projects at twice the rate observed in the construction labor force of 1978. More than 20 percent of all on-site workers on LPW projects were minorities, as opposed to a minority participation rate of just under 10 percent in the construction labor force.

*Program timing*

Another key countercyclical characteristic involves the timing of the construction and related activity stimulated by LPW. As required by both statutes, construction was initiated on all but a small number of projects (which obtained waivers) within 90 days of their approval. There were no requirements in the LPW statutes concerning timing of subsequent project activities or project completion. However, data on the disbursement of program funds and construction employment suggest that even in the absence of such requirements, project activity moved at a fairly rapid pace.

Within the first year after enactment of the LPW I legislation, 34 percent of the program's funds had been disbursed; by the end of the second year after enactment, 81 percent had been disbursed. In the case of LPW II, 24 percent of program funds had been disbursed by the end of the first year after enactment, with 81 percent disbursed by the end of the second year. The first-year lag under LPW II is primarily attributable to the timing of the start of LPW II on-site construction during the winter of 1977.

Since disbursement patterns are often as much a function of Federal and local government accounting systems as they are indicative of the timing of expenditures and the flow of funds into the economy, the timing of construction employment on LPW projects is a more accurate reflection of the timing of the program's economic stimulus. LPW employment generation began in January 1977 six months after enactment of the LPW I legislation and continued throughout the economic recovery period. Within one year of enactment of Round I, 41 percent of the total construction employment for that Round had been generated, with 88 percent generated by the end of the second year. Round II generated 33 percent of its total construction employment within the first year after enactment, with 83 percent generated by the end of the second year. Again, the differences between the two programs are primarily attributable to seasonal factors.

Drawbacks should also be noted. Due to our inability to predict the length and severity of economic cycles, legislative and administrative requirements, and actual program implementation, the stimulus effects of countercyclical public works, even under expeditious circumstances, often have a procyclical effect. Our data indicate that combined LPW I and II monthly outlays peaked in the second quarter of 1978, three years after the trough of the 1973–1975 recession and well into the economic expansion. Similarly, direct program employment also commenced in early 1977, peaked in 1978 and continued into 1979. By the time LPW I and II were generating employment opportunities, construction unemployment had declined from nearly 20 percent to approximately 10 percent. Some would also argue that construction labor markets were becoming relatively tight, as exemplified by the fact that only 13 percent of all workers hired for LPW construction activities were previously unemployed.

*Substitution of funds*

In determining the effect of an injection of Federal funds into the economy during an economic downturn, consideration must be given to the incidence of fiscal substitution. In the case of LPW, this means the extent to which LPW funds simply replaced previously appropriated or planned local expenditures. In terms of fiscal stimulus, the examination of substitution must also include the extent to which the provision of LPW funds resulted in "project acceleration";

that is, the extent to which planned local projects were begun ahead of the original construction schedule because of the LPW grant. Also to be considered is the end use of the funds released as a result of substitution. If the released funds are used to finance another capital project for the locality during a cyclical contraction or during the early phases of recovery, both the countercyclical stimulus and infrastructure creation goals are met.

A final consideration in determining the impact of substitution is the amount of funds leveraged by the LPW grant from non-LPW sources (especially State and local governments). To determine the total stimulative effect of LPW, these leveraged resources must be added to actual LPW funds. However, some of this leveraging shifts resources out of other capital projects, and this amount must be subtracted from total leveraged funds. In summary, then, to understand the "real" stimulus effect of LPW, we need a reliable estimate of the proportion of LPW obligations representing deferred and accelerated expenditures and the end use of released funds.

In its macroeconomic evaluation of LPW, Chase Econometric Associates, Inc. estimated net substitution of 20 percent and a 9 percent crowding out of private sector investment. These estimates were based on Chase's consideration of responses at an early stage of program implementation. As part of the microeconomic evaluation of LPW currently being conducted, Abt Associates, Inc., interviewed contractors, subcontractors, and suppliers, and estimated that LPW's crowding out of private sector investment was negligible. Abt also undertook a survey of 100 State and local governments administering 253 LPW projects. Preliminary analysis indicates that 21 percent of the sample LPW funding represented substitution of LPW grant funds for local funds where the capital project involved would have been undertaken within the year. However, of the 21 percent that was made available as a consequence of LPW grants, 12 percent was spent on construction of another capital project for the locality within the year. Thus, net substitution is estimated at 9 percent. In connection with the Chase and Abt substitution estimates, it should be noted that this is a controversial issue on which there is no agreement. Estimates of substitution in public works programs range from 9 percent to 65 percent.

Funds leveraged from other sources, on the other hand, are estimated at 14 percent. To account for the extent to which leveraged resources were shifted out of other capital projects, the total leveraging estimate must be reduced to 10 percent. Thus, considering both net leveraging and net substitution, the total funding impact attributable to LPW is $6.06 billion. In other words, every LPW grant dollar resulted in $1.01 (i.e., the full LPW dollar plus one additional cent) in public works construction that would not have taken place in the absence of LPW within the same time frame.

*Local fiscal relief*

Another potential benefit of the LPW program—particularly LPW II, which permitted grantees to submit project applications in order of local priority—was its provision of local budgetary relief. This type of impact requires careful examination, particularly in light of evidence that often in the past, local governments tended to build up surpluses during economic expansions and draw down surpluses during contractions. Although the evaluation has not yet produced specific data, we know that during the local budget crunch of 1976–78, some communities were able to avoid raising taxes or reducing public services by using LPW funds to finance needed capital investments. As I noted earlier, other communities were able to accelerate planned capital expenditures with the influx of LPW monies.

*Stimulation of construction supply industries*

Another objective of public works construction is to provide economic stimulus to construction supply industries. The microeconomic analysis of LPW, which will be available late this summer, will specify LPW projects' effects on individual supply industries.

The final factor we must consider in conjunction with LPW's countercyclical effects is the inflationary impact of LPW labor and materials demand during the 1977–80 period. On an industry-wide, or macroeconomic basis, the inflationary impact was minimal by nature of the program's relatively small share of total construction spending. During the peak period of combined LPW I and LPW II activity in the first three quarters of calendar 1978, monthly program outlays averaged less than 4 percent of the total value of new non-residential construction put in place. Including the residential sector, LPW demand amounted to only 1.8 percent of total construction spending. The sizeable increases in construction costs

that accompanied the recent recovery period have been attributed by the industry to rising fuel, raw material, transportation, labor and regulatory costs borne by the producers, distributors, and users of construction materials, as well as to escalating construction financing and equipment costs.

The inflationary effects of LPW demand on local markets are being examined as part of the microeconomic evaluation of program impacts. Although the results of this analysis are not yet available, anecdotal evidence indicates that some areas did experience material shortages that coincided with LPW construction activity. Upon receipt of final evaluation data late this summer, we will pinpoint the extent of such local supply bottlenecks, as well as any labor shortages, caused by LPW demand.

CONCLUDING REMARKS

It is important to bear in mind that consideration of public works as a countercyclical tool cannot take place in a vacuum, since antirecessionary programs generally include a combination of measures directed toward various segments of the economy and the work force. In the past, these have included such programs as countercyclical revenue-sharing, expanded public service employment, and accelerated public works. Consequently, to assess accurately the potential of public works as a countercyclical tool, its impacts must be considered in relation to those of other countercyclical measures, as well as the policy objectives sought. Moreover, any decisions on what constitutes an effective countercyclical program must be based on analyses of the various components.

At the present time, we are providing support for a study being conducted by the Brookings Institution which looks at the impacts of countercyclical revenue sharing expanded public service employment, and LPW in 15 areas. Preliminary results from that study are scheduled for late summer 1980 and should provide some insights with regard to the relative effectiveness and complementary effects of the countercyclical measures involved.

Thank you for the opportunity to share with you background information on EDA's experience with the LPW program, as well as preliminary findings from the ongoing evaluation of that program. We will be happy to provide the completed evaluation materials to you when they are available late this summer.

I want to conclude my prepared statement by expressing the pride that I take in the role EDA played in designing the LPW II Program and in inplementing both Rounds of the Program. We believe the LPW effort is of major significance—both in terms of its considerable benefits to areas and workers throughout the country, and as a result of the insights the evaluation of its impacts will provide for future public policy in this area.

Senator BENTSEN. We will let each witness give his statement. Mr. Vaughan, please proceed.

## STATEMENT OF ROGER J. VAUGHAN, ASSISTANT VICE PRESIDENT, CITIBANK, N.A., NEW YORK, N.Y.

Mr. VAUGHAN. Thank you. It is a pleasure to be able to participate in these hearings on what I consider to be a very important economic issue.

Senator BENTSEN. Bring the microphone closer. I am sure the audience would like to hear what you have to say.

Mr. VAUGHAN. First, I would state that I am entirely sympathetic with the need to repair and develop the public infrastructure, but that is a separate issue from countercyclical policy. If we do choose to commit public money for longrun capital redevelopment, let us not do it with the kind of on-again, off-again local public works policy that has exacerbated cyclical fluctuations and has made the task of infrastructure redevelopment at the local level even more difficult.

Let me review briefly what I consider to be the main problems with a Federal countercyclical public works effort and concentrate my remarks on a countercyclical stabilization policy that I think would be more timely.

The evidence of the failure of past countercyclical efforts to act countercyclically is, I think, overwhelming, but let me summarize the major problems.

First: Federal assistance arrives too late. The time between the downturn and the creation of jobs in the public works program ranges from 2½ to 4 years.

Second: Federal assistance is ill targeted. Local public works funds are typically allocated among jurisdictions according to prevailing local rates of total unemployment, yet public works provides jobs primarily in the construction industry, and unemployment rates in construction are only loosely related to overall unemployment rates.

Third: Federal assistance ignores local needs. There are wide variations in the way a national recession affects local areas. While the Nation is still debating whether or not we are suffering from a recession, the State of Michigan has been suffering from a decidely unambiguous downturn for many months.

Fourth: Public works jobs are inadequate for the cyclically unemployed. They focus only on the construction industry and do little to alleviate the misery of the economically disadvantaged.

Fifth: Discretionary programs discourage countercyclical budgeting at the State and local levels. Since State and local governments do not know in advance in what form or when Federal countercyclical assistance will arrive, they have no incentive to plan their capital budgets so that they can act countercyclically. In fact, the process of waiting for Congress to decide what types of projects it intends to fund has caused State and local governments to delay their own expenditures during recessions. This is not conducive to the needs of long-term capital planning.

Can we fine tune the Federal effort? I don't believe we can. An automatic unemployment rate trigger which is being considered to speed the release of Federal funds would not address the problems of areas where cycles lead the national recession, nor would it help States and cities plan for a countercyclical capital budget.

The solution is for the Federal Government to provide matching funds on a regular basis to State and local stabilization funds. This concept is outlined in detail in my prepared statement, so I will briefly outline the advantages of this proposal here.

In the mid-1970's the State of Michigan, stung by the precipitous decline in revenues during the 1974–75 recession, set up a state stabilization fund. Money is paid into this fund from general revenues automatically, with no legislative debate, when the local economy is performing well. When the State economy enters a recession, money is released from this fund to be used either to supplement general revenues or to fund public works.

Between the beginning of 1977, when the fund was set up, and the end of 1979, when the recession had begun, the State had accumulated $275 million, which will be transferred into general revenue funds to help cover an estimated $400 million deficit. Through this program, the State is actually engaged in long-term countercyclical planning. Had they more resources, additional funds would have been targeted to public works programs.

Rather than the Federal Government discouraging these efforts, we should replace our major discretionary countercyclical programs, including antirecessionary fiscal systems, CETA's countercyclical

67-217 O - 80 - 3

component, and local public works with a matching grant program for State stabilization funds.

The Federal Government would make available between $3 and $4 billion annually, which is more or less the average expenditure on these countercyclical programs over the whole business cycle, to State governments that have set up stabilization funds on a matching fund basis. The States would build up these funds during expansionary periods and spend the funds for three countercyclical functions: fiscal assistance stabilization, public works, and public employment and training programs.

This program would encourage the development of countercyclical capacity that is responsive to local countercyclical needs, and would insure a very timely response to recessions. Michigan has already released its funds and is using them to supplement its budget. By comparison, Federal assistance will not be available until 1981 at the earliest.

The program combines the efforts of three current programs at no additional cost to the Treasury. In fact, the program requires no additional spending at any level of government. The whole basis is to reduce spending in expansionary periods when it contributes to inflationary pressure and shift it to recessions to where jobs are needed.

The Federal Government can influence the design of these State stabilization funds by setting up eligibility requirements. For example, to avoid States' using the funds as general revenue, the State trigger—local performance indicators would determine contributions and withdrawals—would be selected so that withdrawals are made in no more than 5 out of 16 quarters over the course of the business cycle.

The program avoids the need to develop inefficient, but politically expedient, allocation formulas. Only those States that set up funds would receive Federal assistance, and in proportion to the level of local effort. Yet, allowance can be made for the level of available sources by weighting local contributions by some measure of local per capita income or the degree of local fiscal strain. Thus, a $1 local contribution from a poor State might be counted as $1.20 when computed for the Federal match.

States could design their funds to include contributions from local jurisdictions, which they would match, much as the Federal contributions match States' efforts.

Existence of the fund and the predictability of Federal contributions would encourage State governments to set aside public works projects during boom periods, ready to be started quickly during the recession.

There are other, less direct, benefits to this type of program. By switching expenditures from boom to slump, we are reducing inflationary pressures. By dampening the boom-bust construction cycle, we are reducing the demand pressure on the construction industry that has driven costs upward at rates in excess of the overall rate of inflation, and we are encouraging the development of a longer term approach to capital budgeting at the State and local level.

Over time, the stabilization funds would prevent the need to slash programs and raise taxes in recessions, only to slash taxes and introduce new programs during booms.

There is no question that the concept is politically, fiscally, and economically feasible. Michigan has shown that. In spite of Federal disincentives, rational steps can and will be taken at the State level.

We must act now to rationalize Federal countercyclical policy while the pain of the present recession is still sharp. Unless we lay the basis for that countercyclical strategy now, we will be meeting again in 4 years as ill prepared to deal with recession as we are today. Like a long-running Broadway play, the cast will change, but the script will remain the same.

Thank you.

Senator BENTSEN. Thank you, Mr. Vaughan.

[The prepared statement of Mr. Vaughan, together with an appendix, follows:]

PREPARED STATEMENT OF ROGER J. VAUGHAN[1]

*Countercyclical Public Works: A Rational Alternative*

Mr. Chairman, members of the Committee, it is a pleasure to be able to participate in these hearings on an issue that, I am convinced, is of vital importance to our national and regional economies.

The sharp downward plunge in the national economy this spring has again caught Congress, the United States Government, and many economists, unprepared. If our response is a third round of the Local Public Works Program, then federal assistance will arrive too late, flow to the wrong areas, and fail to generate jobs.

I do not believe that the cyclical policy confusion that lags our cyclical economic confusion by a few months is necessary. If we are not to be condemned for repeating the past, we must use this opportunity to set in place a rational stabilization program that harnesses the resources of all levels of government and provides assistance when it is needed, where it is needed, and to whom it is needed. I would like to take this opportunity to describe why a traditional, discretionary, federal public works program does not work, and to outline an alternative that does.

WHY PUBLIC WORKS PROGRAMS DO NOT WORK

Our past experience with discretionary public works programs shows that they do not work. I am entirely sympathetic with the goals of providing employment opportunities to the millions laid-off or rendered jobless by a recession. But we cannot do this with our present, sporadic policies. Rather than help smooth out cycles, they tend to make things worse. The evidence is overwhelming and so all I will do is summarize the major problems here:

*Federal assistance arrives too late.*—The time between a cyclical downturn and the creation of jobs on a countercyclical public works program has ranged from 2½ to 4 years. Even if Congress were to enact a third round of the Local Public Works Program late this summer, jobs would not be created until next spring at the earliest—a full 5 quarters after the overall economic downturn, longer since construction employment started falling, and for some states, 7 quarters after unemployment rates reached recessionary levels.

*Federal assistance is ill-targeted.*—Local Public Works funds are typically allocated according to prevailing local rates of unemployment. Yet public works provide jobs in the construction industry, and unemployment rates in construction are only loosely related to overall unemployment rates. Thus federal grants may exacerbate the problems of tigh construction markets, driving up the costs of new buildings.

*Federal assistance ignores local needs.*—There are wide variations in the way a national recession affects local areas. While the nation was debating whether or not we were suffering from a recession this spring, the State of Michigan had been suffering from a decidedly unambiguous recession for months. Yet federal aid will not be discussed, let alone provided, until a majority of the nation has entered the recession.

*Public works jobs are inadequate for the cyclically unemployed.*—The typical job on a public works project lasts about two weeks. This is insufficient to provide relief for those unemployed for many weeks during a recession. About half the increase in the unemployment rate during a recession is caused not by an increase in the number of workers experiencing a spell of unemployment, but by an

[1] The views expressed are solely those of the author, and do not represent the views of Citibank, NA.

increase in the average duration of unemployment of those who suffer a spell of unemployment even during the best of times. The construction sector is ill-equipped to provide opportunities to these economically disadvantaged individuals.

*Discretionary programs discourage countercyclical budgeting at the State and local level.*—Since state and local governments do not know, in advance, in what form, or when, federal countercyclical assistance will arrive, they have no incentive to plan their capital budgets so that they can act countercyclically. In fact, the process of waiting for Congress to decide what types of projects it intends to fund causes state and local governments to delay their own expenditure programs.

The result of these problems is that past public works expenditures intended to provide countercyclical assistance, have stimulated the economy during the recovery phase, not when most people are out of work. The last recession, in its depth during 1974 and 1975, spawned the Local Public Works Program which provided most of its jobs during late 1977 and early 1978. Perhaps the only good thing to be said about these delays is that there is still about half a billion dollars of obligations made under this program that are unspent—that can help fight the present recession. The assistance will flow to the wrong areas in the sense that it is not targeted toward the localities with the highest unemployment in construction.

Two final problems also undermine the effectiveness of public works programs. First, stimulating construction is only part of the countercyclical package. Providing emergency fiscal assistance and special training and work experience programs are also part of the countercyclical package. Thus Congress must wrestle with three different bills, and their numerous amendments at the same time. Finally, in order to speed up the job creation process, federal programs usually demand that state and local governments break ground on their federally funded projects within two or three months. The result is that local governments apply for federal assistance for projects that they would have funded anyway. No new jobs are created. We simply swap federal for local funds. The fiscal relief may be welcome but does little to help the local unemployed.

Can we fine tune the federal program? I do not believe we can. An automatic unemployment rate trigger would speed the release of federal funds but would do nothing to address the problems of areas whose cycles lead the national recession, nor would it help states and cities plan for a countercyclical capital budget. The solution is for the federal government to provide matching funds on a regular basis to state and local stabilization funds. This is the rational alternative discussed in the following section.

## PUBLIC WORKS AS A COUNTERCYCLICAL TOOL: A RATIONAL ALTERNATIVE

In the mid-1970s, the State of Michigan, stung by the precipitous decline in revenues during the 1974–75 recession, set up a state stabilization fund. Money is paid into this fund from general revenues, automatically, when the local economy is performing well. When the state economy enters a recession, money is released from this fund to be used either to supplement general revenues or to fund public works. Between the beginning of 1977, when the fund was set up, and the end of 1979, when recession had begun, the State had accumulated $275 million, which will be transferred into general revenue funds to help cover an estimated $400 million deficit. Through this program the state is actually engaged in long-term countercyclical planning.

In spite of the desirability of this behavior on the part of state and local governments, present federal policies actually discourage it. To the extent that a state or local government carries out an effective countercyclical program and reduces the local unemployment rate, it will receive a smaller share of federal countercyclical funds.

The solution is to replace the major, discretionary, federal countercyclical programs—Antirecessionary Fiscal Assistance, CETA's countercyclical component, and Local Public Works—with a matching grant program for state stabilization funds. The federal government would make available $3–$4 billion annually (the average annual expenditure on these countercyclical programs) to state governments that set up stabilization funds, on a matching fund basis. The states would build up these funds during expansionary periods and use the funds for three countercyclical functions—fiscal assistance, public works, and public employment—during recessions. The program is described in detail in the following Appendix, which is a Chapter from a report I have just completed, published by the Council of State Planning Agencies. I will present only a summary of the program here:

The program would encourage the development of countercyclical capacity that is responsive to local countercyclical needs.

The program would ensure a timely response to economic fluctuations and avoid the need for time wasting legislative deliberation at each downturn. The federal government would make $3–$4 billion available every year, expansion and recession, and leave the details of design and administration to local areas.

The program combines the efforts of three current programs at no additional cost to the Treasury.

The Federal Government can exert some influence over the design of state stabilization funds by setting up eligibility conditions. For example, to avoid the funds being used as general revenue, the state trigger to determine contributions and withdrawals would have to be selected so that withdrawals were made in no more than 5 quarters out of 16.

The program avoids the need to develop inefficient, but politically expedient, allocation formulas. Only those states that set up funds would receive federal assistance, and in proportion to the level of local effort. Yet, allowance can be made for the level of available resources by weighting local contributions by some measure of local per capita income or the degree of local fiscal strain. Thus, a one dollar local contribution from a poor state might be counted as $1.20 when computing the federal contribution.

States could design their funds to include contributions from local jurisdictions which they could match, much as the federal contributions match states' efforts.

The existence of the fund and the predictability of federal contributions would encourage state governments to set aside public works projects during boom periods that are ready to be started quickly during recessions.

The program involves no increase in public spending at any level of government. The whole basis of the program is the countercyclical retiming of spending, not increasing the average level of spending.

There are other, less direct, benefits as well. By switching expenditures from boom to slump, we are reducing inflationary pressures. By dampening the boom-bust construction cycle we are reducing the inflationary pressure on the construction industry that has driven costs upward at a rate in excess of the overall rate of inflation. And we are encouraging the development of a longer-term approach to budgeting at the state and local level. Over time, the stabilization funds would avoid the need to slash programs and raise taxes in recessions, only to slash taxes and introduce new programs during booms.

There is no question that the concept is politically feasible. Michigan has shown that, in spite of federal disincentives, rational steps can, and will, be taken at the state level. We must act to rationalize federal countercyclical policy now, while the pain of the present recession is still sharp. It is too late to help build up local funds to allow local action this time. In fact, it is too late to do much to fight the present recession effectively with any weapons. But it is exactly the right time to prepare for the next downturn. Unless we lay the basis for a rational countercyclical strategy now, we will be meeting again in four years, as ill-prepared to deal with recession as we are today. Like a long-running Broadway play, the cast will have changed, but the script will remain the same.

# APPENDIX

## A STATE STABILIZATION FUND:

## A RATIONAL COUNTERCYCLICAL STRATEGY

The following Chapter is from "Inflation and Unemployment: Surviving the 1980s" by Roger J. Vaughan, published by the Council of State Planning Agencies, Washington, D.C., 1980.

# HOW STATES CAN FIGHT RECESSION

A state's own economic stabilization strategy is certain to be more effective than federal efforts in softening the blows of recessions. It will not wipe out recessions; indeed, it will only make a modest dent in the economic problems that a recession causes. But it will lead to a more rational deployment of countercyclical resources and provide more targeted assistance to those affected by an economic slowdown. The preceding chapters have provided some indication of what such a strategy would look like. This chapter spells it out in more detail. The first step is to set up a stabilization fund—following the Michigan model—which is built up during periods of relatively rapid growth and spent during recessions.[1] The fund would be used to finance three types of countercyclical programs: public works, public employment and training, and intrastate antirecessionary fiscal assistance. These programs would function automatically, subject to legislative review, with funds released when local economic indicators crossed predetermined thresholds. Each program would be keyed to a different indicator since each program is addressing a different countercyclical goal. But this is not the full extent of a countercyclical strategy. There are other measures, including tax reform, long term economic development financing, and regulatory review, that can help reduce local cyclical volatility.

The stabilization fund offers state governments many advantages:

■ *It requires no increase in state and local spending.* Through the fund, state and local spending is retimed and redistributed more evenly over the course of the cycle. Public works are concentrated in times of slack demand for construction activity, and the high level of transfer payments that a recession entails are paid for, in part, during boom years. Expenditures, therefore, reflect *average* revenues over the cycle rather than the present year-to-year budgeting which has led to such a switchback in public spending.

■ *It maintains the integrity of appropriations during recessions.* All too often, recession-induced shortfalls in revenue necessitate the cutting back (or even the cutting out) of programs for which the legislature has appropriated funds. The stabilization fund avoids the need for such wasteful surgery.

■ *It reduces the temptation during good years to expand public programs beyond a sustainable level or to temporarily cut taxes.*

Surging revenues during economic booms, when social services are at a low level, often encourage the expansion of existing programs or the addition of new programs that would not be undertaken if the budget constraint were tighter. A state surplus frequently leads to political pressure to cut taxes. From the perspective of the overall cycle, these surpluses are not "real." They are matched by potential deficits during slumps. The stabilization fund avoids the appearance of such surpluses.

■ *It may actually reduce spending in the long run.* By encouraging a longer term approach to budgeting, reducing the full impact of recessions, and retiming capital expenditures, the fund may actually help reduce state and local expenditures.

The concept of the stabilization fund can be extended beyond the goal of fighting cyclical downturns. States can design a fund to avoid long term problems such as the decline in revenues from severance taxes or depletable natural resources. The State of Alaska is currently designing a permanent fund into which oil revenues will be deposited. If invested profitably, the annual interest from the funds investments will provide a permanent source of revenues from which to meet operating expenses. Any state with substantial revenues from severance taxes should take similar steps to avoid the catastrophic adjustment problems that will otherwise occur when these resources are exhausted.

We must stress that the recommendations made in this chapter are exploratory and intended for guidance only. States have widely varying economies and must design their funds to suit local conditions. Research, thought, imagination and experience will improve the design of stabilization funds.

## A STATE STABILIZATION FUND

To finance the necessary countercyclical programs, and to reduce excessive growth in spending during periods of rapid expansion and inflation, states must set up stabilization funds. Contributions would be accumulated while the economy—and state and local revenues—grows at above average rates, and would be withdrawn and spent when growth—and revenues—falter. The fund would not necessarily be reduced to zero during every recession. Some recessions are deeper than others. By maintaining some reserve during a shallow decline, the fund would be larger when a deep recession threatens.

Setting up such a fund is essential. States will not set aside surpluses for a rainy day without a special program. The natural tendency to run surpluses during good years generates political pressure to either cut taxes or start new programs, leaving little fiscal flexibility to face the ensuing recession. While the taxpayers' revolt maintains a head of

67-217 O - 80 - 4

steam, this pressure is unlikely to abate. In 1979, as the nation's economy neared recession, many states undertook wholesale tax reductions. Property taxes were reduced in 22 states, assessments curbed in four; personal income taxes were cut in 18 states, and sales taxes in 15. The principal beneficiaries of these tax cuts will be the relatively affluent. The equity and efficiency of the state-local tax system have been reduced, and as the recession makes inroads into revenues, these same states will demand federal assistance. In fact, the basic lesson from the discussion in this book is that the surplus is not really a surplus at all. The gap between spending and revenues should not be judged on a year to year basis but over the full cycle. Enough of the expansion years' bonuses should be set aside to allow for the continued operation of state and local services and to fight recession during the bad years.

We propose a stabilization fund with four sources of contributions:

- *Federal Matching Funds.* Instead of current countercyclical programs (LPW, ARFA, and fluctuating CETA VI appropriations) federal grants should be made to stabilization funds of $3-$4 billion annually (at a minimum), allocating according to each state's own contribution, with allowance for local fiscal conditions.
- *State Tax Revenues.* The cyclical component of a volatile tax such as the personal income tax.
- *State Borrowing.* Bond issues for designated countercyclical projects, in those states in which this is permitted.
- *Contributions from Local Jurisdictions.* Payments by local jurisdictions into a "recession insurance" fund, from which they could draw as revenues fell.

These sources are discussed, in turn below. But before discussing these sources of funds we must analyze how big these funds should be, and what triggers should be used to turn on contributions and expenditures. Following this discussion, some of the institutional issues involved in setting up such a fund are analyzed.

### *The Size of Stabilization Funds*

How big should a state stabilization fund be, and at what rate should states contribute during good years? Ultimately, the best answer to these questions will be provided by experience accumulated through the operation of stabilization funds. The only experience thus far has been with the Michigan stabilization fund and that has been in existence for only two years. Until experience is gained, however, some "ballpark" estimates may provide some initial guidance as well as some insight into the likely impact of the program. The following subsection discusses the institutional issues relevant to the determination of contributions and expenditures. This subsection

analyzes only the aggregate questions of fund levels and accumulation rates.

Let us assume that full scale countercyclical expenditures from the fund are required in one year out of four.[2] Expenditures would not cease as soon as the economy turned upward. During one or two quarters after the end of a recession, expenditures would run close in volume to contributions. And even during the best years, expenditures might run at 20 percent of contributions as the state provided assistance to local areas with cyclical problems out-of-phase with the overall state economy. Therefore, expenditures in the three non-recession years would probably run at an average of 25 percent of contributions.

Total state spending from the fund during the one bad year would be about $20 billion if all states participated (see below). Total federal contributions over the four year period would be $16 billion, of which the states would have spent $3 billion during the inter-recession years when expenditures from the fund were running at about one quarter of contributions. Assuming that there are only small state and local contributions during the recession (made to leverage federal contributions), then state contributions during the inter-recession years must average about $4.5 billion (of which one quarter would be spent) each year. This would range from perhaps only $1 billion during the first post-recession year, as the recovery gained momentum (1976, for example), to $7 billion during the peak year (1978). A hypothetical four year period and aggregate contributions and expenditures are shown in Table 18.

Why $15-$20 billion? The estimate is not random. The 1974-75 recession was particularly severe, and is unlikely to be duplicated by most recessions because of the severity of the impact of the rise in oil prices. Experience in that recession thus provides an upper limit for an estimate of the appropriate level of spending on each component. Estimates of state-local revenues lost because of the high rate of unemployment in 1975 range from $5 billion to $20 billion (ACIR, May 1979). Perhaps $6-$8 billion should be set aside for antirecessionary fiscal assistance. In the same year, state-local construction expenditure was about $4 billion in real terms below what it would have been in the absence of a recession, and private construction declined by 20 percent, an abnormally sharp decline. Between $5 and $7 billion should be set aside for public works. Finally, $4 to $5 billion should be set aside to provide employment and training opportunities for the hard-to-employ.

How should this total be allocated among states? This will depend on relative state contributions. But for the sake of illustration, let us assume that all states participate, and that state funds are proportional to their share of national cyclical unemployment and total state-local revenue loss. Table 19 shows how a $16 billion accumulated total

**Table 18**
**Economic Conditions and the Behavior of Hypothetical State Stabilization Funds**

| | *YEAR 1* | *YEAR 2* | *YEAR 3* | *YEAR 4* | |
|---|---|---|---|---|---|
| | | *Peak* | | *Trough* | *TOTAL* |
| *ECONOMIC CONDITIONS* | *Weak Recovery* | *Strong Recovery* | | *Recession* | *($ billions)* |
| *State Stabilization Funds ($ billions)* | | | | | |
| Federal Contributions | 4 | 4 | 4 | 4 | 16 |
| State-Local Contributions | 1 | 4 | 7 | 1.5 | 13.5 |
| (Borrowing) | | (1.5) | (2.5) | (1) | (5.0) |
| Expenditures | 4 | 2 | 2 | 20 | 28 |
| Accumulated Fund Balance (End of Year) | 1 | 7 | 16 | 1.5 | |

would be distributed among the 50 states, assuming that about $9 billion is set aside for public works and public employment and $7 billion for antirecessionary fiscal assistance. It also shows each state's contribution when total contributions run at annual rate of $1 billion.[3] The most obvious fact revealed by this table is that states will differ in the relative importance of revenue sharing and public works and employment programs, depending upon the relative cyclical volatility of their revenues and employment. For example, California experienced only 5.5 percent of the cyclical unemployment in 1975, but, in a GAO simulated recession, experienced 13.9 percent of the cyclical decline in state-local revenues. The California strategy would concentrate on the fiscal assistance component (ACIR, May 1979). By contrast, Indiana suffered 5.3 percent of the employment decline and only 2.3 percent of the revenue decline. Their efforts will have to focus on job creation. These differences result from differences in economic and fiscal structure.

We should stress that these numbers are only indicative. Each recession is, in some ways, a quite distinct experience, and local incidence differs from recession to recession (Appendix A).

***Triggering*** States may either adopt an automatic triggering mechanism in which both contributions and expenditures are triggered by the performance of the state and local economies relative to threshold indicators, or may make contributions or withdrawals each year on a discretionary basis. The examination of federal programs in the preceding chapters suggests that an automatic procedure leads to more rapid response than a discretionary procedure. Politically, too, an automatic trigger lessens the temptation to indulge in short run tax cutting or spending increases rather than accumulating a necessary surplus. The Michigan fund (see inset) determines contributions based upon the growth in real personal income, and triggers the release of funds for budget balancing (antirecessionary fiscal assistance) based upon real income growth, and for economic stabilization (public works and public employment) based upon the state unemployment rate. Based upon our previous discussions we suggest the following triggers:

■ *Contributions.* The trigger should be an indicator that is most closely correlated with total revenues, perhaps personal income, unemployment rate, or employment growth. The pay-in trigger should be a measure of the secular growth rate or level (a 2.0 percent growth in real income in Michigan). The best trigger will differ from state to state according to economic and fiscal conditions. States must undertake research to determine the triggers that are best suited to their local economy.

## Table 19
## Hypothetical State Stabilization Funds Accumulated Before a Recession and Annual Contributions

| State | State Share of Total (percent) | | State Stabilization Fund Accumulation at Cycle Peak[a] | State Stabilization Fund Accumulation at Cycle Peak ($ millions) | | | State Contribution per $1 billion of Total State Contributions | Accumulation at Cycle Peak as a percent of State Expenditured |
|---|---|---|---|---|---|---|---|---|
| | Cyclical Unemployment in 1975 | Decline in State-Local Revenues | | For Public Works and Public Employment[b] | For Fiscal Assistance[c] | Total | | |
| Alabama | 1.7 | 1.2 | 1.5 | 153 | 84 | 237 | 14.8 | 12.7 |
| Alaska | — | — | no fund | — | — | — | — | — |
| Arizona | 1.1 | 0.7 | 0.9 | 99 | 49 | 148 | 9.3 | 15.3 |
| Arkansas | 1.5 | 0.7 | 1.2 | 135 | 49 | 184 | 11.5 | 19.4 |
| California | 5.5 | 13.9 | 9.2 | 495 | 973 | 1468 | 91.7 | 14.8 |
| Colorado | 0.9 | 1.3 | 1.1 | 81 | 91 | 172 | 10.8 | 13.6 |
| Connecticut | 0.9 | 1.7 | 1.2 | 81 | 119 | 200 | 12.5 | 12.4 |
| Delaware | 0.5 | 0.3 | 0.4 | 45 | 21 | 66 | 4.1 | 13.9 |
| D.C. | — | — | no fund | — | — | — | — | — |
| Florida | 8.2 | 2.7 | 5.8 | 738 | 189 | 927 | 57.9 | 32.1 |
| Georgia | 4.0 | 2.3 | 3.3 | 360 | 161 | 521 | 32.6 | 24.6 |
| Hawaii | — | — | no fund | — | — | — | — | — |
| Idaho | — | 0.3 | 0.1 | — | 21 | 21 | 1.3 | 4.5 |
| Illinois | 6.8 | 4.7 | 5.9 | 612 | 329 | 941 | 58.8 | 16.5 |
| Indiana | 5.3 | 2.3 | 4.0 | 477 | 161 | 638 | 39.9 | 34.5 |
| Iowa | 0.5 | 1.0 | 0.7 | 45 | 70 | 115 | 7.2 | 8.3 |
| Kansas | 0.9 | 0.8 | 0.9 | 81 | 56 | 137 | 8.6 | 12.0 |
| Kentucky | 0.9 | 1.6 | 1.2 | 81 | 112 | 193 | 12.1 | 9.7 |
| Louisiana | 0.7 | 1.2 | 0.9 | 63 | 84 | 147 | 9.2 | 6.4 |
| Maine | 0.7 | 0.4 | 0.6 | 63 | 28 | 91 | 5.7 | 15.7 |
| Maryland | 0.9 | 2.4 | 1.6 | 81 | 168 | 249 | 15.6 | 11.8 |
| Massachusetts | 1.7 | 4.2 | 2.8 | 153 | 294 | 447 | 27.9 | 13.2 |
| Michigan | 7.1 | 5.3 | 6.3 | 639 | 371 | 1010 | 63.1 | 21.0 |
| Minnesota | 1.8 | 2.9 | 2.3 | 162 | 203 | 365 | 22.8 | 18.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Mississippi | 1.2 | 1.0 | 1.1 | 108 | 70 | 178 | 11.1 | 15.7 |
| Missouri | 2.5 | 1.9 | 2.2 | 225 | 133 | 358 | 22.4 | 20.6 |
| Montana | — | 0.2 | 0.1 | — | 14 | 14 | .9 | 2.4 |
| Nebraska | — | 0.5 | 0.2 | — | 35 | 35 | 2.2 | 5.1 |
| Nevada | — | 0.3 | 0.1 | — | 21 | 21 | 1.3 | 5.9 |
| New Hampshire | 0.4 | 0.2 | 0.2 | 18 | 15 | 33 | 2.1 | 7.2 |
| New Jersey | 6.1 | 2.5 | 4.5 | 549 | 175 | 724 | 45.3 | 21.2 |
| New Mexico | — | 0.3 | 0.1 | — | 21 | 21 | 1.3 | 3.2 |
| New York | 11.2 | 12.2 | 11.6 | 1008 | 854 | 1862 | 116.4 | 22.8 |
| North Carolina | 3.3 | 2.5 | 2.9 | 297 | 175 | 472 | 29.5 | 21.6 |
| North Dakota | — | — | no fund | — | — | — | — | — |
| Ohio | 4.3 | 4.4 | 4.3 | 387 | 308 | 695 | 43.4 | 17.6 |
| Oklahoma | — | 0.9 | 0.4 | — | 63 | 63 | 3.9 | 4.5 |
| Oregon | 0.9 | 0.9 | 0.9 | 81 | 63 | 144 | 9.0 | 10.3 |
| Pennsylvania | 6.2 | 5.7 | 6.0 | 558 | 399 | 957 | 59.8 | 15.5 |
| Rhode Island | 0.9 | 0.5 | 0.7 | 81 | 35 | 116 | 7.3 | 18.1 |
| South Carolina | 2.3 | 1.3 | 1.9 | 207 | 91 | 298 | 18.6 | 19.1 |
| South Dakota | 0.3 | 0.1 | 0.2 | 27 | 7 | 34 | 2.1 | 7.9 |
| Tennessee | 2.3 | 1.4 | 1.9 | 207 | 98 | 305 | 19.1 | 16.6 |
| Texas | 1.8 | 2.5 | 2.1 | 162 | 175 | 337 | 21.1 | 6.6 |
| Utah | 0.2 | 0.6 | 0.4 | 18 | 42 | 60 | 3.8 | 8.0 |
| Vermont | 0.3 | 0.2 | 0.3 | 27 | 14 | 41 | 2.6 | 11.0 |
| Virginia | 1.6 | 2.3 | 1.9 | 144 | 161 | 305 | 19.1 | 12.4 |
| Washington | 0.4 | 1.3 | 0.8 | 36 | 91 | 127 | 7.9 | 5.6 |
| West Virginia | 0.5 | 0.6 | 0.5 | 45 | 42 | 87 | 5.4 | 7.7 |
| Wyoming | 0.1 | 0.2 | 0.1 | 9 | 14 | 23 | 1.4 | 8.1 |
| U.S. TOTAL[e] | 100 | 100 | 100 | 9000 | 7000 | 16,000 | 1000 | 15.5 |

*a* Total expressed as a percent of fund accumulations for all states.

*b* Share of cyclical unemployed x $9 billion.

*c* Share of revenue loss x $7 billion.

*d* As a percent of total state expenditures, FY 1977.

*e* Columns may not add to totals due to rounding.

*SOURCE:* Calculations of state share of total cyclical unemployment use estimates of cyclical unemployment in Vernez et al. (1977, p. 252); share of decline in state-local revenues are from ACIR (May 1979, p. 27).

## Michigan State Stabilization Fund

As enacted, the countercyclical budget and economic stabilization fund is designed to attack the two problems of cyclically low revenues and high unemployment. The law establishes formulas by which money is deposited in the fund and by which withdrawals can be made. (Included in Appendix B of this paper.) Major provisions of the law are as follows:

### Budget Stabilization

1. All transfers into or out of the fund will be based upon the annual growth of adjusted Michigan personal income (MPI) in the current calendar year.

2. Adjusted Michigan personal income is defined to mean total state personal income minus transfer payments (nontaxable income received from the government) deflated by the Detroit Consumer Price Index so as to remove any inflationary bias. Transfer payments are deducted so that the full impact of the cycle is identified.

3. When the adjusted MPI grows by more than the *pay-in* trigger level of 2 percent, the percentage excess will be multiplied by the total general fund/general purpose revenue accruing to the current fiscal year to determine the amount to be transferred from the general fund to the stabilization fund in the *coming* fiscal year.

4. When the annual change in adjusted MPI is less than the *pay-out* trigger level of 0 percent, the percentage deficiency will be multiplied by the total general fund/general purpose revenue accruing to the current fiscal year to determine the amount to be transferred from the stabilization fund to the general fund in the *current* fiscal year.

Examples: If GF/GP revenue is assumed to be $3 billion and the adjusted MPI change from the prior year is assumed to be: *Case 1:* + 7 percent; *Case 2:* + 1.5 percent; *Case 3:* -4 percent, application of the formulas would be:

*Case 1:* 0.7 - .02 = .05 x $3 billion = $150 million pay-in to fund next FY,

*Case 2:* .015 is between .000 and .02 = no pay-in or withdrawal.

*Case 3:* -.04 x $3 billion = $120 million withdrawal during current FY.

It was not intended that the budget stabilization fund would entirely eliminate the problems posed by revenue fluctuations. Its purpose is to ameliorate the problem by reducing the extreme peaks and valleys.

### Economic Stabilization

1. In any quarter following a quarter when unemployment averages 8 percent or more, the act provides that an amount may be appropriated from the fund for countercyclical policy as shown below:

| *Percent Unemployed in Most Recent Quarter* | *Percent of Fund Available for Economic Stabilization During the Following Quarter* |
|---|---|
| 8.0 - 11.9 percent | 2.5 percent |
| 12.0 percent and over | 5.0 percent |

Example: If the stabilization fund balance is assumed to be $200 million and the rate of unemployment is 9 percent for the quarter ending March 31, 1979, the fund could be used as follows in the April-June quarter: .025 x $200 million = $5 million for countercyclical programs.

2. The funds appropriated for economic stabilization may be used for capital outlay, public works and public service jobs, refundable investment or employment tax credits against state business taxes for new outlays and hiring in Michigan, or any other purpose the legislature may designate by law which provides employment opportunities counter to the state's economic cycle. Obviously, the latter purpose is subject to very broad interpretation.

In brief, the law states that payments will be made into the fund when the adjusted MPI annual growth rate exceeds 2 percent, and, withdrawals from the fund may be made in four situations: (1) the real MPI decreases, (2) quarterly unemployment exceeds 8 percent, (3) revenue falls short of statutory estimate (without change in the tax rate or base), and (4) in an emergency upon two-thirds vote by each house.

*Source:* Council of State Governments (1979).

■ *Expenditures.* Each of the three program categories requires a different trigger since each is targeted on a different goal:

- Public Works—the unemployment rate in the local construction industry;
- Public Employment—the number of eligible participants;
- Fiscal Assistance—an indicator correlated with revenues, perhaps as in Michigan, the same indicator that is used to trigger contributions.

Unlike the other two programs, public employment and training is an entitlement program, for which the volume of spending is determined by the number in need. The hard-to-employ will be enrolled in CETA funded programs even during the best of times, but as their number increases during the recession, increased funding will be made available to CETA prime sponsors from the state stabilization fund.

Local jurisdictions may wish to develop their own triggers to determine their contributions to the stabilization fund, depending upon the cyclical behavior of their revenue base. The property tax tends not to be cyclical, and cities may find a measure of the cyclical component of expenditures (i.e. the unemployment rate) may prove more effective. Expenditure triggers should be *local* so that the state can determine the appropriate location for its public works and the distribution of the local part of its fiscal assistance. We would expect that local jurisdictions are more likely to favor making discretionary contributions. We urge that they attempt to develop automatic indicators to avoid the temptation to spend excessively during good years.

***Federal Matching Funds***

Washington should allocate the $3 to $4 billion a year it has spent on discretionary countercyclical programs among state stabilization funds according to states' own contributions in the form of a matching grant. During the early years of this policy, when only a few states have such funds, it will be necessary to fix a match rate. When almost all states participate, the total $4 billion would be divided among the states according to how much they have contributed—leading to a lower match rate when state contributions are large, and a high rate when they are small. We have argued that little can be done to improve the effectiveness of federal countercyclical programs. Poor timing has led to long delays in recognizing a recession and in taking the appropriate legislative and administrative action. The on-off approach to countercyclical policy, which changes from one recession to the next, has stunted the development of local stabilization capacity. It has also meant that federal expenditures have little stimulative effect because they tend to displace state-local funds. The short time schedule given state and local governments to spend the

67-217 O - 80 - 5

federal largesse virtually ensures that the projects funded must already be in the pipeline. Neither does the uncertainty about the level of federal funding encourage, or even allow, rational budgeting by other levels of government.

The federal contribution is important because it increases the attractiveness to local voters of a stabilization fund as an alternative to a state tax cut. By spreading federal outlays evenly over the course of the cycle, the tendency for the federal countercyclical spending to be concentrated in inflationary periods, and therefore to contribute to inflation, will be abated.

*Allocation Formula.* By providing funds only to those states that have set up stabilization funds, there is automatically some targeting. States that do not experience cycles will not find it worthwhile to participate. Under a straightforward matching grant system, each year a state would receive a share of the federal allocation that is equal to its share of total state contributions to all stabilization funds. However, this would make no allowance for differences among states in their ability to pay. Some weighting system, or allocation formula, is required. No variables or indices have been devised that reflect "ability to pay" to the satisfaction of all observers, but experience suggests that some simple "needs" variables could help. Two possible variables could be applied: indices of the state unemployment rate and the local effort in paying for welfare assistance relative to national averages. These variables would be used to weight the value of states' own contributions. For example, a state whose average unemployment rate was ten percent above the national average in a given quarter (6.6 percent against a national rate of 6.0 percent, for example) and whose own source welfare payments absorbed a percentage of state personal income that was twenty percent above the average for all states (0.90 against 0.75 percent) would be treated as if it had contributed $1.32 (= $1.0 x 1.1 x 1.2) for each dollar it actually contributed into its fund. Other variables which could be included to measure the extent of local fiscal capacity include per capita income, state and local taxes per $1000 of local taxes, and the poverty rate.

*Federal Conditions.* The allocation of $4 billion of federal funds to state stabilization funds runs the danger of becoming a mere extension of the General Revenue Sharing program unless conditions are attached concerning state expenditures from the stabilization funds. It would defeat the entire countercyclical purpose if states used the resources acyclically to address problems of long term economic decline, or simply to meet operating expenses. At the same time, if states could only make expenditures according to some national unemployment rate above 7 percent for two quarters—the program could no longer meet *state and local* countercyclical needs. Or, if it were required that funds only be spent in counties whose unemployment rate exceeds 8 percent, then the program would be one

addressing long-run economic decline rather than cyclical unemployment. Two conditions that are both administratively feasible and would encourage the development of the right type of stabilization fund expenditure triggering mechanism are:

- Expenditures from a stabilization fund cannot exceed 25 percent of contributions in 10 out of 16 quarters. Federal contributions would be reduced by the percent that states exceeded this limit. This allows states to make at least some expenditures in any period to address local cycles but ensures that overall, expenditures are concentrated in one time period.
- Expenditures can only be made in areas (counties, cities, or townships) whose unemployment rate has exceeded 125 percent of its two year average for two successive quarters. Again, states that ignored this would be penalized by the loss of federal contributions.

It is also desirable to include some federal conditions to ensure that state efforts are effectively targeted on those most in need. Many state and local governments have needed federal prodding into the areas of affirmative action and income transfers. The public employment component of state stabilization expenditures will be channeled through the existing CETA prime sponsors, and will be subject to current regulations. Therefore, some minority set aside provision for public works projects and an equitable allocation formula for the fiscal assistance program could be required. The simplest administration procedure would be to require federal approval of the stabilization fund design before it became eligible for federal matching grants. This type of procedure has been used by the CDBG program and for various types of education assistance.

***State Tax Revenues*** Total state-local contributions over the four year cycle total $13.5 billion, of which about $5 billion may be borrowed. How much should come from state revenues and how much should come from local revenues is up to the individual states. Two considerations should guide these deliberations. First, the share should be related to the share of each level of government in total revenues, which varies among states, averaging about 50-50 nationwide. But the state share should be greater than the local share because state revenues tend to be more cyclical than local revenues. The property tax provides much more stable revenues than income taxes. Second, the share of contributions should be related to the relative distribution of antirecessionary fiscal assistance grants. Since states are likely to take a disproportionately large share of this component because of their volatile revenues, state contributions should be larger. Also, states are able to use their broader tax base to redistribute resources from rich to poor

jurisdictions. To do this effectively, they must make the major share of state-local contributions.

Setting up a fund will be more difficult for those states with relatively regressive tax structures, since they tend to have less cyclically volatile revenue sources—a regressive income tax, or a sales tax, is less volatile than a progressive income tax. The stabilization fund provides a complementary policy for those states taking steps to improve the equity of their tax structure since it will help dampen the increased cyclical volatility of their revenues.

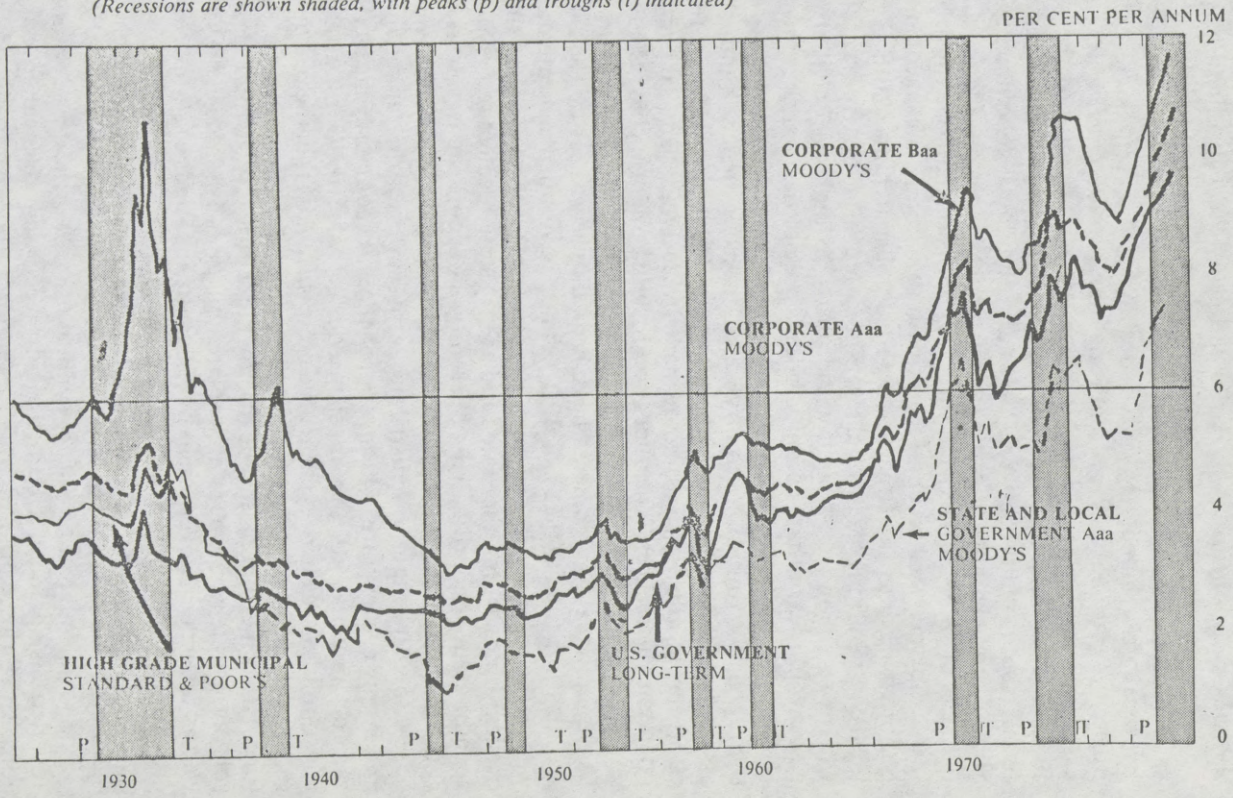
***State Borrowing*** Since about a third of the expenditures are for capital projects, those states that are able should finance a part of their stabilization fund by issuing bonds. Many states, however, are constitutionally precluded from borrowing, and will have to make their full contributions from tax revenues. Those states and jurisdictions that can borrow should prepare a number of long term capital projects that can be delayed with little harm until the economy weakens. Bonds should be issued to finance these projects under conditions that: "the project shall be undertaken when the unemployment rate in the local construction sector has increased for two consecutive quarters and has reached a rate in excess of 140 percent of its average level in the preceding six quarters" or similar language. To ensure coordination between state and local countercyclical efforts, the state should act as a packager for the bond marketing. In fact, the state could contribute part of the cost of locally funded projects in order to ensure local participation and cooperation.

There are several reasons for borrowing early to finance countercyclical public works. First, bond issues take time. If the state waits until a recession, or a construction slowdown is clearly indicated, expenditures will not be made until the worst is passed. Second, by "setting aside" a number of projects, the problem of displacement is minimized, and thus one of the major problems inherent in the federal system is overcome. Third, cycle peaks and the first year of recessions have been accompanied by record inflation and interest rate levels (Figure 3). Further, high interest rates usually lead financial institutions to reduce their portfolios of tax exempt bonds as they seek more effective shelters, which further increases the cost of public sector borrowing. Funding countercyclical public works during good years will cut borrowing costs. Finally, voters may be more willing to approve a bond issue during good times than when afflicted by recession-induced frugality.

A major advantage of borrowing is that it allows a rapid increase in stabilization funds. However, since it is tied directly to public works projects, it should never provide more than about one-third of the state contributions to the fund.

**Figure 3**
**Yields on Selected Long Term Securities (1930 to present)**

*(Recessions are shown shaded, with peaks (p) and troughs (t) indicated)*



***Local Contributions*** Participation by local jurisdiction is essential to ensure: a) accountability of the state fund to its component jurisdictions; and b) prudent budgeting by local governments to avoid becoming "fiscal junkies." These objectives can be met by requiring that, to be entitled to fiscal assistance during recessions, local governments pay into the state fund. The extent of local participation will depend on the allocation of fiscal responsibility between the state and local governments. In Hawaii, for example, the state government is responsible for three quarters of state-local expenditures; in Ohio, less than one third. This would operate very much in the same way as total state-local contributions paid into the fund leverage federal matching grants. Thus, local contributions paid would leverage state allocations from the fund when a recession necessitated withdrawals. By making contributions, cities would learn that economic booms are not the norm, and would be forced to reduce their average spending level (which would reduce their reliance on discretionary and uncertain federal and state assistance). Allowance could be made for local differences in fiscal effort just as allowance would be made by the federal government for interstate differences. The allocation formula might include the local unemployment rate and local taxes per $1000 of local income. In Michigan, local governments have been allowed to set up their own stabilization funds (P.L. 30, 1970). They have not been integrated within the state fund. The advantages of integrating local countercyclical funds within the state fund are: 1) state-local countercyclical spending can be coordinated—operating under consistent triggers and consistent expenditure program design; and 2) the broad state revenue base allows the state to redistribute resources toward relatively poor and highly cyclical jurisdictions so that the state countercyclical effort can be targeted to the most needy areas. However, a major metropolitan area with cyclical needs very different from the rest of the state and with sufficient local resources may wish to set up its own fund, either metropolitan wide or only the central city. In this case, the role of the state would be to make matching funds available in the same way as the federal government makes matching funds to states. Some provision should be made in the federal program to distribute a limited share of funds directly to local jurisdictions' funds—treating them on the same basis as state funds.

The total allocation of expenditures from the fund among jurisdictions should not be tied rigidly according to local contributions, since this would remove the important element of flexibility. Each jurisdiction would be guaranteed expenditures equal to what it had contributed plus some allowance for local fiscal conditions. The state must maintain an "emergency" component from which to provide assistance to those areas that suffer unusually deep recessions. A rule of thumb, at least during the initial years of operating the fund,

would be to keep, say, 25 percent of the cumulative total within each of the three components of the fund as a "discretionary" allocation.

The state may also wish to provide assistance in the form of short or medium term loans to local jurisdictions suffering from acute fiscal distress. This will encourage those jurisdictions to deal with their fiscal problems rather than become permanently dependent on emergency assistance.

***Institutional Design Issues***

Setting up an effective stabilization fund raises two other important design issues: How is the fund administered? And what is the role of the state legislature?

*Fund Administration.* Those administering the fund must perform several tasks:

- Managing contributions, including those from local jurisdictions.
- Coordinating bond issues for countercyclical public works projects.
- Controlling short term portfolio investments to maximize the rate of return on the accumulated balance.
- Administering the distribution of expenditures among jurisdictions and programs.
- Managing federal receipts and ensuring compliance with federal regulations.

To ensure local participation, representatives from those participating jurisdictions should be included on the administrative board, together with representatives of the relevant state agencies, the governor, and the state legislature. Voting on geographic allocation issues could be on the basis of the value of accumulated contributions into the fund.

Expenditure allocation procedures must be set up in advance of a recession, to avoid administrative delays, with legislative approval if required.

The accumulated fund balance should be invested in secure, short term investments that yield the highest possible rate of return—money market certificates, federal government securities, even state and local bonds providing their maturity does not exceed the date at which fund expenditures are most likely to be necessary. The fund cannot be used to further local development finance efforts since such investments are unlikely to be liquid, especially during a recession.

*Role of the Legislature.* The legislature will be called upon to remove statutory blocks to setting up a stabilization fund as well as shaping the enabling legislation. There may even be constitutional amendments to be overcome. The Council of State Governments summarizes the legal aspects in Michigan:

Michigan's constitutional provisions prohibiting continuing appropriations, or accumulation of funds for future use, limiting fund transfers except as accomplished by legislative appropriations, and requiring an annually balanced budget are common to many states. In Michigan, an opinion of the attorney general states that creation of a trust fund and legislative appropriations to the fund for a valid public purpose meet the constitutional requirements.

Passage of the necessary amendments and legislation is most likely while the impacts of a recession are still fresh in the memories of the public and the legislature.

The legislature will also play a role in administering fund contributions and expenditures. Although difficult to achieve, the legislature's role should be one of oversight through a standing committee or subcommittee—not one of prior approval. In this way, control could be effective without the time-consuming process of seeking approval before action is taken.

## PUBLIC WORKS

The major function of public works projects is to develop economic and social infrastructure. The public works component of the countercyclical strategy is targeted at providing employment for idle resources in the construction and building supplies industries. Special construction projects should not be undertaken solely to provide jobs for the unskilled or inexperienced. There are two reasons for this: 1) the average duration of low-skilled jobs on public construction projects has been about 2 weeks; 2) because of skill requirements and the nature of the construction labor market, few jobs for the unskilled are generated on site. The hard-to-employ are the target of the public employment and training programs described in the following section. Appendix C provides estimates of the number of jobs and the type of participants in past public works projects and public employment programs.

### *Triggering Expenditures*

A project for which the finances had already been raised would be started when unemployment in the local (county or city) construction sector shows a cyclical downturn. Because monthly local employment and unemployment data are not always reliable, there is something of a trade-off between waiting for sufficient monthly data to be sure that a downturn has occurred, and creating jobs as quickly as possible. Employment and unemployment data, while providing confusing signals, are, along with housing permits, the only data available in a timely fashion at the local level. States will have to experiment on developing efficient leading indicators of construction downturns. Until satisfactory analyses have been undertaken, we would suggest the following indicator:

■ Pre-selected public works projects will be undertaken in an area (county, city, special district) when the unemployment rate in construction increases for two successive quarters and averages a rate for three months that is 140 percent above its average rate in the preceding twelve months.

The indicator must be based on the behavior of the construction sector since this does not necessarily coincide with total employment and public works are specifically targeted to construction. In order to avoid labor supply bottlenecks, the predicted number of on site jobs created by a project should not come within more than 66 percent of the estimated number of unemployed construction workers within easy access of the project site.

***Type of Public Works Projects*** Public works projects undertaken as part of state stabilization policy should be those that are compatible with the area's overall economic development strategy and public infrastructure needs. There is little that can be gained in selecting special labor intensive projects since these are unlikely to provide the unskilled worker with more than two or three weeks work which does next-to-nothing for his skills, work experience or income maintenance. Make-work construction projects leave the local taxpayer with bond-servicing costs and little of permanent value by way of reward. There is little cyclical behavior in the type of public construction projects undertaken by state and local governments and so state-local patterns provide no basis for selection of project type most suitable for counter-cyclical purposes (Vernez and Vaughan, 1978).

Heavy construction projects—flood control, dams, levees, water supply facilities and water treatment plants—are rarely suitable for countercyclical purposes because the heavy construction industry does not behave cyclically. The 1974-75 downturn was an exception. Moreover, the equipment and skills needed on such projects are highly specialized, and may have to be imported from other areas and states, which will reduce their local job generating ability. However, some heavy construction projects should be kept "on-the-shelf" in case of a repeat of the 1975 experience. Sewer projects have the advantage of being relatively quick to complete (Table 20).

For timely implementation, the planning for countercyclical projects must have been completed in advance, so that time consuming public hearings and lawsuits do not delay getting construction firms to work on the projects. Pre-selection is obviously a difficult issue. If the project is essential to the delivery of public services, then delay may be costly and disruptive. On the other hand, construction projects should never be undertaken simply in order to create jobs. Developing the planning capacity at the state and local level to set aside capital projects for countercyclical implementation will take time, and involve

67-217 O - 80 - 6

a new function for state and local planning agencies, and will add a new dimension to capital budgeting (see Volume 9 in Studies in State Development Policy, *The Capital Budget*).

The energy crisis has led state and local governments to investigate the feasibility of using energy conservation projects as a means to create jobs. It seems doubtful that many low-skilled and unskilled jobs can be created in this way. Even relatively straightforward construction and rehabilitation projects embody a very high percentage of skilled workers—plumbers, carpenters, electricians, for example. Overall, only 13 percent of those in the construction industry are unskilled; 56 percent are craftsmen. Craftsmen are in short supply during most of the business cycle, and depending on local cyclical behavior, may not be readily available even during a recession. Since as many as four craftsmen are needed for each laborer, few unskilled jobs can be created.

## PUBLIC EMPLOYMENT AND TRAINING

The increased duration of joblessness by the chronically unemployed constitutes about half of the increase in the unemployment rate during a recession. This group also suffers most acutely; they are less likely to receive unemployment insurance or other benefits, have any accumulated savings, or have other wage earners in the household. They are therefore the special target of the public employment and training component of the countercyclical strategy. Unlike public works, expenditures from the fund would not be determined by local economic indicators, but by the numbers of eligible participants. Eligibility would be the same as for Titles II and VII of the newly re-enacted CETA program, and expenditures from the fund would be made to local CETA prime sponsors as their ranks of participants were swelled by the recession. The stabilization fund would, essentially, allow states to accumulate CETA funds to cope with a recession, since Washington has proved unwilling to appropriate sufficient funds during recessions to provide for the number of eligible unemployed.

### *Eligibility*

The program must focus on those most harmed by cyclical fluctuations—those who find it difficult to secure employment even in the best of times. These include:

- Those who have drawn unemployment insurance for more than 15 weeks or have exhausted their benefits
- Welfare recipients (AFDC, Home Relief, etc.)
- Disadvantaged new entrants to the labor market who have unsuccessfully searched for at least 15 weeks, including those released from

prison or the armed forces, and those from households earning below the poverty level.

Strict enforcement of eligibility is necessary. Prior to the 1978 reauthorization, those enrolled under countercyclical CETA programs were all too often employed on the day prior to entry, were relatively skilled and well educated, would have been eligible for unemployment insurance, and, in all likelihood, would only have been unemployed for a short period of time. Although strict enforcement slows down the rate of job creation, the trade-off can be worthwhile if it effectively targets on the needy.

***Type of Program*** Experience suggests that there is no simple formula that guarantees success in training the hard-to-employ. States and localities are developing programs that are best suited to their problem clientele and to their economic structures under Title II and VII of the new CETA legislation. Their approaches include: 1) public employment; 2) training; and 3) wage subsidies.

*Public Employment.* Although the CETA experience has led some commentators to criticize public employment as an effective job-creating device, it may be the only effective way to reach out to "high risk" cases—just as loan guarantees are the only way to reach certain high risk businesses. And, as in the case of capital market failures, the problem is one of transactions costs. A private firm may find it very expensive to search for, screen, and train an ill-educated, inexperienced member of the labor force. A firm employing 20 people can scarcely invest in a personnel office skilled in the techniques necessary to bring such individuals into the workforce. The public sector, because it already has data in the eligible population, because it has been administering training programs, and because of its size and its diversity of employment opportunities, can make a greater outreach effort.

But public employment should be regarded, in part, as a *screening* system—a way of identifying those who are and those who are not suitable for private sector training and employment. A public sector jobs program should not be regarded as an end in itself, unless participants can move into permanent public sector employment.

*Training.* A recurring failure in publicly administered training programs has been the inappropriate skills imparted to many of their participants. Evaluations of pre-CETA manpower programs suggest that few participants "were placed in areas of growing demand, in jobs with real potential for advancement" (Perry et al., 1976, p. 77).

Greater effectiveness may result from a coordination of training efforts with private employers. By training eligible participants for slots needed by private employers, or even subsidizing private firms to train eligible participants (but without the type of red-tape that has

## Table 20
## Duration of Construction, by Type of Public Works Project

*Average Duration in Months (with Percentage of Total Jobs Generated by Quarter)*

| | 3 | 6 | 9 | 12 | 15 | 18 | 21 | *Total Duration in Months* | *Total On-site Man-hours*[a] | *Range of Construction Time* |
|---|---|---|---|---|---|---|---|---|---|---|
| *Building Construction* | | | | | | | | | | |
| Private one-family housing | | | | | | | | 4.8 | 37.5 | NA |
| Public housing | *10.4* | *21.6* | *27.3* | *23.2* | *15.1* | | | 14.8 | 52.9 | NA |
| Schools | *15.6* | *26.9* | *32.6* | *22.2* | | | | 12.0 | 39.3 | NA |
| Hospitals | *6.5* | *12.4* | *16.5* | *19.3* | *17.6* | *14.9* | *9.8* | 21.0 | 43.4 | 10-47 |
| Nursing homes | | | | | | | | 13.4 | 42.0 | NA |
| College housing | *11.1* | *22.4* | *31.3* | *25.4* | *9.6* | | | 13.4 | 43.7 | 4-22 |
| Federal office buildings | *6.8* | *15.3* | *20.5* | *23.0* | *21.8* | *.6* | | 16.8 | 41.9 | 9-31 |
| *Heavy Construction* | | | | | | | | | | |
| Sewer lines | *27.0* | *41.1* | *26.4* | *5.5* | | | | 9.5 | 45.0 | NA |
| Sewer plants | *45.7* | *47.3* | | | | | | 6.5 | 43.4 | NA |
| Land operations[b] | *27.5* | *33.5* | *26.0* | *13.0* | | | | 11.1 | 52.2 | 2-30 |
| Dredging[c] | *39.5* | *44.0* | *16.5* | | | | | 6.7 | 82.3 | 2-16 |

NOTES: Figures in italics indicate percentage of total on-site man-hours spent in quarter. NA means not available.

*a* For each $1,000 of contract costs, measured in 1974 dollars.

*b* Land operations, as defined by the Bureau of Labor Statistics, include 28 civil works projects: large earth-fill dams (1 project), small earth-fill dams (3 projects), local flood protection (3 projects), pike dikes (5 projects), levees (7 projects), revetments (5 projects), and four miscellaneous projects—channel improvement, jetties, outlet channel, and sea wall extension.

*c* Dredging includes 15 projects, of two different types: hydraulic, in which a dredge equipped with a cutterhead pumps soft material through a pipeline to a disposal area, usually on-shore; and the second type, in which soft or broken hard material is loaded into scows and taken to a disposal area, usually in deep water. The sample projects are the same as those used in the Haveman and Krutilla study.

*SOURCE: Labor and Material Requirements for Construction of Private Single-Family Houses, 1972*, BLS Bulletin 1755, p. 5; *Labor and Material Requirements for Public Housing Construction 1968*, 1974, BLS Bulletin 1821, pp. 6-7; *Labor and Material Requirements for School Construction, June 1968*, BLS Bulletin 1586, pp. 7, 17; *Labor and Material Requirements for Hospital and Nursing Home Construction, 1971*, BLS Bulletin 1691, pp. 14-15; *Labor and Material Requirements for College Housing Construction, May 1965*, BLS Bulletin 1441, pp. 24-25; *Labor Requirements for Federal Office Building Construction, 1962*, BLS Bulletin 1331, pp. 26-27; Labor and Material Requirements for Sewer Works Construction, 1966, Bulletin 1490, p. 18; *Labor and Material Requirements for Civil Works Construction by the Corps of Engineers, 1964*, BLS Bulletin 1390, p. 19-20.

impeded WIN), the unskilled may be prepared more effectively for unsubsidized employment. The Private Industry Councils (PICs) financed under CETA Title VII may become a model for an expanded state-based countercyclical effort. There may also be opportunities to expand the level of apprenticeship programs to provide skill training to the uneducated. European nations make much more use of apprenticeship programs than does the U.S.

*Wage Subsidies.* Jobs can be created by reducing the cost of hiring additional labor. A wage subsidy could take several forms. One approach could be modeled on the new Targeted Jobs Tax Credit which is applicable only to the hard-to-employ, and can be taken by business as a credit as well as a reduction in taxes. During its initial nine months, the program has been poorly publicized and has encountered severe administrative problems. But it could provide the basis for an effective state effort. An alternative would be to provide employment vouchers to unemployed individuals, based upon their past income and unemployment experience. An employer could redeem these vouchers—either for cash or reduced business payroll taxes—for each week that they provided the worker with a job. The cash value, or subsidy, would decline over time as the subsidized worker gained work experience. Additional subsidy would be provided to employers providing vouchered workers with training programs. However, accumulated experience with wage subsidies has not shown them to be overwhelmingly successful. Whether this is due to poor program design or to an inelastic demand for unskilled labor has not yet been established.

The sobering conclusion is that there is no easy way to provide either effective training or private sector employment to the economically disadvantaged. With the greatly improved targeting in CETA and the growth of Private Industry Councils, the capacity to assist those in need will, we believe, be improved. The ability of the stabilization fund to inject an additional $7 billion into the delivery system when demands increase will encourage the development of a targeted countercyclical component to the CETA program.

## ANTI-RECESSIONARY FISCAL ASSISTANCE

Fiscal assistance must serve two purposes: 1) it must provide short run assistance to help the state and local jurisdictions that suffer sudden negative cash flows; and 2) it must allow state and local governments to meet public service demands and maintain the integrity of appropriations.

The fiscal assistance component would offer two types of aid: grants released by a trigger indicator, and short term loans made to jurisdictions suffering from a sudden and harsh combination of reduced revenues and increased expenditures.

*Triggering* The trigger to release grants for state and local fiscal stabilization must be an economic indicator related to the extent of fiscal stress—the combination of declining revenues and increased social service expenditures. Michigan uses the adjusted personal income growth rate. When this falls below zero, funds are released to the state government at a rate proportional to the shortfall of the indicator (see above). The best indicator will differ from state to state, depending on the economic and fiscal base, and upon the level and type of social services. States must conduct research to determine which variable, or set of variables, is most closely related to fiscal outcomes. Other variables that might be included are: the welfare caseload; the unemployment rate; the number of unemployed; the number of long term unemployed; and the change in employment. The trigger should be some level of an indicator that is only exceeded in recessions, and that is proportional to the level of cyclical—rather than secular—fiscal stress. The trigger would be used, each quarter, to determine the volume of countercyclical grants available to state and local governments.

*Allocation* The distribution of these grants between state and local governments, and among local governments, is a key issue. The record of many state governments with respect to fiscal assistance and state-based revenue sharing is not encouraging. Neither is it possible to develop any rules that can be applied to all states. The state of Hawaii collected 75 percent of total state-local revenue and would require a much larger share of the countercyclical component than the state of Ohio, which collects barely 30 percent of state-local revenue. However, two aspects of the design of the state stabilization fund will help in overcoming these difficulties. First, federal approval of the fund's operating procedures would be required to make the funds eligible for federal matching grants. Second, and more important, local governments would participate in the state stabilization fund, both by making contributions and by sharing in its administration. We suggest a two stage allocation procedure. In the first stage, the trigger determines the total volume of fiscal assistance available for a given quarter. This is allocated between the state and local levels of government according to some pre-agreed share. In general, state governments would receive more than half of the allocations because their revenues constitute about half of the state-local total and because their revenues are much more cyclical. In the second stage, the local share is allocated among local jurisdictions. This could be done either according to local indicators—for example, a city might receive an amount proportional to its share of the total state welfare case-load—or according to the city's own previous contributions to the stabilization fund. The latter method could take into account local fiscal effort in much the same

way as federal matching grants make allowance for state fiscal effort (see above). Jurisdictions, through allocations from all three components, would be guaranteed expenditures more than equal to their accumulated contributions. The second allocation method is more attractive since it would encourage local areas to adapt to fiscal realities—the most cyclically volatile would face an incentive to make large contributions. This would reduce their tendency to expand programs or cut taxes in good years.

***Loans*** A small reserve from the fiscal assistance component would be set aside to provide medium term loans to areas that experience an especially sharp, or unexpected fiscal problem. A loan would compel the area to make appropriate fiscal adjustment, whereas a grant would not. Determination of loan eligibility would be made on a case by case basis according to rules set by those administering the fund.

## OTHER STABILIZATION POLICIES

The stabilization fund, and the expenditures described in the preceding sections, are the core of a state based countercyclical strategy. But other measures can be taken to reduce local cyclical volatility. These include:

- *Long run economic development.* By diversifying the local base, cyclical amplitude can be reduced. A major part of such development is to establish an effective local capital market for both debt and equity financing and improve the quality of the local labor force.
- *Tax reform.* The structure of local taxes can be adjusted to provide a more effective automatic stabilizer. This will involve more volatile revenues, but the stabilization fund protects state-local expenditures from these cycles.
- *Review of regulations.* Some regulations, particularly usury ceilings, actually exacerbate local cycles. Review and reform of the cyclical impact of these regulations will help.

***Long Run Economic Development*** A successful long run economic development strategy can help reduce an area's susceptibility to recessions. The diversification of the local economy shifts labor from traditional, cycle-prone, sectors into emerging, less cyclical industries. A tight labor market discourages firms from laying off workers. The tools for such a strategy are discussed in other papers in Studies in State Development Policy, but a few points can be reiterated here.

First, a successful development finance strategy that improves the availability of both debt and equity capital can increase the local birth rate of new firms. Nationwide, the most rapidly growing firms are

small young companies, and their growth, can provide a countercyclical buffer. Also, company birth rates are surprisingly uncyclical—although business failures are cyclical. Developing an attractive birth "matrix" that can be provided by older urban areas is a major step in dampening the downswing.

Second, developing labor skills, as we have argued above, is another way of reducing local cyclical vulnerability. Firms tend to hoard skilled and experienced labor when demand falls, because, if laid-off, such employers may not find employment elsewhere.

***Tax Reform*** Reforming the state and local tax structure can dampen local cycles. First, highly cyclical revenues act as automatic stabilizers because they ensure that the disposable income of consumers and firms falls by less than the gross income. A progressive income tax is therefore a good economic stabilization device. Those states with regressive tax structures should introduce more progressive schedules both for equity reasons and as a stabilizer. In addition to the personal income tax, other changes that have a similar impact are: 1) reducing the regressivity of the sales tax by exempting food, medical supplies, and other necessities, and including services; and 2) improving the equity of the property tax by replacing home owner exemptions and deductions with circuit-breakers.

These changes are all the more important because another major tax reform—indexing—will actually reduce the cyclical volatility of tax revenues. Indexing is a necessary step toward reducing the inequity and inefficiency induced by inflation. Unless countervailing measures are taken, the effectiveness of the tax structure as an automatic countercyclical tool will be impaired.

There are other steps that can also be taken. The way unemployment insurance premiums for employers are calculated implicitly subsidizes high-turnover firms. They do not pay premiums at a rate high enough to cover the volume of benefits paid their employees. By abolishing the maximum rate and redesigning the premium calculation formula, firms could be encouraged to hoard, rather than layoff, labor.

***Regulatory Reform*** Regulations can inadvertently contribute to cyclical economic behavior. They may also raise the cost of doing business and slow secular growth. This is not to say that such regulations should be abolished. Regulations provide different levels of government with means to attain a variety of social objectives—from orderly residential development to reduced air pollution. But state governments should be aware that regulations may have undesirable economic impacts that can be mitigated or avoided altogether. The list is potentially endless, but we have focused on a few regulations to illustrate how a review of regulatory activity

may help local government.

*Usury Ceilings.* To reduce the cost of owning a home, several states[5] have imposed usury ceilings—upper limits on the mortgage rate that banks can charge on home mortgages. While the market mortgage rate is below the usury ceiling, there is no effect on the housing market. When inflation pushes up interest rates above the usury rate, financial institutions, to cover their increased cost of funds, must seek assets with a higher yield. Therefore, they drastically reduce their volume of mortgage loans—usually rationing the few they do make by raising the down payment, offering them only to favored customers, and raising the points charged. This effectively excludes those with limited assets from home buying. The ceiling does reduce borrowing costs, but only for those favored few who get mortgages. For many more, the usury ceiling delays homeownership until the market rate falls. The demand for housing is slashed and construction employment falls. The last three recessions—1970, 1974, and 1979—have also been the years of peak interest rates when low state usury ceilings have contributed to the depth of the local recession. This is illustrated in Table 21. It shows the usury ceiling in New York State, the national average mortgage rate, and the ratio of housing permits in New York to housing permits in the nation. When the national rate exceeds the New York ceiling, the ratio falls.

*Housing Regulations.* States should review their building codes to determine whether laws governing seasonal construction, housing starts, and other aspects of construction may be contributing to the volatility of that industry. Canada has experimented successfully with cash bonuses to encourage winter construction—winterizing construction costs only a few hundred dollars, and if home buyers can be encouraged to buy in the winter, builders can smooth out the seasonal shifts (Vernez and Vaughan, 1978). This would have the added benefit of reducing the labor cost of construction, for workers would no longer demand wages high enough to compensate for the seasonal nature of their work and would draw less unemployment insurance.

The principal could be extended to cover cyclical fluctuations. If impediments to securing mortgages were removed, states could offer cash bonuses to those buying or rehabilitating homes. The bonuses could be tied to the prevailing unemployment rate in the construction sector. Since we have little evidence on the efficacy of such a policy, states should proceed cautiously. The bonus should only be used countercyclically, and sparingly at that, since it is regressive—providing assistance to those rich enough to be able to afford to purchase a home.

**Table 21**
**Single Family Housing Construction and the Usury Gap**

| | *Interest Rates* | | | *Housing* | | |
|---|---|---|---|---|---|---|
| *Year* | *N.Y.S. Ceiling* | *U.S. Average* | *Usury Gap (N.Y.S. Ceiling-U.S. Rate)* | *N.Y.S. Permits* | *U.S. Starts* | *N.Y.S. Permits/ U.S. Starts* |
| 1960 | 6.00 | 6.23 | -.23 | 50,388 | 994.7 | .051 |
| 1961 | 6.00 | 5.98 | +.02 | 41,424 | 974.3 | .043 |
| 1962 | 6.00 | 5.93 | +.07 | 39,584 | 991.4 | .040 |
| 1963 | 6.00 | 5.81 | +.19 | 42,223 | 1,012.4 | .042 |
| 1964 | 6.00 | 5.80 | +.20 | 44,112 | 970.5 | .045 |
| 1965 | 6.00 | 5.83 | +.17 | 46,236 | 963.7 | .048 |
| 1966 | 6.00 | 6.40 | -.40 | 37,800 | 778.6 | .049 |
| 1967 | 6.00[1] | 6.53 | -.53 | 36,180 | 843.9 | .043 |
| 1968 | 6.65[2] | 7.12 | -.47 | 36,168 | 899.4 | .040 |
| 1969 | 7.42 | 7.99 | -.57 | 31,596 | 810.6 | .039 |
| 1970 | 7.50 | 8.52 | -1.02 | 26,988 | 812.9 | .033 |
| 1971 | 7.50 | 7.75 | -.25 | 34,836 | 1,151.0 | .030 |
| 1972 | 7 50 | 7.64 | -.14 | 39,012 | 1,309.2 | .030 |
| 1973 | 7.94[3] | 8.30 | -.36 | 36,948 | 1,132.0 | .033 |
| 1974 | 8.50 | 9.13 | -.63 | 27,504 | 888.1 | .031 |
| 1975 | 8.50 | 9.10 | -.60 | 24,080 | 892.2 | .027 |
| 1976 | 8.50 | 8.99 | -.49 | 23,058 | 1,162.8 | .020 |

1. Usury ceiling changed on July 1, 1968 to 7.25%.

2. Usury ceiling changed on February 16, 1969 to 7.50%.

3. Usury ceiling changed on August 15, 1973 to 8.0% and on October 11, 1973 to 8.50%.

*SOURCE:* Derived by the author from data supplied by the New York State Banking Department, the Board of Governors of the Federal Reserve System, and the New York State Department of Commerce.

**Footnotes to Chapter 6**

1. The concept of a stabilization fund is not original. In 1977, Michigan took the highly innovative step of creating a "rainy day" fund (PA 76). The enabling legislation is presented in Appendix B. The fund was recommended by a blue-ribbon commission, the Michigan Economic Advisory Council, headed by Michael Blumenthal, later to become Secretary of the Treasury. Thereafter, the legislature took the lead. An excellent discussion of this policy is contained in the Council of State Governments publication, "Innovations: Michigan's Budget and Economic Stabilization Fund," Lexington, Kentucky, 1979. Those interested in obtaining further information should contact the Council of State Governments, the Michigan State Fiscal Agency, or the Michigan Department of Management and Budget.

2. For example, for a state that closely paralleled the nation, full scale expenditure should have commenced in the second quarter of 1970 (allowing for some lag in recognition), been cut back in the second quarter of 1971 (four quarters), and reduced until the second quarter of 1974 (twelve quarters). Full scale expenditures would have been undertaken until the first quarter of 1976 (six quarters), and would have been reduced until the fourth quarter of 1979 (fifteen quarters).

3. The data in the table indicate that Michigan should accumulate approximately $1 billion against a relatively severe recession, which is the statutory limit on the present fund. Actual accumulations by the end of FY 1979 would be $235 million unless there are draw-downs triggered by rising unemployment during 1979. (This is, of course, in the absence of federal or local contributions.)

4. It allows the first $30 plus one third of the remaining earnings to be disregarded when computing welfare eligibility.

5. The lowest ceilings are in Arkansas, Georgia, Iowa, New York, North Dakota, and West Virginia.

Senator BENTSEN. Mr. Cantor, please proceed.

## STATEMENT OF ARNOLD CANTOR, ASSISTANT DIRECTOR, DEPARTMENT OF ECONOMIC RESEARCH, AFL–CIO, WASHINGTON, D.C.

Mr. CANTOR. Thank you, Senator.

I am pleased to have this opportunity to present the AFL–CIO's views on public works investment programs as a means to stimulate the economy and fight recession. I would also like to commend the chairman and the committee members for the timeliness of this inquiry.

Unemployment has jumped to 8.2 million workers; the construction industry is already in a depression with 17.5 percent of the labor force unemployed; and there is no longer any shadow of a doubt concerning the economy's downward direction and the need for Government action.

Recession is no longer a question of if and when, but one of how long, how deep, and how damaging.

The AFL–CIO has had a long history of support for public works programs to provide quick, pinpointed job-creating economic stimulus during a recession and to build, repair, and improve this Nation's stock of public facilities. Present gaps must be closed and adequate levels of public investments are an essential precondition to longer term private sector economic growth, increased productivity, and full employment. The term, in the jargon, is "infrastructure."

The perennial claim of the opponents of such programs is that public works waste taxpayers' money on unnecessary makework projects, they take too much time to start up, too long to complete, and therefore stimulate the economy at the wrong time.

The AFL–CIO has never accepted these arguments, and a number of recent studies as well as the experience under rounds I and II of the local public works program, as Mr. Hall has shown, demonstrate that public investments can create jobs where and when needed and the projects "pay off" in direct job creation, fiscal stimulus, and worthwhile public capital facilities.

In an effort to summarize my prepared statement, I would highlight a couple of points not taken up——

Senator BENTSEN. Your prepared statement will be made a part of the record.

Mr. CANTOR. The Commerce Department regularly publishes a series on State and local public works construction which paints a dismal picture of deterioration and need. According to the Commerce Department, in 9 out of the past 11 years, the real volume of outlays for State and local public construction declined. In 1979, State and local governments spent $40 billion on public construction—including Federal aid. After adjusting for inflation, this represents a rate of 32 percent below 1969 levels.

I would also like to call attention to another Department of Commerce study of public sector capital formation "Government-Owned Fixed Capital in the United States, 1925–79", Survey of Current Business, March 1980.

According to John C. Musgrave, the author of the study: "In constant dollars, total government net fixed capital formation has declined steadily since the mid-1960's from a high of $25 billion in

1966 to $7 billion in 1979. . . . Since the late 1960's, the Federal component has been a small negative value, and the State and local component had declined by the late 1970's to about one-third of its value in the late 1960's."

I think it is important to look at the legislative history of the 1976 Local Public Works Act, and the program's results. They clearly point up the potential of such programs and the need for speedy legislative action.

For example, hearings on the original emergency accelerated public works jobs bill began early in 1975, and a bill passed Congress in May 1975—1½ years after the recession began. That bill was vetoed by President Ford, and the $2 billion round I public works program did not get off the ground until Congress succeeded in overriding a third Presidential veto in July 1976 and the appropriations bill was enacted in October 1976—almost 3 years after the "official" start of the 1974–75 recession. And, because of the winter, much of the job impact was delayed even further, particularly in the Northeast.

The lessons learned under round I and the improvements in round II clearly demonstrated that:

One: Public works jobs programs can start up quickly. Except for isolated incidents, decisions on applications were made within 60 days and construction started within 90 days.

Two: Projects could be small and of short duration. The average project funded under round II was under $500,000 and 62.5 percent of the projects were completed in less than 1 year, and the average duration was only 10.4 months.

Three: The funds could be targeted to the areas that are most in need. The average unemployment rate for areas receiving round II funds was 9.4 percent.

Four: The number of applications received and the types of projects funded indicated that there continues to be a huge backlog in a wide range of facilities that are essential and welcome additions to the Nation's capital stock.

The program represented a valuable tool for creating jobs and needed public investments which do not add to inflationary pressures. Rather, they contribute to growth, development, and productivity.

Mr. Hall has pointed out the types of projects funded and the longer term benefits of these projects. Under present economic and budgetary circumstances, the targeting attributes of measures like LPW II are of particular importance.

Many communities that were hard hit by the 1974–75 recession continued to experience stagnation or decline and remain extraordinarily vulnerable and ill-equipped to deal with another economic downturn. There is every reason to believe that unless action is taken, the larger urban areas will suffer relatively more during this recession than the last.

As an example, the unemployment data for the Nation's metropolitan areas highlights their continuing economic problems. In March, before the huge April and May jumps in national unemployment, when the national average rate of unemployment was 6.2 percent—it is now 7.8 percent—31 metropolitan areas recorded unemployment rates of 8.5 percent or more, including several with 12 percent or higher rates. Also, yesterday the Department of Labor released the latest figures

on metropolitan unemployment. I would like to insert that table for the record.

Those figures show that in April the total now is up to 35 major urban areas with unemployment rates of 8.5 percent or more, and again, that is a month earlier figure than the current national unemployment rates.

[The table follows:]

*Metropolitan areas with unemployment rates of 8.5 percent or over, April 1980*

| *State and metropolitan area* | *Unemployment* |
|---|---|
| California: | |
| Bakersfield | 9.7 |
| Fresno | 10.0 |
| Modesto | 15.2 |
| Sacramento | 8.5 |
| Salinas-Seaside-Monterey | 10.6 |
| Stockton | 12.4 |
| Illinois: Decatur | 9.9 |
| Indiana: | |
| Anderson | 16.4 |
| Fort Wayne | 9.4 |
| Gary-Hammond-East Chicago | 9.5 |
| Muncie | 9.7 |
| South Bend | 9.0 |
| Louisiana: | |
| Alexandria | 9.3 |
| Monroe | 8.7 |
| Michigan: | |
| Battle Creek | 11.5 |
| Bay City | 15.2 |
| Detroit | 12.9 |
| Flint | 17.5 |
| Jackson | 10.3 |
| Lansing-East Lansing | 9.9 |
| Muskegon-Norton Shores-Muskegon Hgts | 12.4 |
| Saginaw | 14.5 |
| New Jersey: | |
| Jersey City | 9.1 |
| Vineland-Millville-Bridgeton | 9.3 |
| New York: Buffalo | 9.2 |
| Ohio: | |
| Toledo | 10.6 |
| Youngstown-Warren | 10.1 |
| Oregon: Eugene-Springfield | 10.1 |
| Pennsylvania: | |
| Altoona | 8.5 |
| Johnstown | 10.8 |
| Northeast Pennsylvania | 9.2 |
| Williamsport | 15.2 |
| Texas: El Paso | 8.5 |
| Washington: Tacoma | 8.6 |
| West Virginia: Wheeling | 9.1 |

Mr. CANTOR. Over the past few years, many of these areas have at best been able to barely hold their own, helped by the overall growth in the national economy, Federal aid, and extremely conservative local expenditure policies. In addition, many localities have increased their reliance on revenue sources that are more sensitive to the economy's performance, and their taxing and service-providing abilities are extremely limited. The combination of economic downturn, inflation, high interest rates, taxpayer resistance, plus what has undoubtedly been a growing backlog of needs as a result of neglect of

physical capital, could precipitate very severe consequences in terms of fiscal collapse, physical collapse, and, of course, joblessness.

In that light, I believe the following admonition from the study prepared for this committee on the fiscal condition of cities should be emphasized. To save time, I will not read the quote. It is in my prepared statement.

In sum, Mr. Chairman, the AFL–CIO is convinced that public works programs represent an effective and appropriate method to provide needed and timely fiscal stimulus to the economy, increase job opportunities, and provide necessary improvements in the Nation's stock of public facilities.

We urge this committee to support enactment of H.R. 2063, the Economic Development and Public Works Act. The House-passed version includes an AFL–CIO supported provision of a countercyclical local public works program which is not included in the Senate measure.

We also look forward to working with the Congress and this committee in development of additional targeted jobs programs in transportation, housing, energy conservation, and other public capital improvements which are needed as investments in the future of America and to deal with the rapidly worsening economic situation.

Senator BENTSEN. Thank you, Mr. Cantor.

[The prepared statement of Mr. Cantor follows:]

PREPARED STATEMENT OF ARNOLD CANTOR

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Recession is no longer a question of if and when; but one of how long, how deep and how damaging.

The AFL–CIO has had a long history of support for public works programs to provide quick, pinpointed job creating economic stimulus during a recession *and* to build, repair and improve this nation's stock of public facilities. Present gaps must be closed and adequate levels of public investments are an essential precondition to longer term private sector economic growth, increased productivity and full employment.

The perennial claim of the opponents of such programs is that public works waste taxpayers money on unnecessary makework projects, they take too much time to start up, too long to complete and therefore stimulate the economy at the wrong time.

The AFL–CIO has never accepted these arguments and a number of recent studies as well as the experience under Rounds I and II of the Local Public Works Program demonstrate that public investments can create jobs where and when needed and the projects "pay off" in direct job creation, fiscal stimulus and worthwhile public capital facilities.

The Commerce Department regularly publishes a series on state and local public works construction which paints a dismal picture of deterioration and need. According to the Commerce Department, in nine out of the past 11 years, the real volume of outlays for state and local public construction declined. In 1979, state and local governments spent $40.0 billion on public construction (including federal aid). After adjusting for inflation, this represents a rate of 32 percent below 1969 levels. In real terms, on a per person basis these figures show that public construction represented $151 per capita in 1969, compared with only $95 last year. (See Table I.) And these figures do not reflect the recent huge

increases in interest rates and their impact on present state and local construction activity.

I would also like to call attention to another Department of Commerce study of public sector capital formation "Government-Owned Fixed Capital in the United States, 1925–79" (Survey of Current Business, March 1980). According to John C. Musgrave the author of the study:

"In constant dollars total government net fixed capital formation has declined steadily since the mid-1960's from a high of $25 billion in 1966 to $7 billion in 1979. . . . Since the late 1960's the Federal component has been a small negative value, and the state and local component had declined by the late 1970's to about one-third of its value in the late 1960's."

An examination of the legislative history of the 1976 Local Public Works Act and the program's results clearly points up the potential of such programs and the value of speedy legislative action.

For example, hearings on the original emergency accelerated public works jobs bill began early in 1975, and a bill passed Congress in May of 1975—a year and one-half after the recession began. The bill, however, was vetoed by President Ford and the $2 billion Round I Public Works Program did not get off the ground until Congress succeeded in overriding a third presidential veto in July 1976 and the appropriations bill was enacted in October 1976—almost three years after the "official" start of the recession. And, because of the winter, much of the job impact was delayed even further, particularly in the Northeast.

Job estimates on the Local Public Works Program indicated that the $6 billion spent on over 8,500 projects in Rounds I and II generated 110,000 direct onsite jobs, 66,000 jobs in firms and industries providing building materials and supplies, and 249,000 additional jobs as the added income of these workers creates additional sales, production and incomes. The total—425,000 job years—represents an average cost of $14,000 per person year of employment.

The program was a huge success and a major factor in pulling the economy out of the 1974–75 recession even though the legislative authority was long delayed.

The lessons learned under Round I and the improvements in Round II clearly demonstrated that:

1. Public works jobs programs can start up quickly. Except for isolated incidents, decisions on applications were made within 60 days and construction started within 90 days.

2. Projects could be small and of short duration. The average project funded under Round II was under $500,000 and 62.5 percent of the projects were completed in less than one year and the average duration was only 10.4 months.

3. The funds could be targeted to the areas that are most in need. The average unemployment rate for areas receiving Round II funds was 9.4 percent.

4. The number of applications received and the types of projects funded indicated that there continues to be a huge backlog in a wide range of facilities that are essential and welcome additions to the nation's capital stock. Within 45 days of the final approval of the $2 billion Round I Act, the Economic Development Administration received 25,000 project proposals totaling $24 billion—from schools, bridges, libraries and port facilities, to fire stations and water and sewer lines.

The program represented a valuable tool for creating jobs and needed public investments which do not add to inflationary pressures, rather, they contribute to growth, development and productivity.

For example, the types of projects that receive the major portion of the Local Public Works funds under Rounds I and II were repairs and construction of water and sewer systems; and projects involving street, road, bridge and railroad bed repairs and rehabilitation. These projects were quickly started, they provided immediate jobs and the type of improvements that are essential complements to private sector investment, growth and productivity.

Under present economic and budgetary circumstances the targeting attributes of measures like LWP II are of particular importance.

Many communities that were hard hit by the 1974–75 recession continued to experience stagnation or decline and remain extraordinarily vulnerable and ill-equipped to deal with another economic downturn. There is every reason to believe that unless action is taken the larger ubran areas will suffer relatively during this recession than the last.

The unemployment data for the nation's metropolitan areas highlights their continuing economic problems. In March, before the huge April and May jumps

in national unemployment, when the national average rate of unemployment was 6.2 percent, (it is now 7.8 percent) 31 metropolitan areas recorded unemployment rates of 8.5 percent or more including several with 12 percent or higher rates. (See Table II).

Over the past few years many of these areas have at best been able to barely hold their own helped by the overall growth in the national economy, federal aid and extremely conservative local expenditure policies. In addition, many localities have increased their reliance on revenue sources that are more sensitive to the economy's performance, and their taxing and service-providing abilities are extremely limited. The combination of an economic downturn, inflation, high interest rates, taxpayer resistance, plus what has undoubtedly been a growing backlog of needs as a result of neglect of physical capital, could precepitate very severe consequences in terms to fiscal collapse, physical collapse, and, of course, joblessness.

In that light, I believe the following admonition from the study prepared for this committee on the fiscal condition of cities should be emphasized:

"It is important to note that capital expenditures have typically been used as a buffer whereby shortfalls in revenues or unforeseen current expenditures can be financed by deferring capital outlays. Because deferrals of capital expenditures in recent years have so exacerbated the deterioration of the physical plant in some cities, capital expenditures may not be deferrable in the future." (Trends in the Fiscal Condition of Cities, 1978–1980, JEC 4/20/80, page 32)

In sum, Mr. Chairman, the AFL–CIO is convinced that public works programs represent and effective and appropriate method to provide needed and timely fiscal stimulus to the economy, increase job opportunities and provide necessary improvements in the nation's stock of public facilities.

We urge this committee to support enactment of H.R. 2063, the Economic Development and Public Works Act. The House-passed version includes an AFL–CIO supported provision of a countercyclical local public works program which is not included in the Senate measure.

We also look forward to working with the Congress in the development of additional targeted jobs programs in transportation, housing, energy conservation and other public capital improvements which are needed as investments in the future of America and to deal with the rapidly worsening economic situation.

TABLE I.—STATE AND LOCAL GOVERNMENT OUTLAYS FOR NEW CONSTRUCTION

| Year | State and local outlays for new construction (billions of dollars) | Real State and local outlays for new construction (billions of 1972 dollars) | U.S. population (millions) | Local outlays for new construction per capita (1972 dollars) |
|---|---|---|---|---|
| 1969 | 24.7 | 30.7 | 202.7 | 151.45 |
| 1970 | 24.8 | 28.4 | 204.9 | 138.60 |
| 1971 | 25.9 | 27.4 | 207.1 | 132.30 |
| 1972 | 26.1 | 26.1 | 208.8 | 125.00 |
| 1973 | 28.1 | 26.1 | 210.4 | 124.04 |
| 1974 | 33.7 | 26.6 | 211.9 | 125.53 |
| 1975 | 34.6 | 24.9 | 213.6 | 116.57 |
| 1976 | 32.1 | 22.2 | 215.1 | 103.21 |
| 1977 | 30.9 | 20.2 | 216.9 | 93.13 |
| 1978 | 37.5 | 21.6 | 218.7 | 98.76 |
| 1979 | 39.9 | 21.0 | 220.6 | 95.19 |

Note: Outlays figures include grant-in-aid funds from the Federal Government.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Government Division.

TABLE II.—*Metropolitan areas with unemployment rates of 8.5 percent or over, March 1979*

| *State and metropolitan area* | *Unemployment* |
|---|---|
| California: | |
| Bakersfield | 8.8 |
| Fresno | 9.4 |
| Modesto | 13.5 |
| Salinas-Seaside-Monterey | 10.5 |
| Stockton | 12.1 |
| Indiana: | |
| Anderson | 16.6 |
| Fort Wayne | 9.4 |
| Gary-Hammond-East Chicago | 9.2 |
| Muncie | 10.4 |
| South Bend | 8.8 |
| Terre Haute | 8.7 |
| Louisiana: | |
| Alexandria | 10.0 |
| Monroe | 8.6 |
| Massachusetts: New Bedford | 8.6 |
| Michigan: | |
| Battle Creek | 9.7 |
| Bay City | 13.0 |
| Detroit | 11.7 |
| Flint | 14.6 |
| Jackson | 8.8 |
| Muskegon-Norton Shores-Muskegon Hgts | 10.9 |
| Saginaw | 11.8 |
| New York: | |
| Buffalo | 8.6 |
| New York City | 8.8 |
| Oregon: Eugene-Springfield | 9.0 |
| Pennsylvania: | |
| Altoona | 10.0 |
| Erie | 8.9 |
| Johnstown | 12.1 |
| Northeast Pennsylvania | 9.9 |
| Williamsport | 12.6 |
| Texas: El Paso | 10.0 |
| Wisconsin: Eau Claire | 9.6 |

Source: Bureau of Labor Statistics, U.S. Department of Labor—preliminary.

Senator BENTSEN. Mr. Patton, if you would proceed, please.

## STATEMENT OF D. K. PATTON, SENIOR VICE PRESIDENT AND DIRECTOR OF OPERATIONS, HELMSLEY-SPEAR, INC., NEW YORK, N.Y., AND CHAIRMAN, LEGISLATION COMMITTEE, NATIONAL COUNCIL FOR URBAN ECONOMIC DEVELOPMENT

Mr. PATTON. As cleanup hitter, I may touch upon some of the points made by the preceding speakers, which I think were quite good.

I was pleased to hear Mr. Vaughan, who I thought might be on the opposite side, come in for a different form of public works. That might be discussed at some future date.

The issue today, though, is the question of should we anticipate the need under certain conditions of such a program by making standby legislation available? As I read some of the material, I am reminded when I was here in 1974 and 1975 pleading 2 years ahead of a national recession or depression for such measures. Now we see them criticized as coming too late because they work too slowly.

Few issues in this city encounter as much intellectual prejudice as the subject of public works. It is viewed by those who analyze it as an expense rather than an investment, and it is structured in such a way by many critics as to make it fail by definition of goals that are established for it.

So in this case the heavy emphasis on primary job production and a total neglect of the issues that were brought out by Mr. Cantor so well, which is that we face a situation in this Nation where we have a declining infrastructure, a reduction of productivity in our urban centers and our impoverished rural areas, municipal productivity dropping, and it is affecting private productivity.

Now, where do we stand without the availability of this legislation at this time? We enter a period of time in which by September of this year I am predicting we will return to unemployment rates in those 31 metropolitan centers that will exceed the level it was in Newark and Watts in 1967. I'm not talking about the Bedford-Stuyvesant's; I'm talking about New York. I am not talking about the Watts of Los Angeles; I am talking about the entire city and the sum total of unemployment rates in all 31 centers, which will be worse than they were in the worst places in 1967.

Now, as we enter this period we are not going to accelerate public works expenditures. We are going to decelerate them. There is a drop in general revenue sharing of 50 percent in real terms. There is a drop in community development block grants in current dollars and the local municipalities, increasingly sensitive to broad-based taxation, will cut back on public works investments.

It is as if we made a set of regulations that prohibited the automobile industry from investing in new plant and equipment at this time as it faces a national crisis of its own. So we are talking here about turning away from necessary investments which could be placed at a strategic time in the most strategic locations.

Now, if there are shortcomings to public works in terms of their countercyclical nature, we should not deny the demand for an increase in their levels of expenditure to rehabilitate this Nation and its ability to produce.

The last time we had LPW, in New York City we brought out of mothballs four industrial parks because they were stuck. New York City's economic base was insufficient to make it competitive. In this crisis, we face upward of 10 cities which are in the same critical financial condition as New York City was in 1974. And we face nationally an inability to make the kind of investments that we need to do at the time that we need to do them.

And then we quibble about whether the direct impact of the money spent is adequate, and we view it as cost per job. We don't view it as an investment in sewer, water, buildings, and rehabilitation of the quality of life, improvement of the long-term productivity of the community, but as a cost per job according to the wisdom of the Office of Management and Budget.

Let me comment on some of their statements.

First: They ignore the fact that there is a national deceleration of public works expenditures.

Second: These reports and analyses ignore the secondary effects, as Bob Hall has mentioned, of the expenditures for plant, material and equipment in other industries. It ignores the anticipatory effect of

procurement contracts that may result in steel orders and concrete and cement orders and the investment of capital to produce them in other sectors.

It ignores the long-term benefits of improving the infrastructure of cities and making them more competitive, retaining industry. It assumes that hastening the recovery from a recession, albeit a little bit after the fact, is not useful, that is, a useful effect. It assumes it will take us 120 or 150 days to find out that we are in a recession. I think that that shortchanges our intellectual capacity to determine when we are getting into trouble.

I think more work should be spent at finding anticipatory economics rather than in criticizing the corrective actions.

It draws heavily on LPW I and II. The fact of the matter is that we have never had a local public works program that was in place in advance of a problem that we could use. The issue that is analyzed in this report, including LPW, is one that has never existed. We have never had a program that we could analyze in terms of countercyclical public works.

Of course they come too late when the legislative process is in the middle. The simple issue is: Should we remove that delay from the critical path of responding to an economic downturn?

Last: It discounts entirely the long-term benefits on our cities of having an improved quality of life and an improved infrastructure. We have ignored——

Senator BENTSEN. If you would forgive me, I have an amendment up before the Finance Committee that I'm very much interested in. I'm going to ask Congressman Brown to chair.

Mr. PATTON. I can finish in one sentence. We have ignored the fact that all of the public works programs have been untargeted and targeted away from the areas of most critical need. So I think that we should look in time and space at an improvement in the situation, and I suggest the incorporation of standby public works in the Public Works Economic Development Act.

Representative ROUSSELOT. My colleague, Representative Brown, is on the phone, and will assume the chair in a moment or two.

Thank you for your testimony, Mr. Patton, and your analysis of what you think will work or not work.

[The prepared statement of Mr. Patton follows:]

PREPARED STATEMENT OF D. K. PATTON

I appear today to stress the critical importance of protecting America's cities and our federal budget from the onslaught of a serious recession that, even now, strikes at this nation's economy and at the lives of millions of citizens whose hopes for the future diminish each day.

Washington can make no more cost-beneficial investment in defense of our economy than a re-authorization of those E.D.A. public works programs geared to rebuilding the decaying infrastructures of this country's urban centers, both large and small. Federal commitments to public works are the means of upgrading the setting in which America's business plant operates, creating both temporary and permanent employment opportunities, and generating public revenue. The alternative course of indiscriminately withholding those resources necessary to reclaiming the nation's productive assets will inevitably result in human waste, personal misery and a due bill, based on estimated transfer payments and tax losses, in the billions of dollars. Not spending wisely now will cost our country dearly in the long run.

Underlying any E.D.A. program is the vital significance of making private investment possible by providing an infrastructure of sufficient quality to attract

private commitments. Your committee has requested evaluation of public works as a countercyclical tool. While public works programs have proven indisputably potent as instruments to foster economic growth in localities I would like to challenge a pervasive notion that such programs have their primary utility in times of distress. Public works are an integral component of community economic development efforts no matter what the financial weather. Aside from the obvious observation that private investments will shy away from physically deteriorating areas, it is clear that good roads, sewers and other infrastructure elements make construction feasible.

Even though America now confronts a daunting economic crisis, public works, regarded as either a countercyclical measure or not, seem to be in disfavor. I would like to respond to some of the more frequently heard criticisms of these programs.

First, public works are alleged to include types of projects not directly related to infrastructure improvements such as schools, town halls and other public use buildings. Although this may often be the case, I must point out that development of this kind elevates the downtown atmosphere and invites the private capital needed to revive the economic prospects of cities.

Second, public works projects are alleged to provide employment only in the short term and, more or less, exclusively in new construction. On this point, it must be noted that without a decent infrastructure employers will not locate in a given area. Therefore, public works are the foundation for job development. However, public works projects could have a more extended influence on the built environment if maintenance and rehabilitation were added to the act's perview. The dire need to retrofit buildings to increase energy conservation and the enormous energy savings that could be achieved by restoring mature structures strongly indicate that federal public works commitments to these activities could help to reduce this nation's perilous energy deficit. I believe that such an amendment is well worth considering. Moreover, these projects have secondary benefits in troubled times. New construction for example, focusses demand on the underutilized steel industry. Other beneficial secondary effects move throughout the economy.

Third, the Local Public Works Act is said to be inadequately linked to the development process administratively. In fact, E.D.A. is a development-oriented agency and the most effective federal office to coordinate such a program.

Fourth, some budget cutters have suggested that if a locality is determined to resuscitate its economy the local government will find the funds to spur development. I have labored on that front as practitioner for many years and it has been my experience that no municipal budget item is as prey to charges of political expediency as economic development. The presence of federal money is essential to augment scarce local resources and lend the imprimatur of a national commitment to community economic recovery. Absent this assistance, such projects that are more likely than not to be branded as giveaways when shortsightedly measured by some politicians against the urgent agenda of social costs borne by cities struggling to sustain their revenue bases.

We are heading toward the gale winds of an economic upheaval in this nation. Precisely when we need to stimulate public works investments in distressed communities that cuts are most likely. It is also in the most distressed communities which most need the uplifting effects of these projects. The most desperate places in America must be made suitable again for private investment if our country is to regain its competitive strength in the global marketplace and offer hope to its growing legion of unemployed and underemployed citizens. We have no choice but to invest ourselves out of the recession. Public works are building projects in the public interest.

Representative ROUSSELOT. Mr. Cantor, did you have a chance in advance to review Mr. Vaughan's testimony?

Mr. CANTOR. No, sir, I did not.

Representative ROUSSELOT. As you know, in his testimony he lists why these countercyclical programs have not worked, based on past experience; that is, very effectively. He mentions several reasons:

One: Federal assistance arrives too late.

Two: Federal assistance is ill targeted and it ignores local needs.

And then there is one that really intrigues my interest: public works jobs are inadequate for the cyclically unemployed. He mentions that the typical job on this type of program lasts about 2 weeks. OMB tells us it lasts 4 weeks, and that this is not sufficient to provide relief for those unemployed for many weeks during a recession, and it doesn't arrive in time.

What is your response to that, on the basis of the facts of the past?

Mr. CANTOR. Again, I did not have the opportunity or privilege to see Mr. Vaughan's testimony in advance. I am aware of the arguments——

Representative ROUSSELOT. Are those real arguments on the basis of past experience?

Mr. CANTOR. As Mr. Patton has pointed out, I don't think there is any relevant experience supporting Mr. Vaughan's arguments. I think you have to look at the legislative history of this program to evaluate the relevance of Mr. Vaughan's statistics, and at the same time you have to consider the investment aspect. Most important, Congressman Rousselot, in the context of what we are dealing with at this moment—I take that back—at any moment, the distinction between a cyclical program and a structural program is a very, very, very muddy distinction.

Representative ROUSSELOT. A muddy distinction?

Mr. CANTOR. Yes.

Representative ROUSSELOT. What do you mean by that?

Mr. CANTOR. It's very unclear. It is a very nebulous distinction. I am talking about what is the distinction between a countercyclical versus a structural program. Quite frankly, I think the weaknesses or some of the alternatives must also be considered, and one of the first alternatives that comes up is a tax cut as an antirecessionary device. I think if you compare a program like public works in terms of costs, in terms of benefits, in terms of stimulus, I think there is no contest.

With all due respect to the title of this hearing and to the chairman, putting the issue solely in this form, that is, as a countercyclical tool, I really think it is very unfair to the program, and it is very unresponsive to the Nation's needs to view it solely as a countercyclical device, because I don't think that countercyclical or structural aspects can be pigeonholed so precisely.

Representative ROUSSELOT. In your testimony you say you favor what the House did in H.R. 2063. My understanding is that the provisions for mostly countercyclical was about $2 billion.

Mr. CANTOR. Yes, sir.

Representative ROUSSELOT. And if the points of view and facts on the basis of previous experience, which you say is irrelevant, which I don't know——

Mr. CANTOR. You are taking my statement out of context.

Representative ROUSSELOT. Did you use the term "irrelevant"?

Mr. CANTOR. I used the term "irrelevant."

Representative ROUSSELOT. It does not apply to past experience?

Mr. CANTOR. It does not apply as measuring the efficiency of a countercyclical device, sir.

Representative ROUSSELOT. Well, in any regard, in that bill there was roughly $2 billion, and all of these points that Mr. Vaughan

makes, if they are halfway correct—it will arrive too late, it won't get there, they will be very temporary jobs—it really won't do the job that we are all seeking to do, that is, put people back to work on a permanent basis.

Mr. CANTOR. If I may, Congressman Rousselot, I would suggest that perhaps you ask Mr. Hall how quickly he feels he could put that $2 billion out if it were available at the moment.

Representative ROUSSELOT. Mr. Hall, I have been asked to ask you: How fast could you get the $2 billion out, and would that be different than what Mr. Vaughan has stated? It ignores local needs; the jobs only last from 2 to 4 weeks, as OMB says; it is ill targeted?

Mr. HALL. Let me respond to the four questions I think you have now asked me.

First, in terms of ill targeted, I believe that in round II we had good targeting to the areas of highest unemployment, which demonstrates that funds can be targeted to such areas.

Representative ROUSSELOT. That was one.

Mr. HALL. Under round II, we allocated planning targets to eligible areas.

Representative ROUSSELOT. What timeframe? What year?

Mr. HALL. In June 1977.

Representative ROUSSELOT. How much did you put out?

Mr. HALL. The planning targets represented $4 billion. We made our first grant award in July 1977 and the last grant award was made in September. In 71 days, we moved $4 billion.

Representative ROUSSELOT. How many people did that put back to work?

Mr. HALL. The employment generation, as I testified earlier, was some 96,000 person-years of direct employment, that is, on-site; some 66,000 person-years of indirect employment, that is, employment by suppliers of material, equipment, et cetera; and then 193,000 to 222,000 person-years of induced employment—that is, the generation of employment affected by the circulation of LPW-stimulated moneys into the economy; for a total of 355,000 to 383,000 person-years of employment.

In terms of your second question about ignoring local needs, I think one of the interesting features of the round II local public works program was giving each community, in effect, a planning target representing its fair share of the $4 billion based on relative rates and levels of unemployment. The local community then decided within that planning target what projects were to be funded.

In terms of the length of employment, the nature of the construction industry is such that employment of any individual on a specific job is often very short. An electrician comes on the job to do the wiring in the facility, and it only takes a short period of time, say 3 to 4 weeks.

I think the pertinent issue is the cumulative length of employment of an individual who happened to be an electrician or in the industry overall. That's why we deal with person-years of employment as opposed to numbers of individuals, whose individual job experience on one job might have been $x$ weeks or——

Representative ROUSSELOT. An electrician moves from one job to another.

Mr. HALL. As most construction workers do.

Representative ROUSSELOT. You say 67 percent of those hired were skilled workers. Is that 67 percent of all direct hires?

Mr. HALL. Yes, this is the onsite employment, sir. So 67 percent of the onsite——

Representative ROUSSELOT. You say these programs cost about $6 billion; the cost per person-year ranging from $15,000, I think it was, to $62,000. Isn't that cost just a little steep to employ workers who are mostly skilled?

Mr. HALL. I'm not sure that's the question.

Representative ROUSSELOT. That's the way I'm asking it. It may not be your question.

Mr. HALL. Let me see if I can answer it then. However, I want to clarify that. The unit cost per employment depends on what you want to measure. If you want to measure onsite figures, it is $62,000. If you want to——

Representative ROUSSELOT. I'm using your figure.

Mr. HALL. I think in terms of measuring employment effects of the program, you ought to count the direct, indirect, and induced employment. So, if you believe the $62,000 is too steep the other aspect I would point out——

Representative ROUSSELOT. I said a little steep. I want everybody to be employed.

Mr. HALL. I should point out that the $62,000 is not wages going to an individual. There is obviously brick, mortar, and material, and then 2, 3, 4, 5, years from now you have a building you can kick, touch, and feel, as we say.

Representative ROUSSELOT. Mr. Vaughan?

Mr. VAUGHAN. I think there are one or two points that need to be made here. In terms of addressing local needs, the aggregate unemployment rate is not a good measure of the need for construction employment in an area, An area might have high sectoral unemployment in certain industries, but pumping construction money into the area does not generate jobs for the people.

Representative ROUSSELOT. For local people.

Representative BROWN. Or the people who are out of work in that community; it may not be construction workers.

Mr. VAUGHAN. Exactly.

The second problem with meeting local needs is that the on-again, off-again approach creates uncertainty. The local government and State government have no ability to budget efficiently.

And also, moving money out of EDA is only a small part of the problem. There is still, I believe, about half a billion dollars of money that was moved very rapidly by EDA in 1977 that has not been spent on local public works programs. It will probably be spent this year, but that would represent a lower annual expenditure than during 1979 and 1978 and 1977, the boom years. It is much more difficult to get money spent than it is to obligate it.

I do not believe that a national unemployment rate is an appropriate form of releasing and creating an ongoing public works program. States and areas differ so much in their response to a national recession. A national 8½ percent trigger will do nothing with those areas that significantly lead the Nation.

Another point is that the construction sector does not have a high ratio of unskilled workers. In a recession, those that suffer most are

not those people on layoffs, who receive fairly extensive benefits already, but the unskilled. The people who find it difficult to secure a permanent job even in the best of times are the ones who suffer in a recession. Half the increase in the unemployment rate in a recession comes not from an increase in the number of people who experience unemployment, but from a prolonging of the period of unemployment of the economically disadvantaged. For these people, construction jobs are singularly inappropriate.

I would like to end by saying I do endorse the comments from both Mr. Cantor and Mr. Patton that we do need to do something about long-term capital redevelopment in the public sector. That has to be entirely separate from how we deal with recessions. These are two very distinct types of programs.

Representative BROWN. I would like to continue on the same theme.

Mr. Hall, I have been somewhat struck by the fact that the administration, the current administration, has cut back on a particular project in Ohio at a time that our unemployment rate has reached 9.4 percent. That is not a record, but it is too high an average.

Michigan, I guess, has had a record. The project is the Portsmouth atomic facility, the nuclear enrichment plant. They have cut that from $329 million, I think, down to $130 million. It doesn't strike me that that is consistent with what you were telling us here. It is an ongoing project. They are just slipping the money into a later timeframe. I find it startling that they would do that at a time that you would like to have people employed in construction.

We do have construction workers out of work in Ohio, and some of them who will be out of work will be people who were working on that particular project, because the administration had taken that position.

Now, let me go back to the situation in 1974, 1975, 1976, and 1977. The figures that I have in front of me indicate that the unemployment rate in 1975 was 8.5. In 1976 it was 7.7; in 1977 it was 7 percent unemployment; and in 1978 it reached 6 percent; and never, until it started up again here recently, did it get below 5.7.

Now, you are telling me, or you told Congressman Rousselot, that the grants were made in July to September 1977. It strikes me as unlikely that much of that money got into the hands of people actually employed in a construction project, in public works, until 1978, or perhaps even later. As a matter of fact, we have one of those projects in our district, and it is just getting completed now, which means that what we did was to hire people during the time of least unemployment.

I am not suggesting that it was the time in which the unemployment was ducky because, you know, we have got this ratcheting effect that we have discussed here so much in this committee, where the best we could do was 5.7 percent unemployment in the "good times" we have just been through. But it was during those good times that the construction workers were working on that project.

It seems to me that that is not countercyclical by definition, but procyclical. Could you explain to me how it is countercyclical?

Mr. PATTON. We just said, sir, that the bill should have been passed in 1974. It was passed in 1975. It was vetoed in 1975. It passed again in 1975; it was vetoed again. What you are arguing is for standby legislation so that you can implement at the time of the recession.

Representative BROWN. I surely am, because that is precisely what we said in the report of the Joint Economic Committee in 1977. The reason it was vetoed, as I understood it, was precisely the argument that I am making today, and that is that by the time you get the project underway, you get people employed, they are employed at the peak of the period that follows, assuming that the recession has the normal length that recessions have had normally. I think that would be a bad assumption in this recession. It is going down so fast it may not be able to recover quite as rapidly as it is going down now.

Mr. PATTON. The last one was as predictable and similarly initiated, and it had—the bill had been passed. Had it even been signed in 1975 the first time, it would have been in action and Mr. Hall would have had the money out there working and people would have been employed at that time.

Representative BROWN. As I point out to you, the peak of the recession, in terms of unemployment at least, was in 1975. You were telling me it would have been signed in 1975, and then we would have had the money in 1976 when we had a 0.8-percent drop in unemployment, and in 1977, when it dropped another seven-tenths of a percent, and in 1978, when it dropped another full percentage point. I think we need something a little bit different than that, and I think we can go back and look at that history and say it was not terribly productive in being countercyclical.

I want to make one other point, or ask about it. At least in my area the people who bid on those major public works projects came out of Michigan. They talked about how it was targeted to the areas of unemployment. Our unemployment was in the automobile industry.

Mr. Cantor, you may be helpful in this. How capable are United Auto Workers' employees as construction workers?

Do you understand the point I am making, Mr. Hall?

Mr. HALL. Yes, I understand it. I don't think the intent of the program, Congressman, was to take unemployed automobile workers and put them in construction work.

Representative BROWN. That was a point in our community, and the construction workers who got the jobs came out of Michigan. It was a Michigan firm that got the job and they brought in their people from another State.

Mr. HALL. In an economic downturn, you have very high unemployment in durable goods, the manufacturing sector. You also have very high unemployment in the construction industry. Indeed, the construction industry, as an industry, ordinarily has the highest percentage of unemployment of any sector of the economy during a recession, with rates of 17, 18, 19, or even 20 percent. If you define the objective of a countercyclical public works program as putting unemployed construction workers to work or keeping construction workers in employment and preventing the further rise of unemployment in the construction industry, then one might say it is an effective tool. The view that a countercyclical public works program should be targeted to dealing with unemployed auto workers or long-term structurally unemployed is not appropriate.

Representative BROWN. Should one talk about targeting to an area where there are unemployed auto workers as if you had put any unemployed auto workers back to work by a public works program? Should one say that you have targeted it to the construction workers in that area when the workers come in from another State?

Mr. HALL. They don't all come in from another State. Contrary to what Mr. Vaughan said, our experience has been that overall general unemployment rates are an appropriate proxy for measuring countercyclical distress in construction and related industries. In other words, there is a high correlation between the overall unemployment rates and the construction unemployment rates.

Representative BROWN. Let's talk about that. I think you may have a point. I don't agree with some of your others, but I do agree with that one. Construction workers go out early in a recession.

Mr. HALL. Generally they go out early.

Representative BROWN. And come back early; right?

Mr. HALL. Not necessarily.

Representative BROWN. Let's talk about the recession we are in now. Wasn't the construction industry one of the first ones to collapse?

Mr. HALL. Yes, and this is generally the case, because it is the construction industry that is immediately affected by fiscal policy.

Representative BROWN. And by tightening up in the credit, they put the construction workers out of work first.

Mr. HALL. I would suggest that has been the effect of tightened fiscal and monetary policy—certainly since World War II.

Representative BROWN. Is it true or isn't it true that construction workers go out first?

Mr. HALL. I was saying that construction workers generally go out first. What I was pondering was your question as to whether they go back first. I would hazard a guess that they probably don't go back first. I would say that employment in the durable goods sector would probably go back at a faster rate than construction, because when the economy starts to turn around and the inventories come down, you might see manufacturing employment coming back on line faster than construction employment, where there is a long leadtime in terms of building permits. It is an interesting question. I am just hazarding a guess in terms of the second part of your question.

Representative BROWN. If the objective of the created recession is to break inflation, which, as I understood, was the objective of this recession on the part of the administration—at least that has been the testimony before this committee, that the objective was to slow growth, achieve a 7½-percent unemployment rate. That was the Council of Economic Advisers report to us at the beginning of this year, so that we would have inflation broken by the recession.

If the objective is to break inflation, and it is coming down, then wouldn't that have the impact of stimulating the return to employment of people in the construction industry first, because it would seem to me that the housing industry and the major construction industry would respond with lowered interst rates?

Mr. HALL. I think your basic point is correct. Certainly the high interest rates and the situation in the credit market was devastating in terms of construction starts. To the degree that financing is available and available at affordable rates, I think one will see an improvement certainly in housing starts and commercial/industrial construction.

Representative BROWN. If we assume that interest rates are a burden to construction because they add to the cost without enhancing in any way the amount of materials that one can buy with the money—would you buy that assumption? Let's start with that, that high interest rates are a burden to construction because you are not paying

for anything that you are really building. You are paying to use the money.

Mr. HALL. I would buy it in the sense that I would look at the effect of high interest rates and their effect on construction. It is a burden, because we have less construction with higher interest rates.

Representative BROWN. Would you also add to that things like taxes and regulation as a burden?

Mr. HALL. It is a generic question. I have difficulty responding.

Representative BROWN. I am thinking of it as an unproductive burden. In other words, when one must pay high taxes——

Mr. HALL. What is a high tax?

Representative BROWN. Real estates taxes. Let's say; for example, Federal taxes equal to 22 percent of the gross national product. That is a new record. That is what the tax rate is now. That's what I would mean by high taxes. The President just yesterday, in our conference on the Energy Security Corporation, apparently is backing another $1.3 billion in taxes by raising the price of gasoline and putting the money to SPRO, which would be additional taxes. And so, those taxes are higher than they were previously, than they were as we went into the recession. That's what I call high taxes.

Now, the question is: Would you add high taxes and high regulatory cost to high interest rates as a part of the burden that would slow the recovery?

Mr. HALL. I think, if you are interested in economic policy, perhaps you should have somebody up from the Council of Economic Advisers, but let me briefly respond. To the extent that taxes, whatever the rate, reduce investment in construction and to the extent that there are costs associated with regulatory policy, being neutral on whether the regulations are good or bad, I think the obvious answer would be yes, that it would detract from further construction.

Representative BROWN. I think that is the obvious answer. My time is up.

Mr. HALL. If I may, Congressman, I would like to elaborate for the record on your earlier question on the LPW program. Sixty-six percent of the workers did come from the project area construction work force. There was, in some areas, some movement of construction firms and employees in and out of States, but again, I would suggest that this is not an unknown pattern in the construction business.

The other point——

Representative BROWN. So the targeting was, in effect, about two-thirds?

Mr. HALL. I don't think one would draw that conclusion. The targeting placed the funds where they should go for public works facilities construction. The construction workers were working in the area. They were buying hotel space. They were buying meals. Material, more often than not, is purchased in the area, particularly heavy material, due to high transportation costs. So I don't think one can draw a parallel, that only 66 percent of the money went into that area.

On construction expenditures, I would like to note that as of today, 95 percent of the funds obligated—95 percent of the $6 billion under rounds I and II—have now been expended. That is over 2½—almost 3 fiscal years. The expenditures in the first year were some 35 percent.

By the end of the second year, some 85 percent were expended, as accounted by the Treasury.

Mr. CANTOR. I would like to add one comment that I think is pertinent to some of Mr. Vaughan's points, as well as your point, concerning what this type of program can do for the auto workers in Ohio. I think the issue, as I understand the hearing, is public works expenditures as a means to counter a recession, not as the sole means. Speaking for the AFL–CIO, we see this as, one, admittedly a key one, but nevertheless just one part of a series of measures that are necessary to fight recession. We certainly are also supportive of other programs that are of more direct help to the unemployed auto workers.

We would certainly be supportive of programs that directly respond to Mr. Vaughan's point of hiring unemployed in ghetto areas, and so forth and so on.

I would emphasize our view of this program is as "a" measure, not as "the" measure.

Thank you.

Senator BENTSEN. You had another question, Congressman?

Representative ROUSSELOT. Yes, Mr. Chairman, if I could.

As a followup to your statement earlier in the hearing, Mr. Hall, as you are well aware, an OMB study that was produced in November 1979 had three basic points:

One, for the most part, countercyclical public works programs are implemented during recoveries and are thus procyclical.

Two, their impact on the unemployed is minimal, and, in fact, only 2 percent of the local program costs were expended in wage payments to the employed.

Three, the duration of unemployment on public works projects of 4 weeks is too short to provide meaningful skills or training.

Now, since that came from OMB, I am sure you would want to comment on that, Mr. Hall, because your testimony doesn't exactly go in that direction. I assume you are part of the same administration.

Mr. HALL. Yes. My colleagues at OMB and I work very closely together. That is OBM's study. Perhaps the question should be more appropriately addressed to officials of OMB.

Representative ROUSSELOT. I'm addressing it to you, because it is quite different from what you state.

Mr. HALL. Regarding the procyclical versus the countercyclical issue, I think it is quite clear, and Mr. Patton has made the point a couple of times at this hearing, that if one starts a program some 2 years after the trough, one is going to have an impact that won't be as countercyclical as if one started the program during the trough.

I think it is fair to say that LPW I and II were funded and implemented in periods when the economy was recovering, albeit unemployment was still very high. I want to make the point that unemployment is a lagging indicator in this economic circumstance.

On the first point, there is much merit to it.

The second point is the minimal impact on the unemployed. That comes back, Congressman, to a point I was trying to make earlier. It depends on what objective you are trying to set up for a program.

I would suggest—and we set forth as an objective in round II—that the employment target, if you will, in a public works program is primarily the construction industry, to reemploy those already unemployed and to keep construction workers at work.

I would not agree that a countercyclical public works program should be targeted and used for dealing with the long-term structural unemployed as a training mechanism.

When I closed my testimony, as Senator Bentsen may recall, I indicated, as did Mr. Cantor and other members here this morning on the panel, that one should look at an array of countercyclical measures in order to accomplish various objectives and policies.

If you want to pump money into the economy, the fastest way to do that is through a countercyclical revenue sharing check—if that's your sole objective. If you want to deal with structurally long-term unemployed, I would suggest some forms of public service employment programs. We can target right to the long-term unemployed. That might be an appropriate vehicle.

If you want to soak up or provide income maintenance for those laid off in the manufacturing and durable goods industry, I would suggest extended unemployment insurance. I think there is a range of tools that can be used to deal with a variety of needs that the economy and society have during a downturn.

I would say we might have a disagreement on point 2 in that we might have different perceptions of what the objective for the program is.

The third point is that duration of employment is too short, 4 weeks. In judging this I think one has to understand the construction industry, and I have worked in the construction industry. In terms of skills development, the objective is to employ skilled construction workers and maintain employment. I don't see it as a skill training instrument.

Those are some general observations, and I am sure OMB would be delighted to respond.

Representative ROUSSELOT. Thank you.

Senator BENTSEN. I listened to your testimony and have scanned your prepared statement and I still don't know the administration's position on LPW III. What is it?

Mr. HALL. Let me respond this way, Senator, if I may. The administration has not put any money in the budget for round III LPW. As I understand, the Congress has not put any money in the budget resolution for round III. The administration has not supported a round III in the legislation it submitted to the Congress to expand EDA's program. And, therefore, at this time the administration is not supportive nor has it taken any steps to be supportive of a round III.

I should point out, however, that the President, in his January budget message, did indicate that if the economy should begin to deteriorate significantly, the administration would consider tax reductions and temporary spending programs, such as those for jobs and public works, targeted toward particular sectors of economic stress.

However, the position right now is basically continuing opposition.

Senator BENTSEN. The administration is for a balance budget.

Mr. HALL. That's correct, sir.

Senator BENTSEN. I have a copy of a June 11 letter to Senator Burdick, signed by Senator Hollings, urging the Senate not to concede to the House on the issue of public works.[1] Now, if a compromise

[1] See letter of June 11, 1980, on p. 69.

is reached—and suppose they are talking about an extra $2 billion—where is that money going to come from? Are you going to recommend the cutting of another $2 billion elsewhere, and where will it be?

I just went back to the Finance Committee, where we are dealing with some very difficult subjects. We are talking about older citizens, we are talking about medicare, and we are talking about medicaid. We are talking about what we should do on payment of social security benefits, and what to do about daycare, which I support very strongly. And we are also talking about cuts, because we are charged under the reconciliation process in the Finance Committee with making cuts in some of those programs, which are pretty painful.

Where do we take off the other $2 billion?

Mr. HALL. I don't think it is my choice or my decision as to where to take it out, Senator.

Senator BENTSEN. I mean the administration.

Mr. HALL. I mean the administration. My point is, the administration has not proposed and, does not support the $2 billion countercyclical public works program.

Senator BENTSEN. They are not supporting it.

Mr. HALL. They are not supporting it at this time.

Senator BENTSEN. I am a member who has supported public works projects because I believe they are capital investments. I do believe that the infrastructures of cities and counties are in trouble. But I have some deep concerns about this being the most effective utilization of money at a time of high unemployment.

It seems to me we get a lot more cost benefits in other approaches to this problem than public works. So then why don't we approach this, not using unemployment as a pretext for public works projects, but because we need public works nationally to help buildup the infrastructure and have a continuous program of that?

It seems to me that really is the more rational approach to it.

Mr. HALL. Senator, the need for improved infrastructures in the United States has been pointed out. As you are well aware as a member of the committee, the Economic Development Administration's basic legislation, the Public Works and Economic Development Act, under title I contains the authority and responsibility to mount public works that create private investments, private sector jobs, and revenues. The administration has been supportive of that.

Indeed, the expanded EDA legislation, which unfortunately is stalled on the Hill in conjunction with the LPW program, would have provided a major expansion of title I, some $550 million for the kind of investment you are talking about.

Senator BENTSEN. Now, Mr. Patton.

Mr. PATTON. I thought the issue was permissive legislation rather than mandatory expenditures. I don't think what is before you—I could be corrected—is to design and implement a public works program tomorrow, but to create in advance of need a program that could be initiated, rather than wait for 6 months or 1 or 2 or 3 years then, as in the past, to pass such enabling legislation. It is in the nature of a fire extinguisher rather than an order to the administration to go out and spend.

I think that much of this report is an indictment of the relationship between Congress and past administrations, perhaps as an outsider with no axe to grind, an indictment of the present situation where

they can't seem to settle on something and the $2 or $3 billion Economic Development Act is hostage to a difference of opinion.

I would suggest either using Mr. Vaughan's notion or my notion or Mr. Cantor's. There should be something in a state of readiness to meet economic emergencies, with certain ground rules for implementing it. We are talking about a trigger. We are not talking about a budget resolution or a chain of expenditures. I think that is the issue.

Senator BENTSEN. Mr. Cantor, do you have any comment?

Mr. CANTOR. Well, sir, to emphasize what I said before, I think the case is so clear and so compelling for these kinds of programs. Labeling them as countercyclical or not I don't think is that helpful under present circumstances, because the need is so clear. Quite frankly, I don't see anything risked if there is a trigger and if this is on the books as a standby program.

And at the same time, if we look back, a number of years ago we used to consider—we used to use the word "accelerated" in front of this kind of program, which to me implies that we're attempting something above and beyond what Government is already doing. And again, my original point: I don't think we are talking about substitutes; we are talking about a continuing need for public capital investments, and we are talking about a marginal increase that we can crank in during the time of a recession to help get us out of that recession. I think that's the issue.

Senator BENTSEN. Mr. Vaughan, do you care to comment?

Mr. VAUGHAN. I think we have established that there are really strong infrastructure needs. We have also established that there are tremendous local variations in those needs. I believe the only way we can rationally set up a countercyclical strategy is by having a small ongoing Federal effort, as I suggested, to help States and cities set-aside resources during periods of growth so they can provide jobs during recessions.

I'm not calling for an increase in expenditures. I am calling for a rational timing of that expenditure. We can only rationally time expenditures at the State and local level.

Representative BROWN. I have one further question for Mr. Vaughan, if I may, and it is a question more for the record than anything else. Mr. Vaughan, your proposal for setting Federal and State money aside in good years to fund public works in bad years is very similar to a proposal in the minority views of the Joint Economic Committee Annual Report. At that time we suggested countercyclical accounts be set up with the States with Federal matching funds in special bank accounts. By putting the accounts into the banking system instead of the Federal bonds, we avoided the problem of having to sell bonds for cash during a time of tight credit, when it might crowd out private financing.

I would appreciate any comment on that point now or any you might send for the record in the future, after you have had a chance to look at our suggestion about the handling of the accounts.

I do have an interesting part of that record that appears on pages 107, 108, and 109 of that report. It says in part:

> If the program is funded by a tax increase, it is obvious that the private sector will contract as the public sector expands. This is widely understood. No one recommends tax increases in recessions. However, other funding methods used have the same effect.

I think that is still true, that no one recommends tax increases in recessions.

If you want to comment now, you are welcome to do it. But you are also welcome to send it in.

Mr. VAUGHAN. I just received a copy of the appropriate pages this morning, so I can't comment directly on it. It also points out that financing debt during recessions is expensive, for the interest rates are highest at that time. So you have a double reason to set aside resources during good years.

Representative BROWN. I wonder, Mr. Chairman—it is off the topic a little bit—if we could just take 1 more minute and ask Mr. Cantor, because he is an authority in this area and he is here, what is the AFL–CIO projection of unemployment in 1981 and the rest of 1980? And which of your members have been hit the hardest by the recession?

Mr. CANTOR. In terms of projections, sir, we don't have any econometric forecasting models. I would really prefer responding in terms of a very, very deep concern.

And again, I would like to bring this back to a point that we raised earlier about the tendency of construction to lead the recovery. The major factor that is troubling me and the AFL–CIO now is, if you look at the numbers, if you look at where our economy is going, there are no plus signs. Consumers are not able to do anything to turn the economy around. The States and localities are in great trouble financially and we have the energy problem.

I find it very, very worrisome, because I can't find anyplace to look for a little light at the end of the tunnel. So the question really is, in my terms, unanswerable. I am very, very pessimistic, and very hopeful that Congress will look at it this way and move some programs to preclude——

Representative BROWN. You get all of your material from some other sources? You do no independent analyses about prospective unemployment?

Mr. CANTOR. I said we don't have an econometric model. We are not in the forecasting business. We do hear from our people. We see problems. I think we have a good staff of intelligent and effective observers and analysts. And I have given you the best I can under the circumstances.

Representative BROWN. Would it be possible for you to send us at some cutoff date, past, present or future, some indication of what the unemployment is by various unions represented by the AFL–CIO? Are you equipped to do that?

Mr. CANTOR. Not normally, sir. We generally rely on the Bureau of Labor Statistics for that kind of information.

Senator BENTSEN. Gentlemen, thank you very much for your attendance and testimony you have given us. The committee stands adjourned.

[Whereupon, at 11:44 a.m., the committee adjourned, subject to the call of the Chair.]

# APPENDIX

United States Senate

COMMITTEE ON THE BUDGET
WASHINGTON, D.C. 20510

June 11, 1980

The Honorable Quentin Burdick
Environment & Public Works Committee
United States Senate
Washington, D.C. 20510

Dear Quentin:

One of the major issues facing the conference on S. 914 is the countercyclical local public works authorization contained in the House bill. It is our understanding that the House conferees have argued that because this is standby authority, it need not be accommodated in the Budget Resolution. We cannot agree with this line of argument for two major reasons:

- According to the latest CBO economic forecast, the authorization would be triggered in the fourth quarter of FY 1980, based upon unemployment in the third quarter of FY 1980.

- Passage of the authorization would create the expectation that funding would be provided, thereby placing enormous pressure upon the appropriations process.

There is no funding allowance for this $2.0 billion program in either House or Senate budget resolutions, in either FY 1980 or FY 1981. Given the difficulties experienced in finding a consensus on funding cuts, it appears highly unlikely that an additional $2.0 billion could be cut from other programs in order to make room for the proposed LPW program. Funding of this proposal early in FY 1981 would increase outlays by $600 million and imperil our chance to balance the budget.

In addition to budgetary considerations, there are other compelling reasons why this program should be rejected:

- Evaluations show that this is a poor countercyclical program. Only 18% of LPW outlays would take place during an average cyclical downturn.

- When previously funded, it has crowded out other private sector investment, and state and local governments have substituted LPW funds for state and local financing of construction projects.

The battle against inflation is our number one economic priority today, and a restrained Congressional Budget will make an important contribution. We urge the Senate conferees to stand fast and to reject the House provision for a LPW authorization.

Sincerely,

Henry Bellmon
Ranking Minority Member

Ernest F. Hollings
Chairman

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

June 18, 1980

Honorable Lloyd Bentsen
Chairman, Joint Economic Committee
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your request for the views of the Administration on the issues of public works programs and their use as countercyclical economic policy tools. I appreciate your agreeing to my providing these views in this form rather than in testimony.

Considerable analytic work on the issue of the counter-cyclical effectiveness of public works projects has been done, and although not all the work is completed, some of our own initial conclusions are clear enough to be offered for consideration during your hearings. In particular I would like to summarize some of the major conclusions of a study done by the staff of the Office of Management and Budget, based upon a careful review of the data available on the first two rounds of countercyclical public works funding. A copy of that study is enclosed.

First, the problems of triggering these programs at the onset of a recessionary period, and of targetting them to localities of high cyclical unemployment, are very difficult to solve. Using only one indicator is not adequate; policymakers need more flexibility to consider all relevant factors.

Second, public works construction projects have, in the past, been so slow to implement that the direct employment or general economic stimulus they have generated has fallen too late in the following economic upturn. As a result, public works expenditures have generated inflationary pressures in the local economies affected.

Third, public works programs have provided little direct help in solving problems of the long-term unemployed and disadvantaged. Because direct employment in the construction trades is primarily in skilled jobs, employment generated by these programs normally does not reach many of the unskilled, hardcore unemployed.

Overall, the evidence suggests that public works programs have not been as effective as other countercyclical tools in stimulating employment and economic growth. During this period of budgetary restraint, any

funding for LPW would threaten to squeeze out higher spending priorities. Further, it would be inappropriate to institute a large, new spending program at a time when the Federal Government is experiencing severe fiscal restraints and cutting back on other spending initiatives.

Sincerely,

James T. McIntyre, Jr.
Director

Enclosure

# HIGHLIGHTS FROM PUBLIC WORKS AS COUNTERCYCLICAL ASSISTANCE

Executive Office
of
The President
Office of Management and Budget
Special Studies Division
Economics and Government

November 1979

## PREFACE

In November 1979 the Special Studies Division/Economics and Government of the Office of Management and Budget prepared an analysis of the effectiveness of public works as a means of countercyclical assistance. The report examined post war cyclical experiences nationally and in subnational areas to assess the feasibility of developing appropriate national trigger, targeting, and allocation mechanisms that could be used to effectuate a national standby countercyclical public works program. In addition, the report examined the timing requirements associated with construction projects to determine whether such requirements precluded the use of public works construction as a countercyclical tool. Finally, the report briefly analyzed the performance of past countercyclical public works programs with a view to determining the effectiveness of such programs in meeting the needs of the unemployed.

The purpose of this report is to highlight the major findings of the November report as well as to briefly discuss the approach taken in reaching these conclusions.

This report was prepared by Anthony J. Sulvetta and Dr. Jules Lichtenstein under the supervision of Howard M. Smolkin, Deputy Associate Director, Special Studies Division, Economic and Government of the Office of Management and Budget. Opinions and conclusions expressed herein should not be construed as representing the views of the Office of Management and Budget, Executive Office of the President.

MAJOR FINDINGS

- A national countercyclical public works program cannot be triggered and targeted to cyclically distressed areas in a timely manner to compensate for cyclical fluctuations in unemployment and aggregate economic activity.

- Even if it were possible to time a countercyclical program comparable to the Local Public Works Programs of 1976-1977, to coincide with a national cyclical downturn, the employment build-up patterns associated with public works construction activities (the necessary time to construct public works facilities) would lead to a significant overlap of job generation and general economic stimulus into periods of national economic recovery.

- Public works programs have had minimal impact on the unemployed due to two factors -- 1) low labor intensity of public works projects and 2) the mismatch between skill requirements of construction activities and the lack of comparable skills among the unemployed.

- Duration of employment on public works for individual workers is: too short to provide meaningful relief from previous periods of unemployment, of insufficient time to maintain workers skills and work habits, and too short a period for on-the-job training.

- In addition to timing problems and the inability of public works programs to effectively target benefits to the unemployed, public works are an extremely costly means of generating employment. Under various assumptions of the model presented in the text, including the degree to which Federal funds were substituted for local funds in public works construction, the gross cost of generating a construction person year of employment ranges from $70,000 to $198,000*.

*An estimate of $70,000 per direct person year of construction employment assumes zero substitution.

Finding No. 1: A Standby Countercyclical Public Works Program Cannot be Triggered in a Timely Manner

In order to analyze whether a standby countercyclical public works program can be triggered in a timely manner, it was necessary to investigate several questions:

-- Are economic indicators available that signal the onset of a recession?

-- Do changes in the State, regional and local economies parallel changes in the national economy?

-- Are recessions similar such that assumptions can be safely made about the impact of future recessions on national and subnational economies?

To analyze these questions the authors of the SSD study examined several indicators in the context of the six recessions that have occurred since the end of the Second World War. These included selected indexes of the Bureau of Economic Analysis' index of leading indicators, the composite list of leading indicators, unemployment rates, and quarterly estimates of Gross National Product (GNP). Because of its importance to public policy, the focus was on the suitability of the unemployment rate as a trigger mechanism. The unemployment rate is often thought of as a key measure of economic health. Results indicate there is little regularity between changes in the unemployment rate and changes in quarterly GNP — which is used to time the cyclical turning point at the start of a recession as defined by the National Bureau of Economic Research (NBER). The authors observed that:

- Changes in the rate and number of unemployed just before and after an NBER-dated recession, are negligible. As such unemployment is not a reliable predictor of a recession.

- A trigger based on the unemployment rate is unsatisfactory for several reasons:

  — Rates differ from recession to recession and may either coincide with or lag the start of a recession.

— Differences in the unemployment rate before and after the start of a recession as well as the unemployment rate which coincides with the NBER-dated start of a recession are unrelated to the severity or duration of a recession.

In short, an unemployment rate cannot be used to trigger a national standby countercyclical public works program in a timely manner. Moreover, regional, State, and local cyclical conditions can vary from national conditions and indicators of a national recession may fail to reflect accurately the character of subnational cyclical behavior.

Synchronization of a national standby countercyclical public works program with regional and local cyclical economic distress is virtually an impossible task. Each recession tends to have unique impacts on industrial sectors of the economy. Although regional economies are tending to become similar structurally, recent studies indicate that each recession has had a different impact on the economy of regions and localities. As such, past experience is only of limited value in understanding subnational cyclical behavior (i.e., cyclical amplitude, duration and responsiveness) during a recession.

Finding No. 2: Even If a Standby Public Works Program Could be Triggered in a Timely Manner It Would Have a Procyclical Impact

In order to analyze whether a standby public works program can have a countercyclical impact on the economy during a recession several basic questions needed answering:

- How long does it take to complete projects funded by a standby public works program once the program has been triggered?

- What is the timing of the value of construction put-in-place for the program?

- When and how many jobs are created by such a program?

To analyze these questions the authors developed a model which focused on the time required to complete public works construction and the stream of employment generated over time by such projects. The model matched information on the type and size of projects funded by LPW with data on construction timing and employment generation which were available on a project type and size basis.

This project data was obtained from: (1) The Economic Development Administration's regular public works program, (2) published and unpublished BLS sources, (3) construction reports of the Bureau of the Census, (4) the Public Works Impact Program (PWIP) and (5) a limited number of completed Local Public Works (LPW) projects. The model assumed:

Assumption No. 1: The type and size of public works projects to be funded by the hypothetical standby program would be similar to those funded under LPW, thus providing State and local governments maximum discretion in the selection of projects.

Assumption No. 2: Unlike the LPW program, where projects were funded in two phases (LPW I for $2 billion and LPW II for an additional $4 billion), the authors assumed a single $6 billion program funded at one point in time.

Assumption No. 3: Standby legislation exists to authorize the expenditure of local public works funds, and unrealistically, a trigger mechanism identifies the start of a recession.

Assumption No. 4: Regional and local economic conditions parallel those of the national economy, i.e., the magnitude and change in direction of regional and local unemployment rates parallel national unemployment rates. The result would be that regional and local economies would neither lead nor lag at the start or end of a recession, and that the severity of a recession in regions and localities would equal that in the nation.

Assumption No. 5: Administrative and implementation time delays at the Federal, State, and local levels, which include advertising (solicitation of construction bids), time required for bid processing, contract awards, and construction starts are minimal. All projects are assumed to start construction 90 days from the beginning of a recession.

Assumption No. 6: Finally, the length of time required to complete project construction is assumed to be 10 percent less than is normally required (i.e. a project 90 percent complete is assumed to be fully complete for calculating employment generated). Obviously, this will serve to accelerate employment generated as well as program outlays.

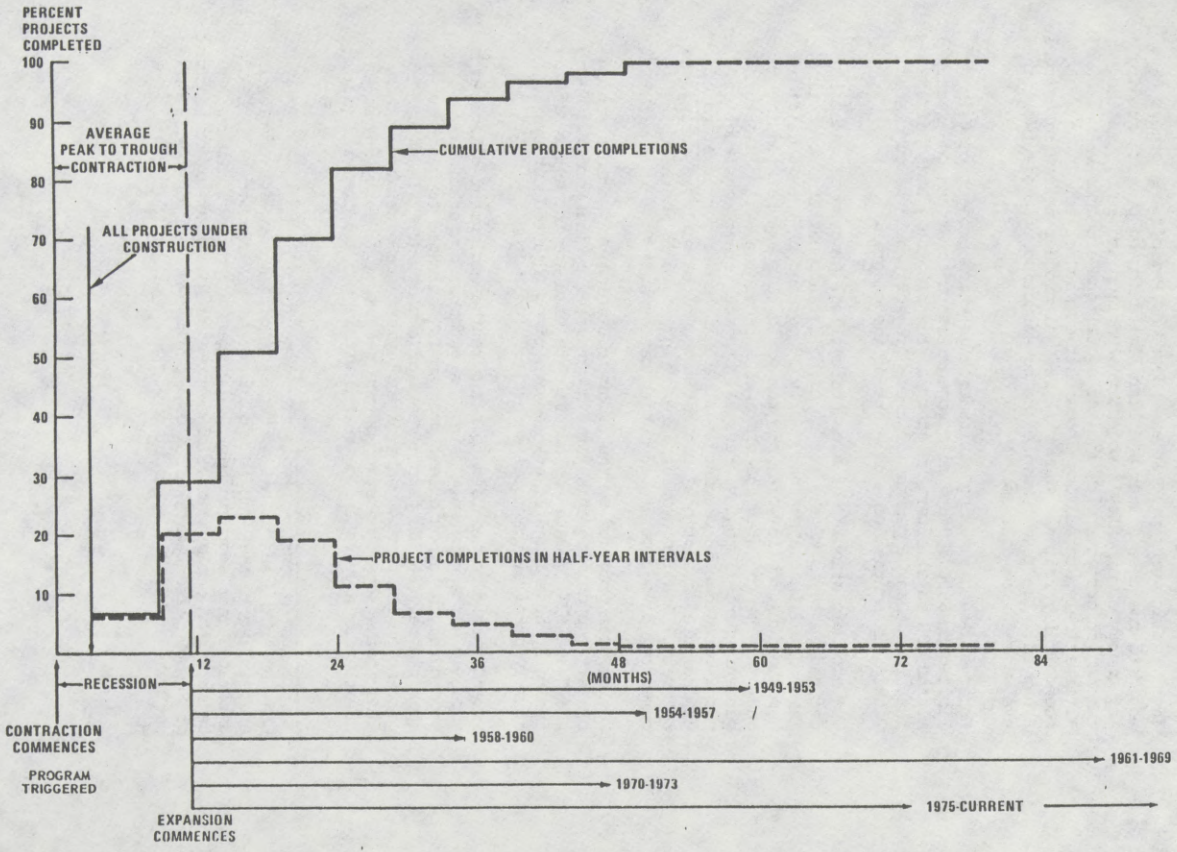
The assumptions discussed above eliminate many of the limitations of countercyclical public works programs cited in the literature. Nevertheless, even utilizing these assumptions the model estimates that countercyclical public works comparable to those funded under the LPW program are inherently incapable of performing effectively as a countercyclical tool.

An examination of the characteristics of the six post war recessions indicates that their duration has been short -- an average of only 11.8 months. This is a period far too short for a public works program to perform in a countercyclical manner given the long period required for construction of projects. Even if a program could be triggered exactly at the beginning of a recession and all projects start construction 90 days (3 months) after the program begins, the bulk of the employment would be generated after the recession ended. This employment would be generated during the economic recovery when total national as well as construction industry unemployment are declining. This situation is illustrated in the following Figure. The model illustrates that the length of time required to complete construction of public works projects extends well beyond the end of the average post war recession. The model estimates that due to the length of time required to complete projects comparable to those funded under LPW, less than 8 percent of all projects would be completed 9 months after the start of the average recession. About 30 percent of all the projects would take more than 2 years to complete. Thus, project construction would extend well into each of the six post war recoveries, even under assumptions which eliminate most barriers to expeditious implementation.

As expected, the length of time required to complete project construction is related to project size (as defined by project cost). Larger projects take longer to complete. Approximately 50 percent of all projects costing $250,000 or less would be completed within 12 months compared to 4.1 percent of projects costing between $1 million and $3 million. This suggests that smaller, low cost projects be given preference over larger, high-cost projects in a properly designed countercyclical public works program.

Smaller projects appear to have other advantages including the capability to diminish the importance of labor and material bottlenecks, concentrate employment opportunities locally, and if implemented expeditiously, have a greater tendency to be countercyclical than larger projects. However, a serious question arises as to whether a funding limitation of this type would alter

ESTIMATED PROJECT COMPLETIONS OVER AN "AVERAGE" POST WAR RECESSION AND ENSUING EXPANSIONS
(11.8 MONTH CONTRACTION)



local public works priorities. Bourdon, Perloff and others have advanced the thesis that a dollar limitation on project funding may change a community's objective function and result in the funding of projects with limited social and economic value. Alternatively stated, local communities may not act in an economically rational manner if Federal project selection criteria are used. The result may be the construction of projects which are wasteful or useless.

Moreover, even assuming a situation in which project cost is limited to $500,000 and all projects start construction exactly 3 months (90 days) after the start of the program, data indicate that less than 11 percent of these projects would be completed within six months from the start of the program.

The economic stimulus of a countercyclical program is generally defined in terms of the stream of dollar expenditures over time. The model illustrates that nearly 15 percent of the $6 billion hypothetical public works program would be spent between the third and ninth month after the start of a recession, with less than 47 percent spent 15 months after all projects start construction. As such, more than 56 percent of all funds (under our accelerated expenditure assumptions) are estimated to be outlayed during the recovery. Smaller projects, requiring 12 to 18 months to complete, have accelerated outlay patterns.

Outlay data provided by the Economic Development Administration closely approximate this pattern generated by this model. When LPW I and LPW II data are adjusted to simulate the outlay of funds for both phase I and II at the same time, adjusted outlays closely parallel the model's results.

Expenditure data are used to estimate the employment generated by a public works program. Using the authors' computational procedure, the hypothetical program is estimated to generate approximately 86,500 person years of employment.* Less than 15 percent of all person years of employment are generated within nine months after the start of the recession. Nearly 95 percent of all person years are generated within two and one half years

*Estimates on cost and employment generation of LPW provided by EDA, after the analytical portions of this study were completed, are similar to the study's findings. As of November 1979, EDA estimated that approximately 86,000 person years of direct construction employment would be created (compared to our estimate of 86,500 person years) at a cost per person year of $69,767 (our estimate of $69,300 was slightly less).

from the start of all construction activities. Over 78 percent of the person years generated during this period would occur during the recovery.

Finding No. 3: Past Countercyclical Public Works Programs have Provided Few Jobs to the Unskilled-Unemployed

Past countercyclical public works programs have hired relatively few unskilled-unemployed due mainly to two factors (1) low labor intensity of public works projects, and (2) the considerable mismatch between the skill requirements of construction activities and the low skill levels of most unemployed.

Labor intensity, i.e. the proportion of total project cost spent on construction wages/salaries, of both the PWIP and LPW programs was only about 22 percent, despite the fact that their project type and mix differed substantially from one another. As such, the bulk — 78 percent, of each program's expenditures operated simply as a fiscal stimulus. According to Robert E. Hall, "The main thing that local public works do is to increase the demand for gypsum board and other materials that are very elastically supplied by other sectors. The effect is just the same as the effect of a general increase in expenditures." In other words, whatever special influence local public works have within labor market areas derives from the 22 cents out of every dollar of the program spent as direct wage payments.

Neither the PWIP nor the LPW program provided a substantial proportion of the jobs they generated to the unemployed. Specifically, the proportion of jobs generated by the PWIP program which went to those who were unemployed just prior to being hired was only 27 percent, and just 12 percent for the LPW program. This is primarily due to the fact that each program required a relatively large share of skilled workers — about 47 percent of all jobs generated by the PWIP program and about 75 percent of all jobs generated by the LPW program. Studies show that the proportion of jobs going to the unemployed is directly related to the proportion of unskilled labor required by a public works project.*

*Unskilled and semi-skilled workers suffer more frequent and longer periods of unemployment during a recession than do skilled workers.

Finding No. 4: Duration of Employment Provided by Past Countercyclical Public Works Jobs has been Too Short to be Meaningful

An analysis of past countercyclical public works programs has shown that the length of time a typical worker is employed on a construction project is too short to: (1) provide meaningful relief from previous periods of unemployment, (2) maintain job skills, and (3) provide on-the-job training.

High labor turnover on construction projects reduces the ability of a public works program to provide either employment continuity, income, or skill maintenance to program participants during a recession. Under the PWIP program for example, the average duration of employment for all workers amounted to only 4.1 weeks. Fifty-eight percent of all workers worked 2 weeks or less.

The average duration of employment for unskilled workers, who had experienced more frequent unemployment prior to being hired, was 3.7 weeks compared to a 4.2 week duration for skilled workers. Preliminary data for the LPW program indicate that the average duration of employment for all workers was 3.5 weeks — 3.5 weeks for skilled workers and 3.4 weeks for unskilled workers.

Wages and salaries paid to the previously unemployed represented a small proportion of the total expenditures for each program. Under the PWIP program 27 percent of all individuals who were previously unemployed received 33 percent of total wage payments — less than 7 percent of total program costs. For the previously unskilled-unemployed, earnings per hour were less than 55 percent of the hourly wages paid to previously employed skilled workers.

Under the LPW program, the estimated 12 percent of the individuals who were previously unemployed received about 14 percent of the program wage bill or slightly more than 2 percent of total program costs. Earnings per hour for unskilled workers, regardless of previous employment status, remained substantially below those for skilled workers — less than 70 percent of the skilled worker hourly rate. Thus the presumed advantages of public works programs — that the direction and composition of spending can be targeted to certain areas and groups to provide income and employment benefits — are questionable if examined in light of the available data.

Finding No. 5: Public Works are an Extremely Costly Means of Generating Jobs*

In order to analyze the cost of generating employment using a countercyclical public works program it was necessary to address a number of questions:

-- What is the direct, indirect and induced employment as well as their sum or "total" employment generated by a countercyclical public works program?

-- What is the "net" employment (accounting for factors such as "displacement" and "crowding out" which decrease employment) generated by a countercyclical public works program?

-- What is the timing of "total" employment likely to be?

-- How do job costs differ depending on the measure of employment used?

To determine "total" employment the authors made several assumptions. First, the sum of indirect and induced employment generated was assumed to be approximately 2.7 times the amount of direct (construction) employment generated.** Second, induced employment effects, i.e. employment generated from the expenditure of wages and salaries by construction workers and workers in supplying industries are assumed to lag the generation of direct (construction) employment by 6 months. For convenience, it is assumed that the value of construction put-in-place is immediately translated into indirect (i.e. construction supplying industry) employment. Results indicate:

-- Approximately 86,500 direct jobs, 66,000 indirect jobs, and 167,700 induced jobs (i.e., "total" employment of 320,200) would be generated by a hypothetical countercyclical public works program funded at

*A job is defined as a person year of employment, i.e., 1800 hours of employment per year.

**Estimate developed by the Rand Corporation of the gross multiplier effect of public works construction activities.

$6 billion with a distribution of projects in terms of type and size, similar to that funded by the LPW program.*

-- Induced employment represents the largest share of "total" employment -- over 52 percent; indirect employment, i.e., employment in supplying/service industries the least — 21 percent; and direct employment approximately 27 percent.

The timing of "total" employment is analyzed in terms of the length of time required to complete construction projects for direct (construction) jobs, and the assumptions, noted above, about when indirect and induced jobs are generated. Results indicate nearly 85 percent of total employment is generated during a recovery and nearly 23 percent of the program's "total" employment occurs two years after the program's implementation.

It is widely recognized that several factors operate to reduce the employment actually generated by a countercyclical public works program. A measure of "net" as opposed to "total" employment generated is necessary. Among the factors contributing to a reduction in "total" employment the authors cite; (1) labor hoarding and inventory accumulation, i.e., the tendency of firms to hoard labor and accumulate unnecessary inventories during recessions which result in little increase in employment when production increases; (2) substitution and "crowding out", i.e., possible reductions in private consumption and investment due to Federal investment; and (3) displacement effects i.e., the substitution of Federal for State and local funds in public works construction activities.

The authors focus on the degree to which displacement of State/local resources by Federal resources reduces the employment generated by a public works program. Because there is little empirical evidence dealing with the degree of displacement which would actually occur for a Federal public works program, they have developed net employment estimates for a broad range of displacement rates. They specify four possible displacement rates

*Alternative estimates computed using the Chase Econometric Inc. methodology indicate a total of approximately 260,000 person years of employment would be generated, i.e., 81 percent of the person years of employment derived by the model.

ranging from a low of 15 percent of State/local funds displaced by Federal funds, to a high of 65 percent.* Fifteen percent is lower than the rate used by Taub and Beale who estimated, for a sample of 50 jurisdictions receiving LPW funds, a displacement/substitution rate of 29 percent, i.e., a displacement rate of 20 percent in addition to a crowding out effect of 9 percent. Others have estimated displacement of State/local funds as high as 60 percent in the short run and up to 80 and 100 percent after one year. Gramlich's work indicates that displacement has the potential to cause an actual decline in Gross National Product thus possibly offsetting any net increases in employment.

"Net" jobs and the cost per "net" job vary considerably depending on the displacement rate assumed. At an unrealistically low rate of 15 percent, approximately 272,000 jobs are generated at a cost of about $22,000 per job. The cost of a "net" direct (construction) job amounts to over $81,000 at this displacement rate. A 65 percent displacement rate will result in only 112,000 "net" jobs, i.e., only 40 percent of the "net" jobs generated at the 15 percent level. At $53,000 per "net" job - their cost is over 2.4 times more per job than those generated at the 15 percent rate. The cost of a "net" direct (construction) job at a 65 percent displacement level approaches $200,000.

Even with our limited knowledge of the impact of displacement it is conceiveable that a standby program would lead to significant anticipatory effects. If a State or local government thinks that Federal funds will become available during a recession this will be sufficient to either expedite or delay planned construction projects which will result in higher displacement rates.

The following Table summarizes the job costs for different "total" and "net" measures of employment generated.

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*"Net" program employment estimates are approximations due to: (1) the likelihood that having overestimated "total" employment in preceding sections will also result in overestimating displacement adjusted estimates; (2) disregarding the potential implications of "crowding out" of private sector investments although "crowding out" could be implicitly factored into higher displacement rates used in the analysis; and (3) the use of a constant factor displacement rate in all time intervals which disregards the implications of intertemporal displacement (the postponement or acceleration of local construction activities).

Cost Per Job Estimates*

| | "Total" Estimate | "Net" Estimate Displacement Rates 15% | 25% | 45% | 65% |
|---|---|---|---|---|---|
| Cost per Direct Job | $69,320 | $81,554 | $92,427 | $126,037 | $198,059 |
| Cost per "Total" (i.e., Direct, Indirect & Induced) Job | $18,735 | $22,041 | $25,190 | $ 34,064 | $ 53,530 |

* A job is defined as a person year of employment, i.e., 1800 hours of employment per year.