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ALFRED P. SLOAN SCHOOL OF MANAGEMENT

PUBLIC WORKS PROJECTS IN THE UNITED STATES:
ECONOMIC DEVELOPMENT AND COUNTERCYCLICAL
PROGRAMS FROM FDR TO THE PRESENT*

by

Thomas A. Barocci**

WP 925-77 May 1977

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INTRODUCTION:

Since 1960, between one-fourth and one-third of every construction dollar spent in the United States went for public works. These expenditures occurred at all levels of government, including projects ranging from the rehabilitation of a commode in the Bronx zoo to the building of Interstate 95. Public works were initially defined as durable and/or immobile, whereas public works have come to include rehabilitation and maintenance activities under the same rubric. Of the $39 billion spent on public works construction in 1975, we can attribute only about $1-2 billion to programs specifically funded for countercyclical job creation purposes or special aid to lagging areas of the country.

Government expenditures on all types of public works do not vary with business cycles to the degree that they do in the private sector. However, there have been repeated charges that federal expenditures are not distributed equally across regions of the U.S. As private expenditures decline

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2 The format of the federal budget does not allow for distributing the portion of federal expenditures directly spent on public works although the figures for ownership indicate that the state and local government "own" almost 85 percent of the total expenditures. Of course, this results from the large number of federal grants for the construction of schools, roads, and so forth. See Statistical Abstract of the United States, 1976, U.S. Department of Commerce, 1976, Table 1244.

with a recession, there is always an attempt in Washington to persuade the federal program-makers to compensate with debt-financed public works expenditures by accelerating the construction of projects already underway, or by financing new ones proposed by the states and localities.  

Even the deficit-conscious Ford Administration passed a series of countercyclical spending programs, not the least of which was an increased investment in public works programs. The initiative for countercyclical and even structural public works construction comes from a variety of circles as diverse as the research departments of the AFL-CIO and the Brookings Institution to local representatives of the building trades and contractors' association. This country has had two periods of dependence on the financing of public works beyond what was deemed "normal" by the Congress: one during the Great Depression and the other a sporadic but continuous flirtation since 1961. We will not address the issues of whether countercyclical employment policy is necessary, although still the subject of hot debate in some quarters of the economics and political professions. In some sense we are all Keynesians and the issue now centers on how much countercyclical stimulus, and not whether.

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4 It is much more difficult financially and politically for a state or locality to assume countercyclical funding of public works, as the federal debt position is the "business" of Congress and the White House, while the debt posture of the states and localities is becoming more the "business" of regional and local financial institutions.

5 All of the programs discussed are assumed to be financed through government debt. There is little debate on whether this works in the sense of increasing employment and expanding output. See Alan Blinder and Robert Solow, "The Analytical Foundations of Fiscal Policy," Alan Blinder, Robert Solow et. al., The Economics of Public Finance, The Brookings Institution, 1974, pp. 3-115. Also, on the question of the comparative efficacy of programs for countercyclical employment stimulation, see Temporary Measure to Stimulate Employment, Congressional Budget Office, 1975.
The use of federal aid programs for the areas of the country experiencing economic stagnation or decline does not have a large consensus. Discussion is often laced with Marxian and Myrdalian theories of uneven development and the other side riddled with phrases from an Ayn Rand handbook. The historical policy offshoot of these debates has always been a compromise with the advocates gaining a program and the foes achieving lillipution funding levels.  

Although the debate is interesting it will not be addressed by this paper. Instead the paper will concentrate on what we have learned and how we might apply this knowledge presently and in the future.

The paper is divided into four major parts. The first presents a discussion of the programs and policies utilized in the U.S. prior to the 1960's, with emphasis on the New Deal era. The second portion concentrates on programs implemented during the 1961 - 1974 periods beginning with the Area Redevelopment Act of 1961 and ending with the Public Works Impact Program of 1972. The third section consists of a more detailed discussion of current issues and the experience we have had with Title X of the Public Works and Economic Development Act of 1965, as amended in 1974. A summary is given and a series of lessons/recommendations for the future use of public works as a tool to combat cyclical and structural employment problems comprises the last section.

Under each major section of the paper, the issues will center on the level of effort, program impacts, long-term value and administrative issues.

When appropriate the public works programs will be compared and contrasted with available evidence of the efficacy of alternative means of

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For a discussion of this question see Sar Levitan, Too Little But Not Too Late, D.C. Heath and Co., 1976, especially Chapter 1.
accomplishing the same end. For example, the utilization of public service employment programs, an issue addressed by Alan Fechoer at this conference, will be a point of comparison in the contemporary context. Also, when possible, we will differentiate between programs aimed at structural problems and those aimed at cyclical employment problems. As the reader will soon see, it is often very difficult to distinguish the two beyond the targets and areas identified in the legislative mandate.\footnote{Public works and public employment programs are usually distinguished by whether funds are appropriated for materials and equipment or not. For example, Wiseman defines public service employment under CETA as a program "designed to preserve skills and maintain income during a cyclical downturn." Funds over and above those paid for subsidized wages and salaries of the PSE clients are usually earmarked for only administrative purposes. See Michael Wiseman, *Achieving the Goals of the Employment Act of 1946 - 30th Anniversary Review Paper No. 1*, On Giving a Job: The Implementation and Allocation of Public Service Employment, Joint Economic Committee, Congress of the United States, G.P.O., 1975. This problem of distinguishing public works and PSE is becoming increasingly difficult as the new regulations covering Title VI of CETA now explicitly call for PSE projects.}

I. THE NEW DEALERS: FDR AND HARRY HOPKINS

If we do not understand the successes of the past we are likely to repeat them only by accident.\footnote{If I may take editorial license with Sartreanale's famous maxim.} When the New Dealers met, they did not have a series of cost-benefit analyses to look to, nor computer simulations of the likely impact of huge spending increases on the unemployment rate and the change in the CPI. Indeed, they didn't even have a copy of Paul Samuelson's *Economics* where they could find out that debt financed projects were effective as countercyclical devices. The programs of the New Deal were a series of perpetually adjusting experimental and demonstration programs approached with a level of funding never before attempted in a capitalist economy. The question of whether or not they were effective will never be completely resolved. Clearly, mistakes were made; some leaned on shovels and others built monuments to the ability of a great Nation to survive a time...
of crisis.

The use of debt-financed public works programs never pulled the country completely out of the Depression (it took the second World War to do that), but they did provide work for millions of people, and enhanced the climate for the long-run economic development of the nation.

INITIAL RESPONSES AND EXPERIMENTATION: 1929-35

Non-intervention is the key word in describing the initial response of the federal government to growing unemployment in the first three years of the Great Depression. The stance of the Hoover Administration was to ask Congress to speed up the appropriations for a previously planned ten year public construction agenda and appropriate an additional $330 million for construction of federal projects. Congress did, however, pass a bill authorizing 2.3 billion for direct grants to states and localities for public works construction, only to have Hoover veto it with objections containing words like "pork barrell." In 1932, the Emergency Relief Construction Act was passed as numbers emerged showing 24 percent unemployment and a drop in private construction activities from $8.7 billion in 1929 to $1.4 billion in 1932. This program provided federal money to states and localities and relied heavily on self-liquidating loans. The program reached its zenith in 1933, when it was directly responsible for the employment of approximately 3 million of the 13 million unemployed.

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10 Ibid, p. 357.

When FDR took office he saw a desperate need to do something quickly while full blown proposals could still be worked out in Congress and the White House. The Federal Emergency Relief Administration\textsuperscript{12} was set up to disperse money to the states for direct and work relief. Unemployment was over 25 percent. This is analogous to the Congressional extension of unemployment benefits in 1974 and the mandating of additional money by pre-legislated formulae for the dispersion of welfare and U.I. payments which were increasing across the country.\textsuperscript{13} The regulations of the FERA stated that "all needy unemployed persons and/or their dependents shall receive sufficient relief to prevent physical suffering and maintain minimum living standards". This provision was the first legislatively mandated "workfare" program of the era. Those persons in need were employed for the number of hours required to compensate the difference between their income and the "minimum standard" at federal wage rates.\textsuperscript{14} In addition, grants were made for unemployable people as well; services under this program peaked in 1935 when over 16 percent of the civilian labor force (21 million persons) were receiving some sort of benefits. Still the federal government was not directly involved in the administration of the program.

\textsuperscript{12}Federal Emergency Relief Act of 1933.

\textsuperscript{13}This program is discussed in some detail in John K. Galbraith, \textit{The Economic Effects of the Federal Public Works Expenditures, 1933-38}, A Report to the Subcommittee on Economics and Public Works, National Resources Planning Board, GPO, 1940.

\textsuperscript{14}This provision is very similar to a recently proposed program in the Commonwealth of Massachusetts. Governor Dukakis has asked Secretary of H.E.W., Califano for a waiver of regulations to allow the State Department of Human Services to force persons to work on public projects for a period of time necessary to "earn" their welfare payment. See letter from Governor Dukakis to Secretary Califano with attached proposal dated February 25, 1977.
1933 marked the first time the federal government became directly involved in operating a work relief program. The Civil Works Administration (CWA) was established under executive order. The federal government directly operated the program which provided jobs both for persons receiving relief and for those who were unemployed and not getting relief payments. Unemployment was the only criteria for eligibility for half the clients. Since there was a spreading prejudice against persons on relief, many who should have applied and, indeed, were eligible for relief, did not sign up. Unfortunately, the CWA got the stigma of a relief and "make-work program, as the local relief office filled as many jobs as possible from their rolls, and each placement led to a decrease in their own expenditures. As jobs became available, many new relief applicants appeared as the wages paid on CWA projects were considered high.

Several major factors led to the termination of CWA after only seven months of operation (November 1933 - July 1934). First, the program was initiated in mid-winter with most jobs being short-term construction. Thus, in order to fill the number of open positions financed (over 2 million in the first two months) many of the localities created what could be called "make-work" efforts. Secondly, the program was the first federal effort which directly provided jobs both for relief recipients and for unemployed persons and was viewed as "temporary." It should be mentioned that the hiring rate and speed of implementation was incredible: by mid January 1934 (1 1/2 months after passage) there were over 4.3 million persons working on CWA projects. Even the highly praised speedy implementation of the
Emergency Employment Act of 1971 could not hold a candle to the hiring rate under CWA. 15, 16

As CWA expired, a new work relief effort was begun under the FERA: the Emergency Work Relief Program (EWRP). Once again relief status determined eligibility and the program was to be a dual venture with equal votes for states and federal government. As it turned out the states had the major responsibility in operation, with many unfinished CWA projects getting most of the initial attention. Urban areas were the target and virtually all of the participants were on relief as opposed to only half under CWA. As in the first FERA program, employment hours per week were determined by the amount of money needed to make up the difference between what a person had and the minimum deemed necessary to get along. Almost 90 percent of the allocated $1.3 billion went to labor costs. 17

The basic principle operating at this time was that states and localities were responsible for the physically unfit and otherwise unemployable persons, while the federal government had responsibility for able-bodied but unemployed persons. This distinction was the basis for the WPA, which replaced the FERA late in 1935.

While CWA and EWRP were being planned and operated the Congress was implementing parallel legislation. One such piece that became important

A discussion of the CWA can be found in Work Relief Experience in the U.S., Committee on Social Security of the Social Science Research Council (undated). 15

Another interesting parallel of the CWA to present problems is the failure of the program to distinguish between the types of persons it was aiming to help e.g. the cohort on relief or those who were in less severe straits - those who were simply unemployed. This could be taken into a present context to the failure to differentiate our programs aimed at the structurally unemployed and the cyclically unemployed. This is discussed later in the paper. 16

Arthur Burns and Edward Williams, Federal Work, Security and Relief Programs, W.P.A. Division of Research, Monograph XXIV, GPO, 1941. 17
was the Public Works Administration (PWA) established in June of 1933. Under the National Industrial Recovery Act of 1933 over $3.3 billion were appropriated while the intention was later interpreted as follows:

1. Preparing a public works program to be undertaken in the event of future necessity;
2. Providing employment for workers in building trades and in industries supplying construction materials;
3. "Priming the pump" of industry by placing large sums of money in circulation and by creating a demand for construction materials.

These goals are not unlike the goals listed in legislation authorizing the latest round of countercyclical public work programs: the Local Public Works Act of 1976.

Several problems with the PWA prevented timely implementation not the least of which was the failure of states to provide technical plans for the public construction they wanted. Another problem (familiar to those involved in the present public works system) was the detailed and time consuming review and appeal procedure for project selection, which worsened as demand by state and local governments far outstripped the funding available. In fact, the delays in implementing the PWA program were precisely the reason that CWA was passed in November 1933. One unique feature of the PWA was that the federal government, through 10 different agencies, administered, planned and ran projects directly. Federal agencies spent $1.8 billion of the total $5.9 billion allocated over the life of the program.

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By the close of 1935, previous hopes that the end of the Depression was near began to wane and the alphabetical patchwork of programs underwent review by the White House and Congress. Although many were being employed and funds were stimulating the economy there was still a long way to go: unemployment hovered around 20 percent. The federal government regrouped its efforts, primarily under the auspices of the Works Progress (later Projects) Administration (WPA). It is to this widely recognized program that we now turn.

CONSOLIDATION: 1935-41:

By 1935 there were 20 million people depending on relief of some kind, almost 17 percent of the total population. Hopes that the PWA would "do the job" were dwindling. The Committee on Economic Security reported the following to FDR: 19

It is a sound principle that public employment should be expanded when private employment slackens, and it is likewise sound that work in preference to relief in cash or in kind should be provided for those of the unemployed who are willing and able to work ... The experience of the past year has demonstrated that making useful work available is the most effective means of meeting the needs of the unemployed.

FDR responded immediately to this memorandum with an announcement to Congress that he wanted two new and expanded programs. He called for the passage of the Social Security Act to provide categorical help to the unemployable and he asked for a federally administered public works program for the unemployed. Within four months the Emergency Relief Appropriations Act of 1935 was passed in response to the latter request. This program

authorized the appropriation of $4.88 billion to "provide relief, work relief and to increase employment by providing useful projects." The allocations were divided among federal agencies to sponsor temporary projects and a new agency, the WPA, was established with $1.4 billion to finance "small useful projects."

Due to the dynamic leadership of Harry Hopkins, the WPA soon had administrative control over virtually all federal work relief efforts. During 1936-43 the WPA averaged over 2 million persons a year on its employment roles with total allocations of almost $13 billion dollars. This was by far the largest and most famous of all the New Deal programs and had become synonomous with public work relief efforts in this era. The hallmark of the program was its adaptability. Hopkins was not adverse to changing the goals, operations and targets as he perceived the need for adjustments. In addition, there were annual Congressional authorizations for the program and they participated in annual alterations.

Although the objectives of the WPA are established in legal terms, it is more appropriate to quote Harry Hopkins from a statement made to his staff in 1935:

"... never forget that the objective of this whole program as laid down by the President ... is the objective of taking 3,500,000 people off relief and putting them to work and the secondary objective is to put them to work on the best possible projects we can, but don't ever forget that first objective, and don't let me hear any of you apologizing for it because it is nothing to be ashamed of."20

Unfortunately the objectives for who was to be employed on WPA projects, were never really translated into explicit criteria, although in 1935 Hopkins

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asked Congress for enough money to employ one member of every needy family in the country. It is interesting to note that at times there were implicit goals for the WPA to provide training, but these were never realized as the unemployment at the time was viewed exclusively as a cyclical problem. What we would now term "structural unemployment" was generally ignored. However, an examination of the list of projects completed during the 8 years of the WPA reveals a large number of projects which were, in the strict sense of the word, economic development projects not simply temporary measures to stimulate employment. The long-run effects of the WPA and its enhancement of the climate for later economic development are the most underestimated of all its accomplishments.

There were several major changes in the administration of the WPA vis-à-vis prior public works projects. These changes centered on the sponsors, hiring arrangements and local contributions both during and after completion of the project. Instead of the previous arrangements with contractors, virtually all WPA projects were undertaken in a manner we would now call "force accounts," that is run directly through local or state governmental units rather than a private contractor. This decision was made because the contractors were either unable or unwilling to hire those most in need, limiting their personnel to semi-skilled and skilled workers. Of course, this method may have filled the efficiency needs of the program, but


equity needs were left unmet.23 Further, the WPA set up state and district offices to administer the program. 30,000 administrative personnel were hired, "without regard to the provisions of the civil service laws."24 Again, we see the almost naive sensibility of the era where it seemed intuitively "obvious" that creating a permanent civil service structure for a temporary program would serve only to institutionalize the agencies and their employees.25

The projects themselves had to be sponsored by a state or local government unit or a federal agency, and that sponsor had to be legally empowered to carry out the work as well as be responsible for its maintenance.26

Approximately 96 percent of the projects under the WPA were initiated locally with yearly contributions averaging between 19 and 25 percent. Once the project was approved on the state level, the WPA district offices were charged with hiring workers and buying the necessary equipment and supplies. This setup was based on the conviction that local government units knew best what needed to be done but were unable to administer it effectively. The historical consensus was that the administrative network was quite efficient and successful. The lesson learned here could well have circumvented

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23 This issue remains unresolved under the strategies designed for funding Title X of the PWED Act of 1965 and the Local Public Works Act of 1976. This is discussed later in the paper.

24 The issues of administration are discussed in detail in Arthur W. Macmahon et. al., The Administration of Federal Work Relief, Chicago, The Public Administration Service, 1941. The authors further point out that WPA requests to Congress to establish a civil service within the WPA were turned down.

25 The problem of civil service laws and temporary employment programs is still unresolved either for the clients of programs like CETA-VI or the administrative personnel.

26 This and some of the following discussion of the WPA is taken from Alden Briscoe's excellent piece on the WPA, op. cit.
problems encountered by our national program planners who insisted that both the planning and administration of CETA had to be the responsibility of localities. Even in 1973 localities had little experience in running social programs.

Employment under a WPA project was based on need and employability, with specific provisions against discrimination on the basis of race, age and sex. Unfortunately, there was little enforcement of these provisions as only 10 to 20 percent were female and/or nonwhite. The aged, however, were highly represented among the work force, although the young (under 18) were barred as there were two separate programs for youth.27

Congress made explicit rules concerning accepting available private employment in the area by stipulating, upon pain of discharge, that workers must leave if pay were at least the same as the WPA wage. Transition off of WPA rolls into private employment remained a specific goal. Another problem with a contemporary ring emerged after Congress passed this provision. Those working on WPA projects, while paid less than similar private sector workers, were virtually guaranteed full-time, full-year work, whereas "regular" private sector jobs, particularly construction, were only rarely full year positions. Thus, even with the lower wages of WPA projects, many were reluctant to leave. Briscoe, however, points out that "career WPA" workers were not a particularly large problem. In 1939, only about 16 percent of the workers had been on projects for three years or more.28 In a reaction to charges by the media of "careers on WPA," Congress enacted legislation

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28 Briscoe, op. cit., p. 102.
that automatically dismissed any WPA worker who had been working for 18 months or more. Those dismissed (almost 1 million over the last 6 months of 1939) had to remain off the project for at least 30 days. This process was called rotation. Many, of course, could not find permanent work and came immediately back after 30 days. The mayor of Detroit commented, "It's pretty hard to rotate your appetite."

Wages paid on the WPA projects followed FDR's guidelines: "security payments which should be larger than the amounts now received on the relief role, but ... not so large as to encourage the rejection of opportunities for private employment." This policy is similar to wage regulations under CETA-VI. However, organized labor managed to use its influence to gain "prevailing wages" on WPA projects, not unlike current public works programs. Thus, after Congress passed this resolution, there was a catch-22: the "security" monthly wage policy was still in effect. Therefore the workers who would surpass this "security wage" if paid the "prevailing wage" simply worked fewer hours per month.  

Overall, wages paid on WPA projects in 1939 ranged from a low level in Mississippi of $19 per month to a high of $95 per month in Washington, D.C. The average hourly earnings on all projects financed under the Emergency Relief Employment Act were 48 cents per hour in 1939 with an overall average in the private sector building trades of about $1.07 per hour.  

29 This same technique has been utilized in certain rehabilitation projects funded under CETA-VI in Massachusetts, where the $10,000/yr. limit would be exceeded if prevailing (read Davis-Bacon) wages were paid. Thus, those working on some of the rehabilitation projects only worked part-time or part-year until the $10,000 maximum was reached. This is discussed in more detail in the forthcoming report by Thomas A. Barocci and Charles A. Myers, "An Evaluation of CETA in Eastern Massachusetts," Industrial Relations Section, Sloan School of Management, M.I.T.

at the local level between the "security" and "prevailing" wage differences.

The WPA projects were labor intensive with nearly 90 percent of the federal contributions going directly to wages. The rules allowed for $7 of materials for each man-month of employment, although the local and state contributions (19 to 24 percent of the total) were often spent on materials. Thus the dual goal of labor intensiveness and usefulness of projects was accomplished. La Guardia Airport could not have been constructed with the federal materials allotment.

The overall economic impact of the WPA has never been the subject of serious economic analysis. However, as over $1.4 billion per year was spent on wages going to over 2 million families, we can be sure that virtually all of it was spent on necessities. The rate of spending, of course, has a positive impact on the countercyclical effect. The multiplier works more quickly if the money goes to wages than if it is spent on materials and equipment. In current dollars this expenditure is equal to approximately $6 to 6.4 billion per year, far above the total public service employment and public works expenditures appropriated to smooth out the current recession. An equivalent level of effort in 1976 would result in employment stimulation in the range of 600,000 to 900,000 for PSE and 350,000 to 450,000 for accelerated public works expenditures.

Further comparison show that the WPA at its highest impact employed 31

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32 These figures were derived from the Congressional Budget Office estimates using 1976 dollars. See Temporary Measures to Stimulate Employment, Congressional Budget Office, 1975. Note that the estimates cited are for the employment impact of the programs 12 months after enactment.
percent of the total unemployed in the country. To equal this we would presently have to have almost 2.5 million persons on a public works or PSE program!

The WPA reached its highest level of activity in 1939 when $2.2 billion was spent on job creation: total federal receipts that year were only $5.1 billion. Further, the total government debt in 1939 was 3.6 billion, fully 70 percent as much as total receipts. Countercyclical policy was indeed taken very seriously in Washington.

Before summarizing the accomplishments and lessons of the era, I cannot resist the temptation to list a few of the WPA accomplishments. The overall figures are truly impressive: 617,000 miles of roads built, 124,000 bridges and viaducts and 120,000 public buildings. Perhaps specific examples will be more illustrative. LaGuardia Airport in New York was a WPA project, as was Boston's Huntington Avenue subway. New York's Central Park zoo and Chicago's waterfront park were made possible by WPA dollars and men. Faneuil Hall in Boston and Independence Hall in Philadelphia, cornerstones of the nation's bicentennial celebration, were reconstructed by the WPA. Enough public buildings were constructed to put one in each of the 35,000 counties in the country. We are proud of our National Endowment for the Arts, but we would have to go much further to match the splendid achievements of the WPA's writer's, musician's and painter's projects under which persons like Jack Levine, William

33 Alden Briscoe, op. cit., p. 113.

34 The $2.2 billion figure is derived from a category in the Federal Budget called "Federal Works Agency," and includes several agencies. See Tables 192 and 193 in Statistical Abstract of the United States, 1941, U.S. Department of Commerce, 1942.
DeKooning and Jackson Pollack were aided. The list could go on and on, but even an abridged itemization illustrates the products of the imagination and drive present in the crisis times of the 1930's.

As must certainly be apparent to the reader, the positive accomplishments of public works projects in this era have been stressed throughout the paper. On balance, I believe that the accomplishments outweighed the tangles, given the inexperience of all of those involved in the planning and implementation of previously unattempted efforts. However, many who criticized the works programs of the 1930's did so armed with evidence. For example, unemployment was still in the 16-18 percent range as the decade of the 1930's came to a close. Several blue ribbon panels were set up to evaluate the efforts during the 1930's. The National Appraisal Commission criticism centered on the programs' inability to fully meet the needs of employable people. However, after criticizing the program's scope, they praised the performance, citing the utility of the work undertaken. The National Resources Planning Board discredited the WPA on two counts: that it did not meet the needs of all unemployed persons and that the objectives of the program were unclear. The same Board also criticized the WPA for mixing the maintenance of work habits, skills and morale with relief efforts.

35 For an expansion of this point see Thomas A. Barocci and William Spring, "Jobs and the Management of the Economy," Boston University Regional Institute on Employment, Training and Labor Market Policy, 1975, (mimeo). Also a fully detailed list of accomplishments is included in Work Relief Experience in the U.S. Committee on Social Security of the Social Science Research Council, New York, undated).


37 Ibid, as cited in An Evaluation of the Public Works Impact Program, op. cit, p.

Thus, almost all formal evaluations indicate that, if anything, the program level was too modest in size.

**Summary**

What lessons did we learn from the era of the Great Depression? The first conclusion that a researcher of this issue must draw is that with the commitment and support of the public, the White House and Congress can, in consort, launch massive and unprecedented programmatic remedies for the unemployment problems of the nation.

On a less dramatic and more specific level, we can examine some of the levels of effort summarized in Tables I.1 and I.2. For example, the simple fact that the WPA managed to employ an average of 2 million persons a year is impressive; this is between one-quarter and one-third of the total unemployed. To equal this effort in the present employment situation, we would have to combine our countercyclical programs to employ between 2 and 2.5 million persons -- at least five times the present effort. Further, Table I.2 shows the percentage of GNP devoted exclusively to the WPA during 1936 and 1939 at 2.25 and 1.75 percent respectively. In a present context this would mean appropriations in the neighborhood of 25 to 33 billion dollars per year. Admittedly, the comparisons can be questioned for relevance, but are nevertheless illustrative of the magnitude of the WPA program.

Galbraith points out that over the 1934-1938 period the various programs were only able to employ 14 percent of the total unemployed.  

Even with this conservative estimate we would have to put over 1 million

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39Galbraith, op. cit, p. 42.
persons to work in order to equal the achievement of the 1930's.

Assessment of the overall economic impact of the programs is difficult as there are no analytically sound studies available since the major economic assessment tools were yet to be invented. Predictions about what the situation would have been without the New Deal programs is equally imprecise, but enlightening. We would have either reverted to reliance on continuation of the "poor law" concept or launched a massive program of federal relief. Neither would have left us with the series of physical accomplishments. The stimulations of private industry resulting from materials and equipment purchases would have been delayed or missed altogether.

On the administrative side we can bring a great deal of knowledge to bear on the present context. The issue which first comes to mind is the fact that projects were almost always initiated by local and state levels of government and administered through federal branch offices. Some attribute the lessening of abuses to this arrangement. Further, when the WPA made local contributions mandatory, the local governmental units responded with between 19 and 25 percent of the total costs. This separated the wish lists from the projects really deemed necessary. In addition, the civil service statutes were bypassed in deference to the crisis times and consequently those employed in the administration were not permanent. The same holds for the clients of the programs. The jobs were temporary. The method whereby wages were determined also provides a lesson. Although there were conflicting policies concerning "prevailing" versus "security" wages, practical compromises were reached either by shortening the number of hours worked or through local agreements.
A final note should highlight the appropriate caveats. In a 1939 public opinion poll taken which asked people about the "best" and "worst" things done under the Roosevelt Administration, the WPA won on both counts! In the final analysis, it is a question of one's perspective. In a present context this would come down to whether or not one favored massive government intervention to ameliorate employment problems. Those of us in favor now, would likely have voted "yes" in 1939. The program was a product of the 1930's and must be judged in that light. We must take its wheat and apply it now, and leave the chaff in the history books.
Table I.1: Some Parameters of Major Public Works Programs in the New Deal

<table>
<thead>
<tr>
<th></th>
<th>Community Works Administration CWA</th>
<th>Emergency Work Relief Program EWRP</th>
<th>Public Works Administration PWA</th>
<th>Works Projects Administration WPA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Target groups</strong></td>
<td>1/2 unemployed</td>
<td>relief (urban areas)</td>
<td>unemployed</td>
<td>unemployed</td>
</tr>
<tr>
<td><strong>2. Wages</strong></td>
<td>high &quot;prevailing with .30 hour minimum&quot;</td>
<td>very low</td>
<td>medium &quot;maintain standard of decency&quot;</td>
<td>medium &quot;security wages&quot; and &quot;prevailing&quot;</td>
</tr>
<tr>
<td><strong>3. Allocations (federal)</strong></td>
<td>860 million</td>
<td>1,300 million</td>
<td>5.900 million</td>
<td>7,800 million</td>
</tr>
<tr>
<td><strong>4. Wages/Total dollars (federal share)</strong></td>
<td>79%</td>
<td>89%</td>
<td>N.A.</td>
<td>88%</td>
</tr>
<tr>
<td><strong>5. State matching funds (% of total)</strong></td>
<td>~10%</td>
<td>N.A.</td>
<td>55-70% (for non-federal portion of program)</td>
<td>19-25%</td>
</tr>
<tr>
<td><strong>6. Number of persons employed (various durations)</strong></td>
<td>4 million total</td>
<td>2.5 million total</td>
<td>100,000 -- 650,000/month</td>
<td>2 million/year</td>
</tr>
<tr>
<td><strong>7. Major Activities</strong></td>
<td>86% construction</td>
<td>majority construction</td>
<td>medium to heavy construction</td>
<td>79% light, medium and heavy construction</td>
</tr>
</tbody>
</table>

Source: Statistical Abstract of the U.S., 1941 and various publications cited in the text.

N.A. Not Available
Table I.2: Comparative Statistics, 1936, 1939, 1975 with WPA information for 1936 and 1939

<table>
<thead>
<tr>
<th></th>
<th>1936</th>
<th>1939</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Labor force (000's)</td>
<td>53,440</td>
<td>55,600</td>
<td>93,129</td>
</tr>
<tr>
<td># Employed (000's)</td>
<td>44,410</td>
<td>45,750</td>
<td>84,783</td>
</tr>
<tr>
<td># Unemployed (000's)</td>
<td>9,030</td>
<td>9,480</td>
<td>7,830</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>20.3%</td>
<td>17.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>G.N.P. (billions)</td>
<td>82.48</td>
<td>90.49</td>
<td>1449.0</td>
</tr>
<tr>
<td>Federal Government Receipts (billions)</td>
<td>4.12</td>
<td>5.16</td>
<td>285.3</td>
</tr>
<tr>
<td>Federal deficit (billions)</td>
<td>4.95</td>
<td>3.60</td>
<td>71.6</td>
</tr>
<tr>
<td># Employed (000's) (WPA only)</td>
<td>3,062</td>
<td>2,436</td>
<td>N.A.*</td>
</tr>
<tr>
<td>Wage Expenditures on WPA (billions)</td>
<td>1.834</td>
<td>1.578</td>
<td>N.A.</td>
</tr>
<tr>
<td>Wages (9) as % GNP</td>
<td>2.25%</td>
<td>1.75%</td>
<td>N.A.</td>
</tr>
<tr>
<td># Employed on WPA as % of total unemployment</td>
<td>33.9%</td>
<td>25.7%</td>
<td>N.A.</td>
</tr>
<tr>
<td>Average Wages paid WPA</td>
<td>$0.46/hr.</td>
<td>$0.48/hr.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>


= Not Applicable.
THE POST WAR II ERA: CYCLICAL AND/OR STRUCTURAL UNEMPLOYMENT

INTRODUCTION

WW II kept America's industry and labor force fully utilized. As the war drew to a long-awaited close, Washington policy makers, remembering the 1930's, began to worry about economic prospects for the post war period. A wave of post war nationalism swept the U.S. and produced a host of strange bedfellows, from Harry Truman and Adlai Stevenson to Roy Cohn and Joseph McCarthy. The crest of that wave was reached in 1946 with the passage of the Full Employment Act. That Act, which passed amidst much controversy and even more compromise, mandated the Federal government to "promote maximum employment, production and purchasing power." However, it contains no mechanisms for accomplishing its rhetorical goals, nor does it define "maximum employment." 40

There were few who were against the rhetorical goals of the Act, but equally few who were willing to include enforcement provisos in the legislation itself. In 1945, during the extensive hearings on the bill, Secretary of Labor, Schwellenback, described full employment as "a condition in which all who are able and willing to work can find jobs under satisfactory conditions," a goal which has yet to come to fruition. 41 Herbert Stein, later Chairman of the Council of Economic Advisors under President Nixon, described the situation in the following manner:

Every phase in the (employment) act is a monument to a battle of the year long legislative war that preceded it passage. The biggest guns of ideology and pressure, conservative and liberal, business and labor, had been engaged in the fight. There has been in our

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40 Originally the act called for full employment, then "defined" at about 3 percent.

The only really clear result of the Act was that it committed Federal government to the concept of full employment, but the questions of how and for whom remain unanswered. This section of the paper discusses the methods and impacts of a series of modest Federal attempts to address both structural and cyclical employment problems through accelerated spending on public work projects.

The first attempt to put economic muscle behind the Full Employment Act was introduced in the 81st Congress by Senator James Murray and 14 other Democrats. The bill was aimed at "the treatment of serious unemployment whenever it arises in any geographic or industrial area." The bill was ambitious containing effective language which was later adopted in several important pieces of economic development and countercyclical legislation. It would have committed 2.2 billion dollars to aid depressed areas and had provisions for retraining and mobility allowances for those in certain depressed areas. As Levitan pointed out, the bill "died a-borning" with the recovery in 1950.

A certain amount of attention was given to areas of the country with labor surpluses during the Korean conflict through the directives included in Defense Manpower Policy No. 4 of 1952. This policy was designed to give

42 Herbert Stein, statement included in the supplement to the Joint Economic Committee symposium, "Twentieth Anniversary of the Employment Act of 1946," pp. 143-152.

43 Sen. 281, 81st Congress.


45 "Placement of Procurement and Facilities in Areas of Current or Imminent Labor Surplus."
a disproportionate share of defense procurements to firms in labor surplus areas. How well it worked is uncertain because no evaluations are available. Following the period of the Korean conflict, the Eisenhower administration took a stance that we could call the "old Federalism" since it assumed that high-level growth in the overall economy would "pull up" lagging areas. The Economic Report of the President, 1955, stated that programs for local areas "should be carried out by the local citizens themselves." With this attitude from the Administration, the battle lines were drawn as Senator Paul Douglas led those who favored aiding depressed areas of the country with special Federal grants. As Douglas persuaded his fellow Senators of the efficacy of aid, the Council of Economic Advisors reversed its position. The problem then became one of adjusting the scope of the assistance. Six years of legislative juggling began; one bill died in the House Rules Committee, another was "pocket vetoed" by the President and yet another vetoed in 1960. A combination of the indefatiguable Paul Douglas and the elevation of John F. Kennedy in 1960 finally brought passage of the first major Postwar economic development legislation: The Area Redevelopment Act.

Levitan details the issues involved in the passage of the bill, noting both the practical and philosophical differences among the friends and foes. Not surprisingly, the issues were the same as those "settled" later by the

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47 During Douglas's previous campaign for the Senate, he became acutely aware of the depressed area problem as he observed the economic situation in Southern Illinois.

48 Paul H. Douglas was an economist in his own right. Indeed, he was elected President of the American Economic Association.

49 John Kennedy, while a Senator, acted as floor chairman for the Douglas bill(s) in 1956.
President's Commission on Technology and the American Economy\textsuperscript{50} and much the same as issues raised during the legislative battles which followed (and are still going on) in reference to the Humphrey-Hawkins bill. The President's task force on aid to depressed areas, headed by Douglas, made the following recommendations:

- special treatment to businesses in depressed areas through targeting of government procurement;
- measures to increase the educational level of persons in depressed areas and expansion of placement services;
- comprehensive public works program;
- tax incentives for new or expanding firms in depressed areas;
- establishment of a youth conservation corps;
- special regional programs to combat un/underemployment in certain depressed areas.\textsuperscript{51}

Only the last of the recommendations was passed into law by the Area Redevelopment Act. The remainder of the list saw legislative enactment in one form or another over the ensuing decade.\textsuperscript{52}

The report of the Douglas Task Force represents the beginning of the modern era in its use of public works construction as a countercyclical and structural employment tool. The major pieces of legislation passed which specifically address these issues are as follows:

1. The Area Redevelopment Act (1961)
2. The Accelerated Public Works Program (1962)
3. The Public Works and Economic Development Act (1965)
4. The Public Works Impact Program (1971)

\textsuperscript{50} See Technology and the American Economy, Vol. 1, Report of the Progress Feb. 1966. Rereading of this document is highly recommended for all those who are presently concerned with the employment problems of the American economy. The report was carefully and insightfully done. The series of recommendations could have been written last week, rather than a decade ago.

\textsuperscript{51} See Levitan, Federal Aid to Depressed Areas, op. cit., especially chapter 8.

\textsuperscript{52} For example, The Manpower Development and Training Act of 1962, The Accelerated Public Works Program of 1962, The Special Impact Program and others.
The program implemented under each of these acts will be discussed in turn with special reference to the costs, allocation formulae, characteristics of those employed, speed of implementation, aggregate impact, value of the output, wages paid, administrative arrangements and the level of effort. Title X of the Public Works and Economic Development Act of 1965, as amended, known as the Emergency Jobs Act is discussed in more detail in Section III of this paper. At the outset it should be mentioned that there are no detailed evaluations of any of the programs prior to Title X, except for an in-house (EDA) study done on the PWIP program. 53 Thus, specific conclusions concerning impacts and administration are often gleaned from impressionistic evaluations of the programs.

AREA REDEVELOPMENT ACT

The Area Redevelopment Act was passed with the enthusiastic endorsement of the Administration. 54 A new agency, the Area Redevelopment Administration was charged with carrying through its mandates. The funding for the ARA, however, was meager compared to the magnitude of the problems it was designed to address.

The ARA was supposed to design a program to alleviate conditions of substantial and persistent unemployment in certain economically distressed areas. Immediately two problems emerged which were to plague not only the ARA, but all subsequent programs aimed at both structural and countercyclical employment programs: the timing of grants and eligible area designation. The economic development mandate was to be implemented by encouraging new

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54 While campaigning, Senator Kennedy had, some say, won the West Virginia primary because of his firm stand and commitment to federal aid to depressed areas.
business ventures through loans or by tying public facility construction to the development of a new business. The latter issue resulted from a practical problem within the ARA. Demand for public facility construction funds were far outstripping supply. Demanding a link of the public facility with a new business was a convenient allocation tool. This led to problems as the economy was just then moving into a recession; clearly the hardest time to encourage new business ventures in any part of the country, let alone in "depressed" areas.55 Secondly, the ARA officials depended on low income and employment statistics to measure need and eligibility. These statistics simply do not allow for differentiating between cyclical and structural problems, nor between declining and depressed areas.56

Within the first two years of ARA's operation it designated over 1000 counties as eligible for assistance, nearly one-fifth of the counties in the entire country. Actual obligations from ARA totalled about $350 million -- approximately $350,000 per eligible country. Of this amount approximately $104 millions went to public facilities grants (40%) and loans.57 The percentage given in grants to the eligible areas was directly related to the unemployment rate; areas with a rate above 12 percent received five-sixths of the total in the form of a grant.58 The ARA investment per job under the


57 The remainder allocated to industrial and commercial loans, technical assistance projects, training courses and research projects.

58 Levitan, Federal Aid ..., op. cit. pp. 150-151.
public facilities grants and loan program ranged from $600 for those projects funded under $250,000 to about $7000 for those over $1 million. According to ARA documents, the average investment per job was $1800.  

The public facilities grants portion of the ARA was highly controversial, with advocates defending grants on the basis of certain communities' inability to raise any money at all, and opponents claiming that grants would "rob communities of their initiative by making them more dependent on federal aid."60 The compromise which came out of the debate allowed for as much as 100 percent grants if the projects "fulfilled a pressing need" in the depressed area.  

To accommodate this provision, the ARA covered about 86 percent of the total project costs during the first two years of operation.  

The popularity and subsequent demand for public works grants had a tremendous impact on the ARA, which had too little money and experience and had promised too much. Project selection became an ad hoc process and charges of political favoritism occurred.  

Regionally, the dispersement of funds under the ARA seemed to favor the South. During the first two years of the program, 57 percent of public

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59 Levitan mentions the high end project costs but offers no further explanation for this wide discrepancy. Also, there is no indication of the job tenure. This may have been due to several especially large capital intensive projects on the high end.

60 Levitan, Federal Aid ... op. cit., pp. 137-138.


63 Not unlike those facing the Economic Development Administration in reference to present allocations of funds under the Local Public Works Program.
facilities grants and loans went to Southern states even though only one-third of the eligible population lived in that area of the country. 64

Also, far-reaching promises of job creation and impact of ARA programs were somehow translated into "fact" by ARA publications and news releases. 65

The image of the ARA was becoming tarnished by media charges of incompetance.

Soon after ARA began, the administrators "realized" that industry was unwilling to locate where roads, sewers and water lines were not satisfactory. This realization led to the increasing emphasis placed on public and civil works construction, a grant and selection process unfamiliar to the ARA personnel. 66

It should be kept in mind that public facilities grants were not the major raison d'etre for ARA. The legislative debate centered on the simple, but severe problem of a lack of industrial jobs in rural America. To ameliorate this problem the business loan program was set up at the heart of ARA to offer low interest start-up capital to expanding firms. It was assumed that this would sufficiently lower operating costs and make the firms economically viable. The legislators also implicitly assumed that the areas had sufficient social overhead and infrastructure. 67 The legislative emphasis on loans is reflected in the actual allocations: 54 percent of total funds became

64 The reasons for this disproportionate allocation to the South are not clear although Levitan hints that Southern support in Congress for this legislation was given in anticipation of obtaining a large part of the public facilities money. Their expectations were fulfilled. See Levitan, Federal Aid ... op. cit., p. 149.

65 The problem of overstating accomplishments became more acute in reference to the APW program and is discussed in the next section of the paper.

66 As indicated earlier, public works grants had to be directly linked to a private business venture.

67 It may well have been that the financial institutions were charging a premium interest rate in the area to account for the higher risk of doing business in the region(s). Another possibility is that the track record (or lack thereof) of industrial establishments in the areas was poor, and other firms were afraid to move there.
industrial and commercial loans. The legislation, however, did anticipate
the need for training or retraining, and about eight percent of the funds went
to this end. However, the training program was later overshadowed by the

One very positive accomplishment of the ARA was the requirement which
made the formulation of an overall economic development program (OEDP) essential
for grant or loan eligibility. Even though the original documents were
rather primitive by today's standards, they did facilitate discussion among
local leaders regarding the future economic development of the area. This
provision is retained by the successor agency -- the Economic Development
Administration (EDA). The OEDPs were to provide a blueprint for development
and each project and loan request had to be appropriate to the medium and
long run plans.

As the ARA was still trying to administer the multifaceted Area Redevelopment
Act, the national economy was moving into a recession. Congress responded
by passing new legislation with an explicit purpose:

to speed up and expand public works in communities
with substantial unemployment, primarily to provide
"immediate useful" employment, but also to aid indus-
trial development and make them better places in
which to live and work.

Obviously, Congress and the President intended to combine a countercyclical
policy with an economic development strategy. The legislation is called the

68 Levitan, Too Little ..., op. cit., p. 9.

69 MDTA was run by the Department of Labor (and HEW in the early stages) and
lack of interagency cooperation became a problem.

70 Quoted in Levitan, Federal Aid ..., op. cit., p. 152.
Public Works Acceleration Act of 1962. The ARA was designated as the administering agency after the President rendered the funds to the Department of Commerce.

ACCELERATED PUBLIC WORKS PROGRAM (APW)

Although the purpose of the APW was stated as combining economic development and countercyclical job creation, the legislation did not require the formulation of an OEPD by the applying locality. This facilitated the implementation of the program, but also gave rise to the criticism that the projects did nothing for economic development goals. This criticism is a quizzical leap in logic, although it is clear that coordinated efforts for improving an area's infrastructure are likely to enhance economic development more than uncoordinated efforts.

The ARA, with the assistance of the Community Facilities Administration (CFA) and the Public Health Service (PHS) managed to distribute nearly the full $900 million authorization in less than two years. In fact, within five months of enactment the response to the program was so great that localities were urged to withhold further applications, but to attempt funding through the ARA (which still had some public facilities funds). But even this source was exhausted by June of 1963.

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71 This compares favorably with the fact that ARA took almost three years to commit just over $100 million for public facilities projects under the earlier act where an OEDP was mandatory.

72 Milkman, et. al., op. cit., p. 5.

73 It is worth noting that President Kennedy had asked for "standby" authority to feed more money into the economy as deemed necessary to fight the recession. However, conservative Congressmen called this a "political slush fund" and it was dropped from the final version of the legislation. After the great demand for the original $900 million allocations, proponents went to Congress to ask for more and were refused. The President was by this time committed to the tax cut strategy and did not push for additional allocation for the APW. See Levitan, Too Little ...., op. cit, p. 11.
The ARA acted as the coordination center for the APW projects with 14 different federal agencies using their existing networks to distribute the funds to localities. ARA functioned further as a watchdog to assure adherence to the statute in terms of allocations, approvals and progress reports on the grants. This proved to be a severe strain on the ARA staff, which was just becoming familiar with the problems and processes of the ARA program. The assignment of responsibility for administration to the ARA may well have been the straw that broke their back. They simply did not have enough time to set allocation and selection standards to satisfy both the economists and the politicians. The target areas for APW assistance remained the same as the previously determined ARA areas, in addition to area designated by the Secretary of Labor to have had substantial (read over 6 percent) unemployment during the previous 9-12 months. As the national unemployment rate averaged 6.7 percent in 1961, it was virtually an all-inclusive eligibility rule. Thus, ARA efforts to allocate funds to those areas most in need were met with opposition and "a fair share for all" became the basic watchword for fund distribution. The allocation problem once again became a political decision with supposedly analytical foundations. There can be no question that the impact of cyclical unemployment is distributed unevenly across geographic areas and socio-demographic groups.

The question of who should have been first in line for jobs under the APW remained vague. The criteria was that the "jobs (on APW projects) were to be made available to the maximum extent feasible to the unemployed within the eligible communities... There are no records of the employment

74 William Tobin, op. cit., p. 110.


76 Executive Order 11049, September 14, 1962.
status of persons hired under the APW program, thus, no conclusions on this issue can be drawn. However, there is clear evidence that the recession impacts to a greater extent on some labor force cohorts than others.\textsuperscript{77}

For example, lesser skilled workers suffer more unemployment than higher skilled workers. Although we do not have socio-demographic data on those hired for APW projects, a sample of 200 projects showed that nearly one-half of all those employed were unskilled or semi-skilled. The federal projects, done through force accounts (versus subcontract) showed the highest proportion of unskilled workers: one-half of the Department of Agriculture projects and two-thirds of the Interior Department projects employed over 80 percent unskilled and semi-skilled workers. On the other hand the construction of hospitals and administrative buildings, done primarily under subcontract showed "a preponderance of skilled workers."\textsuperscript{78} These findings become very important in designing a countercyclical program which has certain skill groups as its target workers.

The guidelines for approval of APW projects involved the alacrity with which they could be implemented (or continued), whether they met an essential public need (subsequently reducing local unemployment), whether they could be completed within a year and, if possible, accommodate the OEDP of the area. In addition, the guidelines stressed that the federal money should not replace state or local funds which would have been spent on the project with or without the APW help. The locality had to contribute at least 25 percent of the total cost. In fact, the local and "regular" federal agency contributions


to the total expenditures were approximately 51 percent. Thus, total outlays for the program were estimated to be $1,748 million. Initially the ARA estimated that the total outlays would generate 250,000 man-years of employment -- a number that was later proven to be a gross exaggeration. On-site employment on APW projects peaked in June 1964, when 45,519 individuals were estimated to have been employed. The ARA estimates of on-site employment generated were almost twice as large as those revealed by a General Accounting Office (GAO) study.

We have no numbers to indicate whether or not the APW projects "substantially reduced local unemployment." On a national level, however, the impact is easily estimated. During any given month in 1962-63, there were approximately 4 million persons unemployed. At most the APW had one in a hundred on the payroll.

The types of projects to be funded under APW were not stipulated in the enabling legislation nor in the ARA regulations. Clearly, there are differences among project types in terms of the skills needed and labor-capital ratios, as evidenced in a 1977 Rand study. For a $1 billion expenditure, they show a range of 17 to 49 thousand jobs on-site (depending on the project type) with the mean number of on-site jobs calculated to be approximately 33,000.

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79 Johannes U. Hoeber, Ibid.

80 Ibid.

81 There is no wage data available for APW employers.


The project types also vary in terms of the skills they utilize; this too can be estimated with appropriate tools.\textsuperscript{84} The distribution of project types (dollars) funded under the APW breaks down as follows:\textsuperscript{85}

1. Waste treatment, water, sewer and other public utilities 48%
2. Hospitals and other health facilities 13%
3. Street and Road construction 13%
4. Public buildings 12%
5. Wildlife and conservation 3%
6. Other 11%

The APW program analysis data seems to indicate that the mandates of speed of implementation and completion were not met by most of the projects. Within a year from the first appropriation, 3600 projects were completed or underway and by June of 1964 -- 21 months after the first appropriations -- 7,769 projects had been approved by the ARA and were either completed or in process.\textsuperscript{86} The model level of employment under these projects was approximately 30,000 per month and was reached within 7 or 8 months of funding.

The recession had its beginning in the latter part of 1960 and hit bottom near the end of 1961. The APW program was criticized because of long delays in starting the projects even after ARA approval. Over 3/4 of all projects took place in FY 65.\textsuperscript{87} Had there been an ongoing program with triggers for start up, the APW program would have peaked employment 12 to 18 months earlier, at the \textit{height} of the recession. A strong argument for a "triggered"

\textsuperscript{84} Input-Output analysis or econometric estimation are the most useful in this regard and are discussed in the final section of the paper.

\textsuperscript{85} Hoeber, op. cit.

\textsuperscript{86} Hoeber, \textit{op. cit.}, cited in William Tobin, \textit{op. cit.} p. 110.

A countercyclical program can be based on these findings.  

Before summarizing the experiences under the ARA and APW programs it is worthwhile to note a reference to the level of effort vis-a-vis the federal budget which was put into the countercyclical program. The total allocations for APW were $400 million in 1962 and $450 million in 1963; representing approximately 6 and 9 percent of the total federal deficit of those two years. If this ratio measures the relative "willingness" of Congress and the White House to go into debt to combat employment with countercyclical spending, we would presently have to spend between 4.5 and 7 billion dollars on employment-generating programs to equal the 1962-64 effort. Further we have presently almost double the number unemployed as there were in the 1962-64 period. By any measure, be it GNP, federal receipts or federal deficit, our present package of countercyclical employment programs is small. Compared to expenditures during the 1930's, the figure is even more meager.  

The ARA was functioning for almost four years and during that time its function was not only to stimulate economic development plans in nearly 1/3 of U.S. counties and to coordinate federal funding with these plans, but also to administratively implement the largest public works project since the

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88 Note that the Appalachian Regional Development Act of 1965 was an additional program that was a specialized off-shoot of the ARA. Through 1975 there has been 2.5 billion dollars appropriated with over 60 percent going to highway construction and only 5 percent to public facilities construction. I have been unable to find an evaluation of this program and it is therefore not included in the analysis.

89 Economic Report of the President, 1976, Table B-63.
1930's. Its failure and accomplishments must be viewed in the light of these intentions.

Available information makes it unwise to conclude whether or not the ARA succeeded in stimulating economic development to lagging areas of the country. Their funding was small compared to the demand for aid. Applications for public facilities grants soon assumed the central role in the ARA program selection. The command given the ARA to carry through provisions in the law relating to business loans, training and retraining, public facility construction and technical assistance proved to be too much for a newly created agency to effectively handle. Even with the heroic administrative efforts extended by some in the agency, they were unable to overcome long delays in funding (as they often had to wait for several agencies to approve the project and the creation of an OEDP). Further, there was no experience in the Department of Commerce for allocating funds, nor for impartially designating areas as targets. In their enthusiasm some of the ARA administrators overestimated what they could accomplish, especially given that the nation was moving into a recession just as they were beginning to make some headway with loan programs.

On a more positive note the ARA made great strides in getting local areas to think in terms of economic development plans. The OEDPs are still embodied by the successor agency, EDA, and are becoming more and more sophisticated. Further, the agency learned the problems inherent in differentiating among areas without a specific and defensible allocation formula. No one appeared to be happy with the amount of help given by the ARA because the politicians who supported the Act had told the folks back home to expect
substantial help. The economic development resources were simply spread too thin. Sar Levitan summarized this point very well: 90

A depressed area program can be effective only when the number of depressed areas is reduced to manageable proportions and only when areas with a potential for development at a reasonable economic cost are made eligible to participate in the program. In short, the program must recognize that some areas are more equal than others.

In effect Levitan is supporting a policy of regional economic triage. One would trust that Levitan is not advocating a policy of leaving the most depressed areas to decline even further, but is rather arguing for an overall economic situation in which only a few severely depressed regions would be in need of economic development aid.

In sum, the economic development efforts under ARA left much to be desired, but they did establish the fundamentals for the refinement of the presently operating EDA.

The efforts undertaken to implement the APW program are another story altogether. If one could point to a single cause of the downfall of the ARA it was that the President turned over to the ARA the responsibility to implement the Act. They then moved full tilt toward allocating money through a complicated and unspecified bureaucratic procedure and were forced to turn attention away from the economic development efforts in order to attempt to integrate the two programs. Surprisingly the funds were out fairly quickly and many were put to work under the program. This program was not the sole cause of recovery from the recession, but certainly contributed to the effort. Had funding been appropriated by more expedient Congress or by a previously

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90 Levitan, Federal Aid ..., op. cit., p. 253.
decided "trigger" mechanism, the jobs provided would have been more timely. The APW program proved to be very popular with the demand for funding, even with the 50 percent matching preference, far surpassing available resources. Priorities were not clear on which areas should be funded. As we shall see, this lesson has still not been learned.

By the end of 1964 the APW funding had expired and the nation was recovering from the recession. There was a consensus among both supporters and foes of the ARA that the agency and its mission should be restructured. This happened in 1965 with the passage of the Public Works and Economic Development Act and the creation of the Economic Development Administration within the U.S. Department of Commerce. The next section of the paper discusses the experience of the EDA with both economic development and counter-cyclical public works programs.

The Economic Development Administration (EDA)

As the national economy had almost completed recovered from the recession of the early 1960's, Congressional attention turned once again to economic aid for lagging areas in the country by creating the Economic Development Administration under authorization of the Public Works and Economic Development Act of 1965. The popularity of and demand for grants under the APW program was still fresh in the minds of Congress and the mandate stated in the legislation reads as follows:

(the agency's mission) is to provide grants for public works and development facilities, other financial assistance and the planning and coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.
Implicit in this mandate is a preference for the emphasis of public works projects, but the priorities are unstated and left to the discretion of the administrators. The only indication the EDA got in terms of the level of effort expected by Congress was the size of the yearly funding level. Initially Congress authorized $500 million for four years, but the level of funding varied. Total funding from 1966-75 was $2.4 billion. Spending was divided with 74 percent to public works grants and loans, 17 percent business loans, 5 percent technical assistance and 4 percent planning and research. 91

The mere existence of the EDA and its use of public works projects as an economic development tool to certain depressed areas of the country indicates cognizance on the part of the federal government that there is uneven development in the U.S., and that the normal budgetary expenditures on the public facilities construction is not equitably distributed. The total federal state and local public construction budget in 1975 was $19.5 billion, 28 percent of total construction put in place. Of this, about half is funded by the federal government either through direct construction or grants to states and localities. Even a conservative estimate shows that the normal allocations are 20 times larger than annual appropriations for EDA's economic development efforts. 92

At the outset it must be mentioned that evaluation of the impact of EDA-run economic development programs on the national economy is not a fruitful endeavor. Even with $500 million in annual appropriations it would be difficult to isolate a noticeable impact on our $1.5 trillion dollar economy. This is not to say that the impact in certain localities has not been substantial.

91 Levitan, Too Little ..., op. cit., p. 19.

92 Statistical Abstract of the United States, 1976, Table 1245.
EDA has several program tools at its disposal: business loans, technical assistance, and public facilities construction. Attention here is directed to the latter. In addition, in a following section there is a brief discussion of EDA experiences in administering the PWIP program, a countercyclical employment program initiated in 1971.

Although EDA retained the three major program tools developed by the ARA, it altered the emphasis in programs as well as the eligibility rules. Public works was given a greater role and the county unit yielded to a larger multicounty area having a "growth center" where business activity could be stimulated. Rural areas remain top priority, but the new legislation allowed for aid to depressed urban areas with a population greater than 250,000. Selection of areas still was based primarily on the employment situation although there were additional provisions for medium family income levels.

The Special Impact Program (SIP) has some characteristics in common with certain portions of the EDA programs. It was initiated under Title I of the Economic Opportunity Act (1965) to create federally subsidized projects in depressed inner city and rural areas. Some of the projects were initiated within the EDA, as well as through the FHA, OEO and the DOL. The program never had public facilities construction as either a major or minor goal and as such is not discussed in detail in this paper. However, several highlights of the program are worthy of attention and the interested reader can refer to the citations at the end of this footnote for elaboration.

The SIP's vehicle for economic development is the Community Development Corporation (CDC); as of 1976 there were 16 urban and 14 rural CDCs still operating under funding and administration of the Community Services Administration (CSA). The total level of funding is about $50 million divided 60-40% in favor of urban centers. The basic format is that the CDCs are provided equity (not loan) grants to begin businesses in the designated areas. The evaluations conducted report a mixed success rate with approximately 20 percent failures, 30 percent profitable and the remainder just at the border line. With careful coordination and sufficient resources it appears that the CDCs can succeed in establishing a profit-making enterprise within the inner city or rural depressed area. For further information see: Geoffrey Faux, CDCs: New Hope For the Inner Cities, Twentieth Century Fund, New York, 1971, and Abt Associates, Inc. An Evaluation of the Special Impact Program, Vols. I, II, III, IV, Cambridge, Mass, 1973. Also Harvey Curn, et. al., Community Development Corporations, Washington, Urban Institute, 1976.
Indian reservations received special treatment.

The Act established broad goals for EDA but did not establish priorities. EDA chose, at least in its early years, never to set agency-wide priorities, but rather to evaluate each individual project in terms of the area's needs. The need for specific policies soon became apparent and in December 1966 the Assistant Secretary announced a policy of "worst first." The return and expected benefits are, of course, fewer under this policy and the EDA administrators seemed to take this seriously until objections from the business development staff emerged. They demanded that investments at least break even. The policy changed tacitly in 1968, when the "worst" areas were still funded but with a smaller proportion of the total than in the previous two years. In 1973 President Nixon tried to eliminate EDA altogether and transfer its finds to the Community Development Revenue Sharing Program. The logic behind this transfer was that the communities knew not only what was needed, but also how to plan and carry it through - logic virtually identical to that behind the passage of CETA in the same year. Congress rejected this initiative as they felt that the redistributional aims of EDA were important and unmet by the formulae for distribution of Community Development Revenue Sharing funds. Further, there was no guarantee that localities would "target" the money as the legislation intended.


95 After the first year review it was found that 110 of 364 projects funded were ineligible. Thus specific priorities had to be established.

96 The previously cited volume on the evolution of policy within EDA gives excellent insights into the problems and processes of EDA over the years. Elections bring changes both in definitions of economic development and priorities.

97 Funding levels were, however, reduced.
The standard development approach of the EDA was to focus on facilities which directly created jobs, but in 1969 this changed to include more unconventional projects such as day-care centers, parking garages, theatres and the like.98 The shift in project emphasis reflects a change in perspective on economic development; things which made the community a better place to live and possibly attracted tourists were now acceptable.

The OEDPs remain a mainstay of EDA development efforts. The EDA, since 1965, can provide funds to local areas to hire professional planners to draw up an OEDP. In many areas and states this document is the only economic plan available. In Massachusetts, for example, the CETA staff is making attempts to combine CETA planning with the OEDP -- clearly a step in the right direction as CETA is an economic development tool.99

Given its broad, sometimes loosely-interpreted goals and its frequently changing administration, what can be said about EDA's accomplishments over the years?

After years of running ARA and EDA like a pick-up baseball game, the administrators decided to evaluate their programs. What immediately comes to mind is the problem of comparing a multi million dollar project in Oakland with a 10 foot bridge in Downhome, Alabama. This simply cannot be done and the administrators wisely chose to formulate a methodology whereby the projects could be evaluated on a case-by-case basis,100 developing certain measures that could be compared across projects. From the outset, EDA was aware that

98Milkman et. al., op. cit.,


their program were aimed at only one aspect of economic development: the improvement of the infrastructure of the area. They had long since been out of the labor training business and they had little to do with natural resources, technology or the cultural characteristics of the area. Even with the most sophisticated tools for evaluation, the real answer to whether EDA aided the development or slowed the decline of certain areas will remain obscured for a long time to come. A sewer system has a life of at least 40 years and a new hospital, city hall or industrial park endures long after yearly Congressional appropriations. Partially because of the impossibility of defining the process of economic change and partially as a response to public and Congressional demands to "prove their worth," EDA evaluations have centered on computing impact measures of the projects funded (how many jobs created for what price and so on). Very little has been done to evaluate the process of aiding depressed or declining areas to obtain the maximum in equity and/or efficiency. In order to accomplish this, a case study approach is the best method, although it is the most difficult to execute. EDA has in fact funded or directly conducted a number of case studies, but as indicated above, the outcomes are measured in terms of dollar and jobs impact, not in the context of the development itself.  

The direct impact measures of EDA public works programs has been well summarized by Levitan, and the highlights follow. He points out administrative problems which have accounted for delays in getting projects underway.


102 Levitan, Too Little ..., op. cit., especially Chapter 6.
The blame is shared by locals who have failed to get bond issues funded promptly or to obtain necessary user commitments and the very careful (and therefore slow) process of EDA approval itself. Even after approval, the data show that it takes nearly 10 months to activate the project and another 73, on the average, to complete it.

Over the decade 1966-75, EDA's projects have continued to favor the building of industrial and commercial facilities with indirect job creation being the major goal. A summary of the projects is show in the following table. 103

<table>
<thead>
<tr>
<th>Type of Project</th>
<th>Number</th>
<th>EDA Investment (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3,746</td>
<td>$1,759</td>
</tr>
<tr>
<td>General industrial/commercial development facilities</td>
<td>1,861</td>
<td>819</td>
</tr>
<tr>
<td>Industrial park, site development</td>
<td>793</td>
<td>331</td>
</tr>
<tr>
<td>Recreation and tourism</td>
<td>279</td>
<td>154</td>
</tr>
<tr>
<td>Educational facilities</td>
<td>151</td>
<td>98</td>
</tr>
<tr>
<td>Port and harbor facilities</td>
<td>106</td>
<td>122</td>
</tr>
<tr>
<td>Airport facilities</td>
<td>55</td>
<td>29</td>
</tr>
<tr>
<td>Health facilities</td>
<td>89</td>
<td>64</td>
</tr>
<tr>
<td>Other public facilities</td>
<td>412</td>
<td>142</td>
</tr>
</tbody>
</table>


One severe problem is that there is a low rate of utilization of industrial parks created under EDA programs. For non-Indian programs the utilization rate was 50 percent in 1974 and for Indian projects only 16

103 Levitan, Too Little, ... p. 106.
percent. Isolation, especially for the Indian projects, may be the determining factor, but this clearly suggests that careful medium and long run planning was not carried through. Building a useless industrial park is no worse than digging a hole and filling it later. The direct on-site jobs look impressive but the contribution to economic development is little if anything.

Levitan also makes an excellent point regarding EDA's investment in tourism projects. Not only are these projects very capital intensive, but the benefits from them usually innure to a small number of people in an area. The jobs provided in this industry are both seasonal and low paying. As such there is serious question about public funding of this type of project. The assessment of EDA's urban projects gets mixed reaction due to the enormous allocations that have been made for several of them. They are worthwhile, but they simply cannot be undertaken with the limited funding allocations of the EDA. The Indian projects represent a major investment of EDA's time and funding. The results are mixed, but a firm commitment to aid the most impoverished of minority groups continues.


105 In fact digging a hole and filling it might even be more cost effective since the entire bill would go to wages (with a little for shovels) and would have a more immediate stimulative impact on the area. Wage payments move through the economy faster than do material purchases. See Michael K. Evans, op. cit.

106 For a more detailed discussion of this issue see Bennett Harrison, The Economic Development of Massachusetts Economy. A report to the Massachusetts Senate Commerce and Labor Committee, 1974.

107 For an interesting and informative assessment of the largest EDA urban project see Jeffrey Pressman and Aaron Wildavsky, Implementation: How Great Expectations in Washington are Dashed in Oakland, Berkeley, University of California Press, 1973.
During 1966-74, the EDA paid for approximately 60 percent of total costs of public works projects, with the other 40 percent supplemented by other federal agencies and the localities. For capital investments on industrial and commercial projects the EDA's share was less than five percent. Levitan hints, and I agree, that this small proportion may not have been the determining factor in the private business making an investment but rather was simply a windfall. This issue is extremely important because the EDA funds are very limited and should be targeted to where they are more likely to "make the difference."

The indirect jobs associated with public works projects often tend to be low skill and low wage, rarely lifting people above the poverty level. Indeed, the reason for the development in the first place was often the existence of a low-wage surplus labor force. On a more positive note, data collected on a sample of projects showed that 90 percent of the jobs went to area residents. These findings are in sharp contrast to workforce characteristics of participants in PWIP which is discussed in the following section of this paper.

As assessment of the long-term benefits of EDA projects is not available. The problems of following an area and the impact of a specific project on that area over an extended period of time are formidable. However, it is worthwhile to carefully construct a longitudinal sample similar to the ongoing project at Ohio State University involving different labor force cohorts. EDA has two longitudinal evaluations underway and should be encouraged

108 With respect to state tax incentives as an economic development policy, a similar criticism is made by Bennett Harrison and Sandra Kanter, "The Political Economy of State Job Creation Business Incentives," in G. Sternlieb, editor, The Declining Northeast, Rutgers University (forthcoming).

Before summarizing the experience of the EDA's economic development efforts, the agency's experience and success in administering the Public Works Impact Program of 1971 will be discussed.

THE PUBLIC WORKS IMPACT PROGRAM

In response to the recession in the 1970-71 Congress allocated additional funds for EDA to implement a countercyclical employment program along with the "regular" economic development public works projects. The funding for the Public Works Impact Program (PWIP) was limited to more than 25 but less than 35 percent of the total appropriated for public works projects in the economic development areas. Over its life span of three fiscal years, the PWIP program had total expenditures of $129 million, the smallest appropriations of any countercyclical program in U.S. history. No matter how small the allocations, EDA had to go through with the full effort of establishing criteria for selection and approval. The experience gleaned under the APW helped a great deal, but as we shall see, EDA did not appear to have learned from the problems encountered by the ARA during the APW program period.

The PWIP program had a single objective: the creation of employment opportunities for under/unemployed residents of designated areas. The long-term development requirements which were present in the APW program were dropped, as was the "pump priming" goal of the APW and the programs of the


111 Note that the funds for PWIP were, according to an EDA official, taken out of economic development and put into countercyclical jobs. He went on to say that they still had the same amount of money to allocate to public works, but had double the administrative problems.
1930's. In addition, the EDA was to become the only federal agency involved in the administration of the program.

All of the areas eligible for EDA long-term assistance were able to apply for PWIP grants. Also able to apply were areas which were experiencing either substantial unemployment (8.5 percent), areas which had more than 50 percent of families below the OEO poverty line, areas which were experiencing substantial outmigration, and/or areas which were experiencing or were threatened with an abrupt rise in unemployment. The "substantial unemployment" criteria was the most important: over 70 percent of the projects went to areas with unemployment rates above 8.5 percent.

Like the APW, the PWIP program was targeted to areas, and was designated to employ area residents to the maximum extent possible. Further, there were no provisions in the PWIP legislation that would disqualify a project that was not an addition to the funds which would be spent in the area on public works. There was no "maintenance of effort" provision. Wages on PWIP were to be "prevailing" as in the APW projects, and projects could be done either through contract bids or force accounts.

As a response to the lack of reliable detailed information on the previous programs operated within the Department of Commerce, EDA conducted a comprehensive evaluation of the PWIP program. 113 The evaluation was in-house, using a sample of 226 projects completed during the program's first two years. Curiously, EDA made no attempt in the evaluation to assess the

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112 The easing of coordination with the OEPD was, according to Congressional testimony, done so that the projects could get into operation faster. Further, "pump priming" would have been rather bold for the Congress to list as a goal with only $50 million in appropriations for the first year. The Nixon Administration has previously vetoed a bill calling for a $2 billion program.

long-term benefits, if any, of the PWIP projects, nor to assess their net-costs, or estimates of indirect and induced employment, or income generated by program expenditures. The latter shortcomings are easy to understand as these are complicated and time consuming, but the fact that they did not access the economic development impact is somewhat ironic, given the mission of the agency.\textsuperscript{114} Nevertheless, the evaluation conducted provides previously unavailable data on countercyclical employment programs.

Once again, the time which elapsed between Congressional reaction to a cyclical downturn and the implementation of a program was too long for the program to aid employment at the depth of the recession. Further, the evaluation points out that PWIP was "proseasonal" (it) was half a year too late to counteract the short-term rise in area unemployment that peaked in January 1973."\textsuperscript{115} As in the APW program, the full impact was a bit too late. Further, the evaluation found that there were at least 6 months between application receipt and start-up of the project. This delay could be eliminated by the maintenance of a back-log of approved projects within the EDA organization.

PWIP had no maximum limit on federal share of project costs, although it had a goal of 50 percent with supplementary funding up to 100 percent. Overall, EDA paid for 70 percent of the total costs of the projects; the average total cost was $334,000 and EDA's share was $234,000.

In assessing PWIP's ability to employ residents of underemployed project areas, the EDA evaluators found a rather distressing fact -- only 22 percent

\textsuperscript{114} The net program cost calculations are also detailed and expensive, and the first attempt to do this is discussed in connection with the Title X program.

\textsuperscript{115} Ibid, p. 27.
of the jobs in sampled projects went to target workers. Further, they found that the non-Indian projects were only contributing an average of 21 percent of total costs to wages. Only 3 of the 202 non-Indian projects had wage payments exceeding 50 percent of the total costs. Further, 48 percent of the man-months of employment went to skilled workers and 42 percent to unskilled. Almost two-thirds of the skilled positions went to non-residents of the area, and on the average, non-residents were paid more than the residents. As the evaluators examined the actual program data further, they found few accomplishments in accordance with the mission of the program. Estimated man-months of employment to be generated by the projects turned out to be over 100 percent too high, while the estimates of the number of jobs turned out to be almost 100 percent too low. The discrepancy in the latter category is explained by the fact that the average duration of the job was slightly more than one man-month. Also, EDA and the project applicants estimated that 73 percent of the jobs would go to target group workers; as mentioned before the final number was 22 percent. The funding level of the program was too small to affect the unemployment rate of the areas.

Perhaps one of the most interesting findings of the PWIP evaluation was the wide discrepancy between the employees and jobs on the force accounts versus those that were contracted under bid. On the force account projects, the target group accounted for 59 percent of the employment, while only 22

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117 Ibid, p. 273
118 Note that a force account does not mean that all jobs are done with the governmental unit's labor force and employment; some of the specialized work can be subcontracted.
percent employed on the bid projects were previously underemployed. Labor intensity on force accounts was 33 percent versus 18 on bid and the cost per man-month of employment was substantially higher on bid accounts ($4559 vs. $2539). Overall force accounts were more labor intensive, more cost effective and they came closer to meeting the mandate of a countercyclical employment program. A special evaluation of PWIP Indian projects was undertaken where it was found that over 80 percent of the jobs and 90 percent of the man-months of employment went to residents of the area; two-thirds of those who received jobs were previously un/underemployed.

In sum, the PWIP program started too late, suffered delays in processing of applications and did not aid in significantly easing the employment situation in designated areas, as the projects appeared to move into the regular stream of construction activities in the area. Force accounts, however, did better in meeting the goals than did the bid contracts. The EDA evaluators made a series of excellent recommendations on future programs of this type and the extent to which these were incorporated into the Title X and the LPW program is discussed later in this paper.

In short, the framers of this legislation and the regulations for implementation did not appear to have learned from the experiences under APW. Either that, or they were purposely attempting to operate the program with the employment and materials purchases designed to benefit the "regular" construction labor force and contractors. In any countercyclical impact was gained, it was in only a few locations and was very short lived.

It should be added here that during the spring of 1971 when Congress was debating the future of EDA, they included a $2 billion dollar appropriation.

119 The series of recommendations are in Ibid, pp. 284-297.
for a countercyclical public works program, in addition to continued funding of EDA's regular program. This bill was passed and then vetoed by President Nixon. The President gave his reasons in a message to the Senate which stated that the lead time was too long and that the jobs would not go to those groups with the highest unemployment. He was absolutely right as even the much smaller PWIP appropriations which came later were too late, too small and incorrectly targeted. However, the question of project selection and enforcement of guidelines for those hired on the projects reflects administrative inadequacy rather than basic program weakness.

SUMMARY

Throughout the previous discussion comments have been made on the efficiency of the programs implemented under the ARA and EDA. There is no reason to repeat them here. However, a few more general comments seem in order.

The economic development efforts of the agencies have achieved mixed results. On a positive note, some of the special area efforts have halted or at least slowed economic decline. Thousands of jobs have been created and many still utilized facilities have been built. At a very minimum economic development plans have brought together previously unconnected interest groups within communities to discuss their goals and priorities. At a maximum, the plans will aid in furthering smooth and coordinated economic change in the future.

In recent years, the EDA has taken a more serious and concerted approach to evaluation of its projects and processes. From these evaluations have come series of constructive and critical comments about what it did and did not do. It would be unrealistic to think that each and every recommendation would be immediately implemented as policy, given that the agency has changed
leadership so often and that its mandate changed with Administrative and, sometimes, Congressional whim. For Endeavors in any area so heavily discussed and so little understood as economic development, it would be unwise to think in terms of drastic quantum leaps. But it is realistic to view activities as making incremental changes in the areas served.

Finally, the fact that long-term benefits are really the cornerstone of economic development efforts reinforces the notion that we cannot expect to see impact assessments beyond criticism. The goal of EDA is long-run results and the demands put upon the agency are short-run. The time frame for impact results is relevant for EDA's countercyclical efforts, but not for its economic development mission.

The EDA experience with countercyclical job creation is an entirely different story and must be judged with stricter criteria and in a shorter time frame. In the use of countercyclical public works projects, the long term economic development benefits are a desirable (albeit peripheral) goal. The overall assessment of the large APW program is that it appears to be, on balance, reasonable. Funding was too late to meet the needs at the depth of the recession, but it did appear to go to useful projects. The selection criteria came down, in the final analysis, to a "fair share for all". Little attention was paid to the relative needs of one area versus another. We unfortunately do not have enough information on the socio-demographic groups served under the program, and therefore cannot assess whether its impact was felt by the groups that needed it the most. We do know that the force account projects under both APW and PWIP had a more favorable labor/capital ratio than the bid contracts, and this is a valuable lesson for the future.
The results of the PWIP program were somewhat disappointing. Although small in size and not expected to have influence on the national economic situation, the program did not really reach those in need. Only about 20 percent of the persons hired were either un/underemployed prior to program hiring. Further, the allocation formulae failed to direct the limited money to the areas that, according to unemployment criteria, needed it the most.

We still lack comprehensive evaluation of the EDA efforts. The following section presents some of the highlights of the study done to determine the impacts and costs of the Title X program administered under EDA. This evaluation, done by Abt Associates, Inc., is the most comprehensive to date on any of the public works programs. However, it is not the last word, as certain issues are not addressed due to lack of time and resources. We do hope that the weaknesses in the Title X evaluation will be corrected when assessing the impact of the more recently implemented Local Public Works Program.
III. CURRENT ISSUES AND THE JOB OPPORTUNITIES PROGRAM (TITLE X)

INTRODUCTION

In mid-1973, Congressional and White House policy-makers maintained a somewhat complacent attitude toward the national economic situation. Inflation was considered the number one problem and very few could foresee the severity of the coming recession. During the 1974 the perceived full recovery from the 1970-71 recession began to falter and the unemployment rate rose dramatically. Congress was watching and in consort with the deficit-conscious White House, they managed, by the end of the year, to pass the Emergency Jobs and Unemployment Assistance Act of 1974. One section of that legislation is called the Job Opportunities Program or Title X of the Public Works and Economic Development Act of 1965 (hereafter referred to as Title X). Most of this chapter addresses the implementation and evaluation of this legislation.

Before turning to a discussion of the general findings of the Abt study, it would be appropriate to discuss the legislation with brief reference to its "sister" legislation, Title VI of CETA. In addition, a series of questions related to countercyclical employment programs in general and Title X in particular are discussed.

The Emergency Jobs and Unemployment Assistance Act of 1974 has three different provisions directed toward the amelioration of recessionary employment problems.

120 PL 93-567.

121 The information reported from the evaluation of the Title X program is based entirely on preliminary analysis and should not be cited or quoted. I would especially like to thank several persons with whom I worked on the evaluation of the program. Dr. Robert Jerrett, the project director, was both untiring and unyielding in his direction of the project. The demands he made were at least doubled by his own efforts. His assistant Jon Silberman also provided valuable aid in the final stretches and Professor Bennett Harrison, my co-consultant to Abt, was indispensible, as was our magic programmer, John Mount. As they are all both friends and colleagues, I offer them special thanks. The full report upon which my data are based will be released in June, 1977 and is yet untitled. Finally, the opinions expressed herein are mine and do not necessarily reflect those of Abt Associates or the EDA.
An extension of federally financed unemployment insurance payments is the first part. This provision allows for extension of U.I. benefits for as long as 65 weeks, to be paid for entirely out of the federal treasury. The second provision established Title VI of the Comprehensive Employment and Training Act of 1973 (CETA-VI) which allocated money to the network of prime sponsors (PS) already in place to allow them to hire unemployed persons on public payrolls. Administration of the legislation was turned over to the local PSs with the Department of Labor acting as watchdog. 

CETA-VI contained a "maintenance of effort" section which stated that the money allocated under this title to finance public service employment (PSE) positions could not be utilized to pay the wages of "regular" public employees. It was believed that would prevent the use of PSE money as a simple addition to the package of the revenue sharing money directed toward states and localities. 

According to DOL regulations, allocation of the PSE money was based primarily on area unemployment rates. The regulations also called for expenditure of 90 percent of the money on wages and the remaining 10 percent on administrative expenses.

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122 A watchdog with one tooth may be a more appropriate description in that the only sanction at DOL's disposal was to withdraw funds if they were not spent in time.

123 This provision was later "relaxed" as the dire fiscal position of some of the states and cities came to the attention of the DOL officials and Congress. In fact, in subsequent funding of Title VI this provision was officially deleted altogether.

124 This provision precluded purchase or rental of materials and equipment for PSE employees. In some instances the locality contributed the needed money and in others existing materials were used or the jobs were almost "pure service." However, the CETA regulations allowed for the transfer of money allocated under one title to another. If this were done the regulations of the Title under which the person was hired were applied. For example, if the CETA-VI money were transferred to Title I and persons hired were put into "work experience" positions, the PS could then spend 20 percent of the total for materials and equipment. Some PS's did, in fact, take this route.
The third major provision of the legislation is called the Job Opportunities Program, added to the Public Works and Economic Development Act of 1965 as Title X. The Economic Development Administration was charged with the responsibility for administration and evaluation of this effort. The expressed purpose of Title X is to:

"provide emergency financial assistance to stimulate, maintain or expand job creating activities in areas, both urban and rural, which are suffering from unusually high levels of unemployment." 

Under Title X approximately $500 million was appropriated for EDA to support projects engaged in:

such activities as rehabilitation of buildings, street paving and repairs, painting, park developments, environmental improvements and other community improvement projects.

The $500 million allocation occurred in two phases: $125 million in early 1975 and the remaining $375 million later in the year. The first round was distributed in June of 1975 and the second round in November-December 1975. The availability of this countercyclical pot of funds caused an incredible reaction from governmental units all across the country. Existing federal agencies acted either

125 Also section 301 of PL 93-567.

126 Title X of the Public Works and Economic Development Act, as Amended, Section 1001.

127 "Requirements for Title X Assistance to EDA Programs," Subpart B, 313.24, Federal Register, Vol. 40, No. 118, 25672 (June 18, 1975).
as sorting or transfer agencies for the project applications. Some agencies simply forwarded all applications submitted to the EDA, while others screened the best and sent only these. EDA eventually received over 18,000 project proposals.

Priority in the EDA selection process was given to areas of the country: (1) designated by the Secretary of Labor as having an unemployment rate over 6.5 percent for three consecutive months, and/or (2) indicated as an area of substantial unemployment for administrative purposes under CETA, or (3) which had been receiving funds under other EDA programs. As a countercyclical program the Title X funds were not intended to be distributed equally among every state or region of the country as the framers of the legislation recognized that the employment problems caused by the recession were not spread evenly. Distribution of funds among areas of the country has become one of the most controversial aspects of the Title X program (and the later authorized Local Public Works Program). It should be mentioned that there is a definite need for research into allocation formulae for public works funding that is both economically sound and politically acceptable. The present formula appears to fulfill neither of these needs.

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128. For example, Nathan Maryn indicated in a November 1975 telephone conversation that the regional offices of the EDA received over 15,000 applications, only 491 of which were sent on to Washington for possible final approval. A similar ratio applied to the Community Services Administration.


Once an area was designated as eligible for assistance, funding was to be given only to those programs or projects:

1. Which would contribute significantly to the reduction of unemployment in the eligible area;

2. Which could be initiated or strengthened promptly;

3. Which could complete a substantial portion within 12 months after such a location is made;

4. Which are not inconsistent with locally approved comprehensive plans for the jurisdiction affected, where such plans exist; and

5. Which would be approved giving first priority to programs and projects which are most labor intensive. 131

These priorities then became regulations which emphasized the area unemployment rate, labor match and labor intensity. In addition, the regulations added three non-statutory project selection factors: funds and manpower leverage, indirect benefits and cost effectiveness.

After two rounds of applications and a cumbersome selection procedure, the EDA chose approximately 2255 projects from the over 18,000 applications. The projects funded in the two rounds represented a total outlay of about $758 million with the EDA share averaging about 65 percent of the total costs. EDA, utilizing employment estimates on the applications, predicted that the total Title X efforts would employ 10,000 persons at "prevailing" wages."132

Almost two-thirds of the projects are in non-metropolitan areas.

131 Title X of the Public Works and Economic Development Act, as Amended, Section 1003.

132 "Prevailing" wages are determined under the provisions of the Davis-Bacon Act.
Title X represented a departure from previously implemented public works programs. Unlike the Accelerated Public Works Act and the Public Works Impact Program (PWIP) Title X did not exclusively fund construction projects. According to strict interpretation of the legislation, the EDA could have directed the funds solely to construction, but this was precluded by legislated restrictions on the amount of project funds which could go toward the purchase or rental of materials and equipment. At least 50 percent of the money was to go to projects that were at least 75 percent labor intensive. As it turned out, this restriction brought about EDA funding of many projects that were closer in design to the PSE programs run through CETA-VI. Congress also stipulated that the EDA give "first priority" to projects which were labor intensive. Review of the heavy construction projects funded under PWIP and APW showed that they were more of a stimulus to the building materials markets than they were to the employment situation. 133

The EDA also "learned" from the PWIP in-house evaluation that without careful controls they could not expect the project sponsors to put a high priority on hiring unemployed workers from the project's area. The evaluation revealed that only 22 percent of the jobs were filled by un/underemployed residents. 134 EDA went only half-way on this issue. They would not consider a project for funding unless the application stated that the sponsor would require the hiring of previously unemployed workers. However, no enforcement mechanism existed. 135

134 Ibid, p. 70
135 The PWIP projects had a "preference" stipulation for hiring unemployed area residents. This EDA regulation went one step further, but, the sponsors did, for the most part, adhere to their promises as the following text indicates.
Since such a large number of the Title X projects were "labor intensive", it is worthwhile to discuss the expected (actual) outcomes of the PSE programs operated by the U.S. Department of Labor's Prime Sponsors, as compared with those of Title X. The CETA-VI program will be compared with Title X throughout the report.

PUBLIC WORKS VERSUS PUBLIC SERVICE EMPLOYMENT

After World War II, public service employment programs were not utilized for countercyclical objectives until the 1970's. Most categorical programs under the Manpower Development and Training Act (MDTA) of 1962 and the Economic Opportunity Act (EOA) of 1964 addressed structural problems of the disadvantaged, with principal stress upon training and employability improvement. Then, in 1971, Congress passed the Emergency Employment Act to fund public service jobs as an antirecessionary tool. Between FY '72 and FY '74 about $2.5 billion in PEP funds were provided to program agents on the relative basis of unemployment rates and the number of unemployed. When the Comprehensive Employment and Training Act of 1973 introduced a more decentralized, decategorized approach to program funding and planning, Title II of CETA took up the public service employment initiative from PEP. The continuing rise in unemployment prompted Congress to add a new Title VI to CETA under which subsidized PSE was expanded. Both Titles II and VI allocate moneys according to formulae based upon unemployment, with Title II subject to greater restrictions. Under the two programs public service employment has reached a level of about 310,000 jobs—almost twice the level reached under PEP.

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136 Under Title X, a project is considered labor intensive if "at least 60 percent of the project funds are to be expended for direct labor costs." See "Job Opportunities Program Interim Regulations." Parts 313.8 and 313.24, Federal Register Vol. 40; No. 101. p. 22537 and No. 118, p. 25672.
In general, public works and public service employment programs have differed from one another in several important respects. Public works usually utilize a project-funding approach, under which applications to implement particular construction, rehabilitation or related projects are screened individually and funded on a competitive basis. In contrast, most public service employment funds are allocated as non-competitive entitlement grants in order to support a wide variety of jobs in qualified state or local governments. Similarly, public works programs often reach the private sector directly (particularly construction trades) via subcontract, whereas public service employment does not. Naturally, the capital needs of public works programs have tended to be greater than those for public service jobs, which have a higher proportion of funds going to wages and fringes. As a result, the cost per job tends to be higher. A further operational program distinction is that EDA's public works programs have channeled a much higher proportion of funds into non-metropolitan areas than has DOL. Related to this is the fact that DOL programs tend to target employment opportunities on the disadvantaged, while public works programs generally, do not. Finally, public works programs have many other objectives, such as the creation or improvement of a physical asset which will have long-term, possibly service producing impacts. Public service employment programs also have had service objectives, but the focus has been more upon providing temporary employment more so than has public works.

The Title X program is unique for EDA and does not fit into either of the general patterns described above. Like traditional public works programs, it is project-based, involves the private sector through subcontract. It has invested heavily in nonmetropolitan areas and has produced or improved physical assets with some long-term value. Unlike most public works programs, its principal objective is employment and, unlike any other EDA program, it has put a premium
upon funding explicitly labor-intensive projects. Moreover, it is intended to focus on the long-termed unemployed. In these respects, Title X is similar to the public service employment programs of DOL.

Thus, in one sense Title X is a hybrid countercyclical employment program, incorporating elements of a PSE type program with the administrative provisions and construction and rehabilitation goals of previous public works programs. This evaluation then offers an opportunity to solve some of the hotly-debated issues of the efficacy of PSE versus public works as a fiscal tool. Also, the efficiency of administering a program in the more centralized manner of EDA can be compared to the legislatively mandated decentralization of CETA.

What are the major questions to be answered? There are three categories of major issues surrounding a program like Title X: Administrative structure, direct benefits and indirect effects.

**ADMINISTRATIVE ISSUES OF PUBLIC WORKS**

The first and most politically volatile issue on the administrative side involves the criteria utilized in selecting the areas eligible to receive assistance under Title X and the method used to establish priority among project applications within the designated areas. This question is extremely difficult to solve on economic grounds alone. For example, is there really a need to distinguish among areas which are depressed, declining or disproportionately impacted by the recession? It is quite difficult to obtain a consensus on the definitions of these three varying area designations. Clearly, research is needed.\(^\text{137}\)

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\(^{137}\) Some areas of the country may "fit" into all three categories. Should these areas then get a "triple dip?" Also, we would want to exclude an area because it was "only" depressed and not disproportionately impacted by the recession?
Further, once an area is designated, the selection of projects within that area is problematic. On efficiency and strictly countercyclical grounds, the program should target projects (thus jobs) which employ those out of work due to the recession. On equity grounds, the target group may be quite different, for example, those who are suffering long term "structural" unemployment.

Other administrative questions center on preferences for in-house or outside evaluation, force account versus subcontracted projects, monitoring procedures, lines of decision making authority and approval of the regulations.

Unfortunately, the Abt Associates study was not designed to address these issues and they will be discussed only when the overall research could elucidate the issues or could form a strategy of evaluation.

**DIRECT BENEFITS OF PUBLIC WORKS**

The direct benefits of the Title X program are the easiest to assess. For example, the size of the program, duration of the projects and employment, cost effectiveness in reference to persons employed and their prior employment status are straightforward data collection issues. These numbers can be estimated for the national sample, and, in some instances, can be accurately specified for smaller areas. Other interesting questions are the wage rates paid, patterns of employment among different types of projects, and the socio-demographic characteristics of persons under Title X. Estimates can also be made of the program's impact on the overall employment situation in the project areas. The Abt study includes an assessment of each of these questions.

**INDIRECT BENEFITS OF PUBLIC WORKS**

The most interesting and difficult questions involve "indirect benefits" (and costs) of fiscal policies and programs. Congressional debate never centered
on these issues but rather on timing, wages, direct employment creation and the like. In addition to direct on-site positions there are a certain number of indirect jobs created in the industries which supply materials and equipment to the project as well as an induced employment impact. These are most commonly referred to as type I and II multipliers.\textsuperscript{138} There are various methods whereby evaluators can estimate both the indirect and induced impacts of a program like Title X, but precise measurement is extremely difficult.\textsuperscript{139} Abt has made a first order measurement of the indirect jobs by asking a selected number of projects to identify the industries from whom they purchased materials and equipment. This is supplemented with published information on indirect jobs created.\textsuperscript{140} There is a clear need for further research on these issues. Induced jobs, at present, can only be crudely estimated from existing econometric or input-output simulations. Further, there is a need to know if the indirect and induced effects differ by region, type of project or overall program. No government data now exist with which to study such interregional differences in program impact.

\textsuperscript{138} The secondary or multiplier impacts rise, diminish and eventually die over time. The analogy of a stone being thrown into a pond is useful. The stone creates a big splash and ripples, which fade away with time and with distance from the impact. For a discussion of the different types of multipliers see William Miernyk, \textit{Elements of Input-Output Analysis}, N.Y., Random House, 1965, especially chapter 3.

\textsuperscript{139} The basic methods are through econometric analysis, input-output analysis and base theory modeling.

\textsuperscript{140} One source used is the \textit{Factbook For Estimating Manpower Need of Federal Programs}, BLS Bulletin 1832, U.S. Department of Labor, BLS, 1975.
The second major question in this category relates to the inflationary impact of the program. From the previous work done it is quite clear that a program of the size of Title X is too small to create any significant national bottlenecks, but whether or not local supply or demand pressures are created is a more difficult question to answer. 141

The timing of expenditures is important for both economic development and countercyclical programs, although more crucial to the success of the latter, especially when considered in consort with the inflationary question. If countercyclical program expenditures reach the market when the economy has passed the recession, the chances of generating inflationary pressures are greater. Ideally, most of the expenditures should occur at the trough. The APW and PWIP programs failed to meet this objective because the legislation came too late and administrative procedures were too slow.

Another important dimension of the timing question relates to industries which benefit (especially materials suppliers or the construction industry itself). This issue also correlates with the type of projects funded under the program. These questions remain unanswered although a follow-up to the previously cited Rand study estimates the varying impacts on both different regions and types of projects. 142

A more specific series of indirect benefits (costs) relates to the programs' impact on the construction industry itself. The questions of impact on the labor

141 A Rand study concluded that a $2 billion expenditure was too small to create bottlenecks in the construction industry materials sector and, therefore, would be unlikely to have an inflationary impact. See Roger Vaughan, Public Works as a Countercyclical Device: A Review of the Issues, A Report to the EDA, Santa Monica, California, Rand Corporation, 1976.

force and capacity utilization cannot be answered with the same precision as the more macro questions of overall economic impact. Regional or local case studies may be the appropriate method to address these issues. Case studies may also be the best method to determine whether or not public works projects "interfere" with local capital markets and whether the constructed or rehabilitated edifice was really necessary or simply "nice to have."

The "real" public costs of the program is important. Clearly, the gross outlays by both the federal government and the local contributors are not representative of the real costs. If those hired are collecting some sort of transfer payments, the jobs under the program will result in at least a partial cessation of payments and, thus, a "saving" to various levels of government. Further, increased taxable income for persons employed will mean a net increase in the amount of taxes collected. A following section includes a detailed estimate of the net cost of the program, the first study of this type ever undertaken.

There are many interesting questions concerning the direct and indirect costs and benefits of a public works program. As far as valid methodology, time, and funding would allow, the Abt study specifically addresses the series of issues cited above.

Title X represented the largest single year allocation of countercyclical public works money since the Great Depression. As such, the results of the admittedly limited, but ground breaking Abt study should offer new and valuable insights into planning and implementation of future programs.

EVALUATION OF TITLE X: PRELIMINARY RESULTS:

First, an overview of funding and project types is presented. The second

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143 The funding of the local Public Works Program of 1976 is even larger, possibly as high as $6 billion.
subsection presents straightforward discussion of the personal characteristics of the participants in the Title X program, including their occupations, earnings and employment experience prior to participation. The third and fourth subsections address the aggregate employment generation and the very important issue of the net (adjusted) costs of the program respectively. All of the data presented are based on 1969 interviews of participants in 195 different projects conducted by the Abt field staff over the fall and early winter of 1976-77. The sample is representative of the universe of Title X participants and, unless otherwise specified, the conclusions reached are valid for the entire program.

Title X Funding and Project Types

Table III.1 offers an overview of the funding levels, project types and funding contributions for the entire universe of Title X projects. Several points are worthy of highlight. First, the "traditional" EDA public and civil works programs only account for about 16 percent of the funded projects, while the atypical service and training projects are 23 percent of the total. Further, the funds were distributed to more projects with smaller overall funding levels than anticipated. Almost 60 percent of the total funds went to projects costing less than $200,000; the mean project costs is about one-third of a million dollars.

Contributions to the overall funding from outside of the federal government is 15.6 percent from the states and localities and an additional 2.6 percent from private sources, mostly foundations and often in kind. Title X, through EDA, paid for approximately two-thirds of the total bill.

144 A complete discussion of the methodology is contained in the Abt report, op. cit.
Table III-1

1a Distribution of Title X Projects by Type

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Works Construction</td>
<td>192</td>
<td>8.5%</td>
</tr>
<tr>
<td>Civil Works Construction</td>
<td>170</td>
<td>7.5</td>
</tr>
<tr>
<td>Forestry, Recreation</td>
<td>637</td>
<td>28.2</td>
</tr>
<tr>
<td>Rehabilitation, Repair</td>
<td>708</td>
<td>31.4</td>
</tr>
<tr>
<td>Service</td>
<td>427</td>
<td>18.9</td>
</tr>
<tr>
<td>Training</td>
<td>86</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2255</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1b Distribution of Title X Projects by Total Approved Funds

<table>
<thead>
<tr>
<th>Total Funds (in $000's)</th>
<th>Total Number</th>
<th>Percent</th>
<th>Public Works</th>
<th>Civil Works</th>
<th>Forestry</th>
<th>Rehabilitation</th>
<th>Service</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 100</td>
<td>879</td>
<td>39.0%</td>
<td>25.0%</td>
<td>31.8%</td>
<td>44.4%</td>
<td>42.8%</td>
<td>38.9%</td>
<td>17.4%</td>
</tr>
<tr>
<td>100-200</td>
<td>470</td>
<td>20.8%</td>
<td>22.9%</td>
<td>21.8%</td>
<td>23.9%</td>
<td>19.8%</td>
<td>17.1%</td>
<td>20.5%</td>
</tr>
<tr>
<td>201-300</td>
<td>292</td>
<td>12.9%</td>
<td>15.9%</td>
<td>13.5%</td>
<td>10.7%</td>
<td>10.7%</td>
<td>11.9%</td>
<td>7.0%</td>
</tr>
<tr>
<td>301-500</td>
<td>297</td>
<td>13.2%</td>
<td>11.5%</td>
<td>13.5%</td>
<td>10.5%</td>
<td>12.6%</td>
<td>13.1%</td>
<td>36.0%</td>
</tr>
<tr>
<td>501-1000</td>
<td>196</td>
<td>8.7%</td>
<td>8.9%</td>
<td>11.2%</td>
<td>6.8%</td>
<td>6.8%</td>
<td>10.1%</td>
<td>10.5%</td>
</tr>
<tr>
<td>&gt;100</td>
<td>121</td>
<td>5.4%</td>
<td>8.9%</td>
<td>5.9%</td>
<td>5.9%</td>
<td>5.6%</td>
<td>8.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2255</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1c Approved Funding of the Job Opportunities Program

<table>
<thead>
<tr>
<th>Funding Sources</th>
<th>Funds</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title X Funds</td>
<td>$497,452,928</td>
<td>65.6</td>
</tr>
<tr>
<td>Other Federal Funds</td>
<td>123,063,911</td>
<td>16.2</td>
</tr>
<tr>
<td>State Funds</td>
<td>$2,667,182</td>
<td>6.9</td>
</tr>
<tr>
<td>Local Funds</td>
<td>$65,182,156</td>
<td>8.6</td>
</tr>
<tr>
<td>Private Funds</td>
<td>19,815,375</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total Funds</strong></td>
<td>$758,181,552</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

| Number of Projects | 2255 |
| Mean Title X Funds Per Project | $220,600 |
| Mean Total Funds Per Project   | $336,222 |
Employee Characteristics

The regulations for Title X encourage employers to give preferential consideration to hiring those who "have exhausted their unemployment benefits, are not eligible for U.I. or...have been unemployed for 15 weeks or more." This preference is not unlike CETA's; therefore, CETA employee and job data will be used as points of comparison.

The personal characteristics data show that employers under Title X made a serious effort to reach those who were most in need of help. Table III.2 shows a percentage distribution of Title X employees positioned with characteristics of the civilian and unemployed labor force.

Table III.2
Characteristics of Title X Employees

<table>
<thead>
<tr>
<th>Employee Characteristics</th>
<th>Title X Employees</th>
<th>Civilian Labor Force $^{145}$</th>
<th>Unemployed Labor Force $^{145}$</th>
<th>Unemployment Rate $^{145}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Male</td>
<td>44.2%</td>
<td>53.3%</td>
<td>44.2%</td>
<td>6.4%</td>
</tr>
<tr>
<td>White Female</td>
<td>11.3%</td>
<td>35.2%</td>
<td>36.1%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Nonwhite Male</td>
<td>31.9%</td>
<td>6.2%</td>
<td>10.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Nonwhite Female</td>
<td>12.7%</td>
<td>5.3%</td>
<td>9.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Age 16-17</td>
<td>1.1%</td>
<td>3.9%</td>
<td>10.8%</td>
<td>21.1%</td>
</tr>
<tr>
<td>18-19</td>
<td>8.0%</td>
<td>5.6%</td>
<td>12.6%</td>
<td>17.4%</td>
</tr>
<tr>
<td>20-24</td>
<td>27.4%</td>
<td>14.7%</td>
<td>22.9%</td>
<td>12.0%</td>
</tr>
<tr>
<td>25-34</td>
<td>29.3%</td>
<td>24.8%</td>
<td>22.8%</td>
<td>7.1%</td>
</tr>
<tr>
<td>35-44</td>
<td>13.9%</td>
<td>18.1%</td>
<td>11.6%</td>
<td>4.9%</td>
</tr>
<tr>
<td>45-59</td>
<td>14.5%</td>
<td>25.2%</td>
<td>14.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>60+</td>
<td>5.8%</td>
<td>7.7%</td>
<td>4.0%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

The most striking figures above show the high proportion of non-whites and young persons participating in Title X. However, females are under-represented in the total hiring, probably due to the high percentage of construction and outdoor work projects. Almost one-third of the participants were under 25 years old; an overrepresentation of that group's share of the labor force and a slight underrepresentation of their share of the unemployed. Clearly, Title X employers held to their promise to hire from these cohorts suffering the most unemployment.

The targeting to those most in need is also illustrated by examining the gross 1976 family income of the participants. Almost 30 percent estimated their family income to be under $4000 and 60 percent estimated under $6000. Although the numbers can be viewed with some skepticism because the participants reported their own family's income in $2000 categories, the program did appear to reach those most in need of income and work. This is very important because a program which is designed as a countercyclical effort and which focusses on the lower income groups fulfills both fiscal efficiency and distributional

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - 4,000</td>
<td>29.2%</td>
</tr>
<tr>
<td>4,001 - 6,000</td>
<td>30.7%</td>
</tr>
<tr>
<td>6,000 - 8,000</td>
<td>16.5%</td>
</tr>
<tr>
<td>8,001 - 10,000</td>
<td>10.7%</td>
</tr>
<tr>
<td>10,001 - 15,000</td>
<td>8.5%</td>
</tr>
<tr>
<td>15,001 - 20,000</td>
<td>2.5%</td>
</tr>
<tr>
<td>over 20,000</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Table III.3

Gross Family Income of Title X Employees, 1976

146 The very high percentage of non-whites partially reflects an overrepresentation of Indians, since reservations were a specific target of the EDA. Almost 13 percent of the total employees were Indians.
equity needs. \textsuperscript{147} The reported gross family income of participants is shown in Table III. 3 (see previous page).

Table III.4 presents socio-demographic, labor force status and duration of unemployment data for Title X participants positioned with similar information for CETA adult and PSE programs. \textsuperscript{148} \textsuperscript{149} Keep in mind that the CETA program(s) are more urban based and are aimed primarily at the more disadvantaged population, although CETA-VI, PSE is an explicitly countercyclical program authorized under the same legislation as Title X.

Several highlights must be noted. In terms of ethnic and income data Title X more resembles the makeup of the regular CETA program than the PSE. Total family income for Title X workers is lower than that for CETA PSE employees and about the same as the "disadvantaged" population of CETA adult activities. This finding was unexpected given the "loose" mandate of Title X.

The employment status information shows that 71 percent of Title X employees were "officially" looking for work, while an additional 11 percent

\textsuperscript{147} See Edward Gramlich, op. cit. Also, see Thomas A. Barocci, "The Recession is a Regressive Tax" (forthcoming).

\textsuperscript{148} CETA data presented here and elsewhere is reported in Continuous Longitudinal Manpower Survey Report No. 4, Characteristics of Enrollees who entered CETA Programs During Calendar Year 1975, (November 1976), prepared by Westat, Inc. for the Office of Policy, Evaluation and Research, Employment Training Administration, U.S. Department of Labor.

\textsuperscript{149} CETA adult activities include Employability Development, Public Service Employment and Direct Placement, but exclude specifically designated youth activities such as Youth Work Experience and Summer Youth Programs.
# TABLE III. 4

Employee Characteristics: Title X and CETA

<table>
<thead>
<tr>
<th>Employee Characteristics</th>
<th>Title X</th>
<th>CETA (adults)</th>
<th>CETA PSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>56%</td>
<td>56%</td>
<td>66%</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>44%</td>
<td>44%</td>
<td>34%</td>
</tr>
<tr>
<td>Male</td>
<td>76%</td>
<td>58%</td>
<td>68%</td>
</tr>
<tr>
<td>Female</td>
<td>24%</td>
<td>42%</td>
<td>32%</td>
</tr>
<tr>
<td>Under 18</td>
<td>1%</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>18-21</td>
<td>19%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>22-29</td>
<td>36%</td>
<td>31%</td>
<td>42%</td>
</tr>
<tr>
<td>30-44</td>
<td>24%</td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td>45-54</td>
<td>10%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>55 and over</td>
<td>10%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>$0 - 4,000</td>
<td>29%</td>
<td>34%</td>
<td>28%</td>
</tr>
<tr>
<td>4,001 - 6,000</td>
<td>31%</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>6,001 -10,000</td>
<td>27%</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>10,001 -15,000</td>
<td>8%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Over - 15,000</td>
<td>5%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Employed</td>
<td>18%</td>
<td>26%</td>
<td>30%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>71%</td>
<td>52%</td>
<td>53%</td>
</tr>
<tr>
<td>Not in Labor Force</td>
<td>11%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>Unemployed For:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 4 weeks</td>
<td>18%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>5 - 13 weeks</td>
<td>24%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>14 - 26 weeks</td>
<td>21%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>27 - 39 weeks</td>
<td>9%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>40 weeks or over</td>
<td>28%</td>
<td>13%</td>
<td>12%</td>
</tr>
</tbody>
</table>
were out of the labor force, possibly "discouraged" workers.\textsuperscript{150} Moreover, the figures on duration of unemployment show that over half of the Title X employees had been unemployed for over 15 weeks (the "preference level" cited in the Title X regulations, and offered as a cutoff point by the BLS in defining "long term" unemployment).

Comparison of Title X hires with unemployment duration information of the entire U.S. labor force, is favorable toward Title X. For example, in the entire labor force only 18 percent of the unemployed had been out of work for over 26 weeks, while the comparable percentage on Title X is 37 percent.\textsuperscript{151} Title X employers did hire a disproportionate number of persons who could be classified as "structurally" or "long term" unemployed.

The assertion that Title X served those most in need is reinforced by comparing the transfer payments received by those in Title X with the percentage of those in the general population and in CETA programs who received one or more transfers. (See Table III.5). Among the Title X workers, the average transfer recipient received 1.7 benefits; this figure was slightly higher for older and non-white participants. Employment status is a good predictor of receipt of benefits with two-thirds of the unemployed versus 45 percent of the unemployed receiving at least one benefit. In the month prior to hiring,

\textsuperscript{150} cf W. Lee Hansen, "The Cyclical Sensitivity of the Labor Supply," American Economic Review, Vol. 51, June, 1961, pp. 299-309. The "discouraged" workers hypothesis is derived from the income and substitution effects which operate on an individual's decision to enter the labor force, which is determined, in part, by the availability of work. Thus, Title X may have "drawn" some workers into the labor force.

\textsuperscript{151} BLS duration of unemployment figures are based upon continuous non-working status while actively looking for work. Title X figures are derived from two separate items, one on labor force status and the other on continuous weeks unemployed. We cannot be certain that responses on "continuous weeks unemployed" always meant "not employed and actively looking for work". Thus, in a few instances, weeks "officially unemployed" may be overstated by respondents. We do not, however, judge this possible overstatement to be frequent or to alter the duration of unemployment data on generalizations presented.
60 percent of all Title X workers received at least one benefit. This is much higher than the CETA adults and PSE participants, who received a benefit in the year prior to participation in the programs.152

Many of the differences in receipt of transfer are accountable through a separation by socio-demographic group. This issue is explained in detail in the Abt volumes. However, one outstanding fact is that over 25 percent of the Title X workers were receiving unemployment benefits while only 2 percent of the CETA PSE participants were getting U.I. This is a very small percentage for a jobs program wherein 80 percent of the participants were out of work for less than 26 weeks. The high percentage of Title X workers receiving U.I. explains most of the difference between these workers and the PSE participants in terms of benefits received.

152 Cautious interpretation is suggested as Title X employees were responding for the month prior to hire and CETA participants for the year prior.
TABLE III. 5  
Transfers Received: Title X, Adult CETA and General Population

<table>
<thead>
<tr>
<th>Transfer</th>
<th>Title X</th>
<th>CETA (Adult)</th>
<th>CETA PSE</th>
<th>General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Insurance</td>
<td>27%</td>
<td>4%</td>
<td>2%</td>
<td>7.4%</td>
</tr>
<tr>
<td>AFDC</td>
<td>7%</td>
<td>15%</td>
<td>8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>21%</td>
<td>24%</td>
<td>21%</td>
<td>7.8%</td>
</tr>
<tr>
<td>SSI</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Public Housing</td>
<td>11%</td>
<td>4%</td>
<td>4%</td>
<td>(157)</td>
</tr>
<tr>
<td>Other Public Assistance</td>
<td>13%</td>
<td>7%</td>
<td>6%</td>
<td>(157)</td>
</tr>
<tr>
<td>One or More Benefits</td>
<td>60%</td>
<td>32%</td>
<td>26%</td>
<td>(157)</td>
</tr>
<tr>
<td>No Benefits</td>
<td>40%</td>
<td>68%</td>
<td>74%</td>
<td>(157)</td>
</tr>
</tbody>
</table>

153 The CETA figures are not perfectly comparable with the Title X data, since they include all persons who received a benefit "during the year prior to entry" into CETA. The Title X data include only those who received a benefit "during the month before" Title X hire. The one exception is unemployment compensation data, which is for the thirteen weeks prior to Title X hire. Thus, CETA data include an unknown number of persons who would not be included in the Title X figures.

154 The data for the general population is taken from the Panel Study of Income Dynamics (PSID). This information is obtained from interviews with heads of households drawn from a merger of a national sample and a sample drawn from the Census' Survey of Economic Opportunity (SEO).

155 For Title X, other public assistance includes General Relief, General Assistance and Social Security. CETA data are presumed to cover the same benefits. However, "other public assistance" is not defined in the CETA evaluation reports.

156 The Unemployment Insurance figure for CETA PSE is for October-December 1975, during which quarter 2 percent of Adult CETA participants had been receiving Unemployment Insurance.

157 Data not readily available.
The observed characteristics of Title X employees lead to several conclusions. First, Title X has provided short-term employment opportunities to people, who, by any standard, are poor and long-term unemployed, many probably for structural reasons. However, the Title X constituency tends to be the "working poor", those who have been in the labor force and suffered a considerable period of unemployment. Although a higher proportion of these persons were receiving public benefits, substantial numbers of them had enough work experience to earn unemployment compensation. In addition to the 27.4 percent receiving Unemployment Insurance, another 14.1 percent had exhausted their benefits.

Second, Title X projects drew persons who were out of work for both short term cyclical reasons and for long term structural reasons. The latter finding is probably due to the EDA's insistence (mandated by the legislation) that a large proportion of the projects be at least 75 percent labor intensive. Further, service projects were also funded under Title X. These provisions alone may account for the fact that the hirees were more disadvantaged and unskilled. Contrast this with the findings reported in the previous section for the PWIP, where only 22 percent were unemployed prior to hire and very few were unskilled. Hiring of the long term unemployed can also counter the objection of the foes of countercyclical public works programs in that the likelihood of generating inflation by tightening the market for skilled workers is diminished with the employment of less skilled and more disadvantaged groups.

The findings then suggest that Title X may have provided not only a
countercyclical stimulus to the economy, but also, either directly or indirectly, has created more opportunities for the structurally unemployed. Clearly, this is a desirable and efficient "side benefit" of this program; one that has not been achieved by a countercyclical public works program since the 1930's.

The next obvious questions relate to the types of projects funded under Title X and the occupational distribution of those projects, as this is a major determining factor in the type of workers hired.

Project Types and Occupations:

One of the few important data items available for the entire 2250 Title X is the types of projects funded. There is a strong relationship between project types and occupational distribution. For purposes of simplified presentation the project types have been categorized, and the occupations collapsed into five general types. The cross tabulation is presented in Table III.6.

As is evident from the table on the following page, Title X projects were not concentrated in public and civil works, but rather in rehabilitation, forestry, recreation, and service and training. As such, the employment distribution falls into three general categories. In the public and civil works and rehabilitation categories, at least 70 percent of the occupations were related to some kind of structural work with a negligible number of employees in the other categories.

158 This was used as a stratifying element in selecting the sample of projects for the Abt study and in generalizing the net costs of the program from the sample (discussed later).

159 For a fuller description of the occupational distribution by a 2 digit code developed for 84 occupations in Title X see the Abt Volumes. It should be pointed out that 60 percent of Title X jobs fit into only 4 of 84 available EDA codes.
### TABLE III. 6
Occupational Category by Project Type

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Mgrs., Prof. and Tech.</th>
<th>Service Gov't</th>
<th>Clerical</th>
<th>Forestry</th>
<th>Construction and Laborer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Works Construction</td>
<td>8.9%</td>
<td>17.8%</td>
<td>9.6%</td>
<td>1.5%</td>
<td>62.2%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Civil Works Construction</td>
<td>1.7%</td>
<td>4.2%</td>
<td>4.2%</td>
<td>0.0%</td>
<td>89.8%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>2.2%</td>
<td>14.8%</td>
<td>4.9%</td>
<td>7.9%</td>
<td>70.2%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Forestry Recreation</td>
<td>1.4%</td>
<td>5.1%</td>
<td>3.7%</td>
<td>32.0%</td>
<td>57.7%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Service, training</td>
<td>17.1%</td>
<td>44.3%</td>
<td>17.6%</td>
<td>5.8%</td>
<td>15.2%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Other</td>
<td>6.7%</td>
<td>20.0%</td>
<td>10.7%</td>
<td>5.3%</td>
<td>57.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Total Title X</strong></td>
<td><strong>6.7%</strong></td>
<td><strong>19.9%</strong></td>
<td><strong>8.6%</strong></td>
<td><strong>13.3%</strong></td>
<td><strong>51.5%</strong></td>
<td></td>
</tr>
</tbody>
</table>

In contrast, the service and training projects had nearly 80 percent of the employees in managerial/professional and technical, service or clerical positions. A third pattern emerges for the forestry and recreation projects with the bulk of employees in forestry-related occupations and construction-related jobs.

**Weekly Hours, Earnings and Duration of Title X Employment**

As expected, the earnings and duration of employment showed considerable variance, although the hours worked per week were concentrated near 40. Over 80 percent of the employees said that they worked 40-hour weeks with only 2 percent working less than 20 hours per week and another 3 percent over 40 hours per week. Thus, in general, Title X projects provided full-time work.
Earnings varied by project type and occupation. Civil Works construction projects showed the highest average weekly earnings ($170); Service, Training and "other" project types had the lowest average—($128). Further, managers and foremen showed the highest earnings while government, service and clerical occupations showing the lowest. Construction trades workers and laborers were near the high end of the distribution. Overall, Title X workers averaged $135.57 per week, a figure well above the minimum wage, but below average hourly earnings for the economy as a whole.

Table III.7 provides the reader with an overview of the Title X weekly earnings cross-tabulated by various demographic, occupational and project type categories.

Unlike a CETA PSE program, the duration of employment on a Title X project is fixed at the high end by the total duration of the project and the skill mix needed over various project periods. The Abt study sample findings on employment showed a range of less than one week to almost 72 weeks with a mean of 35.2 weeks and a median of 36 weeks. Further Abt analysis of EDA information on completed projects produced an estimate of 19.5 weeks average duration of employment. This duration figure (19.5 weeks) contrasts sharply with the PWIP evaluation, which showed one month average duration of employment. Even on Title X construction projects the average duration was about 14 weeks. The more service-oriented projects had, on the average, a duration of almost 30 weeks.

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160 The Abt sample duration of employment figures are somewhat high because of two factors. First, the Abt survey was done in the fall of 1976, past the time when the short-term summer project employment was underway and thus it did not pick up these workers. Secondly, the workers themselves responded to questions and some who were still employed had to estimate how long the employment would last. This issue is discussed in detail in the Abt Volumes, especially chapter III.
### TABLE III. 7

Average Weekly Earnings on Title X Jobs With Project Type, Occupation, and Demographic Categories of Employees.

<table>
<thead>
<tr>
<th>Category</th>
<th>Weekly Earnings</th>
<th>Category</th>
<th>Weekly Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td><strong>Public Works</strong></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>$110.01</td>
<td><strong>Construction</strong></td>
<td>$130.57</td>
</tr>
<tr>
<td>20-24</td>
<td>129.30</td>
<td><strong>Civil Works</strong></td>
<td>170.43</td>
</tr>
<tr>
<td>25-34</td>
<td>144.57</td>
<td><strong>Construction</strong></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>146.47</td>
<td><strong>Forestry/Recreation</strong></td>
<td>133.66</td>
</tr>
<tr>
<td>45-59</td>
<td>146.17</td>
<td><strong>Rehabilitation</strong></td>
<td>162.33</td>
</tr>
<tr>
<td>60 and over</td>
<td>152.61</td>
<td><strong>Service</strong></td>
<td>124.12</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td><strong>Training</strong></td>
<td>101.10</td>
</tr>
<tr>
<td>Male</td>
<td>$147.84</td>
<td><strong>Other</strong></td>
<td>128.39</td>
</tr>
<tr>
<td>Female</td>
<td>108.53</td>
<td><strong>Manager</strong></td>
<td>$185.11</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td><strong>Professional/Technical</strong></td>
<td>130.94</td>
</tr>
<tr>
<td>White</td>
<td>$141.81</td>
<td><strong>Supervisor/Foreman</strong></td>
<td>177.74</td>
</tr>
<tr>
<td>Total Nonwhite</td>
<td>128.34</td>
<td><strong>Construction Trades</strong></td>
<td>153.90</td>
</tr>
<tr>
<td>Black</td>
<td>113.65</td>
<td><strong>Construction Laborer</strong></td>
<td>128.53</td>
</tr>
<tr>
<td>Am. Indian</td>
<td>153.35</td>
<td><strong>Other Laborer</strong></td>
<td>152.29</td>
</tr>
<tr>
<td>Other</td>
<td>150.55</td>
<td><strong>Operative/Technician</strong></td>
<td>128.98</td>
</tr>
<tr>
<td><strong>Prior Employment Status</strong></td>
<td></td>
<td><strong>Forestry</strong></td>
<td>142.35</td>
</tr>
<tr>
<td>Employed Full-time</td>
<td>$183.98</td>
<td><strong>Government/Social Service</strong></td>
<td>112.76</td>
</tr>
<tr>
<td>Employed Part-time</td>
<td>132.75</td>
<td><strong>Service</strong></td>
<td>104.91</td>
</tr>
<tr>
<td>Unemployed</td>
<td>132.53</td>
<td><strong>Clerical</strong></td>
<td>116.57</td>
</tr>
</tbody>
</table>

Average Weekly Earnings for All Participants = $135.57
Gross earning figures from the Title X sample reflect the occupation and duration of employment. Preliminary figures show the highest gross earnings for those in managerial positions (over $8,000) with a low for those in construction laborer positions—about $4,000 over their project tenure.

Thus, the Title X projects employed persons for a reasonably long time in stable full-time jobs at an earnings rate at least above minimum standards. Again, these positive results of the program likely are reflective of the insistence on labor intensive projects no longer than 12 months.

An important question which immediately follows the above analysis is related to how the jobs provided in Title X compare with the employees' previous jobs in terms of wages and job quality. A common criticism of countercyclical programs and CETA in particular is that the positions offered are at best only minimumly related to the person's prior employment and at worst are "make work" type positions which waste skills.

In order to address the above question, the Abt interview form requested information on prior and usual jobs of the participants, as well as an individual assessment of the quality of the Title X job as compared to previous positions. Table III. 8 provides a summary of the employees' subjective impression of the skills required, type of work and job quality of Title X jobs compared to their prior and usual jobs.

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161 Chapter VI of the Abt study discusses this issue in detail. "Usual" job and "prior" job were differentiated on the question, in order to determine if the prior job was simply a temporary interim position, taken during the recessionary period. Often the two categories had the same responses.
Table III.8

Comparison of Title X Jobs with Usual and Prior Jobs in Terms of Skills, Type of Work and Quality

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Prior (percent)</th>
<th>Usual (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identical</td>
<td>8.1%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Similar or Related</td>
<td>35.8%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Dissimilar, Unrelated</td>
<td>56.1%</td>
<td>48.8%</td>
</tr>
<tr>
<td><strong>Skills Required</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater on Title X</td>
<td>38.3%</td>
<td>31.8%</td>
</tr>
<tr>
<td>About the same</td>
<td>38.7%</td>
<td>41.5%</td>
</tr>
<tr>
<td>Lesser on Title X</td>
<td>23.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td><strong>Job Quality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title X Job is Better</td>
<td>61.6%</td>
<td>52.6%</td>
</tr>
<tr>
<td>Jobs About the Same</td>
<td>28.6%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Title X Jobs is Worse</td>
<td>9.9%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Table III.9 shows the changes in weekly earnings of Title X job holders compared with their usual jobs differentiated by age, sex and race groupings.
Table III. 9

Average Weekly Earnings of Employees on Title X Jobs Compared to "Usual" Job by Age, Race, and Sex.

<table>
<thead>
<tr>
<th>Category</th>
<th>Usual Job</th>
<th>Title X Job</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>$ 98.32</td>
<td>$110.01</td>
<td>+11.69</td>
</tr>
<tr>
<td>20-24</td>
<td>122.26</td>
<td>129.30</td>
<td>+ 7.04</td>
</tr>
<tr>
<td>35.34</td>
<td>153.20</td>
<td>144.57</td>
<td>- 8.63</td>
</tr>
<tr>
<td>35.44</td>
<td>162.69</td>
<td>146.47</td>
<td>-16.22</td>
</tr>
<tr>
<td>45.59</td>
<td>164.23</td>
<td>146.17</td>
<td>-18.06</td>
</tr>
<tr>
<td>60 and over</td>
<td>120.98</td>
<td>152.61</td>
<td>+31.63</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>$155.17</td>
<td>$147.84</td>
<td>-$7.31</td>
</tr>
<tr>
<td>Female</td>
<td>96.97</td>
<td>108.53</td>
<td>+11.56</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>$154.59</td>
<td>$141.81</td>
<td>-$12.78</td>
</tr>
<tr>
<td>Total Nonwhite</td>
<td>123.50</td>
<td>128.34</td>
<td>+ 4.84</td>
</tr>
<tr>
<td>Black</td>
<td>119.00</td>
<td>113.65</td>
<td>- 5.35</td>
</tr>
<tr>
<td>Am. Indian</td>
<td>126.64</td>
<td>153.35</td>
<td>+ 26.71</td>
</tr>
<tr>
<td>Other</td>
<td>146.73</td>
<td>150.55</td>
<td>+ 13.82</td>
</tr>
<tr>
<td>All Employees</td>
<td>$141.50</td>
<td>$135.60</td>
<td>-$ 5.90</td>
</tr>
</tbody>
</table>

Whether one's point of reference is prior jobs or usual work, Title X jobs are roughly comparable. Hourly wages, hours worked per week and average weekly earnings from Title X jobs are roughly the same as those from either prior or usual jobs. What is perhaps more important for policymakers is that more people have experienced an increase rather than a decrease in weekly earnings. Moreover, most of the earnings improvements have accrued to

162The same comparisons with prior jobs are presented in the Abt volumes.
those demographic groups that generally earn less in the U.S. labor market. Youthful and older workers, women and minorities have experienced the principal increases in weekly earnings and hourly wages under Title X. Even though they still earn less under Title X than other groups, Title X has obviously had a short-term redistributive effect of some consequence.

Generally speaking, between 32 and 45 percent of employees have had Title X jobs similar to their prior jobs. Between 38 and 49 percent have had jobs similar to their usual work. A quick start-up, countercyclical jobs program which achieves this degree of occupational continuity may, in fact, have provided jobs which utilize or build upon the skills of employees. A majority of the employees felt that their Title X job was of a better overall quality than their prior and/or usual work. Only about 11 percent felt that the Title X jobs were of a lower quality. The most positive ratings came from the female, minority, young and old segments of the sample.

The findings here are again positive in that the jobs received high ratings from employees, and were comparable to the prior or usual positions they held. The obvious next step would be to interview the same persons after termination to examine post-program labor market experience. However, due to the timing of the study, lack of funds for a longitudinal followup and the lack of information prevented a full-blown examination of this issue. The Abt study did include a special portion which assessed the longer term impact of these projects. There were visitations to 52 selected sites. Included was a search of records to try and ascertain the employment status of termination workers. In addition, about 10 percent of the regular sample survey included
employees terminated prior to interview. From these two sources an admittedly limited, but enlightening discussion emerges.

The reader should keep in mind that the following is based on the experiences of a small subsample and is not generally applicable to the entire Title X population.

Approximately 40 percent of the terminees found employment shortly after leaving the Title X job with the proportion increasing to 60 percent after \(4\frac{1}{2}\) months. Since only about 20 percent of the participants were employed prior to entrance, this suggests a positive impact of Title X in smoothing out labor market experience. There was, however, an improvement in the overall economic situation and surely this accounts for some of the improvements in the employment status of the terminees. The earnings in positions after Title X were, on the average, almost 13 percent higher than the Title X earnings with 60 percent of the terminees earnings more after the program than during. Following from this, over one-half felt that the skills required on the subsequent jobs were greater. Only about 11 percent considered the skills needed on subsequent jobs to be less than those utilized on Title X. This implies a marginal, albeit positive, impact of Title X on the career paths of many of the terminees.

Of those who found jobs after Title X, about 25 percent remained employed by the Title X employer and over half moved to private sector unsubsidized positions. Very few (4 percent) of the employed were hired to another subsidized position.

In the absence of a comprehensive survey, the small sample findings are at least suggestive that Title X had positive influence on the continuity of employment, if not on the career paths of the individuals involved.
AGGREGATE EMPLOYMENT IMPACT OF TITLE X

Although the majority of the Title X projects are not finished, data from the completed projects allows for estimation of the total direct employment impact of the 2255 projects. EDA supplied Abt with information on the estimated and actual employment generated for 543 completed projects. 163

Without exception the applications overestimated the number of persons-months of employment they would generate, although this varied widely by project type. Table III. 10 summarizes the preliminary findings.

As shown in the table on the next page, the public works construction projects provided only 40 percent of the estimated employment with civil works, forestry, and recreation, rehabilitation and "other" ranging from 60 to 87 percent of their estimated months. Overall the projects provided about 73 percent of the employment they estimated that they would. If this can be applied to the entire universe of Title X projects we can expect to find (.74 x 854,525) the program generating about 631,000 person-months of direct on-site employment over its life span. As pointed out earlier the total EDA and contributing

163 Each sponsor must submit final payroll forms to the EDA. This information combined with the estimated person-months of employment submitted with the application allows for the derivation of the information presented.
Estimated and Actual Person-months of Employment by Project Type
(based on 543 completed projects)

<table>
<thead>
<tr>
<th>Project Types</th>
<th>No. of Projects in EDA Universe</th>
<th>Estimated Person-months of Employment</th>
<th>Estimated Person-months in EDA Completed Sample</th>
<th>Actual Person-months in EDA Completed Sample</th>
<th>Ratio: Actual Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public Works Construction</td>
<td>192</td>
<td>82,777</td>
<td>13,948</td>
<td>5,648</td>
<td>.40</td>
</tr>
<tr>
<td>2. Civil Works Construction</td>
<td>170</td>
<td>46,965</td>
<td>4,958</td>
<td>2,966</td>
<td>.60</td>
</tr>
<tr>
<td>3. Forestry-Recreation</td>
<td>637</td>
<td>151,950</td>
<td>41,069</td>
<td>32,187</td>
<td>.78</td>
</tr>
<tr>
<td>4. Rehabilitation</td>
<td>708</td>
<td>244,642</td>
<td>19,341</td>
<td>16,861</td>
<td>.87</td>
</tr>
<tr>
<td>5. Service</td>
<td>427</td>
<td>237,772</td>
<td>12,820</td>
<td>9,254</td>
<td>.72</td>
</tr>
<tr>
<td>6. Training</td>
<td>86</td>
<td>78,449</td>
<td>(*)</td>
<td>(*)</td>
<td>(*)</td>
</tr>
<tr>
<td>7. Other</td>
<td>35</td>
<td>11,979</td>
<td>2,677</td>
<td>2,108</td>
<td>.79</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,255</strong></td>
<td><strong>854,524</strong></td>
<td><strong>94,813</strong></td>
<td><strong>69,024</strong></td>
<td><strong>.74</strong></td>
</tr>
</tbody>
</table>

**"Training" combined with "Service" for this table.

financing was about $758,000,000. Thus we can derive a figure of approximately $1200 per person-month of employment including labor and materials expenses. If we include only labor expenses in this calculation we find that it costs about $825 per person-month of employment. Labor costs represented about 69 percent of total costs.

As can be seen in Table III.11, on the following page, Title X performance measures up quite well when compared with earlier countercyclical jost programs administered by the Department of Commerce and the Department of Labor's PSE program. Admittedly, the numbers provided are often estimates but care has been taken to make the figure as accurate as possible.

The next section details the net cost calculations for the Title X program.
<table>
<thead>
<tr>
<th>Title X (1976)</th>
<th>CETA-VI PSE (FY76)</th>
<th>PWIP (1971)</th>
<th>APW (1962)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. a. Appropriations (Fed)</strong></td>
<td>$500 million (EDA)</td>
<td>$1624 million</td>
<td>$92 million</td>
</tr>
<tr>
<td></td>
<td>$120 million (other Fed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. State Local, and Private contributions</strong></td>
<td>$138 million</td>
<td>N.A.</td>
<td>42 million</td>
</tr>
<tr>
<td><strong>c. Total funding</strong></td>
<td>$758 million</td>
<td>N.A.</td>
<td>134 million</td>
</tr>
<tr>
<td><strong>2. a. Type of work (by percent of employment)</strong></td>
<td>Public &amp; Civil Works 13%</td>
<td>Public Service</td>
<td>Almost all Construction</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry &amp; Rec.</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other 31%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. # of projects</strong></td>
<td>2255</td>
<td>N.A.</td>
<td>203</td>
</tr>
<tr>
<td><strong>3. Labor/Capital</strong></td>
<td>≈69%</td>
<td>≈90%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>4. Target Groups</strong></td>
<td>Unemployed</td>
<td>Unemployed</td>
<td>Un/Under-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>employed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. % hired from unemployed</strong></td>
<td>71%</td>
<td>82%</td>
<td>29%*</td>
</tr>
<tr>
<td><strong>6. % semi or low skill workers</strong></td>
<td>N.A.</td>
<td>N.A.</td>
<td>≈52%</td>
</tr>
<tr>
<td><strong>7. Person-months of employment</strong></td>
<td>≈631,000</td>
<td>372,000</td>
<td>≈39,000</td>
</tr>
<tr>
<td></td>
<td>(1st enroll-ments FY76)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8. Cost/person month</strong></td>
<td>≈$1200 with materials</td>
<td>≈$7800/yr</td>
<td>$3421</td>
</tr>
<tr>
<td></td>
<td>≈$825 with only Labor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9. Administering Agency</strong></td>
<td>EDA</td>
<td>U.S. Dept. of Labor's Prime Sponsors</td>
<td>EDA</td>
</tr>
<tr>
<td><strong>10. % Force Account</strong></td>
<td>N.A.</td>
<td>≈100%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>11. Average duration of Jobs</strong></td>
<td>4.5 - 8 months**</td>
<td>N.A.</td>
<td>≈1 month</td>
</tr>
</tbody>
</table>

* Underemployed included
ADJUSTED COST OF THE TITLE X PROGRAM

The gross outlays for an employment program like Title X do not give an accurate picture of the program's costs. Both labor and non-labor expenditures will result in increases in personal and corporate taxes, and some transfer payments will be "saved". Persons hired will pay higher taxes and possibly spend more on items subject to sales and excise taxes. Moreover, changes in earnings often make a person ineligible to receive transfer payments. Firms from whom materials and equipment are rented or purchased will show an increase in earnings and, therefore, an increase in various taxes paid. The adjusted costs of a program can be used as a measure of efficiency, especially for comparative purposes.

Estimation of net program costs is not an altogether new idea. Simulations have been created for policy purposes. The CBO study was based on simplifying assumptions, utilizing aggregate data in order to obtain rough estimates of the costs of a variety of countercyclical programs. In the CBO study, the category most similar to Title X is "accelerated public works". Using a $1 billion expenditure, the CBO study estimated that the net costs for the initial impact ranged from 79 to 92 percent of gross costs, and after 12 months it dropped to between 51 and 54 percent. The simulations account for the direct and indirect savings and returns as well as the induced impacts of the program (e.g. Type I and Type II multipliers). The figures (after 12 months) show that for every $1 billion in expenditures various governmental units would have received a "net return" of between $460 and $490 million. This study generated much discussion about the and efficacy efficiency of various countercyclical programs. The Abt Associates

164 Congressional Budget Office, Temporary Measures to Stimulate Employment, op. cit.

study provided the first opportunity to develop a precise methodology for deter-
mination of the net costs of the Title X program, and the first to apply that
method to utilizing data obtained in the 1969 participant interviews.\textsuperscript{166}

The Abt study calculates the net costs for both labor and non-labor ex-
penditures of the program. However, only the results of the calculations for the
labor portion of Title X are briefly reported in this section.\textsuperscript{167}

The procedures used in the calculations of returns and net cost are
summarized in the following two expressions:

\begin{align*}
1. \quad & \text{Unadjusted} \quad \frac{\text{Gross}}{\text{Program Costs}} = \frac{\text{Title X Costs}}{- \text{Expenditures}} \\
& \text{Returns} \quad \text{Returns} \\
& \quad \text{From} \quad \text{From A} \\
& \quad \text{Tax} \quad \text{Reduction} \\
& \quad \text{Revenues} \quad \text{In Transfer} \\
& \quad \text{Adjusted} \quad \text{For} \\
& \quad \text{Net Program Costs} \quad \text{Estimated Earnings in the} \\
& \quad \text{Gross} \quad \text{Absence of Title X} \\
& \quad \text{Expenditures} \quad \text{Reduction in Transfer Payments} \\
& \quad \text{Adjusted for the Estimated} + \text{Returns From} \\
& \quad \text{Weeks of Employment in the Abs-} \quad \text{Nonlabor} \\
& \quad \text{ence of Title X} \quad \text{Expenditures} \\
& \quad \text{Adjusted} \quad \text{For} \\
& \quad \text{For Estimated} \quad \text{Returns From} \\
& \quad \text{Weeks of Employment} \quad \text{Nonlabor} \\
& \quad \text{in the Absence of Title X} \quad \text{Expenditures} \\
\end{align*}

\textsuperscript{166} Indeed, the Abt study was designed with the main purpose being calculations
of the net costs of the program.

\textsuperscript{167} A complete discussion of the net cost methodology and results is contained
in the Abt Volumes, especially chapter 4 and appendices B and C.

*Note that the returns from non-labor expenditures are not discussed in
this paper.
The variables in the calculations fall into three categories:

1. Information obtained from 1969 Title X employees through personal interviews (weekly earnings, expected weeks of employment, transfers received, etc.)

2. Information published or derived from published tables and merged with the individual data set (effective income tax, sales tax, excise tax, FICA, gross expenditures, etc.)

3. "Unobserved" variables, e.g. the estimated number of weeks that enrollee i would have been employed in the absence of the program.

The "observed variables", data sets 1 and 2 above, are simply verified and injected into the calculations. The "unobserved" variable, which is crucial to the estimation procedure as it is the most difficult and controversial of the calculation inputs. This variable is important because it "discounts" the gross calculations of tax and transfer returns from Title X labor expenditures. It controls for the possibility that a Title X employee would have worked in the absence of Title X, thereby reducing the tax and transfer savings attributable to the program. There are two possible extremes: that Title X creates no additional employment or that all employment experience in Title X is additional. The truth, of course, lies somewhere in between these extremes.

The ideal solution of this "unobserved variable" problem would have been to draw a control group of non-Title X participants at each project site, matched to our sample by age, race, sex, labor market experience, etc. and then to compare their experiences with participants during the Title X

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168 Full discussion of the sources and utilization is contained in the Abt study, especially appendices A and C.

169 N.B. no additional employment would mean that everyone would have worked for the same amount of time over the program period and all additional employment means that none of the participants would have found any work without the program, over the same period.
project period. Budget constraints upon the initial design of the evaluation did not permit construction of a control group. Thus, it was necessary to find another method of estimating the expected weeks of employment that each enrollee would have experienced in the absence of Title X.

However, a careful examination of the appropriate literature on expected duration of unemployment and employment, stocks and flows in the labor market, longitudinal cohort analysis and previous evaluations of

170 If Joe Smit, is employed on a Title X project as a carpenter, while other local men similar to Joe's background and personal characteristics are unemployed (part or all of the time of Title X), then we would be able to calculate the additional weeks of employment that are attributable to Title X.

171 Development of a control group and the subsequent follow-up necessary is the single most expensive program evaluation design.


174 See, for example, Carol Jusenius and Richard Shortlidge, Dual Careers: A Longitudinal Study of Labor Market Experience of Women, Manpower Research Monograph No. 21, Vol. 3, U.S. Department of Labor, 1975, or any of a variety of monographs put out under the auspices of Herbert Parnes et. al., Ohio State University, Center for Human Resource Research, Columbus, Ohio.
public works and public service employment programs, showed that the "raw materials" for this estimation had already been assembled by the Urban Institute's Inflation and Unemployment Project directed by Charles Holt. With the enthusiastic support and advice of Drs. Holt, Ralph Smith, and Jean Vanski, we proceeded to adapt the work done under the auspices of the Urban Institute to formulate a "statistical control group", divided into 16 demographic groups and updated.

The methodology and results are complicated and space precludes a full discussion. With our updated adaptation of the Smith et. al. methods and the merging of observed variables, we were able to compute net cost figures for labor expenditures and then "inflate" the calculations to the universe of Title X participants. The following Table (III. 12) shows the taxes paid and transfers saved as a result of the program. The first column shows the calculations without utilizing the "discount" factor and the second shows the results adjusted with the "discount" factor. For our entire sample, the average weeks worked on Title X is 35. From our "statistical control" we found that, on average, the participants would have worked about 10.5 weeks. Thus, overall, the net addition to the working time attributable to Title X is about 25 weeks.


177 A discussion of the non-labor expenditures and induced impact is discussed in the Abt volumes.
Combining the figures shown in Table III. 12 with the previously cited labor costs totaling $521 million dollars we can arrive at a net cost figure for the labor portion of the program. The unadjusted "returns" show a total of $155 million or approximately 30 percent, while the adjusted figures show a total return of $123 million or about 24 percent of total outlays for labor expenses.

As illustrated by the Table, our "discount" factor has a substantial influence on the return calculations and is a much more valid estimate of the total program labor costs. 178

178 The Only transfer payment which rises when "adjusted" is, of course, the unemployment insurance component.
Table III. 12

Taxes Paid and Transfers Saved for Title X Participants, Unadjusted and Adjusted*
(Total Title X Labor Costs = $521,267)

<table>
<thead>
<tr>
<th>Transfer Description</th>
<th>Unadjusted ($000's)</th>
<th>Adjusted* ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Transfers &quot;saved&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Federal - AFDC</td>
<td>3161</td>
<td>2644</td>
</tr>
<tr>
<td>2. State - AFDC</td>
<td>854</td>
<td>508</td>
</tr>
<tr>
<td>3. State - General Relief</td>
<td>6643</td>
<td>5636</td>
</tr>
<tr>
<td>4. Federal - State U.I.</td>
<td>15057</td>
<td>19354</td>
</tr>
<tr>
<td>5. Federal and State</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Security</td>
<td>1109</td>
<td>982</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>6807</td>
<td>5207</td>
</tr>
<tr>
<td>Public Housing</td>
<td>414</td>
<td>313</td>
</tr>
<tr>
<td>S.S.I.</td>
<td>394</td>
<td>305</td>
</tr>
<tr>
<td>Medicaid</td>
<td>5387</td>
<td>3821</td>
</tr>
<tr>
<td>Total Transfers</td>
<td>39826</td>
<td>38770</td>
</tr>
</tbody>
</table>

II. Additional Taxes Paid

<table>
<thead>
<tr>
<th>Tax Type</th>
<th>Unadjusted ($000's)</th>
<th>Adjusted* ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Federal Income</td>
<td>29728</td>
<td>21937</td>
</tr>
<tr>
<td>2. State Income</td>
<td>5551</td>
<td>4471</td>
</tr>
<tr>
<td>3. State &amp; Federal Sales &amp; Excise</td>
<td>19279</td>
<td>13465</td>
</tr>
<tr>
<td>4. FICA Employer &amp; Employee</td>
<td>49564</td>
<td>35640</td>
</tr>
<tr>
<td>5. U.I. Payments - State &amp; Federal</td>
<td>11536</td>
<td>8414</td>
</tr>
<tr>
<td>Total</td>
<td>$115,660</td>
<td>$83,927</td>
</tr>
</tbody>
</table>

Total Taxes and Transfers "Saved" = $155,486 $122,697

* Using discount factor

** Totals may not be exact due to rounding
For the Title X program, each dollar of public money expended for labor costs showed a return of approximately 24 cents. It is difficult to put this number into comparative context because no other program has been evaluated in this manner, as far as the author can determine. The simulations done on this issue are not comparable because they also include estimates of indirect and induced income and employment returns and "savings." If these latter portions were included in the Title X calculations, the return would certainly be higher -- thus a "cheaper" program in terms of net costs.

As a point of reference the same methodology could easily be applied to the CETA-VI program and comparisons could then be made.179

The value of the output under the Title X projects has not been mentioned. There is simply no way that this can be assessed with the information collected in the Abt study.

TITLE X SUMMARY:180

It is fair to characterize the Title X program as one which offered employment to those who really needed it and at the same time produced visible and, hopefully, needed output. The wages paid and duration of employment show that the program did not pay excessively, and that it provided many with medium duration jobs of reasonably high quality. Compared with its predecessor public works programs, it stands up well on all counts. Point by point comparison is not possible due to data limitations from previous

179 This CETA-VI research would require little in the way of original data collection as the Prime Sponsors under CETA are likely to have the needed information on file.

180 The information presented on the results of the Title X evaluation only scratch the surface of the many interesting findings of the Abt study and the interested reader is urged to consult the final report.
programs, but it is reasonable to state that none of the more modern countercyclical public works programs can compare in terms of impact on the unemployed per dollar expended. Moreover, comparison with the employees on CETA-VI is also favorable and the question of favoring one over the other may well turn on one's estimation of the output value of a strictly service oriented-program (PSE) versus a project-oriented public works program. Current procedures under CETA-VI allow for the project approach and we may well find that the impact and accomplishments are much the same as Title X. On the other hand, the most recent public works program, LPW, once again puts EDA emphasis on the construction sector with little attention given to the labor intensiveness of the funded projects. We cannot expect to see the LPW program showing employment and cost results similar to those of Title X, but rather more like the APW and PWIP programs.

The major lesson learned from the Title X program concerns the fact that when the regulations and guidelines explicitly state project and target employee preferences, the EDA and the cooperating federal, state and local units of government are able to adhere to those priorities to an extent that had been hoped for by only the most optimistic.

The final section enumerates a series of lessons learned during the historical use of public works as a countercyclical and economic development tool. Moreover, a series of suggestions and recommendations for the future use and evaluation of this type of program is offered.
Almost five decades have passed since the U.S. plunged into the Great Depression. The belief that market mechanisms will equitably and efficiently allocate our human and natural resources is held only by a few academic and Wall Street scribblers. Full utilization of our labor force has occurred only sporadically over this period and has always been connected with a war effort. In response to the problem, various levels of government legislated programs which first and foremost guaranteed every citizen the right to income support of one sort or another. For those who are deemed members of the "regular" labor force and are idled temporarily because of recessionary problems, unemployment insurance is provided -- a transfer program of incredible magnitude from which no directly useful product emerges. For those who are unable to work due to health, family responsibilities or institutional barriers to their employment, other transfers are provided in cash or in kind -- welfare payments. From these comes no useful product, either.

Only occasionally, over the five decades have we identified projects, financed by the federal, state and local governments, which would offer employment to those who wanted to work while they waited for the market to provide them with regular employment. Even less frequently have we taken the position of targeting money for infrastructure enhancement to areas of the country deemed lagging or depressed. Sometimes we have combined the two strategies. Indisputable evidence on the program performance in both equity and efficiency terms is lacking, while opinions are abundant.

ECONOMIC DEVELOPMENT EFFORTS

The special efforts of the federal government to provide aid to lagging areas, first through the ARA and then through the EDA, were aptly described by Levitan as "too little but not too late." It is virtually impossible to quantitatively assess the impact of the ARA and EDA programs, as they are by definition designed to have a longer term impact on the chosen areas. One would be hard-pressed to defend a position against the services and dollars offered by the EDA, as the areas served are clearly better off -- how much better off remains unknown. One would be equally hard-pressed to argue for the continuation of aid to certain areas in the same manner as we have done in the past. There are several major reasons against this argument, the majority of which were discussed in Section II of this paper. However, several points are worth repeating here.

First, we have yet to carefully document the causes of economic depression and identify the most effective points of intervention. Indeed, some have even proposed a form of development triage where those areas which are the worst off will simply be left to fend for themselves, as the limited funding of EDA is already spread too thin. Although this is practical and possibly very efficient from a cost-benefit point of view, this position is indefensible. Instead, we must take a positive approach to ameliorate conditions in the areas of the country which share the least in our abundance. Equal hardship may exist in a town in West Virginia and a slum in Boston. We cannot allow aid to be based simply on visibility or on the power of political representatives. We must find out the causes of depression and assess the amount and type of intervention needed to give life to some of those still citizens in Michael Harrington's "Other America".
The first step in this process is to determine what constitutes a lagging area. As they stand, the allocation and eligibility formulae please neither the economists or the politicians. The economists should be satisfied first, as few compromises as possible. Surely, this process will document the fact that the resources of EDA are totally and completely inadequate in dealing with the enormous problems of uneven development. This must be stated loudly and clearly to Congress and the White House.

Secondly, consolidation of the federal economic development efforts is essential. There are now a variety of programs coming from Labor, HUD, Commerce, HEW, Interior and so on. All have one basic purpose although the target constituencies and areas of the country differ. Instead of competing for segmented Congressional favor, effort should be put into dovetailing present programs as much as possible with future plans of totally coordinated economic development. EDA already has a start in this process due to their wise insistence on Overall Economic Development Plans. Given the experience and history of the EDA, it may be the likely place for coordinated efforts.

Thirdly, the business of economic development does not have to focus exclusively on depressed areas. The problems of certain declining economic regions of the country lie clearly within the same purview. The causes of decline are different from those of depression; thus the solutions may also be different -- one is a building up and the other a prop. Again, research is needed to identify the symptoms and causes of the decline. As elementary as this may sound, it has not yet been done.

The programs of the EDA should run parallel planning efforts to draw up physical and socio-economic plans for both depressed and declining areas, in
conjunction with visible physical projects of the public and civil works nature. There are certain obvious needs in both areas and long waits are unnecessary -- the parallel processes will add credibility to each other. This process will require more effective state and local coordination with EDA in the development and financing of an economic growth strategy. Goals should be explicit with targets laid out and the consequences of certain strategies outlined ahead of time ("target" and "indicative" planning).

Moreover, the business loan program pleases few. Lending institutions balk at the competition, existing businesses don't like to see subsidized competitors and the default rate is high. A program with the public sector holding an equity position in the firms may be worthy of consideration. Areas for expansion must be carefully selected so as not to compete with private businesses. Energy conservation and production might well be a good place to begin, with financing arranged in a manner similar to that of Community Development Corporations.

Finally, the EDA must make a set of explicit goals for its development monies. They must enumerate the problems toward which their programs are addressed and describe the kinds of assistance they should (can) offer.

Insofar as there exists an uneven distribution of our economic wealth and the growth rate in that wealth -- whether that unevenness exists among areas or people -- federal government intervention is not only proper, but obligatory.

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182 Massachusetts is preparing to experiment with this approach through its Community Development Finance Corporation. Also, the Canadian Local Employment Assistance Program (LEAP) fits this model.
COUNTERCYCLICAL JOBS THROUGH PUBLIC WORKS PROJECTS

Governmental responses to the problems of cyclical unemployment require a compromise among three major objectives: net expansion of employment, the creation of useful output and the provision of transfers for support. The bulk of our attention over the last two decades has focused on the third objective. Federal and state outlays for unemployment insurance and transfer payments dwarf those which are directed toward employment expansion and the creation of useful output. During the 1930's concentration centered on "work relief" with vast increases in net employment and an incredible array of visible outputs. During the 1930's we had less patience with the "dole." Now there is less concern with the "moral" need to work and far more concern with inflationary pressures which might be generated with increased spending.

Consequently, our commitment of resources to the public works and public service employment programs has been less than full. Countercyclical public works programs have been instituted four times since 1960. Without exception there has been an excess demand for the funds and delays in implementation which allowed the critics of the programs to mutter a series of "I told you so's." If a countercyclical program is implemented too late to provide jobs while the recession is at its worst, it may well generate the inflationary pressures its critics suggest. And if the funds are not substantial enough to provide "a fair share for all," even its political friends may turn against it.

The response must be substantial funds "triggered" for appropriation and released by early indicators of an impending downturn in the business
cycle. Ideally, the funds should peak at the time when the recession bottoms out, and should then be expended in ever lessening doses until recovery and expansion. A simplified method is illustrated by the following diagram.

![Diagram showing countercyclical project funds](image)

In the diagram point A represents the first early warning indicators of a coming recession which would trigger the release of funds by formula. For example, the line representing employment can be \( E = a + bt + ct^2 + dt^3 \). The dotted line is the inverse of the employment equation and represents the funds to be released (expended) for countercyclical projects. It could be of the form: \( \text{Project money} = K (-bt -ct^2 - dt^3) \) where \( K \) is, say, a percentage of total employment. By this formula the maximum funds would correspond with the bottom of the recession (Z) and would trail off as employment

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183 cf. Georges Vernez et al. op. cit.
became stable or expanded at the end of the recession (Y). The interior dotted and regular lines in the diagram represent a possible "compacting" of the amplitude of recessionary employment changes and the countercyclical money expended. This method of triggering money would appease those who are most concerned with the inflationary aspects of the countercyclical projects and would compensate solely for the recession. If, on the other hand, the money were to be spent with the intention of spurring a change in private optimism (and hence investment), it should be released in a larger series of chunks at the beginning of the recession, thereby possibly reducing the amplitude of the employment drop which would have happened without the injection. The choice here depends on the amount of concern with inflationary pressure and the purpose of the program.

Moreover, explicit decision rules and regulations must be included for area designation and target industries and workers as the impact of a public works program can vary widely. As pointed out earlier, PWIP and APW provided stimulus and direct employment almost exclusively to the construction sector, while Title X was far more widespread in its impact. The difference resulted from Congressional caveats concerning labor intensiveness, the participation of the Labor Department, and the project selection priorities. The most recent program, LPW, is targeted at the construction industry. Thus, we cannot expect to see a large portion of the jobs going to "disadvantaged" persons nor used in the provision of services. Moreover, LPW, following the tradition of public works programs, has no provisions which would limit employment to those out of work and/or those receiving a transfer payment. Although the area unemployment is mentioned in the legislation as a "factor
which must be considered" in project selection, the only explicit reference to target groups is to "unemployment or underemployment in the construction and construction related industries. 184

One cannot criticize the LPW legislation for providing assistance to the ailing construction industry. But without comparable funds directed toward other groups of workers and industries the allocation can be faulted on equity grounds. One possible solution to this equity problem is to provide in the legislation for a certain percentage of the projects to be run under force account, rather than by bid. In the latter case, history has shown that the labor costs are higher ("prevailing" wages) and the impact lowest on the most needy unemployed. When units of government hire workers for projects themselves, we find a greater share of the jobs and new income going to the needy. Indeed, as pointed out in the Title X net cost calculations, the transfers saved constitute an important component of the adjusted cost of the programs. Congressional leaders might also consider allowing (asking) the military bases around the country to provide skilled assistance in the construction of public works. They have both the manpower and machinery, often idle, that is needed for many of the public sector projects.

Another option to be considered for expansion of employment in recessionary times is based on the Canadian Local Initiatives Program (LIP). This program has been implemented on a trial basis in Massachusetts, and evaluation results indicate positive accomplishments, especially when matched with the "regular PSE positions." LIP is quite simple in design. Any person or persons who are unemployed can propose to carry through a project of limited duration which will employ those in need and offer some benefit to the public either through rehabilitation, new business development or provision of a

184Public Law, 94-369, Section 107.
needed service. All projects are visible and initiated by those who will carry them through. Another example of a locally needed and initiated public employment program can be found in the Netherlands, where the "right to work" is taken seriously and addressed by a very large program called the Dutch Social Employment Program. This program also is worthy of serious attention by policy makers.

On the administrative side of both countercyclical and economic development programs encompassing public works projects, there is much room for improvement. However, the administering agencies cannot be expected to accomplish what is only hinted at in legislative authorizations. Without exceptions, the series of recent laws have been vague and noncommittal, save in their reference to funding levels. Allowing those who write the regulations to steer the program in directions that they deem appropriate is no more or less than a Congressional shirking of responsibility. Regulation hearings almost always become sessions where each interest group—carries its most extreme case, hoping to get half its wish list rather than none. With clearly specified intentions, priorities and explicit goals, the administering agencies will no longer have to remain in the state of limbo so often observed in the last 15 years.


The original design of the Massachusetts LIP program was to link those LIP projects which had the possibility of becoming financially self-sufficient with a new program designed to inject equity money into businesses which otherwise would be unable to expand. The public would take an equity position which could be retained or later sold out. Unfortunately, the state officials have not pursued and followed up this link with the LIP projects which might have qualified.

186 Witness the court battles impending over LPW allocations.
Present and past experiences with the utilization of public works and related projects as a tool of economic development and countercyclical employment policy prove that, with careful planning and implementation, employment can be provided, growth and development fostered, and valuable and visible output produced. Idle machines do not lose their value, but a days work lost is lost forever. In lagging, declining or cyclically impacted areas, we can clearly utilize our most valuable resources -- the labor and skills of our citizens -- through programs such as those described in this paper. Our legislated commitment to full employment and our more powerful moral commitment to an equitable income distribution and to the value of a human being should in tandem compel us forward in honing, refining and implementing programs that will aid us in future development and, at the same time, offer productive and dignified employment to those in need.
Bibliography


Committee on Social Security of the Social Science Research Council, Work Relief Experience in the U.S., New York, (undated).


Gorn, Harvey, et. al., Community Development Corporations, Washington, D.C., Urban Institute, 1976.


Harrison, Bennett, The Economic Development of Massachusetts, Massachusetts Senate, Commerce and Labor Committee, Boston, MA, 1974.


Macmahon, Arthur W., et. al., The Administration of Federal Work Relief The Public Administration Service, Chicago, 1941.


Stein, Herbert, "Twentieth Anniversary of the Employment Act of 1946," Supplement to the Joint Economic Committee Symposium, Washington, DC, pp. 143-152.


Barocci, Thomas/Public works projects

Driscoll, James/Structure for problem

De Backer, Car/A heuristic approach to

Harris, Reuben/Organization problem-ha

Kalb, Deborah/The mediator's taxonomy

Bailyn, Lotte/Technical careers at mi

Little, John D/A theory for pricing no

Katz, Ralph/Satisfaction and behavi