This report responds to an Office of Management and Budget request for an evaluation of Federal manpower and recreation programs for youth. The legislative and administrative statements of program goals have been studied. Staff members of the administering agencies have been conferred with frequently. Reports from those agencies' information systems and recent national evaluations of the programs discussed have been read. Even so, serious deficiencies in data, coupled with noncomparable program objectives, prevent the achievement of the kind of comparative cost-benefit analysis which was hoped for. Benefit data was seldom accessible, and programs often account for costs quite differently. A framework for comparison of programs with similar objectives was developed. This report does make some recommendations, relating both to broad national policy for Federal youth programs and to specific research needs. No two programs serve quite the same population, nor do they emphasize quite the same objectives. Some grouping by objectives was necessary to permit even limited comparisons. The categories used here are skill training, work support and experience, and recreation. A total of twelve programs are reviewed and evaluated. (Author/M)
FEDERAL YOUTH PROGRAMS
A DISCUSSION PAPER
December 1972

Prepared by
Office of Planning, Research and Evaluation
Office of Economic Opportunity

At the request of
Office of Management and Budget
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*Comments on an earlier draft were received from all agencies sponsoring
  programs covered in this report. Only those involving significant
  differences of interpretation from our own have been appended. Comments
  have not been edited to take changes from the first draft into account, so
  references to particular passages or page number may not be possible
  to follow.
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FOREWORD

This report was prepared by staff members of the Evaluation Division, Office of Planning, Research and Evaluation, U.S. Office of Economic Opportunity, in response to a request from the Office of Management and Budget. The analysts working on this study were not bound by previously announced agency policy; so interpretations or viewpoints expressed herein do not necessarily reflect the official position or policy of the Office of Economic Opportunity.

The report is organized so that a reader can skip sections for which he has no immediate concern. The analysts' conclusions are contained in the Summary and Recommendations chapter. Readers may find it convenient to refer separately to the brief Comparisons of Participants and Costs, but we believe that the previous chapter entitled Issues in Evaluating Youth Programs serves as a warning against facile generalizations based on these data.

In Chapter 5 the programs are discussed individually. None of the program discussions contain any important cross-program comparisons not already detailed in the introductory sections, and so a reader may safely omit any portion that does not interest him.

The Office of Economic Opportunity staff is grateful for the cooperation
received during the course of this study from the federal agencies charged with administering the programs under consideration. Staff members designated by the secretaries or administrators of those agencies were afforded an opportunity to comment on a draft of those portions of this report pertaining to their programs. This does not imply that they agree with its conclusions or are responsible for any errors of fact it may contain. Where their comments involved significant differences of interpretation from those of the OEO analysts, the full text of their remarks were included in the appendixes. Changes in subsequent drafts of this report (often in response to these comments) have rendered some of the reprinted statements inapplicable, especially references to specific passages or page numbers. Any general disagreement with the approach or conclusions of this report should still be clear, however.

The analysis was conducted under the direction of Lillian Regelson, Director of the Evaluation Division, with specific responsibility for report completion assigned to Fred D. Baldwin. Staff members and consultants contributing to the report included Jack Bloom, Maria del Sart, Jack Ditmore, Susan Dweck, Edna Hopkins, David R. Mandel, William R. Prosser, David Reitz, and others. Sue Zambito edited and Frances A. Desselle typed the manuscript.
I. REQUEST FROM THE OFFICE OF MANAGEMENT
AND BUDGET TO THE OFFICE OF ECONOMIC OPPORTUNITY

This report is in response to a request from George P. Shultz, then
director of the Office of Management and Budget (OMB), to Phillip V.
Sanchez, director of the Office of Economic Opportunity, for an
evaluation of a number of specified federal youth programs relating
to manpower training or recreation. The following passages are
extracted from Mr. Shultz's letter of May 18:

During the preparation of the President's 1973 budget
last fall, we became aware that we lack an overall
analysis of Federal youth manpower training and
recreation programs. These programs reach an estimated
8.8 million young people and represent approximately
$795 million in Federal resources. Were the Youth
Conservation Corps (YCC) to increase from a demonstration
program with FY 1972 funding of $3.5 million to an
operational program with funding of $150 million as
is proposed in S. 2454, the resource allocation would
be significantly greater.

Consistent with the mission which the President has
given OEO, to act as the "R&D" arm for government's
social programs, an evaluation by OEO of Federal youth
programs whose primary objective is manpower training or
recreation programs would be of invaluable assistance
in determining both whether these programs are meeting
their objectives and whether these objectives are con-
sistent with overall policy.

Therefore, I would appreciate an evaluation to be com-
pleted by October 1, 1972, of Federal youth programs
whose primary objective is manpower training or recreation.
This assessment should identify objectives (which might be only implicit), measure costs and benefits of those programs when data are available, and, if appropriate, recommend alternative strategies for Federal youth manpower and recreation programs. The assessment should include an examination of the YCC in the context of other Federal youth programs. The extent to which precise comparisons can be made will, of course, depend on the availability of similar data. Neither new data collection nor longitudinal surveys need be undertaken.

Attached to Mr. Shultz's letter was a list of fourteen programs which we were asked to evaluate. The twelve included in this report are shown on the table at the beginning of the following chapter, Summary and Recommendations.

With the subsequent concurrence of OMB, two programs on Mr. Shultz's list are not discussed separately in this report. They are the Summer Transportation Program (Department of Labor) and the Youth Coordination Grants (DOL). We have not attempted separate evaluations simply because, when benefits and costs are considered, neither transportation nor coordination are ends in themselves. This does not imply that the programs are not useful or well administered. Transportation and coordination are recognized as essential to good programming in manpower and recreation. In a comprehensive cost-benefit analysis, their costs would normally be prorated among the costs of the programs they support.
II. SUMMARY AND RECOMMENDATIONS

The Basis for this Report

This report responds to an Office of Management and Budget request for an evaluation of federal manpower and recreation programs for youth. While preparing it, we have studied the legislative and administrative statements of program goals, conferred frequently with staff members of the administering agencies, reviewed reports from those agencies' information systems, and read recent national evaluations of the programs discussed. Even so, serious deficiencies in data, coupled with noncomparable program objectives, prevented our achieving the kind of comparative cost-benefit analysis we hoped to make. Benefit data was seldom accessible (only Job Corps has an output-oriented management information system), and programs often account for costs very differently. We were, however, able to develop a framework for comparison of programs with similar objectives.

Consequently, this report does make some recommendations, relating both to broad national policy for federal youth programs and to specific research needs. These recommendations are presented in this section, following a brief explanation of the evaluative criteria used in the analysis. Since few readers can be expected to be familiar with every program discussed here, a thumbnail sketch of each is given in table 1.
<table>
<thead>
<tr>
<th>PROGRAM TITLE</th>
<th>OBJECTIVE FOR YOUTHS</th>
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<td>• NYC (In-School)</td>
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<td>Poor 14-21 year olds</td>
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<td>Summer work support and experience</td>
<td>Poor 14-21 year olds</td>
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<td>All income 16-21 year olds</td>
<td>Civil Service Commission (CCSC)</td>
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<td>Work support for students in vocational programs</td>
<td>Disadvantaged 15-21 year olds</td>
<td>Department of Health, Education &amp; Welfare (HEW)</td>
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<tr>
<td>Youth Conservation Corps (Pilot program: primarily residential; in national parks and forests)</td>
<td>Work experience; environmental improvement and education</td>
<td>All income 15-18 year olds</td>
<td>Departments of Interior and Agriculture</td>
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<tr>
<td>Volunteers in Parks (All volunteers)</td>
<td>Work experience and recreation</td>
<td>All incomes; all ages</td>
<td>Interior</td>
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<td>4-H</td>
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<td>All incomes; mostly under 14</td>
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</table>
No two programs serve quite the same population, nor do they emphasize quite the same objectives. Some grouping by objectives was necessary to permit even the limited comparisons we attempted. The categories used here are skill training, work support and experience, and recreation.

Skill Training Programs

These programs are those intended to equip the enrollee with skills needed for certain jobs, not simply those work patterns common to virtually all jobs. The skill may be relevant to a wide range of jobs (e.g., typing or office machine operation) or to only a few (e.g., operating a lathe). Since it is assumed that the participant will enter (or reenter) the job market upon completion of the program, the most appropriate evaluative standard is how well he does there when compared to a nonparticipant with otherwise similar assets and liabilities. The programs discussed under this heading are Job Corps and Neighborhood Youth Corps (Out-of-School, 1 and 2), although projects which are primarily work support and experience account for about 40 percent of the latter's enrollment.

Work Support and Experience Programs

These programs are not designed to teach skills related to a particular job. They are intended to help enrollees acquire good work habits (e.g., punctuality, getting along with coworkers) and also provide income.
Other program goals include accomplishment of needed work for the employing agency and enhanced enrollee grasp of some public issue (e.g., conservation).

Since immediate entry into the job market is not assumed, future earnings of enrollees do not provide the only appropriate evaluative standard. Some evaluators attempt to relate participation to school drop-out rates, but other research suggests that dropping out is determined primarily by factors other than a student's lack of income. The following programs, comprising the largest group dealt with in this report, are classified as work experience: Neighborhood Youth Corps (In-School and Summer), Federal Summer Employment Program for Youth, Work-Study, Youth Conservation Corps, Volunteers in Parks, and 4-H.

Recreation Programs

These programs require no special definition, but because goals are diffuse, evaluative standards are vague. Federal aid in recreation goes to 100-plus large cities and primarily reaches the younger (ages 8-13) low income population. The design of programs funded indicates that prevention of vandalism and civil disturbances has been uppermost in the mind of Congress. The programs discussed are Recreation Support Program and National Summer Youth Sports Program.

Our recommendations are summarized in the paragraphs below. They follow from analyses of program objectives and comparison with the aims of national policy.
RECOMMENDATION

Deemphasis of Skill Training for Younger Workers

The manpower programs serve youth who have left school and need improved employment opportunities. It has been assumed that such youth need skills training, in addition to work experience, and there has been a redirection of the Neighborhood Youth Corps (NYC-OS) program to increase this training.

The job market, however, discriminates against the younger (ages 15-17) trainees in ways that the best skills training program cannot be expected to overcome. Thus, whether the youth returns to school or tries to get employment, he often cannot use his skills upon completion of the program. In addition, many employers prefer to take new employees with good work attitudes and train them themselves. Finally, the early drop-out rate for Job Corps is very much higher for the younger trainees. Accordingly, we conclude that it would be sound policy to de-emphasize job specific skill training for younger entrants to the job market. This suggests that the current movement of NYC (OS) simultaneously toward more skill training and toward recruiting younger enrollees may be self-defeating. What we believe to be a more promising direction is discussed next. The above comments are not intended to apply either to vocational education programs graduating youth at age 18 or to apprenticeship programs in which the trainee is virtually guaranteed a job upon completion. We are unsure the extent
to which they should apply to widely applicable, but still job specific, skills like typing.

**Upgrading the Quality of Work Experience Programs**

A recommendation to deemphasize skill training for younger workers implies that one must rely on work support and experience programs if one is to address their employment needs. At present, little is known about actual benefits and possible negative effects. There is a great deal of anecdotal reporting about what appear to be good projects. There also is a great deal of reporting of poor projects, some of it in evaluative studies of the programs. We believe that obviously make-work projects (those which the supervisor does not care whether are done or not) promote cynicism and bad work habits. We have concluded that a systematic approach to upgrading work accomplishment is needed, not only as an offset to costs, but as an indicator of the value of the work experience to the participant. A first step might be a cross-program survey of enrollees and supervisors, categorizing actual jobs and ranking them on some scale from "very important" to "make-work." This would be appropriate for NYC, Work Study, Youth Conservation Corps (YCC), and the programs sponsored by the Civil Service Commission (CSC). A second, more difficult step, would be to determine what structural changes tend to upgrade low rated jobs and what these changes would cost. For example, the current strong emphasis on summer only employment almost certainly produces a high proportion of poorly developed jobs.
Experimenting with Cost-Reducing Alternatives in Conservation Programs

The pilot YCC has had an extremely favorable image. While this may have resulted from its initial small size, careful selection of work sites, and relatively select enrollment, it is apparent that there is also a great deal of interest in a program of this type. But it is an extremely expensive program, with the highest participant cost per month of the work experience programs—almost as high as Job Corps, a skill-training program. In this regard it is important to look for less expensive ways of achieving the YCC objectives.

Up to now, the federal government has not accepted an obligation to provide employment regardless of family income. The congressional and administrative policy statements for YCC move in this direction, however, by stating that "gainful employment" for the participating youth (who for the most part are not poor) is an objective in itself, or is a precondition for successful achievement of other objectives. Other programs to reduce youth employment have focused on the disadvantaged. This is reasonable in that, although the unemployment rate for youth aged 14-19 is about two-and-a-half times that for the total population, the rate for poor youth is over four times that for the population. The cost of providing employment for any appreciable fraction of nonpoor youth would be very large.

We recommend, within the framework of the YCC program, experimentation with shorter sessions, which would permit more youth to have a similar
experience at about the same overall cost. We also recommend experimenting with the elimination of drastic reduction of payments to enrollees, thereby generating a savings of up to 30 percent of present per participant costs. Volunteer programs dealing with environmental improvement are attracting enthusiastic participants, even for arduous work. Given our prior emphasis on finding out more about the quality of jobs in the work experience programs, we feel it important to learn how important pay is for nonpoor youth. It may be critical to a realistic work experience, but it could equally well turn out that other factors, such as the perceived usefulness of the work, are more important. Finally, we recommend consideration of expansion of the Volunteers in Parks program, both as a way of utilizing skills and for accomplishing needed work in the National Park system.

Reexamining the Federal-Local Relationship in Recreation Programs

Where recreation programs are concerned, we found only the grossest data on costs and participants, and no serious attempts to measure benefits. We do not believe that the effectiveness of a project in reduction of urban tensions—which we assume to be a major reason for congressional support of these programs—is measurable at any but the local level. We have also found repeated complaints of poor federal-local coordination. For these reasons, it appears that greater local control of decisions concerning how much to spend for support of recreation and how to spend it is desirable. It is, moreover, the policy of the present administration
that, in the absence of compelling reasons to the contrary, programs
be funded through revenue sharing rather than categorical grants.

Data Deficiencies

The lack of reliable data is a familiar problem to evaluators, but
it is particularly striking when one attempts cross-program comparisons.
Neither "costs" nor "participants" are defined uniformly, and few
programs make any attempt to define "benefits" with sufficient precision
to allow adequate record keeping. Some of the largest programs are the
least well documented. We are struck by how little can be said about
such basic points as "cost per participant per year" because published
estimates for a single program may differ by 25 percent or more. We
concur with the many recommendations that serious attention be given
to the formulation of a core set of definitions pertaining to costs
and enrollees for mandatory use by operating agencies. Where an agency
felt that the accepted definition was inadequate, it might be fre
to provide reports in the form it preferred in addition to the standard
one, but not instead of it.

Implications for Federal Policy

The report makes clear that we know less about youth problems than
we need to in order to frame (or to decide not to frame) a federal
policy with respect to youth. But a few threads can be identified.
We believe "good" work experience for youth is valuable both to the youth and to society. Many of the programs aimed at other goals are clearly somewhat valuable but are less clearly worth their cost. A coordinated set of quasi-experiments should be conducted focusing on issues related to costs and the relationship of program structure to participant accomplishment. Finally, there remains the large set of issues concerning the difficult and changing problem of helping youth in transition from school to work in ways that benefit both society and youth. These problems are profound and receiving increasing research and development interest. However, major program thrusts in this direction should await a fuller definition of policy issues and operational goals in such areas as career education and public sector employment.
III. ISSUES IN EVALUATING YOUTH PROGRAMS

Thinking About Youth

Consider first some numbers.

In 1972, there are 24.2 million Americans between the ages 14 and 19. About 2.8 million of them, or 12 percent, are from poor families; nearly 2.8 million are black, and of these, 39 percent live in poverty.

An estimated 85 percent of the population aged 14 to 18 is in school. When 19 year olds are included, the percentage drops to slightly under 80 percent. Four and one-half million 14 to 19 year olds were not in school in 1971. Of these, fully 58 percent had not completed 12 years of education and 14 percent lived in poverty. Over 25 percent of the black teenagers who were not in school lived in poverty.

The unemployment rate for youths aged 14 to 19 was more than double that for the total population in March 1971, at 13.7 percent. At the same time, only 33.5 percent of the youths were in the labor force (i.e., working or looking for work). Although the unemployment rate for teenagers not in school was slightly lower than that for the total teenage population, for black teenagers not in school it was around 21 percent. For teenagers who had left school and had a background of poverty, the unemployment rate exceeded 24 percent.
The unemployment rate for 14 to 17 year olds, 16.1 percent, was higher than that for the total teenage population. During the same period, labor force participation of these younger persons was lower, at 25.3 percent. Among this age group, nonpoor youth participate more fully in the labor market than do poor youth, 26.5 percent as compared to 16.8 percent, and face a less severe unemployment rate, 15.1 percent as compared to 26.4 percent. Poor blacks face an unemployment rate of 38.5 percent, while the unemployment rate for nonpoor blacks is 28.2 percent and for nonpoor whites, 14.4 percent.

Any of these groups of young people can be thought about in several ways. From one point of view, they are a source of problems, accounting for more than their proportional share of unemployment, serious crime, and other social ills. From another, they are future adults, who must be educated and given skills. From still another, they are an available resource, whose energy, idealism, and willingness to work make them under-used contributors to national goals.

There is nothing mutually inconsistent in these different frames of reference, but the one used at a given moment determines how one attempts to evaluate a program designed to serve youth. Since one evaluates in reference to some standards (either the program's objectives or other public policy goals), it makes a difference whether one is thinking about delinquency prevention, reduction of unemployment (and whether this is now or in the future), general education and citizen building,
or accomplishment of some needed work (such as conservation of the natural environment.)

As an example of why this is so, consider delinquency prevention.
This report concludes that concern for reducing delinquency and urban tensions was at least one factor in securing congressional support for many of the programs covered by this report. It is a factor seldom emphasized in administrative lists of program goals, however, perhaps because of the recognition that very few cause-and-effect relationships are demonstrable (and perhaps because continuing concern over crime might lead to public disenchantment with the programs).
Because so little evidence is available, this report does not pursue this line of analysis to any significant degree. But if one were discussing the role of youth programs within a comprehensive criminal justice policy, the analysis of delinquency prevention would require much more detail.

To take another example, some programs do emphasize the dollar value of work accomplished by their enrollees. We believe this issue to be important and have raised questions about some of the methods of assessment recently used. We have not, however, gone into great detail. If one were examining youth programs as one of several potential resources in a comprehensive campaign for environmental conservation, consideration of alternative measures would merit more systematic attention.

For most purposes, we conclude that the most germane way of thinking
about youth and the articulation of a federal youth development policy is to focus on the development of the youth themselves. A brief, and extremely stimulating, discussion of possible objectives for youth development is contained in a paper by Dr. James Coleman. Dr. Coleman points out that two factors--the physical separation of most work from the home and the increasingly abstract content of many jobs--combine to deprive most children and young people of regular contact with people actually at work. He does not believe that institutions of formal education can replace this contact with real life models of work, and he pleads for systematic thought to be applied to opening up opportunities for work experience at an early age. He views this work as education (in the broad sense of preparation for a full and productive life) and advances a tentative list of things he would like to see learned before age 18:

1. Intellectual skills, the kinds of things that schooling at its best teaches.

2. Skills of some occupation that may be filled by a secondary school graduate, so that every 18-year old would be accredited in some occupation, whether he continued in school or not.

3. Decision-making skills: that is, those skills of making decisions in complex situations where consequences follow from decisions.

4. General physical and mechanical skills: skills allowing the young person to deal with physical work, in the home or elsewhere.

5. Bureaucratic and organizational skills: how to cope
with a bureaucratic organization, as an employee or a customer or a client, or a manager or an entrepreneur.


7. Emergency skills: how to act in an emergency, or an unfamiliar situation, in sufficient time to deal with the emergency.

8. Verbal communication skills in argumentation and debate.*

Ideally, it is against some such list of objectives that youth programs should be evaluated. But neither of two prerequisites to such an evaluation exists. First, federal policy goals are not coherently articulated (whether one uses the word to mean "expressed" or "connected") and must often be inferred. Second, data relating to the impact of programs on youth development is generally unavailable, with some exceptions relating to employment. Many of the skills on Dr. Coleman's list, of course, would be extremely difficult to measure even after rigorous research. One value of setting such clear objectives is that they might be expected to stimulate better attempts to measure achievement.

Classifying the Federal Youth Programs

The programs named in Mr. Shultz's letter may each be considered from

at least one, and usually more than one, of the perspectives discussed in the preceding section. We hope that our discussion makes clear our view that each perspective is legitimate, depending on the overall frame of reference within which the programs are analyzed. In addition, a program may have more than one explicit objective, and no one of them can be ignored even if it lies outside the primary reference frame of a discussion. To return to an earlier example, although a program's possible impact on juvenile delinquency could be disregarded if that were merely one of several possible side benefits, once the administrators of the program announce that delinquency prevention is an explicit goal (and devote some effort to it), it must be dealt with in an evaluation.

That programs legitimately have multiple objectives makes evaluations more difficult. Stated program goals are often not at the same level of abstraction, and the least quantifiable may be advanced as the most important. We have tried to pay some attention to all explicit goals (though not necessarily at the same level of detail), but where a program appears to be more one thing than another, we have not hesitated to say so.

The objectives of any program are usually related to each other in some way, but this does not preclude point-by-point analysis. Where a program appears to have had some success in meeting each of several objectives--
even if that success is not impressive for any one of them--its supporters may maintain that, considered as a whole, the program is highly successful. That line of argument must be addressed on a case-by-case basis, for benefits of different kinds are sometimes additive and sometimes not. We do not pretend to have solved these problems, but we have tried to make our assumptions explicit.

As the Table of Contents indicates, the programs discussed are classified under three headings: skill training, work support (or work experience), and recreation. The distinction between "skill training" and "work support" was taken from the section on manpower programs in the 1973 Special Analyses, Budget of the United States. The "work support" classification, however, is not quite adequate for employment programs that are not limited to low income youth. We have added the phrase "work experience" to reflect the notion that work also has an educational value, and we have included in that discussion two nonstipend programs that clearly would not be regarded as manpower programs (Volunteers in Parks and 4-H).

Skill training programs

As the label implies, skill-training programs seek to impart specific vocational skills to their enrollees, as well as provide other job-related services. The OMB Special Analyses lists more than ten such programs,

but only Job Corps is uniquely designed for the 14-21 age group. For this reason, the other listed skills training programs are not discussed in this report, but it should be recognized that they serve significant numbers of youth, though generally not those below age 18. Because the evidence indicates that the Out-of-School segment of NYC gives sufficient (and increasing) emphasis to skill training, it is included in that section although the OMB Special Analyses classified all NYC under work support.

A comprehensive view of federal manpower policy should not overlook vocational education which is one of the major components of a national skill-training strategy. It is actually the largest single deliverer of job-oriented training. (In 1971 there were over 6.5 million enrollments in Secondary Vocational Education programs compared to slightly more than one million first time enrollments in DOL manpower programs for youth under 21.) Because of its historical tie to general education, Vocational Education for many years emphasized institutional occupational skills training; it offered other components of a comprehensive manpower program (such as counseling and placement) to only a limited extent. Since the Vocational Education Act of 1963 and its 1968 amendments, the program has tended to become more comprehensive. It thus increasingly resembles the more recently created manpower programs administered by DOL which, reflecting a more active federal role in setting standards, have stressed a wide range of supportive services.

*These figures should be considered only as suggesting general orders of magnitude. Double counting and other sources of error are possible. For example, some DOL programs obtain skills training from the school system.
Evaluating skill training programs

The OMB Special Analyses cites a number of goals of manpower legislation: improving aggregate economic conditions (e.g., reducing unemployment, economic dependence and inflation); assisting specific groups (e.g., poor persons, new entrants and reentrants into the labor force); and helping to meet unfilled public needs (e.g., providing jobs and training in the fields of health, public safety, and pollution control). Progress toward achieving these goals is measured at the national level by indicators such as the labor force participation rate, the unemployment rate, changes in welfare rolls, and data on wages, prices and productivity.

It is usually not possible, however, to attribute a cause-and-effect relationship between changes in these indicators and the operation of manpower programs, whose participants comprise only a small part (approximately 1.5 percent in 1971) of the civilian labor force. As a result, evaluators of manpower programs have argued that the most relevant measure of a program's success (and the only one which there is any hope of capturing) is the success of its individual participants in the labor market.

Skill-training programs are, however, ideally suited in the abstract for cost-benefit analysis. Benefits such as increased employability and job stability, increased wages, decreased dependency, or decreased antisocial behavior can often be expressed in dollar terms.
An ideal measure of success would assess the individual's incremental lifetime economic gain resulting from training. Unfortunately there are major practical problems with doing this: difficulty in establishing a control group (since participants are self-selected); the difficulty of obtaining enough data over time to measure differences between the enrollees and the controls; and the unreliability of projecting short term results over a youth's entire working life. It was for these reasons that in 1969 the Office of Economic Opportunity and the Department of Labor decided to undertake the National Longitudinal Manpower Evaluation Study (LMES).* Although LMES is expected to provide better data than any now available, those most closely associated with it are the first to caution that it does not entirely solve these problems.

As matters now stand, after extensive review of the completed cost-benefit studies, we still do not feel able to answer the question: Do skill training program enrollees achieve comparative economic advantages over nonenrollees in terms of increased work force participation, employment and wages, and do these advantages exist long enough to offset the costs of the programs? This means, of course, that the conclusions in the sections on Job Corps and NYC-OS must be considered tentative.

*See Appendix A for additional information.
Work Support and Experience Programs

The primary purpose of a work support program (as defined in the OMB Special Analyses) is to provide transitional employment to youths who are moving between school and work and need both for successful development. Put another way, the work support program is aimed at youths whose main occupation is still the process of getting an education, while the skills training program is aimed at those who will enter (or reenter) the labor market upon completion. Programs in the former category provide only a coincidental amount of skills training. (For example, the NYC clerical jobs may prove to be relevant to the future careers of many female participants.) If the income transfer is sufficient to enable the enrollee to stay in school, the programs (for the disadvantaged, at least) are considered by program sponsors to have been successful.

Programs of this nature may be considered in a still broader context, as the previously cited paper by Dr. Coleman suggests. The 1972 Manpower Report of the President comments as follows:

Increasingly, the question being asked is what purpose current educational efforts serve or should serve. A need to eliminate the dichotomy between the world of education and the world of work has become all too apparent. The Office of Education has therefore suggested a refocusing of education to give all young people realistic preparation for the job market, whether they leave school at the minimum permissible age or go on to institutions of higher learning....
The new career education approach of the Office of Education is very much in the developmental, rather than the implementing stage. Career education would provide information on job alternatives at the very start of school and build basic subjects from grades 1 through 12 around career opportunities and requirements in the labor market.*

In a sense, the work experience programs represent an attempt to approach the same problem from the other direction; it is the job market, rather than the schools, that is the focus of their efforts. We concur with Dr. Coleman that more attention should be given to how this might be done as part of a systematic youth development policy.

Evaluating Work Experience Programs

Benefit-cost studies based on earnings projected over the lifetimes of participants have not been done (except somewhat for NYC) and seem of doubtful relevance. Programs such as Youth Conservation Corps and those administered by the Civil Service Commission by merit examinations have work support aspects, but their official statements of purpose give stronger emphasis to other objectives. Even for the programs for disadvantaged youth, there is clearly an assumption that work is preferable to straight income transfer. If the only objective were to provide income for continued school, direct scholarships might well be cheaper. The preference for work seems to rest on two premises:

*U.S., Department of Labor, Manpower Report of the President, 1972, p. 92.
first, that the experience of work is itself valuable to youth, even without specific skills training, and second, that the cost of the program will be partially offset by the value of the work accomplished. Both premises seem reasonable, but the first does not lend itself to purely economic measurement, and the second is often quite difficult to measure.

It may be that more attention should be given to estimating the value of accomplished work, not only as a factor offsetting program costs, but as an indicator of the value of the work experience to the participant. Our hypothesis would be that the importance attached to a job by public or private employers, particularly the enrollees' immediate supervisors, is likely to be the best indicator of the quality of the work experience to the enrollee. What differentiates work experience from classroom exercises is that benefits to the participants in the former depend largely on their perception of how real the work is to the employer. Proponents of work experience maintain that young workers learn such "world of work" matters as attendance, punctuality, demands for certain quantities and qualities of work, getting along with coworkers, and adherence to schedules. If the youths perceive that their work products are not really important to their employers, however, it is equally arguable that they will acquire bad work habits and cynicism.

The point may be difficult to demonstrate rigorously, but it seems
plausible. If we knew, for example, that the average employer of youth under Program A would, within some relevant range, exchange $.60 in his discretionary budget for each $1.00 in Program A slots, while his counterpart for Program B would willingly trade only $.30 from his budget for each $1.00 in Program B slots, we would probably be willing to state a belief that Program A enrollees will have a more meaningful work experience than those in Program B.

An article by Lester C. Thurow reinforces this point indirectly with a view of the labor market that deemphasizes the degree to which an applicant's specific skills contribute to his employability. Professor Thurow writes:

Thus the labor market is primarily a market, not for matching the demands for and supplies of different job skills, but for matching trainable individuals with training ladders. Because most skills are acquired on the job, it is the demand for job skills which creates the supply of job skills. The operative problem in a job competition economy is to pick and train workers to generate the desired productivity with the least investment in training costs. For new workers and for entry level jobs, it is the "background characteristics" of the workers that form the basis of selection. Those workers whose backgrounds promise the lowest training costs will be hired. For workers with previous job experience, existing job skills (including skills like reliability and punctuality) are relevant to the selection process to the extent that they might lead to lower training costs.*

*"Education and Economic Equality," The Public Interest (Summer, 1972), p. 72; (emphasis in the original).
This viewpoint seems persuasive, and it strongly suggests that a youth will learn on the job only if his employer takes the youth's potential contribution seriously. Because youth program assignments may range from make-work to the highest priority items (those for which the administrator would have spent his next discretionary dollars), the value of the program to the administrator may be expressed as the rate at which he would trade earmarked program dollars for flexible dollars.*

As a conceptual matter, this rate would be measurable if an administrator were compelled to choose between some number of work experience slots and some amount of funds which could be spent on the agency's mission at his discretion. Experiments of this kind would be difficult to set up in practice, but not at all impossible. We would not attach great importance to exact numbers. We would, however, seek clues about the order of magnitude of the administrator's trade-off and the points at which he apparently perceives diminishing returns from extra manpower. We would also wish to learn what structural factors (e.g., type of work available, seasonality, and existing labor-management relations) entered into his decisions.

Although program evaluators often fail to confirm positive benefits from the programs they are studying, their evaluative models usually accept enough of the assumptions of the program under review so that negative

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*Economists use the term "marginal rate of substitution" to describe this rate.
results are unlikely to surface either. But if work support and work experience projects include a substantial amount of make-work, an evaluation which recognizes the possibility of negative outcomes may be needed. A study of the employers' and enrollees' perceptions of the reality of work support jobs might be a place to start.

These are hardly academic matters since a recurring criticism of NYC by field teams is that enrollees are engaged in make-work (or sometimes no work at all). No one knows the extent to which programs exclusively for the disadvantaged force employers to forgo significant amounts of work achievement (and hence reduce the value of the work experience). The suggestion that this occurs is made in the Senate hearings on YCC, which perhaps by virtue of its small size and relatively select enrollment, has so far incurred almost no criticism on these grounds. The Civil Service Commission collects no quantitative information on the matter although federal agencies are asked for comments in their annual reports.

Evaluating Recreation Programs

Most of the evaluations of recreation programs have dealt with administrative issues, rather than program impact. This is inevitable, simply because there is no generally agreed upon list of the desired results of recreation programs, and those which have been suggested (e.g., reduction of delinquency, better citizenship, improved health) are almost impossible to measure. What is it that the Congress believes itself to be buying with funds designated for summer recreation?
The most obvious answer is that the Congress believes itself to be making an investment in domestic tranquility.* The origin of the programs coincided with the height of concern over urban unrest. The funds continue to be earmarked primarily for summer use and primarily for the largest cities. The participants are for the most part children and youth who are too young either for the private labor market or special work experience programs and who would otherwise be idle and unsupervised.

We know of no way to evaluate scientifically how successful the programs are in preventing riots or reducing urban tensions. Many observers have testified that they do so, but others have expressed skepticism.

This is not to say that some evaluation at the local level is impossible. Where good records are kept, it should be possible to estimate in a rough way the impact of recreation in reducing vandalism, false alarms, open fire hydrants, petty thefts, and perhaps more serious crimes committed by young offenders, such as auto theft. Special analyses of this kind might well be helpful to a city in determining where to concentrate its recreation funds, both by geographical area and by function (e.g., summer camping vs. street programs). No studies of this nature have come to our attention during our brief research on recreation programs, and their feasibility at a reasonable cost would

*This view is not necessarily shared by program administrators. See Appendix B, containing comments from the President's Council on Physical Fitness and Sports on an earlier draft of this report.
depend largely on the preexistence of systems for collecting the necessary records by schools, police, and fire departments.

Although we have generally avoided administrative issues in writing this report, the studies seem to raise a very broad question of federal-state-local relationships that we believe should be noted. This administration has indicated a desire to give state and local governments as much control over social programs as possible. In the instance of recreation, the case seems very strong for letting local governments decide how much money should be spent for recreation and what form the programs should take. We would pose the policy question as follows: Should recreation be regarded as a separate item in the federal budget, or should it be classified under the general category of fiscal relief to state and local governments? More simply, Should the federal government earmark money for recreation?

It seems unnecessary to belabor the point that designating money for anything almost certainly increases the total amount of money spent on it. That is, if the federal government were to give cities an amount of completely flexible money equivalent to the recreation allocation, some cities would spend it on recreation and some would not. Perhaps more to the point, if the cities were to get significantly larger amounts of aid under a revenue-sharing provision, but no special funds for recreation or several other social programs, there is certainly no guarantee that the total spending on recreation would reach or exceed
the present level.

What is fairly clear is that there appear to be no particularly good administrative reasons for federal earmarking, beyond the simple desire to guarantee some minimum level of expenditure on recreation. Two frequent arguments for federal involvement in programs are that the federal government will set higher standards than other jurisdictions, or that the programs involve difficult developmental problems beyond the capability of other levels of government. While there may be some advantages to a liaison with national recreation planning bodies, neither consideration appears to apply here. The federal "guidelines" deal largely with eligibility, months of program operation, staff recruitment, and planning processes. The evaluations show beyond doubt that these guidelines are ignored by local sponsors when it seems necessary to them to do so, usually for good reason.

There have been some negative results attributable to federal direction. The most common complaint, which recurs in each evaluation, is that information on the amount of money available arrives too late for sound local planning. Given the steps involved in federal appropriations, we think that this problem is likely to persist. The frequent calls for "better coordination" and "clarification of lines of responsibility," those cliches of administrative studies, refer largely to coordination of federal agencies and staff. We do not think these recurring criticisms necessarily reflect on the competence of the organizations involved,
but are more likely part and parcel of the present federal-state-local relationship.

In short, the evidence suggests that recreation programs are a very logical candidate for inclusion in a revenue-sharing arrangement. It should be recognized, however, that adoption of this policy position might well lead some cities to reduce their commitment to summer recreation, not because they believe it unimportant but because other worthwhile activities would compete for the funds. Although our consideration of the issue leads us to conclude that this would be properly a matter for local judgment, we must repeat that we know of no way to anticipate its consequences for urban tension or any other social condition believed to be affected by recreation programs. In the absence of such information, it seems that those most directly affected by the decisions should make them.
IV. TABULAR COMPARISONS OF COST AND PARTICIPANT DATA

The purpose of this chapter is to display program costs, and some data on participants, in such a way that the reader can conveniently make some rough comparisons. The figures should be taken only as indicating orders of magnitude and not as adequate for more exact comparisons. The narrative is devoted essentially to emphasizing the limitations of the tables.

The most fundamental problem, of course, is that it is not very meaningful to compare costs when benefits cannot be compared, and available data simply will not permit a satisfactory comparison of benefits even between programs within the same general category. This point is so basic that we gave some thought to omitting a section of this kind altogether. We have retained it primarily because people usually insist on knowing how much is being paid for something even when they have little way of knowing what is being bought. It seemed preferable to display some comparative data here, with the major cautions all in one place, than to increase the number of tables throughout the text where repeated disclaimers would be necessary.

The cost column which is probably most interesting, "cost per man-month," does not take into account the actual hours worked by enrollees. For
example, it will be obvious that most of the difference between NYC Summer and NYC In-School is attributable to the fact that the summer enrollees are full time and the in-school enrollees part time. We have omitted a "participant cost" column as meaningless for the skill-training and the work experience programs because the duration of participation differs greatly between programs. The only exception to this rule involves the programs that operate solely during the summer where enrollment levels are likely to remain steady over the course of the summer.

Taken with the above cautions, however, the cost per man-month does permit a few unsurprising generalizations. Of the two programs classified as skill training, Job Corps is appreciably more costly than NYC Out-of-School, but it must be remembered that about 40 percent of the latter's enrollees are in a work experience situation (OS-1) without any appreciable amount of skill training. This comparison shows fairly clearly that the added training does cost money. What costs money, of course, is any high staff-to-enrollee ratio, which largely explains the high man-month cost of Youth Conservation Corps relative to the other work experience programs. It is for their increased staff requirements, as well as for facility costs, that the largely residential programs (again, Job Corps and YCC) are more expensive. The YCC staff time is primarily spent on supervision and (to some extent on education), not on skill training; here the program administrators claim that the costs are significantly offset by the high value of enrollee work. (This savings is not reflected in the comparative
The NYC enrollees also produce work of some economic value, of course, but no attempt has been made by NYC to estimate what this value may be.

In the case of the two recreation programs, we have included a column headed "costs per participant" since the programs do not have slots in the same sense as the manpower programs. The estimates of the number of participants, especially for the Recreation Support Program, must be taken as very rough indeed. The higher participant cost for the more highly structured National Summer Youth Sports Program (NSYSP) is not surprising since that program uses university staff, provides meals, medical examinations, and some medical services. The NSYSP structure also presumably permits counting participants with greater accuracy.

It is important to observe that the total cost of the recreation programs is relatively low. If a city believes that these programs contribute to reducing summer tensions, for example, it would be relevant to compare the total cost of its recreation program against that for some other approach.

One other caveat is in order: costs normally reported do not include administrative overhead nor any prorata of capital cost. That is, substantial costs such as salaries of headquarters officials, program monitoring, and data collection are normally omitted, though not for all programs.
There were four basic sources utilized in compiling the data presented in this section. In order of precedence they were *The Budget of the U.S. Government 1973 - Appendix*, *The Manpower Report of the President for 1972*, the "Manpower Program Special Analysis System,"* and individual publications and reports of the program offices. In those instances where these sources did not agree, the figure chosen was selected on the basis of the above ordering, and the discrepancy was noted on the table in question.

<table>
<thead>
<tr>
<th></th>
<th>EXPENDITURES</th>
<th>PARTICIPANT DATA</th>
<th>Cost per Man-Month</th>
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<td>Federal (in millions)</td>
<td>States, local, and private (in millions)</td>
<td>Enrollment Opportunities (in thousands)</td>
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<td>Other</td>
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<td>NA</td>
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NA: Used throughout the report to mean the information is not available.
*: Used throughout to indicate an estimated figure.
Definitions:

**Table 2**

**Man-Years:** This is equivalent to the average number of participants and is calculated by taking the mid-month or end of month number of participants, totalling for the year and dividing by 12. For programs with large seasonal variations, weekly enrollment levels are utilized.

**Adjusted Number of Participants:** This figure attempts to correct for seasonal fluctuations in enrollment and for unequal enrollment durations among participants. It is calculated by dividing man-years by the average length of stay.

**Cost Per Man-Month:** Calculated by dividing total costs, the sum of federal, state, local and private, by man-years and then dividing again by 12.

Notes:

(a) This figure corresponds to the Job Corps disbursements. When all accruals and expenditures by all agencies associated with Job Corps are considered, the total cost is approximately $180 million.

(b) This figure is a composite of NYC:OS-1 (a work experience program accounting for an estimated 40 percent of enrollment) and NYC:OS-2, a skill-training program. A separate estimate, using somewhat different numbers from these, suggests that OS-2 is about 50 percent higher per man-month than OS-2.

(c) The method suggested by OMB for estimating length of stay, when this data is not directly available, results in higher figures than reported here. The figures here are estimates made by the program offices. This implies that the reported estimates are low or that one or more of the following are inaccurately reported: new participants, participants terminating, or man-years.

(d) The cost of providing wages to an enrollee, only one factor in the costs per man-month, is $166.40 per month. This discrepancy suggests that either the number of participants reported or the average length of stay reported is overstated.

(e) The costs of the Federal Summer Employment Program for Youth are comprised only of salary expenditures. Supervisory, training, and administrative costs are not included. FSEPY is an umbrella program for six CSC programs; three of the programs operate at other times of the year as well. The "other" category is composed of the following programs: Agency Merit Staffing Plans, Summer Employment Examinations, Federal Summer Interns, and Federal Jr. Fellowships.
(f) This figure does not include costs of $532,000 representing materials, supplies, equipment, and technical expertise, which were absorbed by the administering departments but not charged to the program.

(g) Excludes 2,000 volunteers enrolled in a one-day program. Fiscal year 1972 was the first year of program operation.

(h) The basis for this figure is an unpublished National Park Service report that cited 200,000 hours served by VIPs in FY 1972.

(i) This is the total annual enrollment. As with most programs, the enrollment level varies during the year. Complete data on new enrollees and terminees is not available; hence, this approximation is provided. Man-years are, therefore, overstated.
<table>
<thead>
<tr>
<th></th>
<th>Participants (in thousands)</th>
<th>Race (percent)</th>
<th>Family Income (percent under $5,000)</th>
<th>Education (percent less than 9 years)</th>
<th>Sex (percent)</th>
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NOTES: TABLE 3

(a) FSEPY is an umbrella program for six programs; three of the programs operate at other times of the year as well. The "other" category is composed of the following programs: Agency Merit Staffing Plans, Summer Employment Examination, Federal Summer Interns, and Federal Jr. Fellowships.

(b) The male/female ratio was calculated from the May 1971-September 1971 Monthly Reports of Temporary Summer Employment that were filed with CSC. This differed with the 55/45 ratio reported by the Manpower Program Special Analysis System.

(c) Includes 8% who are Samoans.

(d) FY 1972 was the first year of program operation.

(e) Actual range of participants' ages.

(f) The figures do not reflect the composition of the Nutrition and TV program.

(g) Percent is of those who come from families with less than $3,000 incomes per year.
### TABLE 4

**JOB CORPS ENROLLMENTS AND EXPENDITURES**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Opportunities (in thousands)</th>
<th>First Time (in thousands)</th>
<th>Federal (in thousands)</th>
<th>Center Operating Costs per Man-Year (a)</th>
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<td>29</td>
<td>59</td>
<td>$258</td>
<td>$8,470</td>
</tr>
<tr>
<td>1967</td>
<td>42</td>
<td>71</td>
<td>$340</td>
<td>$7,030</td>
</tr>
<tr>
<td>1968</td>
<td>33</td>
<td>65</td>
<td>$300</td>
<td>$6,600</td>
</tr>
<tr>
<td>1969</td>
<td>20</td>
<td>53</td>
<td>$276</td>
<td>$6,240</td>
</tr>
<tr>
<td>1970</td>
<td>20</td>
<td>43</td>
<td>$157 (b)</td>
<td>$6,200</td>
</tr>
<tr>
<td>1971</td>
<td>22</td>
<td>50</td>
<td>$154 (b)</td>
<td>$6,340 (c)</td>
</tr>
<tr>
<td>1972 *</td>
<td>25</td>
<td>53</td>
<td>$185</td>
<td>$6,340</td>
</tr>
</tbody>
</table>

**SOURCE:** Job Corps Management Information System (MIS).

(a) The Center Operating Costs per Man-Year do not reflect all the costs presented in the preceding column. For example, they do not include DOL administrative, recruitment, screening, and placement costs. This column was included because it is the only source of man-year cost that permits consistently derived longitudinal comparisons before 1970.

(b) These figures from the "Manpower Program Special Analysis System" do not coincide with those reported by the Job Corps MIS: FY 1970-$191 million, FY 1971-$153 million.

(c) This figure is not in accord with the man-month data that is presented in table 2 for the reasons stated above in note a.
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Enrollments</th>
<th>Expenditures (in millions)</th>
<th>Cost Per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opportunities (in thousands)</td>
<td>First Time (in thousands)</td>
<td>Total</td>
</tr>
<tr>
<td>1967</td>
<td>79</td>
<td>162</td>
<td>$ NA</td>
</tr>
<tr>
<td>1968</td>
<td>63</td>
<td>94</td>
<td>158</td>
</tr>
<tr>
<td>1969</td>
<td>50</td>
<td>75</td>
<td>138</td>
</tr>
<tr>
<td>1970</td>
<td>35(a)</td>
<td>48(a)</td>
<td>109</td>
</tr>
<tr>
<td>1971</td>
<td>40</td>
<td>53</td>
<td>112</td>
</tr>
<tr>
<td>1972*</td>
<td>36</td>
<td>49</td>
<td>125</td>
</tr>
</tbody>
</table>

(a) The enrollment figures shown above were taken from the Appendix to the FY 1973 Budget. These figures do not coincide with the Manpower Report which reported enrollment opportunities of 45,400 and first time enrollments of 46,200.
### Table 6
NYC-OS 1 and 2: Enrollments and Expenditures, FY 1970-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NYC-1 Adjusted Participants (in thousands)</th>
<th>First Time Enrollments (in thousands)</th>
<th>Federal Obligations (in millions)</th>
<th>Total Expenditures (in millions)</th>
<th>Federal Expenditures (in millions)</th>
<th>State and Local Expenditures (in millions)</th>
<th>Cost per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>63</td>
<td>44</td>
<td>$83</td>
<td>$101</td>
<td>$91</td>
<td>$10</td>
<td>$3200</td>
</tr>
<tr>
<td>1971*</td>
<td>26</td>
<td>22</td>
<td>42</td>
<td>42(a)</td>
<td>38</td>
<td>4</td>
<td>3200</td>
</tr>
<tr>
<td>1972 (budget)</td>
<td>30</td>
<td>24</td>
<td>42</td>
<td>48</td>
<td>48</td>
<td>5</td>
<td>3200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NYC-2 Adjusted Participants (in thousands)</th>
<th>First Time Enrollments (in thousands)</th>
<th>Federal Obligations (in millions)</th>
<th>Total Expenditures (in millions)</th>
<th>Federal Expenditures (in millions)</th>
<th>State and Local Expenditures (in millions)</th>
<th>Cost per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>4</td>
<td>4</td>
<td>$15</td>
<td>$8</td>
<td>$8</td>
<td>$1</td>
<td>$4610</td>
</tr>
<tr>
<td>1971*</td>
<td>36</td>
<td>43</td>
<td>85</td>
<td>83(a)</td>
<td>75</td>
<td>8</td>
<td>4635</td>
</tr>
<tr>
<td>1972 (budget)</td>
<td>42</td>
<td>45</td>
<td>85</td>
<td>98</td>
<td>88</td>
<td>10</td>
<td>4635</td>
</tr>
</tbody>
</table>

Source: "Manpower Special Analysis System."

(a) The actual costs for FY 1971 fell below these estimates. Data that would allow apportionment of this reduction between programs is not presently available. For this reason costs do not coincide with the costs on the preceding table.

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### TABLE 7
NYC I-S: Enrollments and Expenditures, FY 1967-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Enrollments</th>
<th>Expenditures (in millions)</th>
<th>Cost Per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opportunities (in thousands)</td>
<td>First Time Enrollments (in thousands)</td>
<td>Total</td>
</tr>
<tr>
<td>1967</td>
<td>139</td>
<td>207</td>
<td>$ NA $ NA $ NA</td>
</tr>
<tr>
<td>1968</td>
<td>135</td>
<td>195</td>
<td>93 79</td>
</tr>
<tr>
<td>1969</td>
<td>101</td>
<td>134</td>
<td>80 61</td>
</tr>
<tr>
<td>1970</td>
<td>97</td>
<td>140</td>
<td>82 66</td>
</tr>
<tr>
<td>1971</td>
<td>79</td>
<td>120</td>
<td>73 62</td>
</tr>
<tr>
<td>1972 *</td>
<td>102</td>
<td>132</td>
<td>89 75</td>
</tr>
</tbody>
</table>

(a) The figures reported for FY 1967 to FY 1970 were taken from the FY 1973 "Special Analysis System;" they differ from the figures reported in the 1972 Manpower Report.
TABLE 8
NYC-SUMMER: ENROLLMENTS AND EXPENDITURES, FY 1967-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Enrollments (in thousands)</th>
<th>First Time (in thousands)</th>
<th>Total</th>
<th>Expenditures (in millions)</th>
<th>Cost Per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opportunities</td>
<td>First Time</td>
<td></td>
<td>Federal</td>
<td>State and</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
<td>(in thousands)</td>
<td></td>
<td></td>
<td>Local</td>
</tr>
<tr>
<td>1967</td>
<td>294</td>
<td>254</td>
<td>$ NA</td>
<td>$ NA</td>
<td>$ NA</td>
</tr>
<tr>
<td>1968</td>
<td>339(b)</td>
<td>329</td>
<td>137</td>
<td>119</td>
<td>18</td>
</tr>
<tr>
<td>1969</td>
<td>368(b)</td>
<td>425</td>
<td>134</td>
<td>121</td>
<td>13</td>
</tr>
<tr>
<td>1970</td>
<td>443(b)</td>
<td>527</td>
<td>164</td>
<td>146</td>
<td>18</td>
</tr>
<tr>
<td>1971</td>
<td>609(b)</td>
<td>567</td>
<td>206</td>
<td>197</td>
<td>10</td>
</tr>
<tr>
<td>1972*</td>
<td>719(c)</td>
<td>600</td>
<td>326</td>
<td>294</td>
<td>33</td>
</tr>
</tbody>
</table>

SOURCES: Appendix to the FY 1973 Budget, "Manpower Special Analysis System," NYC Program Office, and Manpower Administration, DOL.

(a) The Manpower Report was not in accord with these data which were presented in the sources listed above.

(b) Includes enrollment opportunities made available by Manpower Development Training Act (MDTA) supplemental funds. These were: 49,100 in FY 1968; 36,200 in FY 1969; 64,500 in FY 1970; and 145,000 in FY 1971.

(c) These figures were provided by the NYC Program Office Staff, who state that they are more recent than those contained in the Appendix to the Budget of the U.S., FY 1973, which shows only 609,300 for enrollment opportunities and $193.3 million in federal obligations.
TABLE 9
VOCATIONAL WORK-STUDY ENROLLMENTS AND EXPENDITURES, FY 1970-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Enrollments (in thousands)</th>
<th>Expenditures (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary</td>
<td>Postsecondary</td>
</tr>
<tr>
<td>1970(a)</td>
<td>13</td>
<td>2.7</td>
</tr>
<tr>
<td>1971</td>
<td>22</td>
<td>6.4</td>
</tr>
<tr>
<td>1972(b)</td>
<td>23</td>
<td>7.0</td>
</tr>
</tbody>
</table>


(a) The Appendix to the FY 1973 Budget indicated that a total of 21,000 students were enrolled in FY 1970.

(b) Estimates from 1972 HEW Budget.

(c) This figure represents an obligation rather than an expenditure.
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Participants (in thousands)</th>
<th>Federal Obligations (in millions)</th>
<th>Federal Expenditures(^{(a)}) (in millions)</th>
<th>Cost Per Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>36</td>
<td>$14</td>
<td>$NA</td>
<td>$NA</td>
</tr>
<tr>
<td>1967</td>
<td>46</td>
<td>18</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1968</td>
<td>85</td>
<td>42.</td>
<td>42</td>
<td>490</td>
</tr>
<tr>
<td>1969</td>
<td>74</td>
<td>34.</td>
<td>34</td>
<td>440</td>
</tr>
<tr>
<td>1970</td>
<td>61</td>
<td>39.</td>
<td>39</td>
<td>640</td>
</tr>
<tr>
<td>1971</td>
<td>56</td>
<td>32.</td>
<td>32</td>
<td>580</td>
</tr>
<tr>
<td>1972*</td>
<td>56</td>
<td>32.</td>
<td>32</td>
<td>580</td>
</tr>
</tbody>
</table>

SOURCE: "Manpower Special Analysis System."

\(^{(a)}\)Expenditures reflect only salary costs; supervisory, training, and administrative costs are not included.
TABLE 11
NYC STAY IN SCHOOL: ENROLLMENTS AND EXPENDITURES, FY 1966-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>First Time Enrollments (in thousands)</th>
<th>Federal Obligations (in millions)</th>
<th>Federal(a) Expenditures (in millions)</th>
<th>Cost per Man-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>19</td>
<td>$6</td>
<td>$NA</td>
<td>$NA</td>
</tr>
<tr>
<td>1967</td>
<td>19</td>
<td>28</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1968</td>
<td>16</td>
<td>24</td>
<td>24</td>
<td>1,630</td>
</tr>
<tr>
<td>1969</td>
<td>19</td>
<td>28</td>
<td>28</td>
<td>1,710</td>
</tr>
<tr>
<td>1970</td>
<td>16</td>
<td>28</td>
<td>28</td>
<td>1,730</td>
</tr>
<tr>
<td>1971</td>
<td>17</td>
<td>42</td>
<td>42(b)</td>
<td>2,270</td>
</tr>
<tr>
<td>1972*</td>
<td>16</td>
<td>46</td>
<td>46</td>
<td>2,420</td>
</tr>
</tbody>
</table>

SOURCE: "Manpower Special Analysis System."

(a) Expenditures reflect only salary costs; supervisory, training and administrative costs are not included.

(b) The substantial increase in costs from FY 1970 to FY 1971 was caused by the Commission's change in average salary, estimated from $1.60 per hour to $2.06 per hour.
TABLE 12
YCC ENROLLMENTS AND EXPENDITURES, FY 1971-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Enrollments (in thousands)</th>
<th>Federal Obligations (in millions)</th>
<th>Federal Expenditures (in millions)</th>
<th>Cost per Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>2.7</td>
<td>$ 2.5</td>
<td>$ 2.5 (a)</td>
<td>$ 1,100</td>
</tr>
<tr>
<td>1972*</td>
<td>3.2</td>
<td>3.5</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

SOURCE: Departments of Agriculture and Interior, Youth Conservation Corps, Report to the President, First Pilot Program -- Summer 1971.

\(a\) This figure does not include $532,000 which represents materials, supplies, equipment, and technical expertise absorbed by the administering departments but not charged to the program.
TABLE 13
RECREATION SUPPORT PROGRAM ENROLLMENTS AND EXPENDITURES, FY 1970-1972

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Participants (in thousands)</th>
<th>Federal Expenditures (in millions)</th>
<th>Cost per Participant (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>1,800</td>
<td>$ NA</td>
<td>$ NA</td>
</tr>
<tr>
<td>1971</td>
<td>1,900</td>
<td>$13</td>
<td>$6.80</td>
</tr>
<tr>
<td>1972*</td>
<td>1,900</td>
<td>$15</td>
<td>$7.90</td>
</tr>
</tbody>
</table>

SOURCE: DOL, Manpower Administration, RSP.

(a) Does not include funds provided through NYC for jobs. These were: $35 million in FY 1970; $92.2 million in FY 1971; and an estimated $142 million in FY 1972. Additional costs to run these programs borne by states and localities are not reflected here.
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Participants (in thousands)</th>
<th>Total Expenditures (in millions)</th>
<th>Cost per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>43</td>
<td>$4.7</td>
<td>$2.7</td>
</tr>
<tr>
<td>1970</td>
<td>45</td>
<td>5.3</td>
<td>2.8</td>
</tr>
<tr>
<td>1971</td>
<td>42</td>
<td>5.5</td>
<td>2.9</td>
</tr>
<tr>
<td>1972*</td>
<td>43</td>
<td>NA</td>
<td>3.0</td>
</tr>
</tbody>
</table>

V. PROGRAMS

[SKILL TRAINING

JOB CORPS

The Job Corps was created by the Economic Opportunity Act of 1964:

... To assist young persons who need and can benefit from an unusually intensive program, operated in a group setting, to become more responsible, employable, and productive citizens; and to do so in a way that contributes, where feasible, to the development of national, state, and community resources, and to the development and dissemination of techniques for working with the disadvantaged that can be widely utilized by public and private institutions and agencies.

Job Corps differs from other youth skill-training programs in that it typically removes enrollees from their home environment to a residential setting where they receive comprehensive services, ranging from clothing, food, and lodging to basic education, vocational skills and training, and intensified supportive services such as counseling, health and dental care. Young men and women, aged 16-21 who are permanent residents of the United States, from low income families, and lack education and skills to hold meaningful employment or successfully participate in regular school work are eligible for Job Corps. In addition, enrollees must be living in a disruptive environment, be free of major medical or behavior problems and have
the basic capabilities and aspirations to complete the program.

Job Corps expenditures from 1965 through 1967 increased from $53 million to $340 million; the program was then at its peak with about 120 centers and 42,000 enrollment slots. Concern over high unit costs, however, led to many centers closing in 1968 and a redirection of the program in 1969. (See table 15 for comparative figures since 1965.)

Not all of Job Corps centers are alike; there are essentially four types: all male civilian conservation centers, men's and women's urban centers, residential manpower centers, and residential service centers. The civilian conservation centers (COC), located in rural areas, are administered by the Departments of Agriculture or Interior and have enrollments of between 150 and 250. In previous years these centers stressed conservation work and remedial education; more recently this emphasis has shifted toward more vocational skills, thus lessening the difference from other center types. The urban centers are administered by private firms, universities, and nonprofit organizations. Those for men (MUC) have enrollments of 1,200 to 3,000, while the women's urban centers (WUC) are somewhat smaller, with 350 to 700 women each.

1970, two new kinds of centers were opened--residential manpower centers (RMC) and residential support centers (RSC). The typical RMC is located near an urban area and enrolls 100 to 350 residential and nonresidential youths from the local population; in addition, four of the RMCs are
TABLE 15
JOB CORPS ENROLLMENTS AND EXPENDITURES BY CENTER TYPE

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures (in millions)</td>
<td>$53.5</td>
<td>$258.1</td>
<td>$339.8</td>
<td>$299.7</td>
<td>$275.6</td>
<td>$190.5</td>
<td>$152.5</td>
<td>$108.1(a)</td>
</tr>
<tr>
<td>Number of Centers: Total</td>
<td>48</td>
<td>106</td>
<td>122</td>
<td>109</td>
<td>53</td>
<td>54</td>
<td>65</td>
<td>74(b)</td>
</tr>
<tr>
<td>Men's Urban</td>
<td>36</td>
<td>86</td>
<td>93</td>
<td>82</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Women's Urban</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Residential Manpower</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Residential Support</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Enrollment: Total</td>
<td>10,241</td>
<td>28,547</td>
<td>42,032</td>
<td>33,013</td>
<td>20,003</td>
<td>19,847</td>
<td>22,403</td>
<td>23,354(b)</td>
</tr>
<tr>
<td>Conservation</td>
<td>4,107</td>
<td>12,644</td>
<td>16,221</td>
<td>12,802</td>
<td>5,270</td>
<td>5,571</td>
<td>5,265</td>
<td>6,245</td>
</tr>
<tr>
<td>Men's Urban</td>
<td>5,241</td>
<td>13,262</td>
<td>16,221</td>
<td>10,598</td>
<td>7,750</td>
<td>7,723</td>
<td>7,916</td>
<td>7,916</td>
</tr>
<tr>
<td>Women's Urban</td>
<td>893</td>
<td>2,606</td>
<td>9,534</td>
<td>9,713</td>
<td>5,558</td>
<td>5,314</td>
<td>5,592</td>
<td>5,592</td>
</tr>
<tr>
<td>Residential Manpower</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,209</td>
<td>2,650</td>
<td>3,601</td>
<td>3,601</td>
</tr>
<tr>
<td>Residential Support</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>30</td>
<td>90</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>Cost per enrollee man-year (Center operating costs)</td>
<td>NA</td>
<td>8,470</td>
<td>7,025</td>
<td>6,601</td>
<td>6,243</td>
<td>6,206</td>
<td>6,341</td>
<td>6,323(b)</td>
</tr>
<tr>
<td>New arrivals</td>
<td>59,500</td>
<td>70,700</td>
<td>64,600</td>
<td>53,000</td>
<td>42,400</td>
<td>49,800</td>
<td>48,900(b)</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Job Corps MIS.
(a) As of 3/31/72.
(b) Projected figures.
coeducational. The RSCs with approximately 30 youths each provide offsite basic education and training.

Success is gauged by the extent to which participants become more employable, increase their earning capacity, satisfy Armed Services requirements, raise their basic educational levels, and are more capable of coping with a complex society.

**Job Corps Participants**

A review of LMES data indicates that, Job Corps enrollees are relatively more disadvantaged than enrollees of MDTA (Manpower Development Training Act) and JOBS (Job Opportunities in the Business Sector) but the enrollees of NYC-OS; (see table 16). The typical Job Corps enrollee is male (74 percent), black (62 percent), and 17 years old (57 percent under 18); he has not completed the ninth grade (55 percent less than 10th grade), has been out of school 12 months and has been unemployed for at least 10 weeks (59 percent). He has good facility with conversational English, but his reading and mathematical skills are less than sixth grade level (approximately 70 percent each). He comes from a community of less than 250,000 population (64 percent) and lives with approximately five family members, who have a family income around $4,000 and do not receive welfare assistance (64 percent).

**Benefits**

We have noted that it is impossible at present to ascertain the long term
<table>
<thead>
<tr>
<th>Participants</th>
<th>NYC-OS</th>
<th>Job Corps</th>
<th>MDTA</th>
<th>JOBS</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Rank</td>
<td>% Rank</td>
<td>% Rank</td>
<td>% Rank</td>
<td>% Rank</td>
</tr>
<tr>
<td>Aged less than 18</td>
<td>78</td>
<td>11</td>
<td>69</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>2</td>
<td>22</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Black</td>
<td>68</td>
<td>2</td>
<td>69</td>
<td>2</td>
<td>58</td>
</tr>
<tr>
<td>From single-headed household</td>
<td>46</td>
<td>1</td>
<td>40</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Education completed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 12 years</td>
<td>99</td>
<td>1</td>
<td>92</td>
<td>2</td>
<td>62</td>
</tr>
<tr>
<td>Less than 9 years</td>
<td>25</td>
<td>1</td>
<td>19</td>
<td>2.5</td>
<td>8</td>
</tr>
<tr>
<td>Reported arrests:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>25</td>
<td>3</td>
<td>30</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>Females</td>
<td>5</td>
<td>3</td>
<td>10</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Prior training</td>
<td>86</td>
<td>2</td>
<td>81</td>
<td>3</td>
<td>78</td>
</tr>
<tr>
<td>Reported handicaps</td>
<td>5</td>
<td>3.5</td>
<td>8</td>
<td>1.5</td>
<td>4</td>
</tr>
<tr>
<td>Prior job attempts</td>
<td>70</td>
<td>2</td>
<td>61</td>
<td>4</td>
<td>58</td>
</tr>
<tr>
<td>Family assistance:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welfare</td>
<td>26</td>
<td>2</td>
<td>36</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Food stamps</td>
<td>26</td>
<td>1</td>
<td>23</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Average Ranking</td>
<td>1.9</td>
<td>2.3</td>
<td>3.9</td>
<td>3.7</td>
<td>3.2</td>
</tr>
</tbody>
</table>
benefits of Job Corps or other training programs. Although short term (less than two years) benefits are not sufficient to prove the worth of a program, they are generally necessary for positive results.

Recent data concerned with pre- and post-Job Corps employment are available from the 1969 Harris Study and annual Job Corps Placement Performance Reports.* In 1969 the Harris researchers interviewed two groups of Job Corps terminees: one six months and the other twelve months after Job Corps. Additional data can be derived from various Job Corps records and comparisons of later data to preenrollment data. Job Corps tests enrollees reading and mathematics ability upon entry and periodically thereafter until termination. Over and above the information about the enrollees' length of stay and completion status, Job Corps obtains a one-time follow-up placement report on 80 to 90 percent of all terminees. (It is worth noting that Job Corps has an exceptionally fine data gathering system. Unlike most systems, it focuses on results rather than processes. One ironic consequence is that Job Corps presents a clearer target for criticism than programs with "softer" data. The known is easier to challenge than the unknown.)

*U.S. Manpower Administration, Job Corps: Job Corps Placement Performance, Fiscal Year, 1971.

U.S. Congress, Senate, Committee on Labor and Public Welfare, Closing of Job Corps Centers: Hearings before the Subcommittee on Employment, Manpower, and Poverty...91st Congress, 1st session. 18 April 1969. (Includes the Harris Study).
Table 17 shows a summary of placement reports received on approximately 69,000 Job Corps terminees in FY 1971 and FY 1972. Approximately three-fourths of the terminees reported successful placements in jobs, schools, or the Armed Services. The latter two results are considered positive intermediate results to later employment but the terminees are not included in an analysis of wage rate gains. Likewise those taking care of a family or ill or confined are not included. Looking at the short term employment results, about one-half were employed at an average wage rate of $1.87 per hour in FY 1971. Using Bureau of Labor Statistics definitions, terminees would have a labor force participation rate of 55 percent and a 10 percent unemployment rate as compared to the national 1971 rates of 41 percent and 22 percent respectively for 16 to 21-year-old youths in poverty.**

Completion of Job Corps has more positive effects than attendance for shorter times (see table 18). The individuals who completed the defined program (category I) have better placement results, a higher percent employed, higher wage rates, and a lower percent not looking for work, than secondary completers (those who stayed more than 89 days --

*Although the reports are supposed to be completed and returned to Job Corps within three months after termination, often they are not. Therefore, the results include a variation in the length of separation, which could affect the reported results. In addition, these are one-time reports and an individual who reported he was placed in a job may have held it only for a short period.

**Labor force participation rate equals those employed, plus those looking for work, divided by the civilian population.

Unemployment rate equals those looking for work, divided by those employed, plus those looking for work.
<table>
<thead>
<tr>
<th>Placement Status</th>
<th>Number</th>
<th>Percentage Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY1971</td>
<td>FY1972</td>
</tr>
<tr>
<td>Total</td>
<td>33,803</td>
<td>35,182</td>
</tr>
<tr>
<td>Available for placement</td>
<td>31,088</td>
<td>32,392</td>
</tr>
<tr>
<td>Not available for placement</td>
<td>2,715</td>
<td>2,790</td>
</tr>
<tr>
<td>Available for Placement</td>
<td>31,088</td>
<td>32,392</td>
</tr>
<tr>
<td>Placed</td>
<td>23,656</td>
<td>25,382</td>
</tr>
<tr>
<td>Employed</td>
<td>16,184</td>
<td>17,412</td>
</tr>
<tr>
<td>Wage per hour</td>
<td>$1.87</td>
<td>$1.95</td>
</tr>
<tr>
<td>Entered or accepted into school</td>
<td>6,140</td>
<td>6,328</td>
</tr>
<tr>
<td>Entered or accepted into Armed Forces</td>
<td>1,332</td>
<td>1,642</td>
</tr>
<tr>
<td>Not Placed</td>
<td>7,432</td>
<td>7,010</td>
</tr>
<tr>
<td>Looking for placement</td>
<td>1,808</td>
<td>2,118</td>
</tr>
<tr>
<td>Not looking or not interested</td>
<td>5,624</td>
<td>4,892</td>
</tr>
<tr>
<td>Not Available for Placement</td>
<td>2,715</td>
<td>2,790</td>
</tr>
<tr>
<td>Taking care of family (female only)</td>
<td>1,211</td>
<td>1,327</td>
</tr>
<tr>
<td>Ill or confined</td>
<td>1,504</td>
<td>1,463</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE: Job Corps MIS.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

60
TABLE 18

PLACEMENT STATUS OF JC TERMINES BY CATEGORY, FY 1971-1972

<table>
<thead>
<tr>
<th>Type of Termination</th>
<th>All Categories</th>
<th>Category I(a)</th>
<th>Category II</th>
<th>Category III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 71 FY 72</td>
<td>FY 71 FY 72</td>
<td>FY 71 FY 72</td>
<td>FY 71 FY 72</td>
</tr>
<tr>
<td></td>
<td>33,803 35,182</td>
<td>9,215 10,523</td>
<td>9,300 9,569</td>
<td>788 15,090</td>
</tr>
<tr>
<td>Available for placement</td>
<td></td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
</tr>
<tr>
<td>Not available for placement</td>
<td></td>
<td>5.0 4.0</td>
<td>9.0 9.0</td>
<td>9.0 10.0</td>
</tr>
<tr>
<td>Available for Placement</td>
<td></td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
</tr>
<tr>
<td>Placed</td>
<td></td>
<td>87.0 89.0</td>
<td>76.0 76.0</td>
<td>69.0 72.0</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td>70.0 70.0</td>
<td>52.0 51.0</td>
<td>41.0 43.0</td>
</tr>
<tr>
<td>Wage per hour</td>
<td></td>
<td>$2.06 $2.16</td>
<td>$1.83 $1.87</td>
<td>$1.70 $1.75</td>
</tr>
<tr>
<td>Entered or accepted into school</td>
<td></td>
<td>12.0 12.0</td>
<td>19.0 19.0</td>
<td>25.0 25.0</td>
</tr>
<tr>
<td>Entered or accepted into Armed Forces</td>
<td></td>
<td>5.0 6.0</td>
<td>5.0 5.0</td>
<td>3.0 4.0</td>
</tr>
<tr>
<td>Not Placed</td>
<td></td>
<td>13.0% 11.0%</td>
<td>26.0% 24.0%</td>
<td>31.0% 28.0%</td>
</tr>
<tr>
<td>Looking for placement</td>
<td></td>
<td>4.0 4.0</td>
<td>6.0 7.0</td>
<td>7.0 9.0</td>
</tr>
<tr>
<td>Not looking or not interested</td>
<td></td>
<td>9.0 7.0</td>
<td>18.0 17.0</td>
<td>26.0 19.0</td>
</tr>
<tr>
<td>Not Available for Placement</td>
<td></td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
<td>100.0% 100.0%</td>
</tr>
<tr>
<td>Taking care of family (female only)</td>
<td></td>
<td>64.0 64.0</td>
<td>46.0 48.0</td>
<td>38.0 43.0</td>
</tr>
<tr>
<td>Ill or confined</td>
<td></td>
<td>36.0 36.0</td>
<td>54.0 52.0</td>
<td>62.0 57.0</td>
</tr>
</tbody>
</table>

SOURCE: Job Corps MIS.

(a) Category I: enrollees who fully complete their defined training programs.
Category II: enrollees who stay more than 89 days and do not complete the entire training program.
Category III: enrollees who stay less than 90 days and do not complete the entire training program.
category II). They, in turn, have better results than those noncompleters who stayed fewer than 90 days (category III). Although these data appear advantageous for Job Corps, they provide little information without a standard of comparison. We need to know the amount of gain experienced and the extent to which these results are affected by age, sex, race, or other factors not related to program performance.

**Wage Gains**

Wage rate gains are one of the primary measures of skill training success. In order to measure gains in wage rates attributable to Job Corps, it is necessary to compare enrollees' before-and-after wage rates with a comparable group whose wages have not been influenced by Job Corps training. No completed study has obtained such a comparison group, however; so it is necessary to use a surrogate control group, recognizing, that statistical control is not maintained and conclusive inferences cannot be made. If one is willing to assume that individuals who enrolled in Job Corps fewer than 90 days and then dropped out (category III) constitute a reasonable comparison to determine the effect that Job Corps completion might have on wage rates, then the 1969 Harris Study provides useful information. (To the extent the time in Job Corps influenced the category III enrollees the gains are understated. To the extent that category III enrollees are different—e.g., undermotivated, younger, or a higher percentage of female—the gains are overstated. There is no a priori
information to indicate probable bias either way.) Table 19 shows wage rate gains completers (category I) and drop-outs (category III) by age. Estimated gains attributed to completion of Job Corps were calculated in two ways and range from $0.07 to $0.31 per hour. It should be noted that those who stayed more than 90 days but did not complete the full course of their training gained more than those who dropped out before the 90 days but not so much as the completers. The younger, under 18 group, which has significantly more problems obtaining full time employment, shows a much wider variation in results. The older, 18 or over completers' average gains* ranged from $0.07 to $0.19 per hour. The increases of up to $0.32 (column 2) for the 18 year olds and above category III enrollees are an indication of the instability of the wages that youths experience. Normal cost of living and performance raises would not account for these large increases over a 9 to 15 month period. This instability is borne out by unemployment rates in table 19 and by table 20, which show that estimated annual earnings for these ex-enrollees are approximately one-half what would be expected if they were working full time at their post-job Corps wages.** It is even more

*"Gain" is used to denote increases over and above control group. "Increase" denotes changes between pre-and post-enrollment.

**Wage rates and earnings are each separate measures of training success. Wage rates are a proxie for increased productivity; earnings are an indicator of change in poverty status.
<table>
<thead>
<tr>
<th>Age and Type Terminée(a)</th>
<th>Post JC Wage Per Hour</th>
<th>Increase Over Pre-JC Wage</th>
<th>Gain (Method A)(b)</th>
<th>Gain (Method B)</th>
<th>Pre-JC % Unemployed</th>
<th>Post-JC % Unemployed</th>
<th>Reduction in Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category I(c)</td>
<td>$1.65</td>
<td>$0.40</td>
<td>$0.31</td>
<td>$0.10</td>
<td>44%</td>
<td>33%</td>
<td>-11%</td>
</tr>
<tr>
<td>Category II</td>
<td>1.55</td>
<td>0.22</td>
<td>0.13</td>
<td>0.00</td>
<td>49</td>
<td>33</td>
<td>-16</td>
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<tr>
<td>Category III</td>
<td>1.55</td>
<td>0.09</td>
<td>NA</td>
<td>NA</td>
<td>46</td>
<td>33</td>
<td>-13</td>
</tr>
<tr>
<td>18-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category I</td>
<td>1.86</td>
<td>0.49</td>
<td>0.17</td>
<td>0.07</td>
<td>42</td>
<td>20</td>
<td>-22</td>
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<tr>
<td>Category II</td>
<td>1.78</td>
<td>0.39</td>
<td>0.07</td>
<td>-0.01</td>
<td>45</td>
<td>25</td>
<td>-20</td>
</tr>
<tr>
<td>Category III</td>
<td>1.79</td>
<td>0.32</td>
<td>NA</td>
<td>NA</td>
<td>54</td>
<td>27</td>
<td>-27</td>
</tr>
<tr>
<td>20+</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Category I</td>
<td>1.94</td>
<td>0.51</td>
<td>0.19</td>
<td>0.19</td>
<td>46</td>
<td>17</td>
<td>-29</td>
</tr>
<tr>
<td>Category II</td>
<td>1.87</td>
<td>0.49</td>
<td>0.17</td>
<td>0.12</td>
<td>48</td>
<td>25</td>
<td>-23</td>
</tr>
<tr>
<td>Category III</td>
<td>1.75</td>
<td>0.32</td>
<td>NA</td>
<td>NA</td>
<td>55</td>
<td>30</td>
<td>-25</td>
</tr>
</tbody>
</table>


(a) These data are for the group interviewed six months after termination.
(b) Computation of Gain: Method A assumes that the entire increase of Cat. I and II results from Job Corps training and increase in Cat. III is that "natural" increase which would be expected without training; Method B assumes that the Cat. III wages at time of Job Corps interview are what the Cat. I and II enrollees would have had without Job Corps training.
(c) See definitions of categories on table 3.
### Table 20
**Annual Earnings Before and After JC**

<table>
<thead>
<tr>
<th></th>
<th>Worked During Year Before Job Corps</th>
<th>Annual Earnings (a)</th>
<th>Worked Since Job Corps</th>
<th>Proportion of Time Worked</th>
<th>Annual Earnings (b)</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$</td>
<td>%</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
<tr>
<td><strong>Under 18</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category I</td>
<td>55</td>
<td>917</td>
<td>74</td>
<td>42</td>
<td>1564</td>
<td>19</td>
</tr>
<tr>
<td>Category II</td>
<td>53</td>
<td>803 (c)</td>
<td>83</td>
<td>56</td>
<td>2130</td>
<td>30</td>
</tr>
<tr>
<td>Category III</td>
<td>46</td>
<td>677</td>
<td>75</td>
<td>39</td>
<td>1687</td>
<td>29</td>
</tr>
<tr>
<td><strong>18-19</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category I</td>
<td>62</td>
<td>1113</td>
<td>81</td>
<td>50</td>
<td>2077</td>
<td>19</td>
</tr>
<tr>
<td>Category II</td>
<td>60</td>
<td>1299</td>
<td>84</td>
<td>53</td>
<td>2277</td>
<td>24</td>
</tr>
<tr>
<td>Category III</td>
<td>61</td>
<td>999</td>
<td>79</td>
<td>50</td>
<td>2011</td>
<td>18</td>
</tr>
<tr>
<td><strong>20+</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category I</td>
<td>69</td>
<td>1276</td>
<td>81</td>
<td>54</td>
<td>2346</td>
<td>12</td>
</tr>
<tr>
<td>Category II</td>
<td>66</td>
<td>1376</td>
<td>84</td>
<td>59</td>
<td>2652</td>
<td>18</td>
</tr>
<tr>
<td>Category III</td>
<td>70</td>
<td>1328</td>
<td>79</td>
<td>52</td>
<td>2097</td>
<td>5</td>
</tr>
</tbody>
</table>

(a) Pre-Job Corps annual earnings were computed for all individuals who were out of school three months or more before entering the Job Corps. If they had been out of school between 3 and 11 months before entering the Job Corps, their earnings were multiplied by a factor which converted them to an annual basis.

(b) Current annual earnings were computed for all individuals who are currently (working, unemployed, other) and who have been in no school or training programs since leaving the Job Corps.

(c) Small sample.
disturbing that the completers who are making the most (20 plus age group) are not making enough money ($2,652 per year) to support a family at a nonpoverty level.

Age and Length of Stay Effects

It is well known that age, particularly near the eighteenth year birthday, is strongly related to earnings. Job Corps terminees generally are no exception. The percent placed in jobs, wage gains, wage rates and estimated annual earnings are lower for terminees under 18. (See figure I.) We have already shown that completion of training has positive effects on terminee placement results, as does length of stay. Although we are not sure how much of this latter relationship is due to "aging," it appears that the length of time in Job Corps (standardized for age at termination) is a major contributor to placement results. (See figure 2).

Since one assumes that Job Corps wishes to maximize its overall cost effectiveness, recent trends in these findings cause concern. Average age and average length of stay have declined over the last few years. Approximately 60 percent of enrollees are under 18 years old. The under 18-year-old average length of stay is 3.5 months, about one-half that of older enrollees. The younger enrollees have only a 15 percent probability of completing this program and a 42 percent chance of continuing past 90 days. In addition, it is our understanding that the
Figure 2

Placement Results for Terminers by Length of Stay and Age at Time of Placement

Percent Placed in Jobs (%) vs. Length of Stay (Months)

- Max. Ages (15-19)
- Ages 20-24
- Ages 25-29
- Ages 30-34
- Ages 35-39
- Ages 40-44
- Ages 45-49
- Ages 50 and Over

80%
Job Corps has had some difficulty recruiting older youth.

It appears that if Job Corps wishes to be most cost effective, it must try harder to reverse this trend and concentrate more heavily on older youths. To the extent that aging and length of stay are important for younger enrollees, ways must be found to select those with the potential to remain in the program or to identify those who will not stay and channel them into other programs.

Since we do not know whether Job Corps is (or is not) more effective than other programs with 16 and 17-year-olds, we do not recommend excluding them from Job Corps. On the average, Job Corps is helping those youngsters who stay longer than 3 or 4 months. Because it will be difficult to increase their average length of stay, Job Corps should find ways to concentrate the training or combine resident training and work experience outside the residence center.

**Residency**

Is it necessary to remove the enrollees to another environment? If there are some who do need to be removed can we identify them beforehand? The residential manpower centers were established to test this residency principle. Although there has been little active investigation of the impact or importance of residency, one 1971 study for the OEO found that program costs were less for nonresidents and that nonresidents
were less likely than residents to be early drop-outs and no more likely later. The study did not look at economic gains but did find that the nonresidents had greater educational gains. Therefore, there appears to be some limited evidence that Job Corps Centers need not be completely residential, and that for some participants nonresidential programs may be more successful. (This conclusion has practical application only where centers are near target populations and few centers presently are.)

Placement Efforts

Critics of skill-training programs often attribute much of the gain in wage rates to placement efforts, rather than the training itself.

The U.S. Employment Service (USES), Gate House, and Job Corps Centers are the three principal agencies involved with the placement of ex-Corpsmembers. Of these three, USES has the primary responsibility, placing about 43 percent of the total.

Data from the Job Corps Placement Reports shows that individuals who place themselves (25 percent of total reported) do so at an average wage of $1.80 per hour. This is $0.15 per hour less than the average of all those who reported, but only $0.03 per hour less than those placed by USES.
The centers placed about 11 percent of the total at an average wage of $2.32 per hour and Gate House placed about 18 percent at $2.09 per hour. A study by Unco of pre- and postenrollment services concluded:

It is difficult to judge agencies in terms of placement results. The data on place are more a reflection of the success or failure of the Job Corps program as a whole, as well as the efforts of the placement agencies....

One measure, however, of the efforts of all placing agencies is that they place only one and a half times more youths than place themselves. This is particularly important when one considers that most self-placements occur after the youth leaves the JCC, (Job Corps Center). Inner-city youth, especially those under 18 years of age, are the group that is hardest to place....

The true placement record of USCS is less than outstanding, especially when compared with the record of other placement agencies or of the ex-Corpsmembers themselves....

We conclude that although placement services are very important to the overall success of Job Corps, the enrollee gains in wage rates found cannot be attributed primarily to placement efforts. Agencies other than USES are, on a limited scale, using techniques which make them more effective than USES. But we cannot conclude whether any or all of these practices could be cost effectively applied by USES in its larger scale of operation.

Educational Gains
The primary measurable noneconomic gains associated with Job Corps concern improvement in reading and mathematics scores.* (Although Cain in his 1967 study** tried to estimate the lifetime earning gains associated with increases in school grades completed, we feel that the relationship is too tenuous to use.)

Job Corps officials have calculated that their enrollees per month gain from .12 to .16 grade levels in reading and from .12 to .18 in mathematics but it is hard to know what base to compare these figures to. They are generally higher than the gains achieved by public schools in either regular or remedial programs for the disadvantaged. However, Job Corps is dealing with older youths and youths who are possibly more motivated (as evidenced by the fact that they have volunteered for the program). Further, since the mean length of stay is 5 to 6 months, the average youngster leaving Job Corps still has only a sixth or seventh grade level ability. While that ability level is considered functionally literate, one assumes the individual still is severely disadvantaged educationally.*

*Gains in self-image, improved work habits, and homemaking skills, although important, are extremely difficult to measure. This does not negate their importance; it only means that we cannot quantify or capture all benefits associated with the program.


One interesting but yet unconfirmed piece of information uncovered was that a person with an eighth grade reading ability has about an 80 percent chance of successfully completing the Graduate Equivalency Degree (GED) examination. If true, this must say something about either the GED or graduates from our school systems. This information comes from preliminary studies of the OEO High School Equivalency Program for Migrants.
Costs

Because of its approach the Job Corps is much more costly per enrollee (or man-year) than most other youth-oriented manpower programs. Its expensive reputation was a factor in the closing of a number of centers in 1968 and 1969. Until the last several years the average man-year costs were declining (see table 15). Of the FY 1971 $6,341 per man-year operating costs, the approximate breakdown is:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollee expenses</td>
<td>18%</td>
</tr>
<tr>
<td>Enrollee pay and allowances</td>
<td>18%</td>
</tr>
<tr>
<td>Staff expenses</td>
<td>49%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Amortized capital costs, Department of Labor administrative costs, recruitment, screening and placement costs, Department of Army payroll administration costs, and Department of Agriculture/Interior agency direction costs for the Civilian Conservation Centers add approximately $2,000 to man-year costs. (The Conservation Centers completed work projects which had a value estimated in excess of the cost for supplies and materials.)

It is meaningless to compare costs of different programs without also
comparing their relative benefits. OEO's Longitudinal Study will have the
capacity to compare Job Corps, MDTA, NYC-OS, JOBS, and comparison group
short term results. However, that comparison is several months from
completion. Several papers, which we reviewed calculated such things
as cost per completer and cost per employed completer, which were then
cautiously discussed as possible measures of relative cost effectiveness.
Because we do not know the relation between completion and benefits, this
approach was not considered relevant for our analysis.

As we have noted earlier, the Job Corps is more expensive than most other
manpower programs. Primarily, this is so because of the extensive
supportive services they provide in addition to the traditional skills
training. Although we have fairly accurate cost records of each of these
services, there are no estimates of their value individually or in
combination.

Comparison of Center Costs by Center Type

In 1969 the Administration announced a plan to establish Residential Manpower
Centers that were expected to be less expensive than the older type centers
and whose costs were projected at approximately $5,500 per man-year. Table 21
shows a cost comparison for four types of centers. While the urban
centers are declining in costs, the Civilian Conservation Centers, which
in FY 1968 were the least expensive, have increased their costs and are
now the most expensive. The Job Corps attributes this change primarily to
<table>
<thead>
<tr>
<th>Total FY 1968</th>
<th>All Centers</th>
<th>CCC</th>
<th>MUC</th>
<th>WUC</th>
<th>RMC</th>
<th>RSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total FY 1971</td>
<td>6,341</td>
<td>6,615</td>
<td>6,615</td>
<td>6,615</td>
<td>6,615</td>
<td>6,615</td>
</tr>
</tbody>
</table>

**FY 1971 Functional Costs**

<table>
<thead>
<tr>
<th>Category</th>
<th>All Centers</th>
<th>CCC</th>
<th>MUC</th>
<th>WUC</th>
<th>RMC</th>
<th>RSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education</td>
<td>539</td>
<td>353</td>
<td>380</td>
<td>449</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational education</td>
<td>1015(c)</td>
<td>491</td>
<td>461</td>
<td>777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td>264</td>
<td>269</td>
<td>163</td>
<td>165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsistence</td>
<td>539</td>
<td>437</td>
<td>403</td>
<td>277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay and allowances</td>
<td>968</td>
<td>949</td>
<td>982</td>
<td>538</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>256</td>
<td>258</td>
<td>253</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical and dental expenses</td>
<td>312</td>
<td>262</td>
<td>384</td>
<td>314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>140</td>
<td>261</td>
<td>204</td>
<td>333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations and Maintenance</td>
<td>584</td>
<td>468</td>
<td>508</td>
<td>598</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and administration</td>
<td>(d)</td>
<td>271</td>
<td>256</td>
<td>223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease costs</td>
<td>NA</td>
<td>28</td>
<td>206</td>
<td>189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor fee</td>
<td>NA</td>
<td>162</td>
<td>170</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and support</td>
<td>988</td>
<td>1284</td>
<td>1402</td>
<td>1630</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff travel and training</td>
<td>92</td>
<td>20</td>
<td>30</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td>916</td>
<td>674</td>
<td>697</td>
<td>607</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Not in existence.
(b) Insufficient information.
(c) Includes $498 in salaries to work project personnel.
(d) To the extent incurred, these costs are borne by the Department of Agriculture and Interior as the administering agencies.
staff salaries. Contractor staff salaries in the urban centers have declined about $100 per man-year while the salaries of federal employees at the conservation centers have been increased approximately $700.

The RMCs, which did not exist in FY 1968 and are still relatively new, have not yet met their expected goal of $5,500 per man-year. However, correcting for inflation $7,291 in FY 1971 would be equivalent to about $5,410 in FY 1968. It appears that generally the decline in costs has stabilized and that significant programmatic changes will be required to realize significant new cost savings.

Women's Urban Centers, on the whole, have been the second most expensive centers to operate (CCC being the first). One of the objectives of the women's centers is to prepare their enrollees to be better homemakers, an objective virtually impossible for economists to handle in cost benefit terms. However, when one looks at the short term placement results, he finds that the WUC have lower average placement rates, lower percent employed and lower wage rates. Although these lower placement results are probably an artifact of discrimination against women in the job market, they do bring into question the cost effectiveness of comprehensive skills-training programs for women. But to recommend further discrimination against women by excluding them from Job Corps also seems unwarranted.
The NYC Out-of-School program was established by the Economic Opportunity Act of 1964. The program provides work and training for unemployed and disadvantaged out-of-school youth between the ages of 16-19. As is true of all NYC projects, project sponsors are limited to public or nonprofit institutions, and federal financial assistance may not exceed 90 percent of program costs. Program components include work experience, skill training as of 1970, remedial education and supportive services. (See table 5 for summary of enrollments, expenditures, and costs.)

The Out-of-School program has been in operation since 1965, but the original design was modified in 1970. This modification resulted in a lowering of the maximum eligible age from 21 to 19 with a 10 percent limit on the number of 18 and 19 year olds whom a project may enroll and the introduction of an additional Out-of-School program entitled NYC-2, which enrolls approximately 60 percent of current Out-of-School enrollees. NYC-1, the original program, provides work experience and supportive services, but only minimal skills training. While the work experience component of NYC-1 involves well over half of the enrollees' time, NYC-2 places a greater emphasis on skills training, remedial education, and such supportive services as job placement. Work experience is clearly deemphasized, it is limited to one third of the time of enrollees.
Full time enrollment in the Out-of-School program involves 30 to 40 hours per week. An enrollee may stay in the program for a period of two years although the average length of stay is approximately six months. Enrollees are paid the minimum wage for each hour of work experience time and a weekly stipend based on family status (for example, head of household or single).

The work experience component involves the enrollee in productive work at a sponsor-designated worksite. While the Out-of-School program experimented with a project that provided on-the-job training at worksites in the private sector, the project has since been discontinued, and presently all worksites are public or nonprofit institutions. Work experience usually does not involve extensive on-the-job training, but there are exceptions since the degree of training provided at local worksites varies. Aside from providing employment and earnings to youth who might otherwise be unemployed, work experience is intended to foster proper work habits and attitudes.

The skill-training component entails formal vocational instruction. As is true of all three NYC programs, the sponsor is encouraged to obtain skill-training services at minimal costs from other private or public agencies in the community. (Approximately 15 percent of the $2,300 cost per NYC-2 participant and less
than 10 percent of the $1,600 cost per NYC-1 participant
are allocated for skills training.)* Sponsors may contract
for such services only at last resort. Most of the skills
training in the NYC-2 program is provided by public secondary
and post-secondary vocational education programs.

The educational component has a variety of objectives, the
most important of which is to encourage the enrollees to return
to regular school attendance. (Approximately 10 to 15 percent
of the $2,300 cost per NYC-2 participant and less than 10 percent
of the $1,600 cost per NYC-1 participant are used for remedial
education.) If this is not appropriate, the enrollee is
encouraged to secure a General Education Development certificate.
The educational and vocational instruction that NYC enrollees
receive may be identical in terms of teachers, material, physical
plant, and equipment to the instruction which secondary students
in the community receive. This has presented a recruitment
problem for many projects, for drop-outs are not receptive to
a program that emphasizes returning to school for any type of
instruction.

Supportive services are meant to be an integral part of the
Out-of-School program. They include among others recruitment,
orientation, medical and dental care, child care, counseling,
job development and placement. Obviously, the provision of such services is limited by the initiative of local sponsors, the degree of community support, and the extent to which funds are available.

Much of the criticism of the Out-of-School program as it operated prior to 1970 centered on the work experience component. Criticisms included lack of career progression, of appropriate training, and of supervision. In discussing the reasons for deemphasizing the importance of work experience in NYC-2, it is necessary to consider a review of the research on NYC before 1970:

The work experience approach, it soon became evident, was ineffective not only because many of the available jobs lacked skill content or training potentiality, but also because jobs in the private job market did not parallel many of those in the agencies using NYC enrollees, for example, hospitals, schools and social agencies. Thus, even though work assignments might include acceptable skill content, the skills acquired in NYC might prove unusable in the competitive job market.*

The decision to place greater emphasis on skills training was made simultaneously with the decision to restrict enrollment to 16 and 17 year olds. The latter was based on the assumption that younger enrollees would be more receptive to a program placing greater emphasis on vocational and remedial instruction. In other sections of this report, we have argued that a program of skills training is more effective with enrollees who are at least 18 years of age. If this conclusion is valid, the changes instituted in the Out-of-School program in 1970 may be conflicting.

Conclusion

Given its emphasis on training enrollees for a job, the Out-of-School programs should be evaluated by the extent to which enrollment in the program has enabled participants to experience longer post program employment and greater post program earnings relative to the employment and earnings experience of a suitable control group. However, no benefit cost analysis based on a national sample exists for the Out-of-School program. In addition, the existing studies, which are based on a more limited sample, refer to the Out-of-School program as it operated prior to 1968.* The number of changes in program design that have been introduced since 1968 make such studies of limited relevance.

Education benefits from program participation may also be appropriately measured. But once again, there are no studies of the Out-of-School program that attempt to measure educational gains of participants.

The impact of the Out-of-School program on the redistribution of income and the reduction of the youth unemployment rate are not appropriate criteria for its evaluation. Redistribution of income is not an appropriate criterion because substantial portions of the average cost per participant are directed to the provision of educational and vocational instruction rather than to payment of wages and stipends. (Less than half of participant costs goes to payment of wages or stipends.) The provision of educational and vocational instruction represents an investment and, while income redistribution may be involved, it is inappropriate to evaluate an investment decision according to the transfer of income that is involved. Because there are cheaper ways than NYC-2 to hire youth who might otherwise be unemployed, the reduction of the unemployment rate is likewise not an appropriate criterion.
WORK EXPERIENCE

NYC IN-SCHOOL PROGRAM

The In-School program was established by the Economic Opportunity Act of 1964 and has been in operation since 1965. Its basic premise is that income from jobs will encourage enrollees to remain in school and for this reason the program provides part-time jobs for disadvantaged high school students. To be eligible for the program, an applicant must be enrolled in high school and in the ninth through twelfth grades (or the age equivalent of 14-21). In addition, an applicant must be disadvantaged, as defined by the Manpower Administration, from a low income family, and in need of earnings to continue schooling. Once an applicant has been accepted for enrollment, he may stay in the combined In-School and Summer program until he graduates.

Obviously, it is more difficult to determine those students "who are in need of earnings to continue with school" than those who meet the more usual criteria of other youth poverty programs. Although a list of 21 characteristics of potential drop-outs is supposed to be used by program sponsors, as a complement to the above requirements, the In-School and Summer programs have been criticized for their failure to enroll potential drop-outs.* The problem is complex, for such a policy

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if rigidly enforced would require sponsors to provide work opportunities for those students who in many cases would be the least responsible.

Program components include supportive services and work experience, which involves productive work at a sponsor-designated worksite, often a local school system. Enrollees receive the legal minimum wage as payment per hour of participation and remain in the program, on the average, four to five months. Full time participation in the program involves 8-10 hours per week. Enrollees begin work after school is out in the afternoon, but, occasionally, their class schedules are reduced.

There is little evidence to indicate the type and quality of supportive services provided by the In-School program. Presumably, counseling, remedial education, and some medical care are provided. (A summary of enrollments, fundings, and costs is presented in table 7.)

A study of the causes and effects of dropping out of school has been made by Bachman, Green and Wirtanen.* A group of over two thousand sophomore males from 87 public high schools were surveyed over a four year period (1966-1970). In reviewing the surveys

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of those boys who eventually did drop-out of school, the authors conclude that dropping-out is a symptom of other problems, which have their origin earlier in life. The difficulties experienced by those boys who left school were found to be present at the start of their sophomore year when the first survey was taken. The factors that were most likely to account for these problems were found to be family background (e.g., the parents' education and the stability and size of the family), ability limitations, past school failure, and rebellious and delinquent behavior. In other words, it is suggested that dropping-out is caused by long range personal and family problems.

The authors also attempted to determine the effects of dropping-out although in this case their statistical evidence is less convincing. They conclude that dropping-out does not intensify the difficulties that led the youths to leave school. In fact, "dropping-out may contribute to unemployment, but it makes a smaller contribution than family background and ability."*

These findings cast doubt on the effectiveness of income maintenance or work support programs directed at teenagers in reducing the high school drop-out rate. They imply that a more appropriate policy would be attention directed at family

*Ibid., p. 142.*
and social problems of young school children. Additional research findings follow in the discussion of the NYC summer program.
NYC SUMMER PROGRAM

A 1966 amendment to the Economic Opportunity Act added the Summer program to the In-School program. The Summer program, which provides summer jobs for disadvantaged teenagers in need of earnings to resume schooling in the fall, has eligibility criteria identical to that of the In-School program. Students enrolled in the In-School program have priority over other applicants to the program, but there is no information as to the number of enrollees that take advantage of this fact.

While enrollment levels have decreased and funding levels have remained stable for the other NYC programs, the Summer program has seen a significant increase in funding and enrollment levels (see table 8).

The Summer program has much in common with the In-School program: program components are similar and the same type of legislative regulations apply. Enrollees are employed for 9 weeks with 26 hours of work per week at the legal minimum wage. While most projects provide jobs, there are exceptions; one of the more notable is the community college project where enrollees take a variety of academic courses not offered by public secondary schools. The provision of supportive services is dependent upon the community support that project sponsors are able to muster; for less than 10 percent of the average cost per participant is allocated for the provision of supportive services.
The program has been criticized for providing makework dead-end jobs. Part of the reason for the nature of the jobs may be attributed to the dramatic expansion of the program and the last minute provision of supplemental appropriations, which make serious job development difficult.
(The annual increases in the numbers of enrollment opportunities for the past two fiscal years have been well over 100,000.)

Summary of Research on NYC In-School and Summer Programs

A study by Somers and Stromsdorfer attempts to determine to what extent enrollment in the In-School and Summer NYC programs has resulted in an increase in the probability of high school graduation and in the number of grades completed.* The study is based on a national sample of enrollees in 60 NYC projects in operation during fiscal years 1965-1967. A control group was selected from students who were enrolled at the high schools that sponsored the 60 NYC projects. Because a statistical test determined that the control group did not come from the same population as the NYC enrollees, a multiple regression model employing several socio-demographic variables was applied to the sample.


88
Two equations were used to estimate the educational benefits. The first equation estimated the total net benefits to the average NYC participant. The authors found that the program had no statistically significant effect for the total sample on the probability of high school graduation or on the number of grades completed. Separate regressions were then run for ethnic and sex-ethnic groups. The only positive and statistically significant effect on the probability of high school graduation was found for the American Indian and Negro female subsamples. (Black females were 12.5 percent more likely to graduate.) Not even in these subsamples, however, did the authors find any positive, statistically significant effect on the number of grades completed.

The second equation estimated total net benefits to NYC participants as a function of the number of months they stayed in the program. Although statistically significant effects were found, the results were of little programmatic significance. For instance, it was found that if a participant remained in the NYC program an additional month, his probability of graduation from high school increased by less than one percent, and he was likely to stay in school one day longer.

The authors also discovered that the income per capita per family variable in the two regression equations, used to
estimate net educational benefits, had a zero or negative
effect on high school performance in almost every case.

The premise of the programs—that additional income will
reduce the need to drop-out of school—is indeed called into
question:

It may be the case that programs may have to be
devised to take other approaches toward changing
the propensity to drop-out. The income variable
may not be the most important variable affecting
drop-out behavior.*

These disappointing findings are similar to the conclusions
of a study by Gerald D. Robin on the In-School and Summer
programs in Cincinnati and Detroit.** The author was able
to construct an experimental design in Cincinnati that randomly
assigned participants to the experimental and control groups.
A follow-up survey, taken of all youth to determine school
status, found that 17.4 percent of the yearly enrollees,
15.7 percent of the summer enrollees, and 23.2 percent of the
control group had dropped out of school. As the author notes,
the differences were small and not statistically significant.

The work experience component of the In-School program has
several purposes. The primary purpose, of course, is to provide

*Ibid., p. 252.
**Robin, Gerald D., "An Assessment of the In-Public School
Neighborhood Youth Corps Projects in Cincinnati and Detroit"
opportunities for disadvantaged and unemployed youth to earn some income and there is good reason to believe that many of the enrollees would be unemployed in the absence of the In-School and Summer programs. Making several assumptions about labor force participation and unemployment rates of youth between 14-21, it is possible to estimate an upper bound of the impact of the Summer program on youth and total civilian unemployment rates. The provision of 600,000 summer jobs reduced the youth unemployment rate by three percent. An additional 100,000 jobs would reduce the youth unemployment rate by .5 percent. The effect of the provision of 600,000 summer jobs on the total civilian labor force is a reduction of .6 percent in the unemployment rate.

On the basis of data taken from the Current Population Survey, we estimate that the Summer program provided jobs to at least half and possibly 85 percent of the poor youths in school in ten cities.

The work experience is often justified on grounds that it establishes proper work habits and attitudes, a contention that has been questioned by field observers. To the extent that the work experience component makes enrollees more employable, the In-School program may be evaluated according to the increased earnings and employment that enrollees enjoy.
upon termination of the program. The study by Somers and Stromsdorfer is once again the major source of information.

Somers and Stromsdorfer estimated the economic benefits that can be attributed to participation in the NYC programs by comparing the total post-high school, before tax earnings of NYC participants with members of the control group. A conclusion, which was not in the study but follows from the data included, is that the estimate of economic benefits leads to benefit-cost ratios that are less than one.* (The increase in earnings reached a maximum of $17.33 for the 18 months that the average NYC enrollee was eligible for the labor force.)

Although reason often cited for the large annual increases in expenditures on the Summer program is the impact the program may have on reducing crime, the study by Gerald D. Robin is the only one we have that attempts to measure the impact of NYC projects in reducing crime.** Although the results of the study should not be taken as definitive evidence, the author concluded that: "NYC participation among both males and females, is unrelated to delinquency prevention or reduction."

Conclusions

The primary administrative and legislative goal of the In-School and Summer programs is the reduction of the high school drop-outs have less job market success than high school graduates.

*Somers and Stromsdorfer used two equations to analyze the data, but only one of these was used to estimate the program's impact on employment and earnings. The two equations lead to different conclusions; thus the conclusion cited is based on the equation that had a better statistical fit.

**Robin, p. 152.
As noted, at least one study indicates that this is due more to differences in family background and childhood experiences than to differences in achieved levels of education. In addition, there is evidence that the In-School and Summer programs have not been successful in reducing the drop-out rate.

To the extent that the In-School and Summer programs provide work experience, the programs may be evaluated according to the increased earnings that enrollees receive after leaving them. But the results of one study indicate that while participants received higher earnings than members of a control group, this increase in earnings did not come close to offsetting program costs.

The impact of the programs on reducing crime rates has not been researched thoroughly. Only one study has addressed this question, and it concluded that programs in two cities had no measured impact on reported crime rates.

The In-School and Summer programs are successful in one respect: they do provide income to enrollees. Approximately 65 percent of the $480 average cost per In-School participant and 70 percent of the $380 average cost per Summer participant are paid directly to enrollees in wages.
VOCATIONAL WORK-STUDY

Federal legislation relating to vocational education has traditionally been limited to providing assistance to local schools for the development of vocational programs. The work-study program is a modest departure from this tradition. First funded in 1965, it provides financial assistance to economically disadvantaged students in public vocational programs. (See table 9 for FY 1970 and 1971 enrollment and expenditure data.)

Full time students who are in secondary and post-secondary vocational programs, who need money to continue their education, and who are between 15-21 years of age are eligible for enrollment. The financial assistance is not in the form of grants; instead, students are given part time jobs at public agencies and are paid from program funds. Federal expenditures are limited to 80 percent of program costs, and the funds are administered by the state or local educational agencies. (According to data from fiscal year 1971, more than 90 percent of the program funds go directly to students as wage payments.) The number of hours that a student may work is restricted to 15 per week and the maximum pay that a student may receive is $45.00 per month although these restrictions may be relaxed during the summer if the student is not attending classes. The part time job
does not need to be related to the In-School vocational instruction nor does it involve on-the-job training.

Unfortunately, there is neither sufficient data regarding the type of student enrolled in the program nor completed studies of the program.* Appropriate criteria for the evaluation of the program are its effect on the drop-out rate from vocational programs and on the redistribution of income. The drop-out rate from secondary vocational programs is high relative to the drop-out rates from other secondary curricula, but this differential rate is partially a result of the lower socioeconomic status and ability of the average secondary vocational student.*

While one is tempted to apply conclusions based on studies of the NYC In-School program's effect on the drop-out rate to work-study, the differences in the populations served by the two programs need further study and thus may make such a comparison invalid.

FEDERAL SUMMER EMPLOYMENT PROGRAM FOR YOUTH

The Civil Service Commission manages six employment programs under an administrative umbrella entitled Federal Summer Employment Programs for Youth. These programs can be split into two groups, one serving disadvantaged youth and the other serving all youth. The programs and their enrollment in 1971 are listed below.

No. of Participants

<table>
<thead>
<tr>
<th>Work Support (disadvantaged youth)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Aids</td>
<td>56,000</td>
</tr>
<tr>
<td>Stay-In-School</td>
<td>17,000</td>
</tr>
<tr>
<td>Federal Jr. Fellowships</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Experience (all youth)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Employment Examination</td>
<td>13,000</td>
</tr>
<tr>
<td>Agency Merit Staffing Plans*</td>
<td>22,000</td>
</tr>
<tr>
<td>Federal Summer Interns</td>
<td>425</td>
</tr>
</tbody>
</table>

The programs, with a few exceptions, operate only in the Summer: Stay-In-School allows students to work part time during the school year; the Summer Employment Examination is used to hire youths for the Postal Service during the Christmas rush; and the Jr. Fellowship program is active during all school vacations.

These programs serve youth from age 16 through age 21, or through graduate school for those who continue their education. Salaries

*Also used to hire adults in the summer, e.g., college professors.
range from the minimum wage to GS-12, the work support programs generally paying lower wages than the work experience programs. The youth in the former category are selected because of an identified need for income, generally so that they can finance their education. Those in the latter group theoretically are employed to participate in a learning experience and to perform needed work. That the work experience programs attempt to offer more meaningful work is consistent with the program definitions. It partially explains why they pay more; their work assignments are more highly valued.

The Summer Aid Program's eligibility criteria places less emphasis on the continuation of schooling than the other support programs. The program in this manner resembles a public employment program for youth since applicants qualify for selection solely on the strength of a basic need for income. Selection categories, in order of priority, include those on the welfare rolls, those below the poverty line, or those somewhat above the poverty line.

The Fellowship and Intern programs utilize academic excellence as a criterion. Stay-in-School and merit examination programs place youth in much the same manner as adults are placed in career slots.

The work support programs provide income for disadvantaged youth, and so are, almost by definition, "successful" in this respect.
As noted elsewhere, we regret that so little information is available on the quality of the work experience they provide. These programs include vocational education and skill development components in some cases, and this inclusion should be viewed favorably.

While federal agencies are under some pressure to hire disadvantaged youths during the summer (a ratio of one work support employee per 40 regular employees is requested), there is no similar requirement for the work experience programs. Considering also that summer youth employed under the work experience programs are paid for from agency funds and occupy personnel slots that are limited by agency ceilings, it would appear that the agencies perceive a definite use for their services. These conditions presuppose that the work assigned will be worthwhile in a work experience sense. There is obviously some variability in the degree to which this is the case, and we would expect the extent of the benefit to be dependent on the quality of the supervision. The only study to date on this question was a survey of the 1971 Federal Summer Interns, which indicated that in general the interns were satisfied with their summer experiences.

The Summer Aid program, which showed steady increases in enrollment from 1966 through 1968, has taken fewer disadvantaged youths in each following year. This has occurred in the face of rising unemployment among youth in the same period. (See table 10.)
The issue of work accomplishment has been alluded to but not pursued, for adequate data is not available. No attempt is made by the participating agencies to put a value on the work accomplished. Fortunately, this is not fatal for the analysis of either set of programs. The work experience programs, as already noted, have demonstrated the existence of a demand by agency management. The question is secondary for the work support programs, but it does have implications both for a cost-benefit analysis and for estimating the attitudes of the enrollees in regard to their work experience.

Reports of program costs for all the CSC youth programs consist solely of participants' salaries. Although there are costs associated with supervision, administration, and support, they are overlooked by the standard reporting procedures. This practice is not particularly misleading in the case of the work experience programs, for here these costs are minimal. To supervise a youth over the summer who is performing some simple task or filling in for an employee on vacation is not very expensive. To provide vocational education and skills training is another matter. The costs of the work support programs are probably somewhat in excess of existing estimates because of the increased supervision required for the supplemental components of the programs.

There is one other program objective advanced for some of the
CSC programs. It is that these programs will serve to interest youth in a career with the federal government. We are not aware of any data on the extent to which this may actually be the case.
YOUTH CONSERVATION CORPS (YCC)

The YCC employs youth, ages 15-18, for four to twelve week summer sessions in national parks, forests, and other federal lands administered by the Departments of Interior and Agriculture. In 1971, the first year of program operation, 2,600 youths participated at 60 project sites, and in 1972, this number rose to 3,200 at 94 sites. Project size has ranged from 12 to about 50 corpsmen; three out of four projects are residential, and almost all are coeducational. The YCC is open to "all social, economic and racial classifications," and the administrators have attempted to ensure that demographic characteristics of enrollees approximately reflect those of the population. Corpsmen are paid $52.50 per week at the nonresidential camps, but this is reduced to $38.50 per week at the residential camps to cover added food costs. In 1971, with little publicity, YCC applicants outnumbered available slots by almost 50 to one.

Work performed by the enrollees includes a variety of tasks pertaining to the maintenance and development of the parks and forests: construction of nature trails, improvement of park facilities, weed control, and special studies. Most youth work in small teams under relatively close supervision.

On October 27, 1972, the President signed into law P.L. 92-597, which authorizes an extension of the pilot program for two more years at
a significantly increased level. The bill authorizes $30 million to be spent in the first year and $60 million in the second. An estimated 25,000 youths would be served during the first year. Earlier versions introduced into Congress would have increased the YCC authorization immediately to $150 million. As a point of reference, the present funding level of out-of-school NYC is $125 million, that for summer NYC is $195 million, and that for Job Corps is $200 million.

Program Objectives

As with several of the other programs under consideration here, the evaluative standards for judging YCC are far from self-evident. The legislative statement of policy is as follows:

The Congress finds that the gainful employment during the summer months of American youth, representing all segments of society, in a healthful outdoor atmosphere afforded in the national park system, the national forest system, the national wildlife refuge system, and other public land and water areas of the United States creates an opportunity for understanding and appreciation of the Nation's natural environment and heritage. Accordingly, it is the purpose of this Act to further the development and maintenance of the natural resources of the United States by the youth, upon whom will fall the ultimate responsibility for maintaining and managing these resources for the American people.
The YCC program administrators have interpreted this policy statement as containing three objectives:

1. to provide gainful employment for youth from all backgrounds during the summer months;
2. to further the development and maintenance of the natural resources of the United States by youth;
3. to improve the participants' understanding and appreciation of the natural environment.

These objectives are at different levels of specificity, and it appears that the first two are instrumental to the third. The first objective has not to our knowledge been previously accepted by either the Congress or the Administration as a policy goal in its own right, for the federal government has not acknowledged an obligation to provide work without regard to an individual's income. (To accept this obligation for all youth, whether disadvantaged or not, would be extremely expensive, with one effect presumably being to draw many more youths into the labor force.) The second objective is part of the ongoing mission of other federal programs (in Interior and Agriculture, for example) except for the specification that the work of development and conservation be performed by youth. That the work is to be performed by youth seems to indicate that the third objective is logically prior to the other two. That is, the Congress directed that youth be put to work in the parks and forests in order that they, who must bear "the
ultimate responsibility for managing these resources," can understand
and appreciate them. It might be noted that the recently signed
legislation directs that YCC facilities be made available, where feasible,
to educational institutions for use as "environment/ecological education
camps."

If this is an appropriate interpretation of the Congressional intent,
it echoes a theme in the 1972 Manpower Report that the "need to eliminate
the dichotomy between the world of education and the world of work has
become all too apparent." We believe this to be a promising pattern
for future program development although, as we have already discussed,
there are difficulties in assessing such programs.

It is possible, of course, that the Congress did not have this particular
construction in mind and simply saw all three thrusts as mutually
reinforcing. Can they be analyzed separately? This brings us back
to the methodological problem noted earlier: How does one evaluate
a program with multiple objectives? We do not believe that interrelatedness
precludes point-by-point analysis, nor do we believe that benefits
(even if quantifiable) are necessarily additive. If the goal of YCC
is simply to provide employment, one may ask if it is as cost-effective
as other programs. If it is to accomplish needed work, the same question
is relevant. Likewise with education. If it is contended that one of
these objectives (e.g., education) depends on the opportunities created
by the unique arrangement under which work is performed, then one may ask
if this is necessarily the case, and whether some other arrangement, more cost-effective on the previous counts, would not serve as well. This process of considering each issue one at a time will be the analytic approach taken in this report.

**Educational Impact**

We must acknowledge that if educational success were the primary basis on which the program has been judged, it would be difficult to account for its strong support in the Congress and press at this early stage of its operation. The existing information on YCC's educational effectiveness comes from the evaluation of the 1971 program, undertaken by the University of Michigan's Institute for Social Research. The ISR staff, using tests given enrollees at the beginning and end of the program, found slight increases (less than 5 percent in any category tested) in environmental knowledge, but noted that the youths themselves felt they had learned a good deal more than the tests revealed. It should be emphasized that the tests show the enrollees as having a high initial level of environmental concern (so that the slight positive change may have been all that could reasonably have been expected) but also having a low initial level of factual knowledge (so that more change might have been expected). In fairness, the 1971 YCC camps stressed work accomplishment and the practical problems of resource management facing park and forest administrators, not general environmental learning.
In response to the ISR findings, YCC administrators have taken a number of steps to reinforce the educational content of the program in 1972. These include new teaching materials, attempts to integrate the enrollee's work assignments and study areas more closely, and new testing procedures. The results will again be evaluated by ISR and should be available early in 1973.

As noted, the YCC's slight impact (as measured by ISR in 1971) as an education program hardly accounts for its excellent publicity and strong congressional support.* The opening statement of the Senate Committee on Interior and Insular Affairs on S. 2454 alludes to the value of the work performed by enrollees and the summer unemployment rate among teenagers. There are also references to the low YCC drop-out rate (less than four percent) and the presumed advantage of combining youths from a wide variety of backgrounds in the same project. The latter statements, which include fairly direct comparisons with programs for economically disadvantaged youth, make clear that the program must be considered as a work support program comparable at some points with NYC and at others with the Federal Summer Employment Program.

*The YCC press coverage in areas near the centers has been unvaryingly favorable. A striking example is a story built around a three-day job by a six-member YCC team to hand carry an outdoor privy to a rugged mountain peak. The event was treated as a hard but exciting and character-building adventure, undiminished by the removal of the privy by helicopter some days later.
Rate of Return to the Government from Enrollee Work

The Departments of Interior and Agriculture report that each dollar of funds appropriated for YCC was offset by work worth $.73. This figure was arrived at by asking project administrators how much they would have had to pay contract labor for the work done by corpsmen, and dividing the total of these estimates by the YCC appropriation of $2.5 million. This valuation is set forth by the Departments of Interior and Agriculture as an offset to program costs and presumably would be one component of a more comprehensive benefit-cost model. Because offsetting costs to this degree would affect dramatically the ratio finally arrived at under any conceivable model, some comment on the $.73 figure seems appropriate.

Costs for the first year were measured in a straightforward and conventional manner with the exception of staff pay. At some camps staff positions were filled by regular agency personnel. In these cases, the full cost of these individuals was not always transferred to the YCC accounts. While no incremental cost has been incurred, this accounting procedure understates the services YCC purchased.

Supplies, materials, equipment, and technical assistance, valued at $532,000 were utilized by YCC but were absorbed by the regular operating budgets of the departments. The 1971 program cost was $2.5 million, or $1,000 per enrollee (for eight weeks). The primary cost components were
as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff pay</td>
<td>32%</td>
</tr>
<tr>
<td>Enrollee pay</td>
<td>31%</td>
</tr>
<tr>
<td>Food</td>
<td>11%</td>
</tr>
<tr>
<td>Site activation</td>
<td>1%</td>
</tr>
<tr>
<td>Program direction (central)</td>
<td>7%</td>
</tr>
<tr>
<td>All other</td>
<td>18%</td>
</tr>
</tbody>
</table>

The testimony on the bills to expand the YCC recognized the diseconomies of scale associated with administering a much larger program. The administering departments estimate that a program for 25,000 youths under P.L. 92-597 would cost $1,290 per (eight-week) youth; they had previously estimated that the still larger program envisioned by the initial bills would cost $1,500 per youth. While the $1,290 estimate exceeds the actual costs in the program's initial year, we believe that the earlier, higher estimate may prove more realistic. The departments have made good use of unused facilities on federal lands for housing youth in 1971 and 1972, but slack resources will be exhausted if the enrollment expands by a factor of ten or more. Site preparation costs have ranged from zero to $2,500, but the departments estimate that $10,000 per site would be a more realistic expectation for a significantly larger program.

In addition, of course, the kind of expenses now being covered in the
departmental budgets would have to be provided for in the YCC appropriation. Other important factors to consider in estimating costs are inflation and projected increases in the minimum wage, which would presumably have a significant impact on the costs of any stipend program.

The benefit side of the equation involves more difficulties. Available data would not permit application of some of the measures of value of public investments suggested by economists, and estimates for a small program would not necessarily be relevant for a much larger one. If one accepts the premise that the quality of the work experience for the enrollee is probably related to the priority the program manager places on the work, one would like to know what that priority is. We have, of course, no way of knowing what choices of projects an administrator might have made had he been allocated discretionary resources without the YCC's programmatic constraints. Accordingly, although we do not think that simply asking how much a piece of work would have cost is an adequate measure of its worth, we have no data that would permit us to suggest how to discount such estimates. The YCC administrators point out that seasonal and logistical factors somewhat limit their choice of projects. Nevertheless, we find little evidence of obviously make-work projects, and the ISR study found that enrollee satisfaction with their experience was high.

The available evidence indicates that the quality of the work experience is perceived as good by all parties involved.
It might also be noted that the Park Service (which has approximately 7,000 regular employees) hires about 6,400 seasonal employees annually, and 2,000 of these are hired through the Civil Service Commission. Summer Youth Programs at a median grade of GS-4. The Forest Service supplements its 20,700 full time employees with 10,600 seasonal workers, mostly at the GS-3 and GS-4 level. The GS-4 wage of $3.15 per hour is almost double the YCC wage, but the YCC cost-per-hour worked is $4.24. An exact comparison of the two figures is impossible since both include some overhead not charged to the programs. For some appropriate sample of the summer employees engaged in tasks similar to those performed by YCC enrollees, an evaluation of learning and attitudes similar to that performed by ISR on YCC might further illuminate the relationship of work to education.

**YCC’s Impact on Unemployment and Its Role in Socialization of Youth**

The addition of 100,000 jobs is not trivial, but it should be noted that YCC is not designed to impact most strongly on the disadvantaged and minority groups where unemployment is most acute. If the primary goal were to reduce youth unemployment, YCC’s influence would be limited, for it is simply not targeted on the population groups most seriously affecting the unemployment rates. This is not to deny, of course, that nonpoor youth need jobs and that their employment rate is higher than that of the older population. However, the rates for poor youth are
higher still, and, as already noted, the federal government has not heretofore made a policy commitment to provide jobs without regard to personal or family income.

It also seems appropriate to examine the basis for the judgment that grouping youths from different backgrounds together has positive value in itself. Again, our capacity to answer is limited, but two questions merit comment. The first is the degree to which this social and economic integration actually occurs. The second is whether the brief summer experience seems to produce positive attitudinal changes.

At the national level YCC's participants fairly well reflect the ethnic and economic make up of the nation—although black, Spanish-speaking and poor people are slightly underrepresented, and American Indians and upper income people are slightly overrepresented. This question is of greater import at the camp level. In 33 percent of this summer's camps, the percentage of whites was 90 percent or greater. This includes 15 camps that are 100 percent white. While 19 percent of the families in the U.S. earn less than $5,000 per year only 24 percent of the summer's YCC camps reached this percentage of youths at or near the poverty line. Nearly half the camps have 10 percent or fewer of their enrollees from this lower strata. These distributions can partially be attributed to geography and would require different recruitment policies to alter. The ISR report identified this issue and recommended, for small camps, a broader representation of minority groups than found in
the population as a whole.

The only evidence available that speaks to whether the YCC experience changes attitudes is the ISR survey of the 1971 program. The survey sought to identify changes in attitudes over the course of the summer towards persons of different races. The results were mixed. White and Spanish-American attitudes showed slight positive growth, but black and American-Indian reactions were in the opposite direction. These observations of even slight changes are inconclusive, for they represent only one year's experience, and many of the camps were not significantly integrated.

Experimenting with a Volunteer Approach

What still seems to us necessary is to experiment with ways to increase the learning value of the assigned work while holding down the relatively high program costs. The administering departments, as already noted, have taken steps in 1972 to do the former, and there is no reason to believe that this effort cannot go hand-in-hand with the latter. We think the evidence indicates that in 1973 a large random sample (approximately half) of the projects should be operated on a volunteer basis to test the assumption that "gainful" employment is a prerequisite to an "understanding and appreciation of the Nation's natural environment and heritage." (Please see Appendix E for a brief summary of how a program involving planned variations might operate.)
This recommendation would reduce costs by the amount saved on stipends. A small spending allowance could be substituted for salaries, or wages in monetary form could be eliminated altogether. In an expanded $150 million program the potential savings would be substantial even if the present 31 percent spent on stipends were to decline relative to rising costs in other areas. We think it important to learn more about the extent to which young people will participate in difficult, challenging work where the personal benefits are educational and developmental rather than financial.

*The Student Conservation Association (SCA), a nonprofit organization, has been placing youths in our National Parks and Forests each summer since 1957. This summer they will be taking 300 high school students and 100 college students into 40 parks. The high school students are enrolled for three-week sessions in small groups (15 students, two adult leaders and an assistant) and will receive no pay. The college students are placed individually and receive $20 per week for subsistence. SCA youths perform work that is in many ways identical to that undertaken by YCC and the seasonal employees of the Park and Forest Services. Their budget of $200,000 is funded by a $50,000 grant from the National Park Service, a $60,000 grant from the Ford Foundation, and other contributions from such organizations as the Rockefeller and Mellon Foundations, the American Conservation Association, and the Garden Club. Their total cost-participant is somewhat lower than YCC's, $940 per man-summer, with most of their dollars being absorbed by well-paid adult leaders ($250 a week) and transportation. SCA believes that transferring youth to an environment totally different from one that they are familiar with, will enhance the learning and work experience. Facility costs are nonexistent as the high school students operate out of tent camps in the back country. Accommodations for the college students are furnished by the Park Service. The youths are expected to absorb the cost of their camping equipment, with the exception of low income youth who are subsidized. The program makes a concerted effort to enroll youth of diversified backgrounds. This year they had 20 applicants for each position. This model is of interest for further exploration as it might shed light on the question of how productive volunteers working in this area are in comparison to salaried workers. SCA is also administering the YCC camp at Olympic National Park this summer.
If our recommendation for an experimental design involving some volunteer projects is implemented, the variables that should be observed most closely are recruitment patterns and work performance. It seems reasonable to expect that all-volunteer projects would tend to discourage enrollment by older youth, particularly older males, youth from families at the lower income brackets, and minority youth (probably only to the extent that race is correlated with income). We would expect younger poor youth to participate, simply because their opportunities for paying jobs are poor. Maintaining whatever socioeconomic balance is regarded as administratively desirable should not be difficult, however, if anything like the present oversubscription rate continues.

As has been noted, it is already necessary to weight selection procedures to achieve the present degree of socioeconomic integration, which is less impressive at individual sites (the only place it matters to the enrollees' experience) than in the national average.

**Experimenting with Shorter Sessions**

Variations in the length of sessions is a viable alternative for a program in which the work experience is created primarily to stimulate environmental education and appreciation. The YCC has already varied the length of camp sessions on a nonsystematic basis. Camps have run from four weeks to twelve weeks, with most enrollees placed in eight-week camps. Given a fixed budget, the duration decided upon by a camp's management has a direct bearing on the number of youths that can be accommodated.
The 1971 ISR study indicated that, contrary to what one would intuitively have expected, the longer sessions did not result in greater learning. Actually, the results went the other way—with enrollees in longer sessions scoring slightly lower on tests than those in shorter sessions—but the changes were insignificant. The explanation for this outcome is unknown, and we have not attempted to determine if it might be explained by demographic characteristics of the shorter duration camps. It would be worth examination if it recurs in the 1972 testing, which is hoped to be more congruent with the actual work experience approach of the camps. If a more systematic set of variations are adopted for 1973, considerable attention should be given to developing tests that measure something more than increase in "book knowledge" of environmental problems since the real issue is the relationship of work experience to overall maturation. If the results should suggest that a four-week (or even three-week) experience has much the same teaching effect as an eight-week program, the opportunity for dramatically expanding YCC opportunities is obviously present.

**Reviewing the Evidence**

At this point, some recapitulation is in order. The YCC should not be considered primarily as an income support program for youth since only 31 percent of the budget goes to enrollees, plus an additional 11 percent for food. It is not designed for maximum impact to combat unemployment. To some extent, it is a program to accomplish needed work
in conservation and development of natural resources, but even the most favorable method of estimating its worth suggests a return of $.73 on the dollar. As a social experiment, one can say that it is a program that takes highly motivated, highly idealistic youth for (usually) eight weeks and releases them still highly motivated, highly idealistic, and a little more mature, as should be true of other varieties of work experience.

Having said all this, we must add that we do not believe that such a summary does justice to the potential worth of the YCC concept. Our reading of the legislative policy statement leads us to believe that the YCC is most appropriately evaluated as an educational program (based on certain researchable assumptions about the kind of work experience likely to contribute to effective education). In this regard, the evidence on YCC is not nearly all in. We believe that the ISR evaluators have shown commendable candor in acknowledging that their tests probably were insufficient to measure the learning gains of enrollees from their experience. Even if the indifferent progress in environmental education revealed by the 1971 ISR evaluation were accepted at face value, we think the evidence suggests that YCC merits continuation as a pilot program with more than one possible model being tried and evaluated.

The present YCC costs per enrollee-month are higher than those for other youth programs considered in this report. The alternatives we have suggested are volunteer camps and shorter duration camps. We
would consider these alternatives successful if they filled their slots without difficulty, maintained at least the present modest degree of socioeconomic integration, showed some evidence of contributing to enrollee education (probably not comparable with present unclear data), and maintained an acceptable level of work accomplishment when compared against other alternatives during the same year.
VOLUNTEERS IN PARKS

The National Park Service (NPS) has for some time allowed individuals who wanted to contribute some portion of their leisure time to serving visitors to do so. The agreements that a park administrator could reach with an individual were severely circumscribed, however, by the rules and regulations that governed such arrangements. Specifically, the NPS administrator could neither shield volunteers from tort claims nor offer them compensation, as he would regular federal employees who suffered work-related injuries. In addition, NPS required that these individuals take it upon themselves to acquire adequate insurance coverage as a concessionaire in the park would.

The Volunteers in the Parks Act of 1969 (Public Law 91-357, July 20, 1970) sought to remove these barriers by:

1. Classifying volunteers as federal employees for the purposes of:
   a. Providing protection against tort claims
   b. Establishing coverage for work-related injuries

2. Authorizing reimbursement for incidental expenses such as transportation, uniforms, lodging, and subsistence.

Volunteers in Parks has just completed its first year of
operations during which it enrolled 4000 volunteers,* who worked 200,000 hours or an average of 50 hours per volunteer. The cost of mobilizing this previously untapped labor pool was $99,000 in FY 1972.

VIPs, who range in age from 6 to 78, serve to promote the agency's goals by engaging in such activities as arts and crafts demonstrations and living history pageants, historical research and interpretation, studies of the environment, natural science and archeology and resource management. Eighteen percent of the first year participants were ages 18-21 and another 18 percent were below 18, most of these being teenagers.

To examine VIP by conducting a traditional cost-benefit analysis would appear to be a frivolous exercise. The evidence is convincing that if costs are restricted to incidental expenses, as specified in the legislation, and the projects conducted are sanctioned by the park management, which assumes that they contribute to furthering the agency's mission, then the question of benefit-cost ratios becomes moot.

A program that can cite even a few significant benefits, as this one can, and is run at virtually zero cost, is emphatically impressive. The costs during the first year of operation amounted to $25 per volunteer. This average figure should be used cautiously

*An additional 2000 volunteers participated on a one-time basis in an historical pageant under the auspices of this program.
as it has all the problems typically associated with averages. An annualized estimate based on an average participation rate will have to await the collection of more empirical data. For now, one can be conservative and accept the estimate the Department of Interior provided the Congress* that the cost of equipping and servicing a volunteer would amount to $270 annually. If this figure is at all accurate, it would illustrate what a bargain VIP is, for these same dollars would only buy 86 hours of a seasonal employee paid at the average GS-4 scale. In fact, many VIP activities are conducted by individuals who are highly knowledgeable about their field of work, and who if paid would command a substantially higher salary than the average seasonal employee.

Although VIP has been run on a small scale to date, its potential for expansion is substantial. The Park Service has a need for more service personnel, and there are probably a significant number of youths and adults who would willingly volunteer for work that is socially beneficial, conducted in a pleasant environment, and has reasonable working conditions. These considerations and the flexibility of VIP are reasons for expanding this program.

The flexibility that is an inherent part of this program is central to its future. Park management is free to make whatever

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arrangements it deems most appropriate with its VIPs.

Work schedules are a matter for negotiation on a case
by case basis. This freedom greatly enhances the ability
of NPS to attract individuals who might otherwise be put
off if they had to deal with a regimented organization.

The possibilities that VIP opens for resource mobilization
appear almost endless. VIP, if expanded, would allow a
park superintendent to enlist community organizations in a
varied number of pursuits. Dealing with such groups might
ease the burden of supervising volunteers, allow campaigns to
be mounted quickly and efficiently, and multiply the program's
potential. The possibilities of establishing a cooperative
relationship with the local schools appears especially promising.
The 4-H movement began in the late nineteenth century with the formation of clubs in rural areas to spread agricultural knowledge. The Smith-Lever Act of 1914 established the Extension Service in the Department of Agriculture and marked the entrance of the federal government into the program.

Today, $35.6 million in federal funds go to support 4-H activities. States and localities contribute $55.4 million and the private sector provides an estimated $25 million, an impressive sum that is an indicator of the value the business establishment places on this program.

The national Extension Service dollars that can be used for 4-H are distributed to the state extension services according to the Smith-Lever formula, which allocates 40 percent of the dollars on the basis of the state's farm population, another 40 percent of the dollars on the rural population and the remaining 20 percent equally. Each state's extension service then independently determines how many of these dollars are to go to local 4-H groups, primarily to purchase staff services and educational materials. The role of the private sector in providing resources and equipment at the local level therefore, is significant.

Two nonprofit organizations play an active part in promoting 4-H activities. The National 4-H Foundation in Washington, D.C. conducts seminars and courses in the areas of citizenship and leadership. The
National 4-H Service Committee in Chicago provides incentives to local clubs and individuals in 31 program areas through a nationwide awards program.

In 1971, 3.5 million youths aged 9-19 participated in 4-H activities. They were reached through four different mechanisms, each with a different orientation.

<table>
<thead>
<tr>
<th>Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organized Clubs</td>
</tr>
<tr>
<td>Other Enrollees</td>
</tr>
<tr>
<td>Nutrition Programs</td>
</tr>
<tr>
<td>T. V. only</td>
</tr>
</tbody>
</table>

The T.V. and Nutrition programs are five and two years old, respectively, and represent a new direction for 4-H. The former appeals through the media to all interested listeners while the latter is aimed at poor urban youth.

Four-H's ability to serve the poor and the minority community has not been carefully studied at the national level. The data compiled by the Extension Service indicates that black youth are well represented in 4-H activities, but the extent of integration is unknown.* The data on other minorities is even less clear.

The Extension Service estimates that 25 percent of the youth served come from families with incomes of $3,000 or less. This estimate

*The reporting instrument for FY 1972 will contain data on integration.
is a composite of estimates made by county agents, who in many cases do not know the families of the 4-H enrollees, thus making it plausible that the number of poor being served is overestimated.* The need for 4-H to attract low income youth has been recognized by the President's Task Force on Rural Development, which urged that "funds be provided to add additional 4-H agents in those nonmetropolitan counties where rural poverty is greatest and where the most intensive effort will be required if our next generation of rural boys and girls is to be brought into the mainstream of American life."

While the traditional 4-H programs principally serve youth at the lower age spectrum, we have not attempted to account for this apparent inability to appeal to older youth. As a program for younger youth, 4-H could appropriately be compared to recreation programs that serve mostly inner-city youth of the same age. The graph below addresses this point, for it shows enrollment peaking at age 11 and then tapering off rather dramatically to the extent that over 50 percent of the enrollees are age 12 or less.

Enrollees (in thousands)

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* The Extension Service, commenting on an earlier draft of this report, took exception to this statement.
It hardly needs to be added that we do not believe a benefit-cost analysis of 4-H to be feasible, even with considerably more data than is now collected nationally. The program is so diverse that relating costs to function would be extremely difficult. As with most youth programs, the congressional testimony on 4-H contains references to the prevention of juvenile delinquency, but we know of no attempt to study this topic involving the use of a control group.

Four-H programs are managed at the local level by volunteers. For a program like 4-H, it may be that the best criterion is community acceptance. By this standard the program must be judged a success, for local chapters are staffed entirely by volunteers: in 1971 370,000 adults and 160,000 teenagers contributed their time to supervise children enrolled in 4-H programs. It operates with a small federal appropriation for the number of youth involved and attracts a larger amount of state and private resources. Our nonsystematic observations suggest that the efforts underway to modernize the program should be accelerated. The most productive area for further evaluation is probably at the state and local level, examining the effectiveness of alternative strategies for achieving greater involvement of older, urban, minority, low income youth.
Federal involvement in recreation program efforts since 1965 has been carried out mostly by the Office of Economic Opportunity and the Manpower Administration of the Department of Labor; however, other agencies and organizations also conduct programs. The Bureau of Outdoor Recreation of the Department of Interior has been involved in a major program effort since 1970. A program featuring participation in competitive sports is conducted under the joint auspices of the President's Council on Physical Fitness and Sports (PCPFS), and the National Collegiate Athletic Association (NCAA) at selected colleges and universities. Overall coordination and grants administration of a number of other youth opportunity and development projects have been vested in the President's Council on Youth Opportunity, but the Council has been inactive since the beginning of fiscal year 1972.

The two programs identified in the OMB request are the DOL Summer Recreation Support Program (RSP) and the National Summer Youth Sports Program (NSYSP). The NSYSP is much more structured than the RSP and exhibits a much higher cost per participant. Additional funds have been contributed in transportation services for these and other recreation programs by the Summer Youth Transportation Program (SYTP).

Federal funding in 1972 was approximately 3 million for the NSYSP, 15 million for the summer RSP, and 1.5 million for the SYTP (a considerable percentage of which has been to support recreational activities in past program years).
RECREATION SUPPORT PROGRAM

This program, administered by DOL with technical support from the Department of Interior's Bureau of Outdoor Recreation, (BOR) provides funds to more than one hundred (111 in 1971) of the nation's largest cities to permit expansion of their summer programs to serve approximately two million disadvantaged children, ages 8 through 13. The $15 million for RSP is linked with $142 million in NYC Summer programs funds to hire youth as counselors and aides. (See table 13.)

Two major evaluations have been performed. The 1970 program was evaluated by Kirschner Associates, Incorporated, under contract with BOR. The 1971 program was evaluated by Training, Research and Development (TRD), under a contract from the Manpower Administration.

The data collection method for both studies consisted essentially of on-site observations during program operations and interviews with program administrators, staff, and participants.

Both studies cited delays in providing funds and guidelines as impediments to good planning. (This complaint also appears in earlier evaluations of OEO recreation programs not under review here.) Both studies called for better coordination and more flexibility in guidelines. The Kirschner study stated that the critical administrative factor associated with program success appeared to be the utilization of a city's recreation department, or similar preexistent city wide administrative arrangements.
The study by TRD noted that in none of the 22 sample cities visited were all guidelines followed; indeed, adherence appeared to be the exception rather than the rule. Violations included a variety of issues associated with grant-in-aid programs of all kinds: early starts, late continuations, hiring staff from non target areas, irregular purchasing procedures, non allowable expenditures on equipment, and so on.

It might also be noted that an evaluation of the 1971 SYTP was performed by the Center for Policy Analysis of the National League of Cities and the U. S. Conference of Mayors, under a contract with the Manpower Administration. (The National League of Cities is the prime contractor for this program.) The local administrators interviewed welcomed the funds but complained about lateness. Of the 41 cities having no prior experience with the program, about 30 returned some funds unspent.

THE NATIONAL SUMMER YOUTH SPORTS PROGRAM

The NSYSP, in operation since 1969, affords disadvantaged youths an opportunity to engage in competitive sports and related activities in order to benefit from skills associated with such recreation. The participants, aged 10-18 but mostly at the younger end of this range, are also encouraged to learn good health and citizenship practices through enrichment sessions. The program, funded annually at $3 million, is conducted by colleges and universities selected by the NCAA. Institutional in-kind contributions account for 45 percent of the program budget. (See table 14.)
Overall program approval and supervision are carried out by PCPFS, which also acts as contract monitor to NCAA. Program direction and control are the responsibility of NCAA, the prime contractor, which contributes its services without charge. The private sector supports the program by providing resources such as transportation, equipment and supplies, volunteer workers, and incentives and awards materials.

Enrollees must meet OEO poverty guidelines or reside within a target area designated by the local community action agency. The projects run for 30 program days from early June through early September and are required to maintain an average daily attendance of at least 200 children. An additional three program days are also provided by the institutions for enrollment, medical screenings, orientation and staff briefings.

Program instruction and competition are provided in a number of sports. At least three hours weekly are devoted to discussions on topics such as drug abuse, and career and educational opportunities. There is a daily meal which, after staff, is the second highest cost element.

No comprehensive evaluation of NSYSP has been performed to date. In 1971 the Office of Operations, OEO, after reviewing sample monitoring reports and completing site visits, discussed the results of the 1971 program. The report concluded that although the program generally met its stated objectives, certain basic changes in program content and conduct were mandatory if it was to continue under OEO funding.

Essentially, the recommendations were to change the program structure
in order to meet the year-round basic needs of the target group served;
the new OEO legislation meets this requirement.*

*See Appendix B for PCPFS comments.
APPENDIX A: DESCRIPTION OF THE LONGITUDINAL MANPOWER STUDY

In 1969 the Office of Economic Opportunity and the Department of Labor jointly initiated a national study of four major manpower training programs. The study was designated the Longitudinal Manpower Evaluation Study (LMES). The four programs included were: the Job Corps, the Neighborhood Youth Corps (out-of-school component), Manpower Development and Training Act (institutional training), and Job Opportunities in the Business Sector (contract component).

Operations Research Incorporated was contracted to design the sample, to provide technical direction, and to manage data processing. (Because of this role, the study is often referred to as the ORI study.) The field work for the study was performed by the National Opinion Research Center of the University of Chicago.

The principal goal of the study, at least from the standpoint of OEO, was to permit an evaluation of the four programs using common assumptions and methodology, together with data gathered in an identical manner for all programs, in order to estimate how effective each is an antipoverty measure. To achieve this goal, the study is longitudinal, tracking a sample of approximately 7,000 program entrants and 2,000 comparison group members over time. The tracking begins when a participant enters a program and ends twelve months after his exit. Comparison group members are tracked as "running mates" to program participants.
The study universe (i.e., the population potentially exposed to sampling) is defined as the 43 Standard Metropolitan Statistical Areas (SMSA) in the continental United States with the 1960 populations of 500,000 or more and central city populations of 250,000 or more. Because employment patterns and job skill requirements differ between labor markets, it would be most desirable to compare training programs on an area by area basis for the entire study universe. Cost considerations, however, dictated that only ten of the 43 SMSAs could be studied. The SMSAs in the study universe were categorized by program and socioeconomic variables into ten strata and one SMSA was selected from each on a probability basis. The ten SMSAs selected were: Chicago, New York, Cincinnati, Dallas-Fort Worth, Detroit, Los Angeles-Long Beach, Norfolk-Portsmouth, Philadelphia, and Seattle. Within each of the ten areas, stratified sampling was used to obtain adequate representation by program, races, sex, and age.

The comparison group consisted of a stratified sample of poor persons 16 to 44 years of age who were not attending a regular school, were not handicapped, and had not participated in one of the four programs under study during the previous year, but who did live within one of the ten SMSAs in the study. In sum, the comparison group represents those individuals potentially eligible for the programs under study, but not participating in them.

The LMES is gathering four basic kinds of data on participants and the comparison group. At the heart of the study, data was gathered
through personal interviews of all trainees and members of the comparison group. Interviews were conducted in four waves: at entrance to the program, at exit from the program, four months after leaving the program, and one year after leaving the program. The data cluster essentially around eleven subjects, ranging from employment and income to attitudes toward programs and services. Second, data was gathered on educational achievement. At the time of entrance and exit a portion of sample members were given a test, to measure the level of achievement in reading and arithmetic. Third, weekly data were gathered from program administrators to determine what services were provided to enrollees. The information was collected in terms of numbers of hours in a given week during which certain services were rendered to enrollees. Lastly, data was gathered concerning costs and local labor conditions.

The Longitudinal Manpower Evaluation Study has collected a great deal of data which should be useful both for research studies and policy analysis. As presently contemplated these reports will include the following:

1) **Entering Characteristics of Job Corps Enrollees:** Presently in draft, this report analyzes the age, race, and sex composition of the urban enrollees, their reasons for joining the Job Corps, their educational background, contracts with the police, family status, and labor market experiences. It was completed first because Job Corps data is more readily available than other types of data.
2) **Comparison of Enrollee Characteristics:** This report will be in two parts: a comparison of Job Corps with Neighborhood Youth Corps enrollees (Out-of-School only), and a comparison of MDTA enrollees with those in the JOBS program. Direct comparison of the adult programs with the youth programs are not valid because of the age discrepancies involved. There are few enrollees in the youth programs who are over 17, and almost none in the adult programs who are 17 or under. The data analyzed will be similar to the Job Corps report cited above and should be completed before the end of January, 1973.

3) **Dropout and Length-of-Stay Analysis:** This report, presently being prepared, will analyze the relationship of entering characteristics to the propensity to drop-out of the program, as well as the reasons given by the enrollees for dropping-out. It will examine the factors associated with early drop-out, as opposed to drop-out shortly before completion, and will also provide the basis for a later report analyzing the relative success of drop-outs and completers in the job market. It should be in draft stage before the end of calendar year 1972.

4) **Cost-Benefit Analyses:** Cost data is presently being analyzed under a grant to the University of Indiana. By the end of calendar year 1972, the final survey data should be available and thus permit the beginning of analysis of benefit measures; report is expected by fall of 1973.
5) **Labor Market Stability Studies:** These will extend the effectiveness analyses based on income to other, possibly more revealing, measures of program effects. The measures will include shifts in occupation (and, to the extent possible, an assessment of the potential for further advancement in the occupations); changes in length of tenure on jobs; unemployment patterns; shifts in methods of job search; evidence of labor market knowledge, and changes in labor force participation. While the studies will begin at the same time as the cost-benefit analyses, they are less complex, and thus the results should be available somewhat sooner.

6) **Program Service Analyses:** These analyses will examine, to the extent the data will support such analyses, the relationship between components of programs, entering characteristics of enrollees, and success of training. Such components as basic education, skills training, counseling, and job placement will be included, as well as ancillary services. The data has not yet been delivered, and it is known to be of variable quality; hence, these studies will have to proceed with great care. No estimate can now be given as to the expected date of completion.
APPENDIX B

LETTER FROM DEPARTMENT OF HEALTH, EDUCATION AND WELFARE ON NATIONAL SUMMER YOUTH SPORTS PROGRAM
August 31, 1972

MEMORANDUM FOR

John L. Palmer, Director
Manpower and Labor Market Policy Analysis
OASPE

SUBJECT: OEO Evaluation of National Summer Youth Sports Program (NSYSP)

This is in response to your request for comment on OEO's draft evaluation of the NSYSP.

We are largely in agreement with that portion of the evaluation pertaining to the summer sports program. The new OEO bill would seem to satisfy the points raised in the final paragraph on page 91. The new bill does not call for any significant change in program content or conduct, but it does include a requirement for year-round programming. We are in agreement with this requirement as are most of the colleges and universities which have been involved in the NSYSP. The only reason we have not previously instituted year-round programming on a limited basis is that there were not, in our judgment, sufficient funds to do so.

Our single objection to the draft report is to this statement (third paragraph, page 92): "The most obvious answer is that the government believes itself to be making an investment in domestic tranquility." This very definitely is not what this Council believes. Our reasons for establishing the program were:

a. We did not feel that traditional recreation programs were adequately serving the NSYSP target population.

b. We were desirous of providing the NSYSP target population the same recreational opportunities and experiences which middle-class families are able to provide for their children out of their own means.

c. We wanted to introduce the target population to an environment where they could become aware of new education and career opportunities.

The OEO draft report, in justifying the statement quoted above, notes that the program has been conducted during the summer months in the largest cities, and that the participants are mostly too young for the private labor market or special work experience programs. The reasons for this are as follows:
a. Colleges are uniquely equipped to provide the sports, nutritional, educational and medical services which are part of the NSYSP experience, and their resources are fully available to us only during the summer months.

b. We have not had sufficient funds for year-round programming.

c. We can most efficiently serve large numbers of the target population in the larger cities.

d. Younger boys and girls have expressed greater interest in the program than boys and girls of employable age.

I hope these facts will be reflected in the final evaluation, since we have never conceived of the NSYSP as a means of preventing riots, and we have never attempted to cite any facts or figures which would tend to support such a view.

V. L. Nicholson
Director of Information
APPENDIX C

LETTER FROM DEPARTMENT OF INTERIOR ON YOUTH CONSERVATION CORPS
Mr. Fred D. Baldwin
Evaluation Division
Office of Economic Opportunity
1200 19th Street, N. W.
Washington, D. C. 20506

Dear Mr. Baldwin:

Your letter of August 17, 1972, addressed to Dr. William Vogley, Director of Economic Analysis, concerning the preliminary draft of your report on the Evaluation of Federal Youth Programs has been referred to this office for response.

The Department appreciates the opportunity to comment on the preliminary draft and we trust that the attached comments will be of assistance in making your report a more complete document. I am aware of the difficulty and complexity of your assignment, and believe, overall, that the evaluation is objective and constructive. I, and members of my staff, would be pleased to discuss our comments with you in greater detail, if you believe this would be beneficial.

I note that the section of the report dealing with the Job Corps was not forwarded for our comments. As you know, the Department operates ten Job Corps Civilian Conservation Centers under agreement with the Department of Labor. We would be happy to provide comments from our prospective if you think that such comments would be of value to you.

Sincerely yours,

[Signature]

Director, Office of Manpower Training and Youth Activities

Enclosure
Introduction: The particularly perplexing conceptual problem, which you acknowledge, in dealing with multi-objective programs, and the manner in which you deal with this problem in the evaluation of the YCC, is our major concern. It is difficult to argue with your need to find some "handle" through deciding which of the program's objectives is the primary one, or your attempt to reach this decision by attempting to infer some order of priorities by analyzing how the program operates. We believe, however, that in the case of the YCC, this approach tends to lead the reader to less than full understanding of the program and, consequently, to erroneous conclusions of the program's potential and value.

The assumption that the primary purpose of the YCC is environmental education is, in our opinion, erroneous. We do not believe that the legislation defines YCC "as primarily a program of education in environmental issues and conservation" and for that reason we have not implemented the program as if it were. We believe that the legislative intent is far broader than environmental education. We believe that it was to create a program whose primary purpose is, in the words of its principal legislative sponsors, "one that puts it all together." By the combination of meaningful employment for youth from all types of backgrounds which develops in them a greater appreciation and understanding of the Nation's natural resources and heritage, and at the same time contributes to the development and maintenance of the natural resources, we believe the Congress intended to create something of greater value than the sum of its individual parts. Any meaningful evaluation of the YCC must deal with its success or failure in terms of putting its multiple objective together to create something of greater value.

We recognize that this leads you back to your original problem in dealing with multi-objective programs and further complicates the matter by suggesting the need for measuring intangibles. Your acknowledgement that no single objective, either the employment, or the education, or the resource development aspect of the program would seem in and of itself to account for the strong Congressional and public support may contain the germ of a more satisfactory method of judging the value of the YCC. Perhaps with multi-objective programs of this type, the means of determining whether these programs are meeting their objectives, and whether these objectives are consistent with overall policy, should not be sought solely through an analysis of costs and benefits and alternative means of accomplishing given objectives. We would suggest that an evaluation of this nature ought to place at least equal weight on the measurement of intangibles. We suggest that this measurement can best be found in the perceived value of (or need for) the program by those who benefit.

We believe that the most effective measure of this perceived value is to be found in the following areas:
a. In the high level of public support from parents, educators, public officials at every level of government, civic and community leaders, the media, and the public at large.

b. In the over 120,000 expressions of interest in participation received from youth with little advanced publicity for the program.

c. In the 94% of the participating youth who said that the program was worthwhile.

d. In the 86% of the participating youth who said they liked the program and the less than 1% who said they really disliked it.

e. In the willingness of Colleges, Universities, and local public school systems to lead their support to the program and in the support received by the Council of Chief State School Officers.

f. In the willingness of school systems to grant high school credit for participation in the program.

g. In the initiatives taken by the Department of Labor to further cooperation with the YCC so that the Neighborhood Youth Corps might benefit from the YCC model and become a more meaningful experience for NYC youth.

h. In the support of the governmental officials responsible for the public lands where the camps are located, in their desire to have more camps and more youth involved in their areas, and in the desire of increasing numbers of officials who do not have camps to have them.

i. In the support for the program in the Congress as evidenced by their enactment of legislation to expand the program.

j. In the expressed interest of the Governors of the fifty States in participating in the program.

With this introduction, we would like to pass on to more specific comments on various other aspects of the report.

The Environmental Education Objective: As we indicate above, we do not concur in your finding that this is the primary objective of the program. However, we feel that the educational values of the program have been minimized by selective use of the ISR data and the failure to fully comprehend the nature of the environmental education portion of the program during its first year of operation.

While only slight increases were noted in environmental knowledge based on the ISR data, there were significant increases (19%) in the youth understanding of natural resource management and planning. On the basis of what we know about the 1971 program, we are inclined to believe that this may be a somewhat more accurate measure of what was
achieved in the education portion of the program. The educational objectives for the first pilot year were not defined in sufficient detail. Two program objectives were set forth - the first, to learn about the natural environment including the natural resources, and the second, to learn about the meaningful use, management, and protection of the natural resources. Within this broad guidance, each camp developed its own program. In the absence of detailed guidance, we believe that camps quite naturally concentrated their efforts in those areas where they had a proven capability - that is the area of natural resource management. During the first year of the program, program planners as well experienced some difficulty in arriving at a clear understanding of the full scope of the program's objectives in this area. We believe we have now broadened this scope to more nearly reflect the more comprehensive field of environmental education. Unfortunately for the results of the first year's program, ISR's test instrument was far broader than the program's design and consequently, measured much more accurately what the youth did not learn than it measured what they did learn.

With regard to environmental concern, although it was initially high and remained high at the end, the ISR results show a movement away from extreme positions on the most controversial issues. We believe that this evidences an increased awareness of the complexities involved in environmental problems and reflects an increase in understanding that may not have been successfully measured in the ISR test instrument.

Much more needs to be said about the broader educational aspects of the program. The narrow context in which you have considered educational values in terms of only environmental education does not do justice to the program or the ISR evaluation. Although you recognize in your recommendations that the real issue is the relationship of the experience to overall maturation and development, no mention is made of the youths participation in camp governance; the development of the work ethic; the evidence that their work far exceeded expectations in both quantity and quality; the experience of living away from home, the experience of managing money, the development of work skills, the participation in leisure time activities not previously experienced, or the importance placed by the youth on the YCC as a way to find out about themselves. No mention is made of the value of receiving school credit which can permit youth to strengthen a particular vocational goal or change and redirect goals - the ISR report reflects a significant upward movement in the educational aspirations of the youth as a result of their YCC experience. No mention is made of the value to teachers employed in the program; value to the school systems in effecting curriculum changes or the "ripple effect" wherein the techniques learned in dealing with a limited number of youth in the YCC can be and are being applied by teachers to vastly larger numbers of youth in the more traditional classroom setting.
Return to the Government from Enrollee Work: While we generally agree with the report in this area, there is a need for some clarification.

The value of the work was arrived at by asking project administrators to appraise the value of the work at the current replacement cost of the project by the means that would normally be used by the land managing unit to undertake the project if the YCC was not available. In certain instances this would have been by contract labor. In other instances, it would have been accomplished by regular Agency personnel.

Where staff positions were filled by regular Agency personnel the full cost of these individuals was transferred to the YCC account except for those individuals, principally Camp Directors, whose grades exceeded that allowed in camp staffing patterns. In those instances, the YCC reimbursed the Agency only up to rate allowed in the staffing pattern. We do not believe that this accounting procedure understates the services YCC purchased.

The percentages of the primary cost components shown on page 70 add to 101% rather than 100%.

The statements concerning seasonal workers regularly employed by the Agencies should make it clear that these employees are all eighteen years of age or older, and that valid comparisons of learning and attitudes between the two groups would be less meaningful than the report implies. Similarly, the comparison between the GS-4 wage per hour and the YCC cost-per-hour worked is cast in a context which is misleading and meaningless. If comparisons are to be made between regular seasonal workers and the YCC some mention should be made of the expression by some project administrators that the quantity and quality of the work performed by the YCC exceeds that of the seasonals and that they would rather have them.

YCC's Impact on Unemployment and its role in Socialization of Youth: Here again we see problems in basic assumptions, perspectives and selection of data which detract from full understanding of the value of the YCC. The basic assumption, here and elsewhere in the report, appears to be that the need for meaningful summer employment among teenage youth seems to disappear when family income exceeds the poverty level. The impression given the reader is that he is faced with a choice between an acute need and absence of need rather than degrees of acute need. It is true that the YCC does not target entirely on disadvantaged minority youth where the degree of need is most acute. We believe it is essential to the reader's understanding that the report speak to the rate of unemployment among all youth within this age group and particularly to the scarcity of summer employment opportunities for youth within the age group served by the YCC. In addition, we believe that more extensive treatment of the potential impact of YCC in taking non-disadvantaged youth out of the employment market and thereby creating greater opportunity for disadvantaged youth is warranted in the interest of overall understanding.
Mention should also be made of the fact that 54% of all enrollees in the 1972 program come from families with incomes of $10,000 or less, a 12% increase in these lower income youth from the 1971 program. Nearly 18% of all youth come from families with incomes of $5,000 or less in 1972 up from 11% in 1971. Conversely, the percentage of youth from families with incomes in excess of $15,000 decreased from 26% in 1971 to 17% in 1972.

In this section and in others, the report raises questions as to the positive value in itself of throwing youth from different backgrounds together. While we agree that the evidence from one year's experience is insufficient to determine how well the YCC has done or can do the job of promoting greater understanding among youth of various backgrounds, we are in no doubt that this aspect of the program has a positive value in itself. We believe that the issue of positive value has been decided by the Supreme Court's decision in Brown vs Board of Education.

There are really two issues being considered simultaneously in the comments made with respect to the differences between the make up of the program at the National level and the mix of youth in individual camps. Does the program provide a sufficient mix of youth to serve as a basis for test and evaluation in a pilot program? Does it provide a sufficient mix to allow its potential social benefits to be realized? Our recruiting emphasis at the National level in the first two years of the program may have been somewhat more concerned with the forest than with the trees. We agree that steps need to be taken in this area and feel that your comments will be beneficial to program planners and those responsible for recruitment at the camp level. A study is now underway to upgrade the recruiting effort and to provide an improved mix in all camps. Pilot models will be tried in several states in the third year of the program. While we agree that the points are well taken, the cause of understanding would be better served if the report spoke to the question of how representative each camp was of the demographic area from which the youth were recruited. At this writing, we are a little uncertain as to the impact on the program of recent policy directives with regard to quota systems and how these directives will effect our efforts to obtain an improved mix within specific camps.

In your comments in this section on the YCC as a social experiment, we do not believe that one can say with any real degree of accuracy that the program "takes highly motivated, highly idealistic youth--and releases them still highly motivated and highly idealistic." This seems to us to be a characterization of the youth which is based on opinion rather than supportable fact.

The YCC as a Voluntary Program: This concept proceeds from two assumptions which, as we have noted elsewhere, are of questionable validity. The first is that the YCC's primary purpose can be defined in the narrow terms of one of its parts - environmental education. The second
is that the only legitimate focus of Federal youth employment programs is on disadvantaged minority youth. This latter assumption apparently proceeding from a belief that the employment needs of youth above the poverty level are not acute.

As we have said before, we believe that gainful employment is an integral part of the YCC concept. As such, it accounts for a portion of the support, acceptance and interest in the program that has come from the youth, their parents, the Congress and the public at large. The extent to which that support, acceptance and interest is dependent on the gainful employment aspects is not readily measurable at this time. However, we do know that the legislative intent and therefore, legislative support is clear in this regard.

We do know that earning money was the second most frequently mentioned reason for applying for the YCC by the youth who participated in the 1971 program in a free-response, open-ended question according to the ISR report. In a fixed set of responses 30% of the youth listed earning money as a very important reason for applying. This percentage increased to 34% among those who responded at the end of the program. We are not able to determine the relative weight that should be given responses to the open-ended question as opposed to responses to a fixed set of questions from the ISR report. The data does not provide further insights into the question because it fails to compare responses to demographic data on the youth. However, we believe that it is reasonable to say that gainful employment is an important aspect of the YCC from the point of view of the youth.

Whether or not the experiment you recommend can be undertaken under current legislative guidelines is certainly subject to question. The report does little toward providing an answer.

The type of program that you recommend, after acknowledging the trade-offs that would have to be made, would change the fundamental character of the YCC. In view of the program's evident merit, its strong public support, its obviously strong Congressional support, its achievement of an acceptable measure of success in meeting its objectives during its first year, and its promise of greater success in its second and third years, it is difficult to understand why it is desirable to change its fundamental character. The argument put forth in justification rests on a dollar savings of 30% - the cost of its gainful employment aspect. Certainly a dollar savings of this size is not insignificant. However, it would seem that savings would first be sought in areas that would maintain the fundamental character of the program. The report does not speak to alternative means of creating savings. In fairness to the reader, we believe the report ought to present such alternatives.

The concept of a voluntary program, as you have used it, seems to equate voluntary with "no pay". Is this proper? Other "voluntary"
programs - the Job Corps, Peace Corps, Vista, the proposed all volunteer Army, etc. are admittedly "low pay", but certainly not "no pay". With this in mind, it would seem that there is a possibility that the fundamental character of the YCC could be preserved with some adjustments. Among these might be the very simple labeling of the YCC as a volunteer program and treatment of the earnings as a stipend or living allowance rather than a wage.

Other alternatives that might be considered are a reduction in the present amount of the stipend for all youth or a sliding scale wherein youth from lower income groups receive a higher stipend, but everyone who works receives some monetary compensation for services rendered. Any such alternative must be approached with utmost care. The importance of gainful employment to the program's primary purpose of creating something greater than the sum of its parts must not be underestimated. The concepts of a day's work for a day's pay and equal compensation for equal work are fundamental to our society and, as such provide a strong foundation to the program as it is presently conceived. While other societies may adhere to the principle of "from each according to his ability and to each according to his need," we are not yet convinced that that approach is better than our own.
APPENDIX D

LETTER FROM DEPARTMENT OF AGRICULTURE ON YOUTH CONSERVATION CORPS
We appreciate the opportunity to offer comments on the draft report of your Evaluation of Federal Youth Programs. Mr. Baldwin's letter mentioned enclosure of portions of material that pertain to programs administered by this Department. We note that only the section on the Youth Conservation Corps was enclosed. Title I, Sections 106 and 107 of the Economic Opportunity Act also authorizes operation of the Civilian Conservation Center portion of Job Corps by public natural resource agencies. In accordance with this law, and under terms of agreement with the Secretary of Labor, the Forest Service of this Department administers a Job Corps program in 20 Civilian Conservation Centers on the National Forests. We would be glad to comment on the Job Corps portion of the draft report if OEO would like to send a copy to us.

In your general comments on page 43, you comment on the benefits the youths receive from work experience vs. straight income transfer. "Career Threshold - A Longitudinal Study of the Educational and Labor Market Experience of Male Youth" by Herbert S. Parnes and others, supports the theory that the youths benefit from general work experience. "They learn work discipline and job-hunting methods and acquire knowledge of the labor market, all of which help them to make a better adjustment to a full-time career in later life." Quotation from pages 81 and 82 of the Manpower Report of the President, March 1972.

We do have some suggestions to improve the accuracy of the section on YCC. Some of these are questions of fact, and some are interpretations by those who set up and administered the program.

The most important suggestion we have for change deals with the purposes of YCC as set down in law, agency policy, and congressional intent. On page 67 and again on page 74, we note a statement which defines YCC as primarily a program of education in environmental issues and conservation. This is not our interpretation, nor was the program policy and administration established with environmental education as the primary purpose. The program is administered towards meeting this primary purpose as stated in the Act: "It is the purpose of this Act to further the development and maintenance of the natural

...
resources of the United States by the youth, upon whom will fall the ultimate responsibility for maintaining and managing these resources for the American people. The Departments of the interior and Agriculture did not interpret this primary purpose as being environmental education in setting program policy and direction. The Memorandum of Understanding between the two Departments executed February 17, 1971, defines three primary purposes of YCC. These are to:

1. Provide gainful employment of America's youth, ages 15 through 18, during the summer months in a healthful outdoor atmosphere.

2. Provide an opportunity for understanding and appreciation of the Nation's natural environment and heritage.

3. Further development and maintenance of the natural resources of the United States by the youth.

We believe this program direction reflects Congressional intent as set down in the legislative history. For example, there are frequent references to similarities between the Civilian Conservation Corps of the 30's and the Youth Conservation Corps.

We believe that a clear understanding of these three primary and equal purposes is important in evaluating YCC. In providing program guidance to operating officials, we stressed that one objective was not to be dominant. Had the primary purpose of YCC been environmental education, we would have structured an entirely different program.

The report stresses an alternative of using volunteers for YCC. We assume that this alternative is based upon the premise that the youths are the full beneficiaries of the program because of its environmental education aims. In structuring the YCC program, we recognized that youths need not be paid for the benefits received through education. We estimated that 25 percent of their time would be spent in educational, recreational, and other non-work activities, and provided pay based upon a 30-hour work week with no pay for the remaining 10 hours. We do believe that youth, regardless of background, deserve pay for the very strenuous and hard work they perform during the major portion of their enrollment. This again, is in accordance with one stated purpose of the Act which is to provide for employment.

In regard to employment, you mention on page 74 that YCC is not a program to combat unemployment. We agree that the program is not designed primarily for the disadvantaged where the unemployment percentage is highest. However, some mention of numbers of unemployed might improve the accuracy of the report. For example, the total teenage population is estimated to be 15,324,000. The annual unemployment rate for this age group was 16.9 percent in 1971,
nearly four times that of the adult population. This means that there were 1,257,000 youths unemployed. The June 1971 unemployment rate was 21.8 percent. In June 1969, the unemployment rate was 16.9 percent so the rate has increased despite the increase in programs for youths and a slightly smaller number of youths entering the labor force. As you can see from these figures the magnitude of the unemployment problem is such that there is a need for a program that serves both groups at a time when the need is greatest. The statistics came from the Manpower Report of the President dated March 1972, Chapter 4, New Perspectives on Youth Unemployment.

Another correction we believe is needed to clarify the report involves the comparison on page 72 between seasonal employee wages and YCC costs. In order to make a true comparison, the costs of supervision and program direction need to be added to seasonal employee wages as they were to YCC enrollee pay. The ratio of supervision for seasonal employees is similar to YCC, as are program direction and other administrative costs. The following table shows the comparison of costs between YCC and seasonal employment:

<table>
<thead>
<tr>
<th>Youth Conservation Corps</th>
<th>Seasonal Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nonresidential</td>
</tr>
<tr>
<td>Wages &amp; Benefits</td>
<td>11.00</td>
</tr>
<tr>
<td>Food</td>
<td>-</td>
</tr>
<tr>
<td>Lodging</td>
<td>-</td>
</tr>
<tr>
<td>Supervision 1/</td>
<td>7.00</td>
</tr>
<tr>
<td>Miscellaneous 2/</td>
<td>3.00</td>
</tr>
<tr>
<td>Total</td>
<td>21.00</td>
</tr>
</tbody>
</table>

1/ For YCC the supervision includes the environmental education portion of the staffing.

2/ Does not include the cost of general administrative overhead above the project level or include the cost of work supplies, materials, and equipment.

3/ For comparative purposes the cost has been converted to a 5-day week.
These suggestions are intended to clarify facts and interpretations in the report, and not to reflect adversely on the report. We think it is well done and objective, but can be made even better by eliminating some of the opportunities for misinterpretation.

Enclosed is a copy of the final Report of YCC as submitted to the Congress by the President for transmission to the OEO evaluators.

J. W. DEINEMA
Deputy Chief

Enclosure
APPENDIX E: RECOMMENDED PLANNED VARIATIONS IN THE PILOT YOUTH
CONSERVATION CORPS

The Usefulness of an Experiment

In the portion of this report devoted to the Youth Conservation Corps (YCC), we recommended that certain planned variations be introduced into the third pilot year of the program's operation. The two variations suggested are volunteer projects and short duration projects.

This appendix is intended simply to provide somewhat more detail on what such an experimental approach might involve in 1973. Specific suggestions are made to raise issues, not to imply that our tentative solutions to problems are better than others that might be devised. We fully appreciate the practical difficulties inherent in imposing an experimental design upon an operating program, even a small one, but the Departments of Agriculture and Interior have amply demonstrated their capacities to establish and administer an innovative program if the policy decision to do so is made.

We believe that the proposed variations would shed light on the administrative problems (e.g., recruitment, drop-out rates) of a volunteer program which put youth to work on environmental problems. For both the volunteer/stipend and the long term/short term issues, the experiment should also reveal any gross differences in impact on the participants' learning and work accomplishments. Obviously, it will not reveal what value should be
attached to any differences that may be observed.

For illustrative purposes, we are assuming a program of the same order of magnitude as the 1972 program with its 96 camps, which enrolled about 3,200 youth in 1972.

The discussion that follows deals with two sets of issues: variables to be considered and evaluative criteria. We assume throughout that whether a camp is "volunteer" or "stipend" would be determined randomly. We also assume that those variables which can be controlled administratively—especially recruitment, selection, and assignment of enrollees, and level of camp operating budget—would be held as nearly uniform as possible between sites.

Factors to be Varied

The major experimental variables, of course, are enrollee reimbursement rate and duration of the work experience. We would recommend only two levels of reimbursement: the one now in use and either zero or some arbitrarily low stipend (either to be paid out as pocket money or as severance pay upon completion). There is no point in experimenting with several levels of payment when what one wants to know is whether an essentially volunteer program would be successful.

We recommend that the analysis consider only two session lengths, "short" and "long," even though "short" might include both three and four-week
sessions, and "long" might vary from six to eight weeks. It would be desirable to have sessions of varying lengths at the same sites (e.g., a three-week followed by a six-week session) to reduce the variation attributable to different camp settings that might otherwise confound the analysis. We assume that most parks and forests can accommodate enrollees for ten (and sometimes twelve) continuous weeks, making combinations of this kind feasible. If cost considerations forced a choice between this recommendation and that of more sites, the choice should be for both long and short sessions at each site. Care would have to be taken in measuring work accomplishment since administrators might frequently plan projects that spanned two sessions. In this regard, one should determine randomly from site to site whether the short session occurred first or last.

Another important variable is residential vs. nonresidential projects. We think that nonresidential sites (where enrollees live at home), should be distributed equally between volunteer and stipend programs. This would permit observation of the interaction of residential arrangements with other administrative variables--especially willingness to volunteer and reliability in reporting for work. We would not expect it to permit measurements of any differences in the impact on the enrollee's learning. The YCC already operates both kinds of camps, and the costs per enrollee are about $1,100 at residential camps as compared to about $900 at nonresidential sites. If a significant expansion of YCC occurs, one would
expect the proportion of the less expensive nonresidential sites to increase. (They are presently about 25 percent of the sites.)

One would also want to know which kind of camp was more attractive from the viewpoint of the participating youth. This would have to be estimated through questionnaires since it does not seem feasible to give the enrollees a choice in the matter. Even though we assume that cost and logistical considerations may determine whether or not the majority of sites were residential under an expanded program, an enrollee might be afforded some choice if many camps were in operation.

In any case, knowing whether volunteers were attracted to one setting or another would be useful for planning.

As with any other administrative and educational experiment, one would wish to control for as many demographic variables as possible, but we suspect that this will be feasible only to a limited extent. Differences in enrollee characteristics (e.g., race and income) that might be caused by differing regional camp settings may be taken into account in the analysis of data although they cannot be entirely eliminated at the design stage. Our discussion has assumed that random division of camps into "volunteer" and "stipend" categories would result in an approximately equal number of enrollees in each. This could easily be guaranteed without loss of the randomness important to statistical analysis by stratifying the camps by size before randomly determining which are to be nonstipend.
Data Needs and Evaluative Standards

During the 1971 and 1972 sessions, the Departments of Agriculture and Interior and the Institute for Social Research kept good records on enrollee characteristics, activities, and attitudes. We are assuming that this would continue. Specific items for which accurate records would be critical include the number of applications, characteristics of applicants, methods of recruiting, definitions of recruitment areas; methods of enrollee selection, enrollee characteristics, enrollee attitudes and understanding of environmental issues at entry and exit; time worked, attendance, discipline problems, drop-out rates; the satisfaction of both enrollees and their supervisors with work assignments and working conditions; and performance on the job. Records on most of these matters were kept during the past two years.

As indicated in the body of this report, we believe that the evaluative criteria should include: 1) success in recruitment, 2) socioeconomic integration, 3) enrollee attitudes and work habits, 4) learning gains related to environmental issues, and 5) work accomplishment. These standards deserve some comment.

Success in recruitment would be an issue for both the volunteer/stipend and the long session/short session analyses. For the volunteer/stipend study one wants to know both the numbers and characteristics of applicants. Obviously it would not be necessary for volunteer camps to demonstrate the
present 50-to-one oversubscription rate that the program as a whole now enjoys. The only really important consideration is that the applicants be numerous enough and prompt enough to permit available slots to be filled without heroic administrative efforts. The same recruiting techniques should be used for volunteer and stipend-paying sites, recognizing that administrators at the latter can refer to pay as an incentive. However, the level of effort should be as nearly identical as possible. It might be appropriate to specify a threshold for success in advance (e.g., oversubscription by a factor of three or five), and if so, this would presumably be arrived at by some estimate of how many job slots could realistically be created in the recruitment area under an expanded program.

As noted in the body of this report, the actual extent of socioeconomic integration at the YCC camp level has not been especially dramatic, though it is understandable given the location of most work sites. In comparing volunteer and stipend sites in this regard, it would be important to consider both the composition of the total pool of applicants and the final characteristics of actual enrollees. Of the two groups, the applicants are probably more important for the proposed design since they are an indicator of what future administrators will have to work with in attempting to achieve work site integration. There are two questions: 1) Do youth from different demographic groups apply in sufficient absolute numbers to permit camp integration if a policy of overselection from minority applicants
is continued? 2) Do the proportions of these groups differ significantly between volunteer and stipend camps so that the probable effects of a policy of random selection from among applicants could be estimated under both arrangements?

How much enrollees learn is, of course, an issue for the program as a whole but especially important for long session planning. It is also an issue that cannot be resolved with presently available data. We are certain that comparisons with the 1971 ISR data will not be relevant and doubt that comparisons with 1972 will be much more helpful. We assume that progress will continue to be made in refining testing standards and procedures. Obviously, these should be as uniform as possible among all sites in 1973 under our proposed structure. We would expect only fairly gross differences in learning to be observable and capable of statistical confirmation.

Measuring and comparing work accomplishment between sites will also be extremely difficult. In assessing the 1971 program, the Departments of Agriculture and Interior asked park and forest administrators at the end of the camp sessions to estimate what the enrollee's work would have cost if acquired through normal channels. Although we expressed reservations about the validity of this method in the context of cost-benefit analysis, it is simple to do and might be satisfactory for comparing planned variations within the YCC program. The main point for
an intraprogram comparison is uniformity of approach, not conformity with any a priori conception of cost-benefit analysis. We would recommend getting these estimates both before and after program sessions, however. The preprogram estimate would, of course, be the administrator's summer work plan for the enrollees. Securing it would serve three purposes: it would 1) reveal any differences in workload between volunteer and stipend camps that might be attributable to camp setting, not the experimental variables; 2) permit national administrators to encourage more nearly uniform levels of effort at all camps; and 3) permit the postsession comparison to be based on performance against a plan as well as absolute value.

The drop-out rate has, of course, a bearing on learning, work accomplishment, and program cost. There may be more difficulty in retaining enrollees for the duration of long session volunteer camps if unpaid enrollees feel less obligation to complete a full session than do paid enrollees. While fewer than five percent of enrollees dropped out of YCC in 1971, a large proportion of these left to join families on vacations. With the recommended increase in voluntary enrollments, YCC faces the possibility that this percentage may also rise.

**A Point on Timing**

One other point is perhaps self-evident, but we feel obligated to add it. Setting up any experiment requires time, and we are fully aware that
we have only touched on the practical problems connected with the one we suggest. Somewhere around February 1 should be regarded as the latest date for making a decision to go forward with an approach of this kind in 1973, and so late a date would presuppose that considerable advance planning and a feasibility study had already taken place.
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**FEDERAL SUMMER EMPLOYMENT PROGRAM FOR YOUTH**


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YOUTH CONSERVATION CORPS


VOLUNTEERS IN PARKS AND OTHER MODELS

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RECREATION SUPPORT PROGRAM AND SUMMER YOUTH TRANSPORTATION PROGRAM


NATIONAL SUMMER YOUTH SPORTS PROGRAM

