EXECUTIVE SUMMARY

The Job Corps program serves economically disadvantaged youths between the ages of 16 and 24 who can benefit from a wide range of education, vocational training, and support services in a predominantly residential setting. The National Job Corps Study, funded by the U.S. Department of Labor, was designed to provide a rigorous assessment of the effectiveness of the program. As part of that study, Mathematica Policy Research, Inc. (MPR) will conduct a benefit-cost analysis to assess whether the benefits of Job Corps justify the substantial investment of public resources in the program. Benefits of Job Corps include the increased employment and earnings, reduced criminal activity, and reduced use of other services and programs of youth who have participated in the program. In addition, the products or services students produce during their vocational training in Job Corps are benefits that should be included in the benefit-cost analysis. This report presents estimates of the value of these products and services.

An integral part of vocational training in Job Corps is the hands-on experience gained by students working on projects that involve producing a finished product or service. Depending on their trade, a student may participate in either vocational skills training (VST) projects or work experience (WE) projects. While the main purpose of both VST and WE projects is to train students, the products and services produced on these projects are valuable by-products of the training.

VST projects provide training to students primarily in construction trades. The projects typically involve repair and maintenance of facilities as well as remodeling and construction work. Most VST projects are performed on the buildings and grounds of Job Corps centers, although some are performed in community facilities. Students at nearly all stages of their training work on VST projects. Frequently, students from more than one trade work on the same project.

WE projects are used more in service-oriented trades such as clerical, health, and food-service occupations. After mastering a skill level in their trade, students work in real work settings. While some WE projects take place at the center, they are more typically located at public or private organizations in the community. Students can work up to six weeks in these unpaid positions.

Some VST and WE projects serve to reduce the operating costs of the center while providing students with training. These *center-serving* projects include such activities as general maintenance of the center or work in the center cafeteria or health clinic. Center-serving work projects reduce center operating costs, because students are performing work that would otherwise need to be paid for. Consequently, the benefits produced by these center-serving projects are captured through lower observed operating costs in the cost part of the benefit-cost analysis. To include them in the benefit part of the benefit-cost analysis would double count the benefits. For this reason, this study focuses on projects that contribute to the community and projects that lead to lasting improvements in the facilities or grounds of Job Corps centers, but not on projects that are center serving.

We estimate the value of output produced by students on work projects as the product of (1) the estimated number of days Job Corps students spend on these work projects and (2) the estimated average value of output created per day spent on the projects.

To estimate the number of hours spent on work projects, we collected data on time spent on work projects during 3-month periods from a random sample of 23 centers.

To calculate the value of output produced per hour spent on work projects, we conducted in-depth studies of a random sample of 44 non-center-serving projects that took place at the 23 centers. We valued the output using the supply price--the cost of obtaining the output from another supplier. Depending on the nature of the project, we estimated the supply price using either the independent-estimate approach or the relative-productivity approach. In the independent-estimate approach, we asked an alternative supplier, usually a professional contractor, how much they would charge to produce the same product as the students. In the relative-productivity approach, we estimated the cost of hiring someone else to do the work that the students performed.

Our main findings from the study follow:

- In one year, over one million student-days are spent on all work projects in Job Corps. This is equivalent to 31 (6-hour) days per student-year, where a student-year is equivalent to one student participating in Job Corps for one year. Nearly 80 percent of the student-days are spent on VST projects; just over 20 percent are spent on WE projects.

- Of the 31 days per student-year spent on work projects, about 21 days per student-year are spent on projects that are not center-serving (included explicitly in the benfit-cost analysis) and about 10 days per student-year are spent on center-serving projects (not included explicitly in benefit-cost analysis).

- On average, students produce output worth $39.00 per day or $6.50 per hour when working on non-center-serving work projects. The estimate of $6.50 per hour is consistent with other studies of output produced during training programs and is similar to the average compensation of students when they leave Job Corps ($5.98 plus fringe benefits).

- Students produce output worth $5.48 per hour spent on (non-center-serving) VST projects and $7.01 per hour spent on (non-center-serving) WE projects. The higher value of the output produced on WE projects is consistent with our expectations that students working on WE projects (who are near the end of their training) will have achieved higher skill levels than students working on VST projects (who may have just begun their training).

- Over one year, Job Corps students produce output worth over $27 million while conducting non-center-serving projects. This is equivalent to $789 per student-year. We estimate that students working on center-serving projects reduce the operating costs of the center between $280 and $360 per student-year. These amounts are small compared with the program operating costs of about $26,000 per student-year.

- Our estimates of the value of output are based on the supply price of the product or service produced by the students. However, for some projects, the supply price may overstate the value of the output. For example, if students did not produce the product or service free of charge, no-one may be willing to pay the supply price for it. Hence, our estimates of the value of output produced by students are upper-bound estimates.