

# National Evaluation of Youth Corps: Findings at Follow-up

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Prepared for Corporation for National and Community Service Office of Strategy and Special Initiatives 1201 New York Avenue, NW Washington, DC 20525



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The mission of the Corporation for National and Community Service is to improve lives, strengthen communities, and foster civic engagement through service and volunteering. Each year, the Corporation engages more than four million Americans of all ages and backgrounds in service to meet local needs through its major programs, Senior Corps and AmeriCorps, and through other initiatives.

The Corporation contracted with Abt Associates Inc., an independent and nonpartisan research firm, to conduct the study.

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## **Chapter 1: Introduction**

### **Overview of Youth Corps**

#### **History of Youth Corps**

Conservation and Service Corps, or youth corps, are a diverse set of programs united in their common mission of engaging corpsmembers, primarily young adults, in a combination of community service, workforce development, and education. The programs have their legacy in the Civilian Conservation Corps (CCC) started in 1933 by President Franklin Delano Roosevelt to create jobs during the Great Depression. The residential CCC program served over 500,000 young men at its peak in 1935, with 2,600 camps located in all states. The CCC ended with the start of World War II in 1942.

Federal support for conservation programs returned in the late 1950s and continued until 1981 under several programmatic models. After federal funding stopped, several states began programs and subsequently ten cities started their own programs with support from several large foundations. Federal support for conservation corps returned in 1990 with the creation of the Commission for National and Community Service. The Commission provided \$22.5 million in support for youth corps under Subtitle C of its 1990 legislation. At that time, over 100 corps were in operation across the country. In 1993, funding for service and conservation corps was merged into a larger national service initiative with the creation of AmeriCorps and the Corporation for National and Community Service (the Corporation). The 2009 Edward M. Kennedy Serve America Act strengthened the Corporation's support for programs like youth corps through its emphasis on promoting educational attainment and increasing employment and service opportunities for disadvantaged individuals. For example, the Act creates a Clean Energy Corps that includes "...conservation or youth service corps programs [that provide] work experience, life skills, education, career guidance and counseling, employment training, and the opportunity to develop citizenship values and skills through service to their communities and the United States" (Serve America Act, Section 1302, section 122 [3]).

#### **Youth Corps Today**

Today, youth corps are operated by local community-based organizations and local and state government agencies. While they typically provide educational, employment and training, and community service activities, there is no single program model. Youth corps vary considerably in their organizational structure, type of members targeted, duration and intensity of participation. Corps receive support from the Corporation, other federal agencies (including the Departments of Labor, Interior and Housing and Urban Development), and local and state government and foundations. Some programs receive additional support from fee-for-service projects, in which project sponsors, typically local or state government agencies, provide corps with direct funding for services. Many corps rely upon multiple sources to fund their programming. It is not unusual for community-based organizations receiving funding from multiple sources to operate several different "programs" reflecting their funders' priorities and interests. As an example, one of the organizations in this study operated an environmental corps funded by AmeriCorps, a YouthBuild component funded (at the time) by the Department of Housing and Urban Development, and a charter school providing GED and high school diploma opportunities supported by the Department of Education. All programs included in this study were selected from organizations enrolled in The Corps Network (previously known as the National Association of Conservation and Service Corps) in 2005. The

#### **Chapter 1: Introduction**

Corps Network is an advocacy group with the primary objective of sustaining and growing support for corps programs.

Youth corps programs are intended to positively impact both the communities where they operate and the lives of corpsmembers. Corpsmembers contribute a wide variety of services to their community. Some examples of service projects include tutoring and mentoring students from disadvantaged circumstances, improving parks and other public lands, providing human services, and aiding in disaster relief. Corpsmembers, in turn, receive a wide range of member development services focused on educational opportunities, employment, and life skills development. All of these program components are expected to impact corpsmembers' developmental trajectories such that they will subsequently be better educated, have better job skills, have higher employment and wage rates, be more economically secure, and be more personally and socially responsible than they would have been in the absence of the program.

While serving, corpsmembers generally receive a modest stipend or living allowance (that varies across programs, but generally is comparable to minimum wage or less). Members serving in AmeriCorps-funded programs may also receive a \$4,725 Segal AmeriCorps Education Award<sup>1</sup> upon the successful completion of their program. The Segal AmeriCorps Education Award may be used to pay education costs (e.g., tuition, fees) at qualified institutions of higher education, for educational training, or to repay qualified student loans. Members have up to seven years to use their awards.

### The Need for an Updated Youth Corps Evaluation

In 1996 a rigorous random assignment study of the Conservation and Youth Service Corps was completed for the Corporation's predecessor organization, the Commission for National and Community Service. That study included (1) participant impact analyses, (2) community impact analyses, and (3) cost-benefit analyses. The community impact component reported high levels of satisfaction with, and perceived quality of life improvements from receipt of, the services provided by the corps. Few positive impacts on corpsmembers were found for the corpsmember group as a whole, but significant impacts were reported for particular subgroups, especially African American males. For the corpsmember group as a whole, there were no significant impacts on 37 out of 41 outcome measures in the areas of education, employment, earnings, and personal and social responsibility. There were significant positive impacts on hours worked (including time spent in the corps) and the likelihood of having worked for pay (including paying work within the corps), and there was a significant decreased likelihood of having been arrested. However, youth corps corpsmembers were also less likely to have earned a technical certificate or diploma within the study period.

In 2005, the Corporation contracted with Abt Associates Inc., in partnership with The Corps Network and ORC, an Infogroup company, to conduct a new evaluation of youth corps. The reasoning behind this new study was three-fold. First, the Corporation, along with The Corps Network, wanted updated findings on the impact of youth corps programs on corpsmembers. The findings from the 1996 study were perceived

<sup>&</sup>lt;sup>1</sup> The 2009 Edward M. Kennedy Serve America Act made changes to the maximum amount of the Segal AmeriCorps Education Award. The amount is now tied to the maximum amount of the U.S. Department of Education's Pell Grant. For terms of service that are approved using 2009 funds (or earlier funds) the award continues to be \$4,725 for a year of full-time service, and is pro-rated for part-time service based on the fulltime amount. For terms of service that are supported with 2010 funds, the award value increases to \$5,350.00.

as "dated" and, according to The Corps Network, youth corps programming had changed enough since the 1996 study to warrant a new study. Second, since the earlier youth corps report, researchers have developed a more comprehensive set of outcome measures for evaluations of youth development as well as for evaluations of civic and volunteer programs, as reflected in the 2001 AmeriCorps Longitudinal Study (Jastrzab et al. 2007). Specifically, many of the outcome domains utilized in this study were developed and proved reliable in the 2001 AmeriCorps study. Because the 1996 youth corps study had a very limited set of outcome measures, the Corporation was interested in expanding the outcomes assessed for youth corps in this new study. Third, the Corporation's Office of Strategy and Special Initiatives was interested in conducting randomized control trials and held a competition for contractors to propose random assignment studies of service programs; Abt Associates, in collaboration with The Corps Network, proposed the updated youth corps impact evaluation<sup>2</sup> and the Corporation subsequently commissioned this study.

### **Study Overview**

The research questions that guided the impact study design were:

- 1. What are the impacts of youth corps participation on corpsmembers':
  - educational outcomes (e.g., attainment, aspirations);
  - employment-related outcomes (e.g., employment status, wages and earnings, number of employers, participation in training, total income);
  - civic engagement and life skills (e.g., social trust, volunteering and community participation and responsibility, perceived service efficacy); and
  - risky behaviors (e.g., alcohol and substance abuse, criminal offence and incarceration)?
- 2. Do impacts vary by subgroups defined by corpsmember demographics or program participation characteristics? If so, what are the impacts in each subgroup?

This study of youth corps used an experimental design in order to compare the experiences of youth corps members with those of similar individuals who applied to the program over the same time period (June 2006 through July 2007) but who were randomly assigned to a control group. The study team used a two-stage process to create a sample for the study. First, a stratified random sample<sup>3</sup> of youth corps programs was selected from a population of eligible programs and from this sample, 21 programs were recruited into the study. Then, eligible applicants to each of the 21 programs were randomly assigned to either a treatment group, whose members were allowed to enroll in a youth corps program, or a control group, whose members were embargoed from joining a corps for 18 months. Both stages of sampling are described in greater detail in Chapter 2 of this report.

<sup>&</sup>lt;sup>2</sup> This study focused only on impacts on participants; unlike the earlier study, it did not include a process analysis, an analysis of the program's benefits for the nonparticipants in the community, or a cost-benefit analysis.

<sup>&</sup>lt;sup>3</sup> Corps were stratified based on (1) the proportion of corpsmembers that were supported by AmeriCorps funding in 2005, and (2) the proportion of corpsmembers that were enrolled to participate in the program full-time, parttime, or reduced part-time. See Chapter 2 for more details on stratification and sample selection.

#### **Chapter 1: Introduction**

#### **Data Sources**

Data used for the impact analysis were obtained from three surveys of study participants:

- A baseline survey administered prior to random assignment and completed by all eligible youth corps applicants. This survey included items used to create baseline measures of outcomes (education, employment and earnings, civic engagement and life skills, risky behaviors), and questions regarding background and demographic characteristics.
- A follow-up, postprogram survey administered approximately18 months after random assignment. This survey included items used to create outcome measures, and for the youth corps treatment group, questions about program experiences and satisfaction.
- A tracking survey administered approximately 30 months after random assignment. This survey was primarily intended to maintain contact with sample members in anticipation of a possible longer term follow-up. In addition to questions designed to update all pertinent contact information, the survey included a single question that asked what the respondent was doing the most of the previous week; responses were used to determine the respondent's education and employment status 30 months after random assignment (Exhibit 1.1).

#### Exhibit 1.1 Participant Data Collection

Instrument	Timing	Focus	Response Rates
Baseline Survey (mid-2006–mid-2007)	At the time of program application (shortly before random assignment)	Background and demographic characteristics Baseline information related to outcomes	Treatment group: 100.0% (n=1,357) Control group: 100.0% (n=686)
<b>18-Month Follow-Up</b> <b>Survey</b> (late 2007– early 2009)	Approximately 18 months after random assignment <sup>a</sup>	Information related to outcomes (treatment and control group members) Information on youth corps program experience (treatment group members only) Information on education and employment activities during the 18 months between baseline and follow-up (control group members only)	Treatment group: 77.7% (n=1,055) Control group: 71.1% (n=488)
<b>30-Month Tracking</b> <b>Survey</b> (early 2009– mid-2009)	Approximately 30 months after random assignment	Updated contact information Limited data on select outcomes (1 question)	Treatment group: 66.0% (n=895) Control group: 57.0% (n=391)

#### **External and Internal Validity**

Prior to conducting the impact analyses, the study team conducted analyses to assess the study's external and internal validity. External validity concerns the extent to which results can be generalized to a larger population. The question addressed is, "are the 21 corps that agreed to participate in the study representative of the population from which they were drawn?" Statistical tests indicated that the sample corps are representative of the population of corps (only one out of 31 tests showed significant differences between the two groups). Having one statistically significant test out of 31 is consistent with what would be expected to occur by chance if there were no systematic differences between the groups; therefore, there is no evidence of systematic differences between the sample and population of corps that would threaten the external validity of the study. The one item that was not in balance was the percentage of members "pursuing education but not employed" at program exit. Detailed results of these analyses are presented in Chapter 2.

Internal validity concerns the extent to which causal inferences regarding the impacts of the program can be made for the study sample. Random assignment designs are considered to be the gold standard for producing internal validity, and under normal circumstances the random assignment process is expected to produce comparable treatment and control groups at baseline. But survey nonresponse can produce imbalance between the groups, and the question arises as to whether the baseline characteristics of treatment and control groups are equivalent in the analytic samples. Statistical tests indicated that the analytic samples were equivalent (only three out of 59 tests showed significant differences between the two groups). Having three statistically significant tests out of 59 is consistent with what would be expected to occur by chance if there were no systematic differences between the groups; therefore, there is no evidence of systematic differences between the groups that would threaten the internal validity of the study. The three items that were not in balance were marital status, likelihood of reporting that one was working or in school, and likelihood of reporting an expectation to complete a graduate degree. These variables were included as covariates in the impact analysis models in order to adjust for these differences. Results of the analyses assessing the study's internal validity are reported in Chapter 2.

#### **Outcome Domains Assessed**

The impact analysis focused on assessing the impact of youth corps participation on youth corps enrollees. Since youth corps programs provide a combination of educational support, job training, and community service, program participation was hypothesized to impact educational aspirations, educational pursuit and attainment, employment and earnings, work and life skills, and civic engagement. Through these impacts, participation in youth corps may also lead to a reduction in risky behaviors. Although corps models vary, a typical logic model for corps programs is depicted below in Exhibit 1.2. This logic model was developed by the research team at the start of the evaluation process. More details on the outcomes assessed are provided in Chapter 2.

#### Exhibit 1.2: Youth Corps National Evaluation Logic Model

#### General Theory of Change Model: Youth Corps

Program Ac	tivities (PA)	Intermediate O	utcomes (IO)	Short-Term Outcome(s) (SO) End of Program	Long-Term Outcome(s) (LO)
SERVICE PROJECTS 1 - Team/individual - Supervision/mentoring - Interaction with beneficiaries	ACADEMIC INSTRUCTION 6 - GED classes - Referrals to adult education - College courses - Academic counseling	WORKPLACE SCANS A SKILLS - Communication - Teamwork - Etiquette PA: 1, 4, 7	IDENTIFY NEEDS AND SOLUTIONS TO COMMUNITY ISSUES       F         - Asset mapping         PA: 1, 2, 4	LIFE PATH AWARENESS I AND PLANNING - Career direction IO: 9, 10, A, D, E, H POSITIVE SELF-IMAGE/ II	CIVIC VALUES AND PARTICIPATION       a         - Advocacy       .         - Socially responsible behavior       .         Volunteering       .         - Community leadership       .         - Careers in public service       .
MEMBER DEVELOPMENT         2           - Diversity         -	OCCUPATIONAL SKILLS 7 TRAINING	CONNECTION TO B COMMUNITY	PHYSICAL STAMINA/ G Fitness	SELF-EFFICACY	SO: III, IV, V, VI
- Leadership - Team building	- Career counseling - Certification workshops	PA: 1, 2, 3, 4	PA: 1, 4, 5	IMPLEMENTING SOCIAL III SOLUTIONS	ASPIRATIONAL SKILLS/ D ASPIRATIONS/ ACHIEVEMENTS
REFLECTION 3 - Journals - Discussion	JOB-PLACEMENT 8 ASSISTANCE	AWARENESS OF OTHERS/ C INTERPERSONAL SKILLS/ DIVERSITY	ACADEMIC PROGRESS H - Attain GED, if needed	IO: B, F, I	SO: I, II
- Discussion		PA: 1, 2, 3, 4	PA: 6	COMMITMENT TO CAUSES IV	EMPLOYMENT SKILLS/ c ASPIRATIONS/ ACHIEVEMENTS - Stability/lindependence
EXTRA-SIGNATURE 4 PROJECTS	POST-PROGRAM 9 EDUCATION AWARD	SPECIFIC JOB SKILLS D	POLITICAL/SOCIAL I AWARENESS	IO: B, F, I	SO: 1, II
- Occasional team activity - Member-developed		PA: 1,7	PA: 1, 2, 3, 4	LEADERSHIP SKILLS/ V PRACTICE	PERSONAL LIFE SKILLS/ d VALUES/BEHAVIORS
PHYSICAL EDUCATION 5	PERSONAL MANAGEMENT 10	SELF-KNOWLEDGE AND E ASSESSMENT		IO: A, E, F	- Social skills and attitudes
	<ul> <li>Financial</li> <li>Home management</li> <li>Positive life choices</li> </ul>	- Self-esteem		VALUES/DIVERSITY/ VI MULTICULTURALISM	55. t, ii
		PA: 2,3		IO: B, C, F, I	

#### **Overview of Analytic Methods and Analyses Conducted**

The study team used regression analysis models to test for impacts on the domains listed above, as described in greater detail in Chapter 2 and Appendix A. Both *intent-to-treat* (ITT) and *treatment-on-the-treated* (TOT) effects are estimated in this study.<sup>4</sup> The ITT impact estimates are regression-adjusted differences between the treatment and control groups, and are estimates of the average impact per eligible *applicant* to the youth corps programs selected for the evaluation. The TOT effects provide estimates of the impact per youth corps *corpsmember* (i.e., those applicants assigned to the treatment group who actually participated in youth corps). The analysis approach is discussed in greater detail in Chapter 2 and Appendix A, and the results are presented in Chapter 3. Additionally, in order to better understand the impact estimates and the experiences of the group to which the corpsmembers are compared, descriptive data on services received by control group members are presented at the end of Chapter 3. These data should be viewed in conjunction with the analysis results in order to gain a better understanding of how the impacts should be interpreted.

In addition to the main impact analyses described above, this study included a variety of supplemental analyses. Subgroup analyses, variations in impacts by program, relationships of time in youth corps to outcomes, relationships of AmeriCorps funding support to outcomes, and corpsmembers' satisfaction with their youth corps experience are all explored in turn.

Subgroup analyses were conducted as a part of this study because the study team hypothesized that effects of the youth corps program might vary depending on the characteristics of the corpsmembers, as found in the 1996 youth corps study (Jastrzab et al. 1996). The approach to these analyses and their results are described in Chapter 4. Additionally, because effects of youth corps participation on corpsmembers might also vary by program, analyses of variation in impacts by program are presented in Chapter 5. Due to wide variation in lengths of service among the corpsmembers in this study, nonexperimental, descriptive dosage analyses are presented in Chapter 6. Additionally, the approaches to and results from nonexperimental, descriptive analyses of the relationships between receipt of level of AmeriCorps funding support and outcomes are described in Chapters 7. Lastly, results from analyses of corpsmembers' satisfaction with their experiences in youth corps are presented in Chapter 8.

<sup>&</sup>lt;sup>4</sup> See Bloom (2006).

## **Chapter 2: Study Design and Analysis Methods**

This chapter describes how the study was designed and how the analysis was conducted. In addition, this chapter includes the results from the analyses of the study's internal and external validity.

### **Sampling of Programs**

The sampling frame for selection of programs for this study consisted of 59 youth corps programs that were members of The Corps Network<sup>5</sup> in 2005 (at the time of the study design) and were expected to enroll at least 50 corpsmembers that year.<sup>6</sup> The sampling frame of programs was stratified across two dimensions of program characteristics: level of AmeriCorps funding and proportions of full-time, part-time, and reduced part-time corpsmembers.

First, programs were classified based on the proportion of corpsmembers that were supported by AmeriCorps funding in 2005. In the 2005 corps census administered by The Corps Network (see surveys appendix), corps indicated the percentage of their members that received funding from:

- 1. A full AmeriCorps stipend, wherein a corpsmember receives a stipend funded with AmeriCorps monies and may also receive a Segal AmeriCorps Education Award;<sup>7</sup>
- 2. A Segal AmeriCorps Education only; or
- 3. Non-AmeriCorps monies.

For the purposes of sample selection, corps were classified into the following three AmeriCorps funding categories: "high" if a corps had 80 percent or more members receiving any form of AmeriCorps funding; "medium" if the proportion of members receiving AmeriCorps funding was in the range of 20 to 80 percent; and "low" if 20 percent or less received any form of AmeriCorps funding. Youth corps programs were stratified on the amount of AmeriCorps funding to support exploratory analyses of the relationships between AmeriCorps funding support and outcomes (see Chapter 7). It is important to note that while some of the programs and corpsmembers included in this study received funding support from

<sup>&</sup>lt;sup>5</sup> The Corps Network partnered with Abt Associates and supported the design and implementation of this study of its member organizations. Previously known as the National Association of Service and Conservation Corps (NASCC), The Corps Network was created in 1985 to provide a national venue for corps staff to collaborate and exchange ideas for program improvement. Today, The Corps Network represents 143 conservation and service corps programs operating in 44 states and the District of Columbia, enrolling over 20,000 corpsmembers who, in turn, mobilize an additional 227,000 community volunteers, collectively contributing 21.3 million hours of service annually.

<sup>&</sup>lt;sup>6</sup> Study participation was limited to corps with 50 or more corpsmembers because the fixed cost and burden of participating in random assignment, for both the study and the smaller corps, was determined to be too great for their inclusion in the study. Too few sample points would be gained from selection of the small corps to justify the costs of recruitment and random assignment. Additionally, there is an excessive burden for small corps to participate in a random assignment study because they have even more limited resources with which to recruit corpsmembers and conduct random assignment than larger corps. Therefore, with guidance from The Corps Network the study team determined that corps should have at least 50 corpsmembers to qualify for the study.

<sup>&</sup>lt;sup>7</sup> The Segal AmeriCorps Education award may be used at qualified institutions of higher education, for educational training, or to repay qualified student loans. This award is available upon the successful completion of one's youth corps experience.

#### **Chapter 2: Study Design and Analysis Methods**

AmeriCorps, the youth corps programs should not be considered to be representative of AmeriCorps programs.<sup>8</sup>

The second dimension on which corps were stratified reflected the proportion of corpsmembers that were enrolled to participate in the program full-time (1,500 or more hours per year), part-time (between 900 and 1,499 hours per year), or reduced part-time (between 300 and 899 hours per year). Stratification across these two dimensions ensured that the distribution of the sample exactly matched the distribution of all eligible programs.

Of 34 programs selected in the random sample, 18 agreed to participate, 15 declined to participate,<sup>9</sup> and a single program was found to be ineligible due to a smaller than expected number of corpsmembers. Subsequently, a convenience

#### **Program Selection**

#### Criteria:

- Youth corps program is member of The Corps Network in 2005
- Projected annual enrollment of at least 50 corpsmembers

#### Stratification

- Percent of corpsmembers receiving support from AmeriCorps
- Percent of corpsmembers enrolled fulltime, part-time, reduced part-time

sample of 3 additional programs from the original population of 59 was included, bringing the total number of participating programs to 21. Thus, the group of 21 programs includes the subset of randomly sampled programs that were willing to participate, and a convenience sample of 3 programs.

#### **External Validity**

The results of this study are intended to generalize to a target population of 59 youth corps programs that are part of The Corps Network and that, in 2005, had annual enrollment of 50 or more corpsmembers. Since the study was unable to recruit all 34 programs that were randomly selected to be representative of the national population, the question of external validity arises: whether the 21 programs that participated in the study are representative of the full population of programs. To address this question, the study team compared sample programs' characteristics to those of the population and reported results from a series of tests of whether the characteristics are statistically equivalent in the sample and population groups. The program characteristics described and compared in this section are the characteristics of programs in 2005, just before the sample of programs was selected and recruited and before random assignment occurred. The study team used data from The Corps Network to compare the study sample of programs to the population of study-eligible corps. Information in that data base was gathered from an annual program-level survey that was completed by corps (that were members of The Corps Network) near the end of 2005. For the full survey instrument, see the surveys appendix.

Based upon a comparison of the sample corps and the population of corps on 31 characteristics, the study team found no evidence that the study sample selection process produced a sample that is unrepresentative of the population of Corps Network members (in 2005). Thirty out of 31 tests showed no statistically significant difference between the sample corps and population of corps, which is consistent

<sup>&</sup>lt;sup>8</sup> The corps in this study were sampled from a defined population of youth corps programs, not from the full population of AmeriCorps programs.

<sup>&</sup>lt;sup>9</sup> Many of the programs that declined to participate in the study cited recruitment challenges. Random assignment requires programs to recruit more qualified individuals than there are program slots. Some programs invited to participate were already struggling to fill their existing slots. Other invited programs recruited well in advance and had already filled their slots for the next program year when random assignment began.

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with the number of significant tests expected by chance.<sup>10</sup> The one statistically significant difference was that the sample corps reported a lower mean percentage of members "pursuing education but not employed" at program exit. It is important to note that the representativeness of the sample can only be assessed in terms of the characteristics that were measured, and the possibility that the sample of corps differs from the target population of corps on unmeasured characteristics cannot be ruled out.<sup>11</sup>

Population (i.e., the population of The Corps Network member corps in 2005) and sample characteristics of the corps are displayed in Exhibit 2.1. In both the population and in the study sample:

- A little over half of the members were male;
- More than 85 percent of the members were age 24 years or younger;
- About a quarter of the members were African American, about a third were Hispanic, and about a third were white;
- A little over half of the members did not have a high school diploma, but almost a quarter had some college or above;
- About a quarter of the members had family income that put them below the federal poverty level;<sup>12</sup>
- About half of the members were either AmeriCorps members or participants in the Segal AmeriCorps Education Award Only program;
- The proportions of the members that were expected<sup>13</sup> to complete 300 to 899, 900 to 1,499, and 1,500 or more hours of services ranged from roughly a quarter to a half;
- About half of the members were employed at exit, including those that were and were not pursuing further education at exit; and
- About half of the members were pursuing further education at exit, including both those that were employed and not employed.

These results show that youth corps programs enroll a diverse population of corpsmembers, including some with very low education levels and/or from very disadvantaged backgrounds and including others with college degrees. Approximately three-quarters come from families living above the federal poverty level. A comparison of the characteristics of the population of The Corps Network member corps in 2005 to those reported in Jastrzab et al. (1996) for youth corps programs in 1992 indicates some important demographic differences. In 1992, 65 percent of corpsmembers were African American (46%) or Hispanic (19%), while in 2005, only 54 percent were African American (25%), or Hispanic (29%). The

<sup>&</sup>lt;sup>10</sup> Note that if the sample were obtained as a random sample from the population, then the expected number of tests where equality would be rejected at the 5 percent level by chance alone is 1.5 tests. Thus, the single significant test result is consistent with the number expected by chance and therefore the conclusion is that the sample is representative of the population from which it was drawn.

<sup>&</sup>lt;sup>11</sup> For example, if some unmeasured factor regarding program operations was related to a corps' willingness to participate in the study, then the sample may differ from the target population on that factor.

<sup>&</sup>lt;sup>12</sup> In 2005, the FPL for a family of four was \$19,350; the FPL for a family of one was \$9,570. Source: http://aspe.hhs.gov/poverty/05poverty.shtml

<sup>&</sup>lt;sup>13</sup> Program applicants indicated on their application whether they wished to enroll at a reduced part-time status (300 to 899 hours), part-time status (900 to 1,499 hours), or full-time status (1,500 or more hours). Analyses in this study on service hours utilize the *expected* enrollment status as indicated at the time of program application; the study does not have data on *actual* enrollment status.

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data on the extent to which corpsmembers were disadvantaged are not directly comparable. While it appears that the participants in the current study are less likely to be persons of color and/or low income compared with the earlier study, participants' age and gender distributions are similar.

#### Exhibit 2.1

Comparison of Corps Participating in Study to The Corps Network Population of Corps, 2005

Average Characteristics	Population Mean	Sample Mean	Difference	p-value <sup>a</sup>
Gender				
Male	60.1%	53.5%	-6.6%	0.201
Age				
Under 18 years old	24.1%	29.8%	5.7%	0.695
Age 18-24	63.8%	56.7%	-7.1%	0.544
Over 24 years old	12.1%	13.5%	1.4%	0.803
Race				
African American	24.7%	21.7%	-3.0%	0.437
Asian/Pacific Islander	3.1%	5.2%	2.0%	0.412
Hispanic	29.0%	33.7%	4.6%	0.687
Multi-racial/Other	3.2%	3.2%	0.0%	0.978
Native American	1.9%	1.7%	-0.2%	0.748
White	38.0%	34.6%	-3.4%	0.733
Level of Education Upon Entering Corps				
Less than a high school diploma	57.9%	59.0%	1.1%	0.923
High school diploma or GED and no college	21.2%	16.2%	-5.0%	0.224
Some college	11.3%	13.2%	1.9%	0.647
College degree	9.6%	11.6%	2.0%	0.699
Economic Status Items				
Previous or current public assistance recipient (welfare/TANF)	14.3%	21.9%	7.6%	0.206
Previous or current involvement in the foster care system	3.8%	4.9%	1.2%	0.577
Previous or current court involvement	10.2%	11.5%	1.3%	0.645
Family income below federal poverty level	25.9%	39.2%	13.3%	0.101
AmeriCorps Involvement				
Percentage of corpsmembers funded with full AmeriCorps stipend	22.1%	29.4%	7.3%	0.577
Percentage of corpsmembers funded with Segal AmeriCorps Educational Award only	25.8%	23.5%	-2.4%	0.804
Percentage of corpsmembers non-AmeriCorps funded	52.0%	47.1%	-4.9%	0.711

Comparison of Corps Participating in Study to The Corps Network Population of Corps, 2005

Average Characteristics	Population Mean	Sample Mean	Difference	p-value <sup>a</sup>
Program Enrollment Status				
Percentage of corpsmembers expected to complete 1,500 hours or more of service	27.4%	39.1%	11.7%	0.357
Percentage of corpsmembers expected to complete between 900 and 1,499 hours of service	23.3%	27.2%	4.0%	0.573
Percentage of corpsmembers expected to complete between 300 and 899 hours of service	49.0%	33.4%	-15.7%	0.232
Status at Program Exit				
Percentage of corpsmembers employed at exit (and not pursuing education)	35.1%	32.8%	-2.3%	0.766
Percentage of corpsmembers pursuing further education at exit (and not employed)	35.3%	32.6%	-2.7%	0.861
Percentage of corpsmembers employed and pursuing further education at exit	10.2%	17.2%	7.1%	0.359
Percentage of corpsmembers pursuing further service at exit	6.2%	6.2%	0.0%	0.999
Other exit status (a status other than the four items listed above)	12.1%	10.3%	-1.8%	0.768
Status at Program Exit—Combination Items				
Percentage of corpsmembers employed only, or employed and pursuing education, at exit	45.2%	50.0%	4.7%	0.660
Percentage of corpsmembers pursuing further education only, or employed and pursuing education, at exit	45.4%	49.8%	4.4%	0.743

Source: Data provided by The Corps Network from The Corps Network's 2005 Corps Survey.

 $^{a}$  p-values are from one-sample t-tests where the weighted mean of the sample was compared to the population mean. \*p<0.05.

*Table reads:* At the time the sample was selected, the percentage of corpsmembers who were male was 60.1 percent in the population and 53.5 percent in the sample. There is no significant difference between the sample and population percentages of corpsmembers who were male.

### **Random Assignment**

Sample enrollment and random assignment were conducted on a rolling basis, reflecting programs' standard recruitment and intake schedules. The study sample includes program applicants who applied to a participating youth corps program between June 2006 and July 2007 and met all of the program's standard eligibility requirements. Within each participating corps, program applicants were first evaluated for program eligibility. If they were found to be program-eligible, then the applicants were evaluated for study eligibility. In order to be eligible for the study, applicants had to be 16 years of age or older, planning to serve at least 300 hours per year, and first-time corpsmembers in youth corps programs. Once applicants were found to be study-eligible, they were required to complete the baseline survey, which included informed consent. Applicants were then randomly assigned via a centralized secure website to either the treatment or control group. A staff member from each participating youth corps was designated as the Random Assignment Coordinator to facilitate the random assignment process and ensure the security of the information being collected. The Coordinator also entered applicant data into a custom designed website and verified that applicants completed the baseline survey and consent form.

In order to achieve a sufficient number of eligible applicants for the random assignment, some corps needed to increase their standard recruitment activities.<sup>14</sup> Also, in order to reduce the burden on the corps and reduce the number of applicants that corps had to recruit, fewer applicants were assigned to the control group than to the treatment group. In all, two in three eligible applicants were assigned to the program (treatment) group, while one in three eligible applicants with complete baseline surveys, of which 1,357 were randomized to treatment and 686 were randomized to the control group.

Those applicants assigned to the control group were embargoed for 18 months from enrolling in the youth corps program to which they had applied. They were free, however, to pursue any other employment opportunities or any other education or training programs available to them. It is possible that some control group members may have enrolled in youth corps programs in other localities. The number of such crossovers is unknown because there is no adequate administrative data to assess the number of crossovers,<sup>15</sup> nor was the study team able to capture control group participation in other youth corps programs via the 18- or 30- month surveys. The study team was limited by the fact that every program has a different name and using the term "youth corps" in the survey would have been nonsensical to the respondents.

#### Internal Validity (Equivalence of Treatment and Control Groups)

The results of statistical testing indicated that randomization successfully produced control and treatment groups that were equivalent on baseline characteristics. After randomization the treatment and control groups were compared on 12 demographic characteristics and on 47 baseline measures of education and

<sup>&</sup>lt;sup>14</sup> To assist participating programs in achieving their recruitment targets, Abt Associates provided an external consultant who provided advertising and marketing assistance and staff training in explaining the study requirements and conveying the results of the random assignment.

<sup>&</sup>lt;sup>15</sup> There is no centralized data base in which all youth corps participants are entered. The Corporation's data base of youth corps participants includes only those participants who receive some form of AmeriCorps funding; youth corps participants without AmeriCorps funding are not in this data base. Therefore, the study team had no resource with which to determine crossovers.

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employment outcomes, civic engagement, life skills, and risky behaviors. Across the 59 tests there were only three significant differences between the groups, which is what would be expected to occur by chance alone.<sup>16</sup> The study team found significant differences between groups in the percentage reporting being married, the percentage reporting that they would like to be working two years later, and the percentage reporting that they had enough to money to make ends meet.

Although the analyses described above showed that randomization produced equivalent groups at baseline, the research team also considered the possibility that survey nonresponse could create imbalances between the groups. The results described below suggest that survey nonresponse did not create systematic imbalances between the groups on observed baseline characteristics.

The overall response rate to the 18-month follow-up survey, which was administered 18 months after random assignment, was 75.5 percent,<sup>17</sup> with response rates of 77.7 percent (n=1,055) and 71.1 percent (n=488) in the treatment and control groups, respectively. To assess the equivalence of

#### Timing of follow-up data collections

- 18 months after random assignment
- 30 months after random assignment (limited items)

treatment and control groups among the respondents to the follow-up survey, the study team analyzed demographic characteristics and baseline measures of the outcomes that were assessed at the 18-month follow-up. This analysis resulted in 12 tests for baseline equivalence on demographic characteristics, and 47 tests of baseline equivalence of outcomes measured at baseline. The results of the comparisons indicate that there were three statistically significant test results; this is consistent with what would be expected if there were no bias created by survey nonresponse.<sup>18</sup>

Demographic characteristics of the treatment and control group members who responded to the follow-up survey are displayed in Exhibit 2.2. There is only one significant demographic difference between the groups (marital status; more treatment group members were single). Tests of equivalence between treatment and control groups on 47 outcomes measured at baseline resulted in two significant differences (Exhibits 2.3–2.6). Among respondents to the follow-up survey,

- Treatment group members were less likely than their control group counterparts to have reported at baseline that they were working or in school (50.0% and 59.6%, respectively); and
- Treatment group members were less likely than their control group counterparts to have reported at baseline that they expected to complete a graduate degree (23.0% and 30.0%, respectively).

The research team conducted a similar set of 59 tests for baseline equivalence of treatment and control respondents to the 30-month tracking survey. The overall response rate to this tracking survey was 63.0 percent, with response rates of 66.0 percent (n=895) and 57.0 percent (n=391) in the treatment and control

<sup>&</sup>lt;sup>16</sup> Having 3 statistically significant tests out of 59 is consistent with what would be expected to occur by chance if there were no systematic differences between the groups. Using a p-value level of 0.05 to determine statistical significance, as the study team did in the analysis, one would expect to find: 59\*0.05=2.95 significant tests by chance alone.

<sup>&</sup>lt;sup>17</sup> Of 2,043 study participants that completed the baseline survey and were randomly assigned, 1,543 completed the follow-up survey. Nonrespondents included those who refused, who were not located, and who were not surveyed because they were incarcerated, in active military duty, or deceased.

<sup>&</sup>lt;sup>18</sup> See footnote 16.

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groups, respectively. The results were similar to those described above for the baseline balance among respondents to the 18-month follow-up survey. There were statistically significant differences between treatment and control groups for three items. Two were the same as those described above for the 18-month follow-up sample (working or in school at baseline, 51.5% and 60.0% for treatment and control groups respectively; and expectation to complete a graduate degree, 23.4% and 31.6% for treatment and control groups, respectively). In the 30-month tracking survey analytic sample, there was no significant difference between the proportion that were married at baseline (as there was in the 18-month follow-up survey analytic sample), but control group members had a significantly higher mean than treatment group members at baseline on the measure of neighborhood and civic obligation (48.9 and 50.5 for treatment and control groups, respectively). This is a measure of the respondent's opinion about the importance of being active in his/her neighborhood and participating in various civic activities, including serving on a jury, reporting crimes, keeping the neighborhood clean and safe, participating in neighborhood organizations.

## Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Demographics

Baseline Demographics	Treatment Group Percentage (n=1,055)	Control Group Percentage (n=488)	p-value <sup>a</sup>
Gender			
Male	59.6%	62.3%	
Female	40.4	37.7	0.26
Race/Ethnicity			
White, non-Hispanic	45.9	52.7	
Black	29.0	21.0	
Hispanic	17.7	19.7	0.39
Other	7.4	6.6	
Level of Education			
Some high, middle, or junior high school	42.6	40.3	
High school diploma or GED	30.0	29.0	
Some college or postsecondary school	13.8	14.2	
Associate's degree or 2 years of college	1.3	0.9	0.78
Bachelor's degree, 4 to 5 years of college	12.1	15.4	
Master's, PhD or other graduate degree	0.3	0.2	
Age			
Under 18	9.5	11.6	
18 through 21	60.0	56.1	
22 through 25	27.9	30.6	0.39
26 or older	2.5	1.6	
US Citizen (Y)	97.6	96.0	
Military Service (Y)	1.3	2.3	0.36
Marital Status			0.10
Single	95.6	92.2	
Married	2.5	6.2	0.04 *
Other	2.0	1.6	
Health Insurance (Y)	54.3	58.6	0.17
Bank Account (Y)	57.0	57.3	0.91
Years Lived in Community <sup>b</sup>			
Less than 1 year	18.9	18.7	
1 to 4 years	22.0	24.0	0.69
5 or more years	59.1	57.3	

## Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Demographics

Baseline Demographics	Treatment Group Percentage (n=1,055)	Control Group Percentage (n=488)	p-value <sup>a</sup>
Housing Situation Past 3 Months			
Stable	94.3	91.2	
Transient	3.8	6.2	0.16
Shelter/Homeless	1.2	0.8	0.16
Other	0.7	1.8	
Children (Y)	18.6	15.8	0.10

Source: Baseline survey.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The p-value is for the test of the null hypothesis that the treatment and control groups are equivalent at baseline.

<sup>b</sup> The survey item asked, "how many years have you lived in your present community?"

*Table reads:* At baseline, 59.6 percent of treatment group respondents were male, and 62.3 percent of control group respondents were male. Statistical tests for differences between the treatment and control group on their gender indicated no significant difference between the two groups (p-value=0.26).

Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Educational Outcomes

Baseline Education Items	Treatment Group Percent Yes (n=1,055)	Control Group Percent Yes (n=488)	p-value <sup>a</sup>	
Key Outcomes <sup>b</sup>				
Respondent is working or in school	50.0%	59.6%	0.01	*
Highest level of education respondent has attained				
HS/GED or above (vs. some high school)	57.4%	59.7%	0.53	
Some college or above	27.5%	30.7%	0.36	
Associate's degree or above	13.7%	16.5%	0.33	
Bachelor's degree or above	12.4%	15.7%	0.25	
Graduate degree	0.3%	0.2%	0.86	
Other Outcomes				
Highest level of education respondent expects to complete				
HS/GED or above (vs. some high school)	93.5%	92.1%	0.52	
Some college or above	73.6%	76.3%	0.42	
Associate's degree or above	54.6%	57.3%	0.46	
Bachelor's degree or above	38.7%	42.1%	0.36	
Graduate degree	23.0%	30.0%	0.02	*
Respondent plans to continue education in the future	97.2%	97.3%	0.96	
In the past 12 months, respondent has discussed going to college or vocational schools with someone	94.5%	95.5%	0.61	
Respondent would like to be attending school 2 years from now	69.8%	67.4%	0.47	

Source: Baseline survey.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The p-value is for the test of the null hypothesis that the treatment and control groups are equivalent at baseline.

<sup>b</sup> For an explanation of "key outcomes" and "other outcomes" see the section on Analytic Approach within this chapter. Key outcomes were identified in order to contain the problem of multiple testing.

*Table reads*: At baseline, 50.0 percent of treatment group respondents were working or in school, while 59.6 percent of control group respondents were working or in school. Statistical tests indicate that the two groups were significantly different on this item at baseline (p-value=0.01).

## Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Employment and Earnings Outcomes

Baseline Employment and Earnings Items	Treatment Group Mean or Percent Yes (n=1,055)	Control Group Mean or Percent Yes (n=488)	p-value <sup>a</sup>
Other Outcomes			
In the last 12 months, respondent has worked for pay	90.7%	87.4%	0.18
Respondent worked in a regular job in the last 12 months	84.2%	81.9%	0.42
Respondent has ever been promoted on a job	27.4%	31.8%	0.18
Among those that had worked for pay in past 12 months: Amount respondent was paid per hour in his/her regular job	\$8.58	\$8.16	0.21
Respondent would like to be working 2 years from now	79.4%	82.4%	0.27
Among those that had worked for pay in past 12 months: Number of employers worked for in the last 12 months	1.9	1.9	0.88
Respondent has ever been fired from a job	20.5%	18.6%	0.51
Respondent participated in any job readiness training in the last 12 months	30.7%	36.4%	0.10
Respondent's total personal income in the last year			
Under \$5,000	53.1%	48.4%	
\$5,000 to less than \$10,000	26.2%	27.6%	
\$10,000 to less than \$15,000	9.5%	11.2%	
\$15,000 to less than \$20,000	6.1%	3.6%	
\$20,000 to less than \$25,000	2.4%	3.1%	
\$25,000 to less than \$30,000	1.1%	1.2%	
\$30,000 to less than \$40,000	0.6%	2.9%	
\$40,000 to less than \$50,000	0.8%	1.7%	
\$50,000 or more	0.3%	0.3%	
At the end of the month, respondent usually has:			
Just enough to make ends meet or above (vs. not enough to make ends meet)	73.6%	78.8%	0.09
Some money left over	40.9%	43.5%	0.48
Respondent would like to work in a service field (healthcare/social services/education) job in 2 years	40.2%	41.9%	0.65

Source: Baseline survey.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The p-value is for the test of the null hypothesis that the treatment and control groups are equivalent at baseline.

*Table reads*: At baseline, 90.7 percent of the treatment group respondents and 87.4 percent of the control group respondents indicated that they had worked for pay in the prior 12 months. There were no statistically significant differences between the treatment and control groups at baseline on this item (p-value=0.18).

## Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Civic Engagement and Life Skills Outcomes

	Treatment Group Mean or Percent Yes	Control Group Mean or Percent Yes	
Baseline Civic Engagement and Life Skills Items	(n=1,055)	(n=488)	p-value <sup>a</sup>
Key Outcome			
Respondent volunteered through or for an organization in the last 12 months	42.8%	44.6%	0.61
Other Civic Engagement-Related Outcomes			
Neighborhood and Civic Obligation: Represents the respondent's opinion about the importance of being active in his/her neighborhood and participating in various civic activities, including serving on a jury, reporting crimes, keeping the neighborhood clean and safe, participating in neighborhood organizations ( $\alpha$ =0.72) <sup>b</sup>	48.9	50.0 <sup>c</sup>	0.08
<b>Community-based Activism:</b> Provides respondent's reports of the frequency with which he/she participates in community-based activities, including attending community meetings and writing newspapers to voice opinions ( $\alpha$ =0.79) <sup>b</sup>	48.9	50.0 <sup>c</sup>	0.18
Connection to Community: Represents the respondent's opinion about the strength of his/her connection to the community, as represented by the strength of feelings toward the community, including attachment, awareness, and commitment ( $\alpha$ =0.77) <sup>b</sup>	49.7	50.0 <sup>c</sup>	0.62
Social Trust: Represents the respondent's opinion about the degree to which he/she can trust people and members of his/her community, including the local police ( $\alpha$ =0.60) <sup>b</sup>	49.7	50.0 <sup>c</sup>	0.68
Engagement in the Political Process: Provides respondent's reports of the frequency with which he/she participates in activities intrinsic to the political process, including talking with others about politics ( $\alpha$ =0.77) <sup>b</sup>	49.7	50.0 <sup>c</sup>	0.67
<b>Local Civic Efficacy:</b> Represents the respondent's opinion about the feasibility of working with local or state government to meet a range of community needs, such as fixing a pothole or getting an issue on a statewide ballot ( $\alpha$ =0.63) <sup>b</sup>	49.3	50.0 <sup>c</sup>	0.33
<b>Grass Roots Efficacy:</b> Represents the respondent's opinion about the feasibility of starting a grassroots effort to meet a range of community needs, such as starting an after-school program or organizing a park cleanup program ( $\alpha$ =0.65) <sup>b</sup>	49.1	50.0 <sup>c</sup>	0.19
National Voting Participation: Represents whether the respondent voted in the 2006 national election, and plans to vote in the 2008 national election ( $\alpha$ =0.63) <sup>b</sup> , d	49.8	50.0 <sup>c</sup>	0.78
Importance of Service-Oriented Career: Represents the respondent's opinion about the importance of working in a position that contributes to others ( $\alpha$ =0.52) <sup>b</sup>	50.4	50.0 <sup>c</sup>	0.61
Respondent has engaged in volunteer activities with family members	36.6%	38.5%	0.61

### Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Civic Engagement and Life Skills Outcomes

Pasalina Civia Engagement and Life Skills Itoms	Treatment Group Mean or Percent Yes	Control Group Mean or Percent Yes (n=488)	p-value <sup>a</sup>
Baseline Civic Engagement and Life Skills Items Respondent has volunteered and has spoken about service/ volunteer experience with other	(n=1,055) 34.9%	( <b>1=488</b> ) 38.4%	p-value 0.34
volunteers/friends/relatives in past 12 months Number of weeks that respondent performed volunteer activities in the last 12 months	4.7	4.2	0.54
Number of volunteer hours in past 12 months	60.1	67.7	0.64
In the last 12 months, how often has respondent worked with other people in respondent's neighborhood to fix or improve something (1-Never 5-Always)	2.3	2.4	0.12
In the last 12 months, how often has respondent attended any public meeting where there was a discussion of community affairs (1-Never 5-Always)	1.9	1.9	0.65
In the last 12 months, how often has respondent attended any club or organizational meeting (1-Never 5-Always)	2.3	2.3	0.94
Other Life Skills-Related Outcomes			
Decision-Making Skills: Provides the respondent's report of his/her ability to make sound decisions and judgments ( $\alpha$ =0.73) <sup>b</sup>	49.3	50.0 <sup>c</sup>	0.33
Appreciation of Cultural and Ethnic Diversity: Represents the respondent's opinions about the importance and desirability of relationships between people who do not share the same cultural and/or ethnic background ( $\alpha$ =0.76) <sup>b</sup>	50.9	50.0 <sup>c</sup>	0.22

Source: Baseline survey.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments.

<sup>a</sup> The p-value is for the test of the null hypothesis that the treatment and control groups are equivalent at baseline. \* p<0.05. <sup>b</sup> Constructs were built from several survey items. They were scaled such that the control group mean and standard deviation are 50 and 10, respectively. The impact estimates can be converted to standardized effect size units by dividing by 10 (the control group standard deviation).  $\alpha$ =Cronbach's alpha index of internal reliability.

<sup>c</sup> The mean is 50 for each of these items due to the fact that constructs were scaled such that the control group mean is 50. <sup>d</sup> National Voting Participation is defined differently at follow-up than at baseline; at follow-up, the construct contains 1 additional item ("Are you currently registered to vote?"). The Cronbach's alpha coefficient provided is on the follow-up construct.

*Table reads:* At baseline, 42.8 percent of treatment and 44.6 percent of control group respondents indicated that they had volunteered in the last 12 months; the two groups were not significantly different on this outcome at baseline (p-value=0.61).

Exhibit 2.6

Comparison of Treatment and Control Groups at Baseline Using 18-Month Follow-up Survey Analytic Sample (n=1,543): Risky Behavior Outcomes

Baseline Employment and Earnings Items	Treatment Group Mean or Percent Yes (n=1,055)	Control Group Mean or Percent Yes (n=488)	p-value <sup>a</sup>
Other Risky Behavior Outcome			
Respondent has ever been convicted, or adjudicated as a juvenile offender, of any criminal offense (other than minor traffic violations)	15.0%	14.0%	0.60

Source: Baseline survey.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The p-value is for the test of the null hypothesis that the treatment and control groups are equivalent at baseline.

*Table reads*: At baseline, 90.7 percent of the treatment group respondents and 87.4 percent of the control group respondents indicated that they had worked for pay in the prior 12 months. There were no statistically significant differences between the treatment and control groups at baseline on this item (p-value=0.18).

### **Participant Outcomes Measured**

This study measures the impacts of participation in youth corps, a diverse group of programs that focus on a trio of activities: education support, work experience and job training, and community service and life skills. Reflecting the three-prong set of activities uniting the programs in the study, outcomes assessed are related to education, employment, and civic engagement and life skills. Despite their common foci, the programs in the study vary in terms of their size, intensity, target population, types of activities and funding stream(s). The outcomes selected for the study were developed by the study team in collaboration with The Corps Network, the study's Technical Working Group, and the Corporation for National and Community Service. The study also assesses program impact on risky behaviors because practitioners involved in youth corps believe that the positive effects on corpsmembers' education and employment prospects and connection to their communities will deter members from engaging in negative behaviors. The reasoning behind each type of outcome measured in this study is detailed below.

*Education outcomes.* There are several reasons why one might expect to see increases in educational attainment and/or aspirations as an outcome of participation in youth corps. Most corps include an education component, especially for members who do not already have a high school diploma or GED. Additionally, many programs have the goal of helping their members to attain their GED. Some programs deliberately enroll corpsmembers with different levels of educational attainment so that better educated members can serve as role models for their less educated counterparts. Also, the Segal AmeriCorps Education Award provided to many members in this study through AmeriCorps<sup>19</sup> could encourage postprogram educational advancement. (It should be noted, however, that because the Segal AmeriCorps Education Award can be used for up to seven years after program completion, a period that extends

<sup>&</sup>lt;sup>19</sup> Please see Chapter 7: Relationships of AmeriCorps Funding Support to Outcomes for more details on the different levels of AmeriCorps support and the Segal AmeriCorps Education Award.

beyond the follow-up period of this study, this study may be unable to capture the full effects of these awards.)

*Employment and earnings outcomes.* Participation in youth corps might affect subsequent employment outcomes in a variety of ways. For young people entering a youth corps program with no or limited prior work history, corps can provide important initial work experience. Many programs emphasize basic work skills such as attendance, punctuality, teamwork and conflict resolution skills that may help corpsmembers succeed in subsequent jobs. During their corps experience, members may experience or learn about careers or fields they may not have considered or been exposed to previously. Finally, some members deliberately enroll in specific programs so that they can "try out" prospective future occupations (e.g., conservation, education or health) that they are considering pursuing on a more permanent basis.

*Civic engagement and life skills outcomes.* Community service is a fundamental component of the youth corps experience. For instance, corpsmembers may tutor disadvantaged youth, build or repair playgrounds in low-income communities, clear trails in national or state parks, etc. Many programs include regular "reflection" times during which members discuss their work in their community and the effect of their service on community members. Given the emphasis on community service, participation in service while enrolled in youth corps may increase the likelihood of future engagement in service.

*Risky behavior outcomes.* Because youth corps programs are intended to increase corpsmember employment and education prospects, it is feasible there could be a corresponding decrease in their engagement in negative, or risk-related, behaviors. Such behaviors include alcohol or substance abuse, criminal activity, arrest, conviction and incarceration. The results of the earlier random assignment study of the Conservation and Youth Service Corps (Jastrzab et al. 1996) that found that treatment group members were significantly less likely to have ever been arrested by the time of the follow-up survey (12.0% of the treatment group, 17.0% of controls) support this hypothesis. Only one risky behavior outcome was measured at baseline (whether or not the respondent had ever been convicted or adjudicated as a juvenile offender of any criminal offense) because practitioners advised that applicants would be concerned that honest responses to the questions could negatively influence their eligibility for the youth corps.

### **Analytic Approach**

This section details the analytic approach to the main impact analyses for this study. The variable measurements, use of sampling weights, regression models and the different types impacts that were estimated, and the study team's approach to adjusting for multiple testing are described here, with further details provided in Appendices A and B. The approaches to other analyses (e.g., subgroup analyses, variation in impacts among programs, etc.) are described in Chapters 4–8.

#### **Variable Creation**

Data on program impacts reported in this study are based on self-report by study participants. Differences in outcomes between the treatment and control groups are measured using data obtained through two rounds of follow-up telephone interviews. The first follow-up survey occurred approximately 18 months after random assignment (18-month follow-up survey); this covers at least part of the time when treatment group members were enrolled in youth corps. A second, much briefer telephone survey occurred

approximately 30 months after random assignment and collected information on only a few select outcomes (30-month tracking survey).

Most of the outcomes analyzed in the impact analyses are binary indicators (1=yes, 0=no) of respondent experiences or status at the time of the survey. An example is an indicator for whether the respondent was employed or enrolled in an educational program at the time of the 30-month tracking survey. Some other outcomes are measured on a continuous scale but are based upon responses to a single survey item, such as, "in the last 12 months, how many weeks did you work for pay?"

Other outcomes were constructed from multiple survey items and are intended to measure an underlying construct of respondent attitudes or behaviors. These outcome measures are referred to as constructs. An example is the outcome "connection to community," which represents the respondent's opinion about the strength of his/her connection to the community, as represented by the strength of feelings toward the community, including attachment, awareness, and commitment. Some of the constructs were created to align with the same measures used in the 2008 impact evaluation of AmeriCorps (Yamaguchi et al. 2008). Measures of the internal reliability (Cronbach's alpha) for the constructs are presented for each of the construct measures in the results tables, allowing the reader to identify which items are constructs. Exhibit 2.7 displays the survey questions and their units of measurement that were combined to create this construct. Additional details on the creation of all constructs are in Appendix B.

Exhibit 2.7		
Survey Items Included in the Construct "Connection to Community"		
Corresponding Survey Items	Unit of Measurement	
I have a strong attachment to my community.	1-Strongly diagaroa:	
I often discuss and think about how larger political and social issues affect my community.	1=Strongly disagree; 2=Disagree; 3=Neither agree nor disagree; 4=Agree; 5=Strongly agree	
I am aware of what can be done to meet the important needs in my community.		
I have the ability to make a difference in my community.		
I try to find the time to make a positive difference in my community.		

The constructs were scaled such that the control group's baseline measure on each construct has a mean of 50.0 and a standard deviation of  $10.0^{20}$  The construct measures in the exhibits can be identified because after the description of the construct, the Cronbach's alpha is displayed (e.g., "( $\alpha$ =0.72)"). The Cronbach's alpha is a measure of the construct's internal reliability (i.e., how well the items are interrelated and measure the same idea).

#### **Sampling Weights**

In order to produce population-based estimates, each sample member was assigned a sampling weight. The base sampling weight is the reciprocal of the product of the probability of selecting the corps into the sample and the probability of selecting an individual given that the corps program was selected. The final

<sup>&</sup>lt;sup>20</sup> With this scaling strategy, the impact estimates for the constructs can easily be converted to standardized effect sizes by dividing the impact estimate by the control group standard deviation (10.0). For example, an impact estimate of 0.7 for a construct can be thought of as being equivalent to a standardized effect size of 0.07 standard deviation units.

sampling weights used in analyses of 18-month follow-up responses were calculated as a product of the base weights, a nonresponse adjustment factor, and a poststratification adjustment factor. The nonresponse adjustment factor accounts for differential nonresponse rates for different subgroups of eligible applicants. The poststratification adjustments ensure that the weighted sample matches the population distribution of corpsmembers in 2005 with respect to age, gender, and race of corpsmembers. The final sampling weights used in analyses of the 30-month tracking survey outcomes, such as whether or not the respondent was employed or in school at the time of this follow-up survey, were created in a similar fashion. Thus, the weighted mean of treatment group responses to a survey item is an estimate of the population mean of youth corps participants for that item; similarly, a weighted mean calculated from the control group data is an estimate of the mean of eligible applicants in the counterfactual condition.

#### **Regression Models and Estimated Impacts**

To estimate program impacts the research team utilized linear regression models with fixed effects dummy variables for each of the programs. For each outcome measure the analysis model produces an estimate of the average impact of the intervention across the 21 corps (the treatment effect). In order to improve precision and mitigate potential effects of nonresponse bias, the models include baseline demographic covariates and, when available, a pretreatment score on the outcome measure. Models were fit to the data using SAS Proc SurveyReg (version 9.2) in order to adjust the standard errors of the treatment effect to account for the sampling design and the use of sampling weights.<sup>21</sup>

The impacts are estimated by contrasting the outcomes of the group that was randomized to treatment (survey sample of 1,055) to the outcomes of the group that was randomized to control (survey sample of 488). These estimates are often called the *intent-to-treat* (ITT) effects because once an eligible applicant is randomized to the treatment group it is the program's intention that the applicant will receive the treatment offered. The impact estimates from these regression models are estimates of the average impact per eligible applicant to the youth corps programs selected for the evaluation. Also, to the extent that these programs are a representative sample of all youth corps programs that were members of The Corps Network in 2005 (see above), the impact estimates characterize the effects on the *average eligible applicant* to youth corps in 2006 to 2007.

<sup>&</sup>lt;sup>21</sup> This procedure uses the Taylor series linearization method to estimate sampling errors for the regression coefficients from complex sampling designs (as described in documentation for SAS version 9.2 at www.support.sas,com).

Among the 1,055 treatment group respondents to the 18-month follow-up survey, 162 (15.4%) reported that they never participated in youth corps and consequently had zero participation (893 treatment group members actually participated in a youth corps program). Therefore, estimates of the impact per youth corps enrollee (which exclude these nonparticipants) are also provided. To obtain these impact estimates, which are referred to as treatment-on-the-treated (TOT) effects, the research team used the Bloom adjustment.<sup>22</sup> The validity of this approach is predicated on an assumption that the outcomes of treatment group members who had zero participation in youth corps were unaffected by the treatment group assignment, such that the estimated ITT treatment effect is due entirely to the effect of treatment on treatment group members who had at least

#### Enrollment / Attrition of the Study Sample

Completed Baseline Survey: 2,043 applicants

#### Treatment Group:

- 1,357 (66.4%) assigned to treatment group
  - 1,055 (77.7%) completed 18-month follow-up survey
  - 893 (84.6%) participated in youth corps
  - 162 (15.4%) did not participate in youth corps ("no-shows")

#### Control Group:

- 686 (33.6%) assigned to control group
  - 488 (71.1%) completed 18-month followup survey

some participation in the program. The 162 individuals who were randomized to the treatment group and who indicated on the 18-month follow-up survey that they did not actually enroll in youth corps are defined as "no-shows." The TOT estimate for follow-up survey outcomes was calculated by dividing the ITT impact estimate by one minus the proportion of survey respondents in the treatment group who were no-shows (1–0.154=0.846). Similar TOT estimates were calculated for outcomes from the 30-month tracking survey, where one minus the proportion who were no-shows was 0.861. It is important to note that the TOT estimates are estimates of the impact of youth corps on individuals who actually enrolled in youth corps. Some, but not all, of those enrollees completed their youth corps service.

#### Accounting for Multiple Testing

For the main analyses, the study team conducted 58 tests of the impact of youth corps on outcomes in the areas of education, employment, civic engagement, life skills, and risky behaviors. The large number of statistical tests that were planned for the impact analyses necessitated a strategy for dealing with the technical issue of multiple testing.<sup>23</sup> Put simply, the problem of multiple testing is that for every 100 tests performed, 5 are expected by chance to be statistically significant. This means that even if the intervention had no impact on any outcomes, one would expect to see approximately 5 significant impacts occurring by chance, where roughly half of the impacts would favor the treatment group, and half would favor the control group. If 100 tests were conducted, and significant positive impacts were found for two or three outcomes, it would be a mistake to conclude that the program had caused favorable results for those two or three outcomes because in this scenario, the overall pattern of results is consistent with zero impact of the program.

For the main analyses, the study team contained the problem of multiple testing by identifying a small number of key outcomes on which to focus the impact analyses. Since the number of key outcomes is small, the risk of false rejections is low; therefore the statistical significance of test results is interpreted using the unadjusted conventional p-value (p<0.05). For the remaining outcomes, the study team

<sup>&</sup>lt;sup>22</sup> See Bloom (1984). As noted in the reference, the correction is equivalent to an instrumental variables approach, using the randomly assigned treatment indicator as an instrument for program participation.

<sup>&</sup>lt;sup>23</sup> See Schochet (2008).

#### **Chapter 2: Study Design and Analysis Methods**

considered the use of multiple testing adjustments such as the Bonferroni and the Benjamini-Hochberg adjustments, but concluded that the evaluation field still lacks a clear consensus on the details of applying these adjustments when outcomes come from multiple domains (e.g., education, employment, civic engagement, risky behaviors). Therefore, the study team adopted a strategy of reporting test results for the remaining outcomes with unadjusted p-values while specifying for the reader the number of tests that were conducted (within and across domains) and the number of false rejections that would be expected given the number of tests if there were no impact of treatment. For the key outcomes, test results are interpreted as confirmatory, but for the remaining outcomes test results are interpreted with caution and within the context of the large number of tests that were conducted.

The following three measures were designated as the key outcomes because they were the measures that were most closely aligned with the desired and expected effects of youth corps participation. It should be noted that these outcomes are consistent with the objectives specified for the Corporation under the Serve America Act of 2009.

- Respondent is employed or in school at the time of the 30-month tracking survey. This outcome combines anticipated effects of youth corps on employment and educational pursuit into a single measure because, as noted earlier, youth corps programs vary considerably in the type of participants they target (e.g., high school dropouts, high school graduates, college graduates, adjudicated youth, foster care youth, those interested (or not) in specific service fields) and the emphasis they place on each of the three major components-education support, job training, and community service. Corpsmembers activities also vary, ranging from mentoring elementary students, to building or renovating housing for low-income community members, to providing English translation services in health clinics. Nevertheless, despite differences in corpsmember characteristics and the program experience, it is expected that successful outcomes for corpsmembers are that their youth corps experiences will make them more likely to be employed and/or more likely to be in school. While employment is an indicator for success, it may reduce the probability of being enrolled in school. Likewise, being in school (whether at the secondary or the college level) may make corpsmembers less likely to be employed. The study team therefore created an indicator for whether study participants were either in school or employed approximately 30 months after random assignment and at least 3 months after the last of the treatment group members were expected to have exited the program. (The same indicator, measured at baseline, was used as a covariate in the impact models.)
- Respondent's educational attainment at the time of the 30-month tracking survey.
- Respondent volunteered through or for an organization in the year prior to the 18-month follow-up survey.

#### **Minimum Detectable Effects**

The minimum detectable effects (MDEs) that a study is powered to detect are related to the sample size, the sampling design, the proportion of variance explained by baseline covariates, and the alpha-level criterion used. Hypothesis tests were two-sided and an alpha-level (p-value) criterion of 0.05 was used as the indictor of statistical significance. For binary outcomes, with the sample sizes obtained, the study had 80 percent power to detect treatment-control differences in the range of 7 to 11 percentage points. For example, for the outcome "respondent is working or in school at the time of the 30-month tracking survey," the study had 80 percent power to detect a difference between treatment and control groups of 9.6 percentage points. For the outcome "respondent has attained a high school diploma or GED, or a

higher degree at the time of the 30-month tracking survey," the study had 80 percent power to detect a difference between treatment and control groups of 7.5 percentage points. For the outcome "respondent has volunteered through or for an organization in the 12 months prior to the 18-month follow-up survey," the study had 80 percent power to detect a difference between treatment and control groups of 10.2 percentage points.

This chapter presents the main impact results for all sample members in the domains of education, employment, civic engagement and life skills, and risky behaviors. Subsequent chapters report on outcomes for subgroups of study participants defined by important characteristics.

# **Guide to Interpreting Data Charts**

The results of the impact analyses are presented for all outcomes in the tables in this chapter. Each table provides the following estimates for each outcome variable:

- Unadjusted percent yes/mean for the treatment group. These are the treatment group respondent answers, weighted to reflect the population estimates.
- Adjusted percent yes/mean for the control group. These are calculated as the treatment group mean minus the ITT treatment effect.
- The ITT treatment effect. This refers to the intent-to-treat effect of the program, as described in Chapter 2. The ITT effect provides the estimated impact on the average eligible applicant.
- The TOT impact estimate. This refers to the effect of the treatment-on-the-treated, as described in Chapter 2. The TOT impact estimate provides the impact on the average corpsmember (only for the programs in this study).
- The treatment effect p-value. This is the test of the null hypothesis of no treatment impact, using a two-tailed test.

For example, the reader will encounter a table like this (the outcome and data in this table are fictional):

	Unadjusted Percent Yes Treatment Group (n=1,055)	Adjusted Percent Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>°</sup>	Treatment Effect p-value <sup>d</sup>
Outcome	(18-month follow-up survey)	(18-month follow-up survey)			
Takes a walk every day	50.0%	45.0%	5.0%	5.8%	0.40

<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

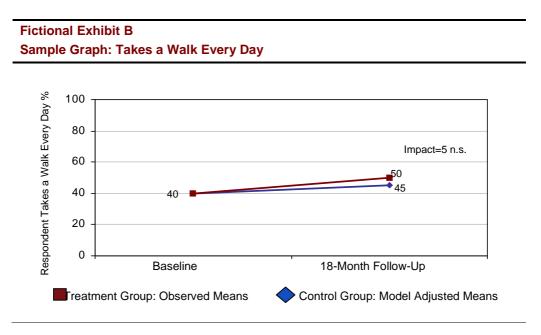
<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

The data in this table indicate that 50 percent of the treatment group respondents to the 18-month followup survey said they take a walk every day, and 45 percent of the control group respondents to the 18month follow-up survey reportedly take a walk every day. Thus, the ITT effect on the average eligible applicant is positive 5.0 percentage points on this outcome. After adjusting for the no-shows assigned to

the treatment group (via the TOT impact estimate that provides the impact on the average corpsmember in this study), the reader can see that the impact of treatment is slightly higher, at 5.8 percentage points. Statistical testing indicates that there is no significant difference between the treatment and control groups on this outcome, as shown by the 0.40 p-value (treatment effect p-value). The reader can also refer to the footnotes to each table to better understand the data presented in each column.

The results of a few outcomes are also illustrated via line graphs.



This line graph illustrates that among treatment group respondents, the percentages that reported that they take a walk every day were 40 percent at baseline and 50 percent at the time of the 18-month follow-up survey. The upward slope of the red line (treatment group) indicates that there was improvement between baseline and follow-up on this outcome for the treatment group, but the similar upward slope of the blue line (control group) indicates that the control group also reported improvement on this outcome. Within the graph the estimated impact of treatment is also indicated ("Impact=5 n.s."), which was 5 percentage points and was not significantly different than zero ("n.s" means "not significant;" a "\*" means "significant"). For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at follow-up, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at 18-month follow-up is the estimated impact of treatment.

# Impacts on Key Outcomes: Education, Employment, and Civic Engagement

This section of the report presents findings on the estimated impacts of youth corps on the study's three key outcomes related to education, employment, and civic engagement.

*Key Outcome 1: The probability that the respondent is employed or in school at the time of the 30-month tracking survey.* There was no significant impact of youth corps on the probability of being employed or in school roughly 30 months after random assignment to treatment or control group (Exhibit 3.1). As indicated in Exhibit 3.2, the percentage of treatment group members that were employed or in school did increase from 50.0 percent at baseline to 66.6 percent; however, a similar increase for control group members meant that there was no significant impact of youth corps on this outcome.

*Key Outcome 2: Respondent's educational attainment at the time of the 30-month tracking survey.* There were no significant impacts of youth corps on educational attainment at 30 months after random assignment (Exhibit 3.1). The educational attainment of corpsmembers did increase over time, but the control group members also increased their educational attainment over the same time frame. For example, the proportion of treatment group members with a high school diploma/GED or above increased from 57.4 percent at baseline to 81.5 percent 30 months later. However, the control group reported similar

increases in educational attainment (Exhibit 3.3). *Key Outcome 3: Whether or not the respondent volunteered through or for an organization in the year prior to the 18-month follow-up survey.* There were no significant impacts on this measure of volunteering 18-months after random assignment (Exhibit 3.1). The proportion of treatment group members that reported volunteering through or for an organization in the year prior to the 18-month

follow-up survey increased from 42.8 percent at baseline to 46.3 percent at the 18-month follow-up survey. However, the control group reported a similar increase on this outcome and thus there was no significant difference between the two groups (Exhibit 3.4). Treatment group survey respondents were instructed to not consider youth corps service in the response.

#### Impacts on Key Outcomes

	Unadjusted Percent Yes Treatment Group	Adjusted Percent Yes Control Group <sup>a</sup>	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>
Key Outcome 1: Engaged in Education and/or Employment	(30-month tracking survey n=935)	(30-month tracking survey n=414)			
Respondent currently working or in school	66.6%	71.1%	-4.5%	-5.2%	0.19
Key Outcome 2: Highest Level of Educational Attainment	(30-month tracking survey n=935)	(30-month tracking survey n=414)			
HS/GED or above (vs. some high school)	81.5%	78.3%	3.2%	3.7%	0.24
Some college or above	46.5%	44.8%	1.7%	2.0%	0.56
Associate's degree or above	17.9%	17.9%	0.0%	0.0%	0.99
Bachelor's degree or above	14.9%	15.4%	-0.5%	-0.6%	0.75
Graduate degree	0.5%	1.5%	-1.0%	-1.2%	0.18
Key Outcome 3: Civic Engagement Item	(18-month follow-up survey n=1,055)	(18-month follow-up survey n=488)			
Respondent volunteered through or for an organization in the last 12 months <sup>e</sup>	46.3%	47.9%	-1.6%	-1.9%	0.66

Source: Baseline, 18-month follow-up and 30-month tracking surveys.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The adjusted percent Yes is calculated as the treatment group value minus the ITT treatment effect.

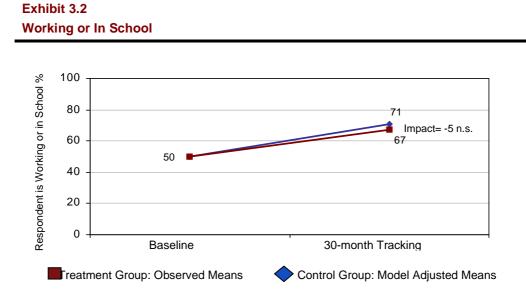
<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

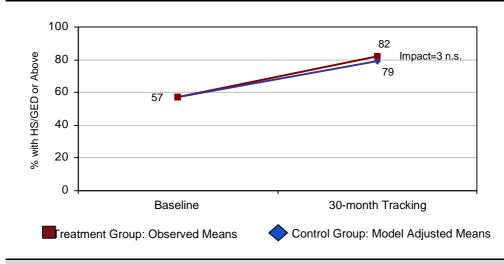
<sup>e</sup> Treatment group survey respondents were instructed to not consider youth corps service in their response.

*Table reads:* At the time of the 30-month tracking survey, 66.6 percent of treatment group respondents were working or in school, while 71.1 percent of the control group respondents were working or in school. The ITT treatment estimate was negative 4.5 percentage points, the TOT estimate was negative 5.2 percentage points, but there was no significant difference in outcomes between the treatment and control groups (p=0.19).



*Exhibit reads:* Among treatment group respondents, the percentage that were working or in school was 50 percent at baseline, and 67 percent at the time of the 30-month tracking survey. The estimated impact of treatment was negative five percentage points, which was not significantly different than zero. For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at tracking, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at tracking is the estimated impact of treatment.





*Exhibit reads:* Among treatment group respondents, the percentage that had a high school diploma or GED or above was 57 percent at baseline, and 82 percent at the time of the 30-month tracking survey. The estimated impact of treatment was three percentage points, which was not significantly different than zero. For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at tracking, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at tracking is the estimated impact of treatment.

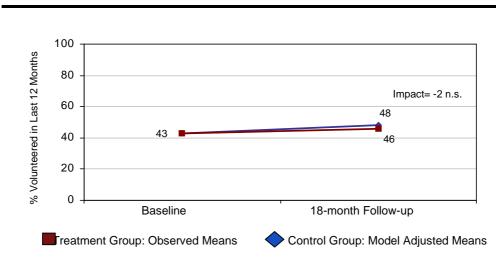


Exhibit 3.4 Volunteered in the Last 12 Months

*Exhibit reads:* Among treatment group respondents, the percentage that volunteered in the 12 months prior to the survey was 43 percent at baseline, and 46 percent at the time of the 18-month follow-up survey. The estimated impact of treatment was negative two percentage points, which was not significantly different than zero. For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at follow-up, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at follow-up is the estimated impact of treatment.

## **Exploratory Analyses: Other Outcomes**

The previous section reported on the three key outcomes for this study that are interpreted as confirmatory. Next, findings for a larger number of remaining outcomes are reported. Because of the large number of outcomes analyzed, these findings should be viewed as exploratory and considered within the context that with the large number of tests comes the expectation that some tests will be statistically significant by chance.

*Educational expectations.* The results suggest that youth corps treatment increased the educational expectations of members.<sup>24</sup> For example, at the 18-month follow-up, 90.4 percent of the treatment group reported that they expected to complete some college or above, which was 7.0 percentage points higher than the control group estimate and was statistically significant. Additionally, at that follow-up, 28.3 percent of treatment group members and 21.5 percent of control group members reported that they expected to complete a graduate degree, for an estimated impact of 6.8 percentage points.

Of eight tests for impacts on other educational expectations (that is, the educational expectations outcomes other than the two key outcomes related to education), two were significant and favored the treatment group. This is greater than the number expected by chance alone (0.4). Additionally, among the remaining measures of educational expectations where there were no significant differences between treatment and control groups, the impact estimates favored the treatment group for all measures.

The other indicators of educational expectations also favored the treatment group, but the differences from the control group were not significant (Exhibit 3.5). For example, more treatment than control members indicated that they expected to complete high school or above<sup>25</sup> (99.4% of treatment group members compared to 98.4% of control group members), an associate's degree or above (73.4% compared to 68.1%), or a bachelor's degree or above (57.4% compared to 52.9%). However, since the treatment and control groups reported similar changes in these aspirations from baseline to the 18-month follow-up, no significant differences between the groups were found.

Thus, while there are indications that youth corps participation impacted the educational expectations of corpsmembers, those expectations have not materialized into quantifiable impacts on educational attainment or the probability of being in school or employed (at least not during the 30-month timeframe covered by the study).

<sup>&</sup>lt;sup>25</sup> The outcome "highest level of education respondent expects to complete" is measured in five *not* mutually exclusive categories. For example, a respondent would be included in the category "HS/GED or above" if he/she indicated on the 18-month follow-up survey that he/she expected to complete a HS/GED degree, some college, an associate's degree, a bachelor's degree, or a graduate degree (respondents only indicated one category of educational expectations on the survey). Those respondents included in the "HS/GED or above" category could have already achieved a HS/GED degree (these respondents would have indicated an expectation to complete a level higher than the HS/GED level), or they could have already achieved some college (these respondents would have indicated an expectation to complete a level higher than some college), etc.

#### Exhibit 3.5

Impacts on Other Educational Outcomes

	accomes					
	Unadjusted Percent Yes Treatment Group (n=1,055)	Adjusted Percent Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>	
Other Outcomes	(18-month Follow-up)	(18-month Follow-up)				
Highest level `of education respondent expects to complete						
HS/GED or above (vs. some high school)	99.4%	98.5%	0.9%	1.0%	0.18	
Some college or above	90.4%	83.0%	7.4%	8.6%	<0.01	*
Associate's degree or above	73.4%	68.1%	5.3%	6.2%	0.09	
Bachelor's degree or above	57.4%	52.9%	4.5%	5.2%	0.17	
Graduate degree	28.3%	21.5%	6.8%	7.9%	<0.01	*
Respondent plans to continue education in the future	93.8%	91.7%	2.1%	2.4%	0.25	
In the past 12 months, respondent has discussed going to college or vocational schools with someone	69.0%	62.3%	6.7%	7.8%	0.06	
Respondent would like to be attending school 2 years from now	53.8%	47.7%	6.1%	7.1%	0.10	

Source: Baseline, 18-month follow-up and 30-month tracking surveys.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p < 0.05.

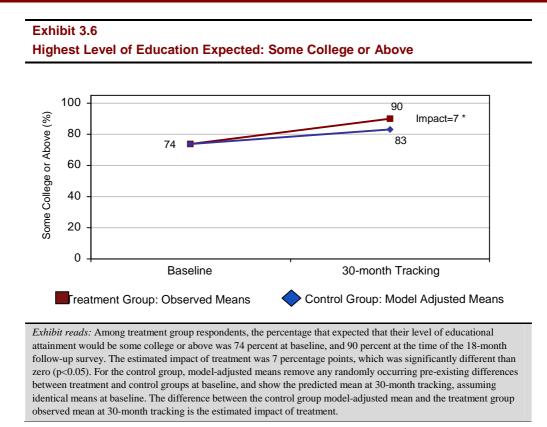
<sup>a</sup> The adjusted percent Yes is calculated as the treatment group value minus the ITT treatment effect.

<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

*Table reads:* At the time of the 18-month follow-up survey, 99.4 percent of treatment group respondents expected to complete their HS/GED degree or above, while 98.5 percent of the control group respondents expected to complete this level of education. The ITT treatment estimate was positive 0.9 percentage points, the TOT estimate was positive 1.0 percentage points, but there was no significant difference in outcomes between the treatment and control groups (p=0.18)



*Other employment and earnings outcomes.* As described previously, although treatment group members reported an increase of 16.6 percentage points on the probability of being "employed or in school" at 30 months after random assignment, there was no significant impact on this key item because control group members also reported an increase of 11.0 percentage points. Analyses of 12 other employment outcomes measured 18 months after random assignment indicate no evidence of a causal relationship between youth corps participation and the probability that the respondent had worked for pay, had held a regular job, had been promoted or fired from a job, or had participated in any job readiness training in the prior 12 months. Nor were there impacts on respondents' interest in working in a service-related field such as healthcare, social services, or education, or working in any job two years in the future (Exhibit 3.7).

There were, however, significant differences between the treatment and control groups on four other employment-related outcomes measured 18 months after random assignment. Treatment group members were found to have had significantly fewer employers in the prior 12 months<sup>26</sup> (Exhibit 3.7). More favorable outcomes were also found for treatment group members on measures of annual income,<sup>27</sup> wages, and perceived ability to make ends meet (Exhibit 3.7). Specifically, treatment group members'

<sup>&</sup>lt;sup>26</sup> The number of employers between baseline and the 18-month follow-up survey was included as an outcome measure because it was intended to be a measure of job stability. The youth employment market is frequently described as "churning," with young people moving from one low-paying job to another without gaining important job skills from their work experience (see for example, Neumark 2002). A lower number of jobs can be potentially interpreted as less "churning."

<sup>&</sup>lt;sup>27</sup> In the baseline survey, questions about annual income asked for income in income brackets (e.g., \$5,000–10,000), while at follow-up the item asked for an annual income in a dollar amount. Because of this reporting difference, the study team has not included a graph illustrating income at baseline and follow-up.

hourly wages were an average of 86 cents higher than those of the control group. Treatment group members reported annual incomes that were, on average, about \$1,200 greater than the incomes of control group members, although this positive finding may have been a result of the stipend received<sup>28</sup> by treatment group members while enrolled in youth corps. And finally, 79.5 percent of treatment group members reported that they could make ends meet, compared to 72.3 percent of the control group (Exhibits 3.7 and 3.10).

These results need to be interpreted in the context of the following important caveat. The measures of wages and number of employers were calculated only for respondents who had worked for pay in the prior 12 months. Because working for pay status was not (and could not be) randomly assigned, the contrasts between treatment and control groups on these items are not true experimental impact estimates. There was no significant impact on the probability that the respondent had worked for pay in the prior 12 months.<sup>29</sup> Also, treatment group members were less likely to have worked for pay in the 12 months prior to the 18-month follow-up survey (82.2%) than they were in the 12 months prior to the baseline survey (90.7%) (see Exhibit 3.8). Thus, the impacts on wages and income were not a result of a greater amount of employment.

Due to limitations of the study, it cannot be ascertained whether wage and employment impacts extend to the time period after members leave youth corps and are no longer receiving the youth corps stipend.<sup>30</sup> Taken collectively, however, these results suggest that enrollment in youth corps boosted the income and average hourly wage of members, at least temporarily, 18 months after random assignment.<sup>31</sup> The finding that 18 months after random assignment treatment group members were more likely to report that at the end of the month they could make ends meet may be suggestive of a lasting benefit.

<sup>&</sup>lt;sup>28</sup> Corpsmembers may have included their youth corps stipend when reporting annual salary (however, the stipend was explicitly excluded from the reporting of hourly wages, which is a separate measure). Also, as noted earlier, the financial stipend, or living allowance, paid to corpsmembers varies across programs, but is generally comparable to minimum wage.

<sup>&</sup>lt;sup>29</sup> The survey item asked "In the last 12 months, have you worked for pay?" While youth corps service is generally not considered to be employment, this survey did not specifically direct respondents to not include work done in the corps in their responses.

<sup>&</sup>lt;sup>30</sup> The study attempted to collect UI wage information for participants but was unsuccessful due to recent changes in the U.S. Department of Labor's requirements for states' sharing of those data for research purposes. See Appendix G for additional details.

<sup>&</sup>lt;sup>31</sup> With 13 tests for program impacts on other employment and earnings outcomes, the expected number of tests that would be significant by chance alone is less than 1 (the expected number is 0.65 tests). That there were four statistically significant tests, all favoring the treatment group, is more than the study team would expect by chance if there were if fact, no treatment effect in this domain.

### Impacts on Other Employment-Related Outcomes

	Unadjusted Mean or Percent Yes	Adjusted Mean or Percent Yes			
	Treatment Group (n=1,055)	Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>
Other Employment-Related Outcomes	(18-month Follow-up)	(18-month Follow-up)			
In the last 12 months respondent worked for pay	82.2%	84.6%	-2.4%	-2.8%	0.30
Respondent worked in a regular job in the last 12 months	78.1%	81.6%	-3.5%	-4.1%	0.22
Respondent has been promoted on a job in the last 12 months <sup>e</sup>	22.3%	20.2%	2.1%	2.4%	0.44
Respondent has been fired from a job in the last 12 months	11.0%	10.8%	0.2%	0.2%	0.94
Among those that had worked for pay in past 12 months: Amount respondent was paid per hour in his/her regular job <sup>,f, g</sup>	11.3	10.5	0.9	1.0	0.04 *
Among those that had worked for pay in past 12 months: Number of employers worked for in the last 12 months <sup>f</sup>	1.4	1.5	-0.1	-0.1	<0.01 *
Respondent's total personal income in the last year <sup>h</sup>	9949.9	8675.5	1274.4	1480.2	0.03 *
At the end of the month, respondent usually has:					
Just enough to make ends meet or above (vs. not enough to make ends meet)	79.5%	72.3%	7.2%	8.4%	0.02 *
Some money left over	35.4%	31.2%	4.2%	4.9%	0.18
Respondent participated in any job readiness training in the last 12 months	21.6%	25.9%	-4.3%	-5.0%	0.18
Respondent would like to be working 2 years from now	74.6%	78.2%	-3.6%	-4.2%	0.21
Respondent would like to work in a service field (healthcare/social services/education) job in 2 years	44.5%	40.4%	4.1%	4.8%	0.26

#### Impacts on Other Employment-Related Outcomes

Source: Baseline and 18-month follow-up surveys.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p < 0.05.

<sup>a</sup> The adjusted percent Yes is calculated as the treatment group value minus the ITT treatment effect.

<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

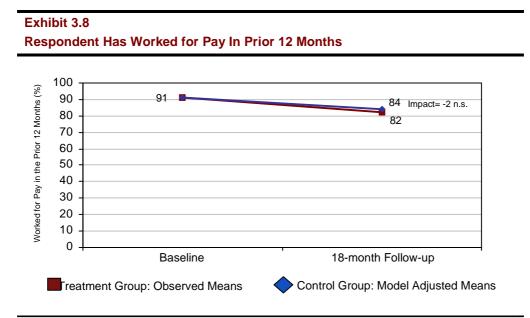
<sup>e</sup> At baseline, the question asked if respondent "had ever" experienced the item, whereas at follow-up, the question asked if the item had occurred in the last 12 months.

<sup>f</sup> This item was only asked of those who had worked for pay in the prior 12 months. These outcomes were constructed from survey items that asked about all the places respondents had ever worked for at least two consecutive weeks, and the outcomes were constructed to be restricted to the prior 12 months. Youth corps treatment group members were instructed to not include work in youth corps in their responses to these items. Since working for pay was not randomly assigned, the contrast between treatment and control groups on this item is not a true experimental impact estimate.

<sup>g</sup> The hourly rate was calculated as a weighted average over all jobs in the prior 12 months. Wages were weighted by the number of hours worked at each job.

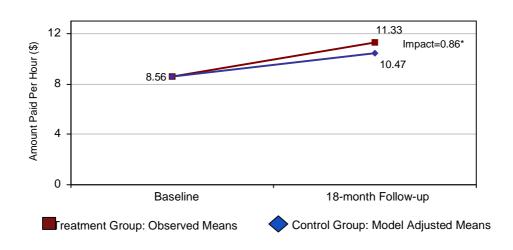
<sup>h</sup> Response possibilities were different at baseline and at follow-up. At baseline, respondent selected a category of income; at follow-up, respondent gave one figure.

*Table reads:* At the time of the 18-month follow-up survey, 82.2 percent of treatment group respondents had worked for pay in the prior 12 months, while 84.6 percent of control group respondents had worked for pay in the prior 12 months. The ITT treatment estimate was negative 2.4 percentage points, and the TOT estimate was negative 2.8 percentage points, but there was no significant difference in outcomes between the treatment and control groups (p=0.30).



*Exhibit reads:* Among treatment group respondents, the percentage that had worked for pay in the prior 12 months (not counting time spent in the corps) was 91 percent at baseline, and 82 percent at the time of the 18-month follow-up survey. The estimated impact of treatment was negative 2 percentage points, which was not significantly different than zero. For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at follow-up, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at follow-up is the estimated impact of treatment.





*Exhibit reads:* Among treatment group respondents that had worked for pay in the prior 12 months, the average hourly rate at baseline was \$8.56 per hour, and was \$11.33 per hours at the time of the 18-month follow-up survey. The estimated impact of treatment was 86 cents per hour, which was significantly different than zero (p<0.05). For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at 18-month follow-up, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at follow-up is the estimated impact of treatment.

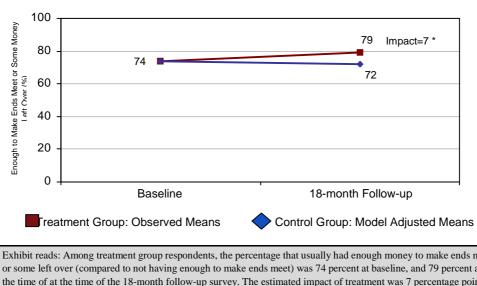




Exhibit reads: Among treatment group respondents, the percentage that usually had enough money to make ends meet or some left over (compared to not having enough to make ends meet) was 74 percent at baseline, and 79 percent at the time of at the time of the 18-month follow-up survey. The estimated impact of treatment was 7 percentage points, which was significantly different than zero (p<0.05). For the control group, model-adjusted means remove any randomly occurring pre-existing differences between treatment and control groups at baseline, and show the predicted mean at 18-month follow-up, assuming identical means at baseline. The difference between the control group model-adjusted mean and the treatment group observed mean at follow-up is the estimated impact of treatment.

*Other civic engagement and life skills outcomes.* In addition to the key outcome of volunteering, 21 additional tests were conducted for impacts on other measures of civic engagement and life skills based on data collected in the 18<sup>-</sup>month follow-up survey. The study team found only one significant impact: engagement in the political process,<sup>32</sup> which favored the control group (Exhibit 3.11). This pattern of results, where 1 out of 21 tests was significant, is what would be expected by chance alone and is consistent with what would be expected if youth corps had no impact in this outcome domain. We therefore conclude that the results suggest no impact of youth corps on the measures in the civic engagement and life skills domain.

Treatment group members (among those who had volunteered in the last 12 months) did report an average increase in the number of weeks they volunteered (up from 4.7 at baseline to 5.3 18 months later) and in the number of volunteer hours (an increase from 60.1 hours at baseline to 70.3 hours at follow-up). The changes were not found to be statistically significant, however, because the control group also reported similar average increases in these activities.

<sup>&</sup>lt;sup>32</sup> It is likely that some treatment group members were prohibited from participation in political activities while serving in AmeriCorps programs.

Exhibit 3.11	Ex	hib	it 3	<b>3.1</b>	1
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### Impacts on Other Civic Engagement-Related Outcomes

	Unadjusted Mean or Percent Yes Treatment Group (n=1,055)	Adjusted Mean or Percent Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>
Other Civic Engagement-Related Outcomes	(18-month Follow-up)	(18-month Follow-up)			
Neighborhood and Civic Obligation (construct): Represents the respondent's opinion about the importance of being active in his/her neighborhood and participating in various civic activities, including serving on a jury, reporting crimes, keeping the neighborhood clean and safe, participating in neighborhood organizations ( $\alpha$ =0.72) <sup>e</sup>	48.9	49.6	-0.7	-0.8	0.15
Community-based Activism (construct): Provides respondent's reports of the frequency with which he/she participates in community-based activities, including attending community meetings and writing newspapers to voice opinions ( $\alpha$ =0.79) <sup>e</sup>	49.3	49.3	0.0	0.0	0.97
Connection to Community (construct): Represents the respondent's opinion about the strength of his/her connection to the community, as represented by the strength of feelings toward the community, including attachment, awareness, and commitment ( $\alpha$ =0.77) °	49.8	49.9	-0.1	-0.1	0.89
Social Trust (construct): Represents the respondent's opinion about the degree to which he/she can trust people and members of his/her community, including the local police ( $\alpha$ =0.60) <sup>e</sup>	49.3	50.4	-1.0	-1.2	0.09
Engagement in the Political Process (construct): Provides respondent's reports of the frequency with which he/she participates in activities intrinsic to the political process, including talking with others about politics ( $\alpha$ =0.77) <sup>e</sup>	49.1	50.3	-1.2	-1.4	0.02

#### Exhibit 3.11

Impacts on Other Civic Engagement-Related Outcomes

Impacts on Other Civic Engage					
	Unadjusted Mean or Percent	Adjusted Mean or Percent			
	Yes Treatment Group (n=1,055)	Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>
Local Civic Efficacy (construct): Represents the respondent's opinion about the feasibility of working with local or state government to meet a range of community needs, such as fixing a pothole or getting an issue on a statewide ballot ( $\alpha$ =0.63) <sup>e</sup>	49.4	49.0	0.4	0.4	0.55
Grass Roots Efficacy (construct): Represents the respondent's opinion about the feasibility of starting a grassroots effort to meet a range of community needs, such as starting an after-school program or organizing a park cleanup program ( $\alpha$ =0.65) <sup>e</sup>	49.3	48.8	0.5	0.5	0.44
National Voting Participation (construct): Represents whether the respondent voted in the 2006 national election, and plans to vote in the 2008 national election ( $\alpha$ =0.63) <sup>e</sup>	49.5	49.7	-0.2	-0.3	0.67
Importance of Service-Oriented Career (construct): Represents the respondent's opinion about the importance of working in a position that contributes to others ( $\alpha$ =0.52) <sup>e</sup>	49.8	50.4	-0.5	-0.6	0.26
Respondent engaged in volunteer activities with family members in the last 12 months	26.0%	29.7%	-3.7%	-4.3%	0.32
Among those that have volunteered through or for an organization in the last 12 months:					
Respondent has volunteered and has spoken about service/volunteer experience with other volunteers/ friends/relatives in past 12 months <sup>1</sup>	35.1%	34.4%	0.7%	0.8%	0.84
Number of weeks that respondent performed volunteer activities in the last 12 months <sup>f</sup>	5.3	5.4	-0.1	-0.1	0.89
Number of volunteer hours in past 12 months <sup>1</sup>	70.3	92.9	-22.5	-26.2	0.26

Exhibit 3.11
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Impacts on Other Civic Engagement-Related Outcomes

Impacts on other offic Engage					
	Unadjusted Mean or Percent	Adjusted Mean or Percent			
	Yes Treatment Group (n=1,055)	Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>c</sup>	Treatment Effect p-value <sup>d</sup>
Respondent has asked his/her friends, parents, children, or other family members to volunteer with him/her in any activities in the last 12 months <sup>f</sup>	25.9%	28.1%	-2.2%	-2.6%	0.53
In the past 12 months, friends, parents, children, or other family members have volunteered with respondent because respondent asked <sup>f</sup>	21.6%	23.5%	-1.9%	-2.2%	0.58
In the last 12 months, how often has respondent worked with other people in respondent's neighborhood to fix or improve something (1-Never 5-Always)	2.2	2.2	0.0	0.0	0.90
In the last 12 months, how often has respondent attended any public meeting where there was a discussion of community affairs (1-Never 5-Always)	1.7	1.7	0.0	0.0	0.92
In the last 12 months, how often has respondent attended any club or organizational meeting (1-Never 5-Always)	2.0	1.9	0.0	0.0	0.90
Life Skills-Related Outcomes	(18-month Follow-up)	(18-month Follow-up)			
Decision-Making Skills (construct): Provides the respondent's report of his/her ability to make sound decisions and judgments ( $\alpha$ =0.73) <sup>e</sup>	49.7	49.2	0.5	0.6	0.49
Appreciation of Cultural and Ethnic Diversity (construct): Represents the respondent's opinions about the importance and desirability of relationships between people who do not share the same cultural and/or ethnic background ( $\alpha$ =0.76) <sup>e</sup>	50.7	50.3	0.4	0.5	0.50
Respondent's level of satisfaction with his/her life as a whole nowadays (on a scale of 1 to 10) <sup>g</sup>	7.6	7.6	0.1	0.1	0.54

#### Impacts on Other Civic Engagement-Related Outcomes

Source: Baseline and 18-month follow-up surveys.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p < 0.05.

<sup>a</sup> The adjusted percent Yes is calculated as the treatment group value minus the ITT treatment effect.

<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

<sup>e</sup> Constructs were built from several survey items. They were scaled such that the control group mean and standard deviation are 50 and 10, respectively. The impact estimates can be converted to standardized effect size units by dividing by 10 (the control group standard deviation).  $\alpha$ =Cronbach's alpha index of internal reliability.

<sup>f</sup>These items were asked only of those that had volunteered through or for an organization in the last 12 months. Because volunteering through or for an organization is endogenously determined the contrast between treatment and control groups on these items are not true experimental impact estimates.

<sup>g</sup> The outcome was not measured at baseline.

*Risky behavior outcomes.* The 1996 youth corps study had found that youth corps significantly decreased the probability of having been arrested (Jastrzab et al. 1996). The current study, however, found no significant impact of youth corps participation on conviction or adjudication. The study team also tested for significant differences between the treatment and control groups on the other risky behavior items that were measured only at follow-up. Of 10 tests of impacts on reduction in risky behaviors, 1 was significant: fewer control group respondents indicated that they had used any illegal drugs in the 30 days prior to the 18-month follow-up survey (Exhibit 3.12). Identification of this single significant impact is roughly in alignment with what would be expected to occur by chance.

Impacts on Risky Behavior Outcomes

Impacts on Kisky Benavior Outcom	63				
	Unadjusted Mean or Percent Yes Treatment Group (n=1,055)	Adjusted Mean or Percent Yes Control Group <sup>a</sup> (n=488)	ITT Treatment Effect <sup>b</sup>	TOT Impact Estimate <sup>°</sup>	Treatment Effect p-value <sup>d</sup>
	(18-month	(18-month			
Risky Behavior Items	Follow-up)	(To-monut Follow-up)			
<b>Risky Behaviors:</b> Represents the respondent's engagement in petty crime, theft, physically violent behavior, or gambling $(\alpha=0.67)^{e, f}$	49.3	49.9	-0.5	-0.6	0.45
In the past 30 days, respondent ever drank five or more drinks of wine, beer, or liquor at one time or in one sitting <sup>f</sup>	32.1%	31.4%	0.7%	0.8%	0.81
Among those that had 5 or more drinks in one sitting in the past 30 days, number of days that respondent had five or more drinks of wine, beer, or liquor during the past 30 days <sup>f, g</sup>	5.4	4.5	0.9	1.1	0.08
In the past 30 days, respondent used any illegal drugs <sup>f</sup>	13.9%	9.6%	4.3%	5.0%	0.04 *
Among those that used illegal drugs, number of days that respondent used illegal drugs during the past 30 days <sup>f, h</sup>	10.7	11.4	-0.7	-0.8	0.73
In the past 12 months, respondent has been arrested for any criminal offense	7.6%	9.0%	-1.4%	-1.6%	0.38
In the past 12 months, respondent has been convicted of a criminal offense	2.9%	3.2%	-0.3%	-0.3%	0.72
Among those that had been arrested, number of days respondent was incarcerated in prior 12 months <sup>f</sup>	3.8	5.1	-1.3	-1.6	0.51
During the past 12 months, respondent ever felt so sad or hopeless almost every day for two weeks or more in a row that he/she stopped doing some usual activities <sup>f</sup>	16.6%	17.8%	-1.2%	-1.4%	0.67
During the past 12 months, respondent ever seriously considered suicide <sup>f</sup>	3.6%	3.5%	0.1%	0.1%	0.93

#### Impacts on Risky Behavior Outcomes

Source: Baseline and 18-month follow-up surveys.

*Note:* Means and percentages are weighted to reflect probability of selection, and poststratification and nonresponse adjustments; \* p<0.05.

<sup>a</sup> The adjusted mean or percent Yes is calculated as the treatment group value minus the ITT treatment effect.

<sup>b</sup> ITT (intent-to-treat) is model-estimated average impact on youth corps applicants.

<sup>c</sup> TOT (treatment-on-the-treated) is estimated average impact on youth corps participants. Calculated as ITT/proportion of treatment group that enrolled in youth corps programs.

<sup>d</sup> Treatment effect p-value is for test of null hypothesis of no treatment impact, two-tailed test.

<sup>e</sup> Constructs were built from several survey items. They were scaled such that the control group mean and standard deviation are 50 and 10, respectively. The impact estimates can be converted to standardized effect size units by dividing by 10 (the control group standard deviation).  $\alpha$  = Cronbach's alpha index of internal reliability.

<sup>f</sup> The outcome was not measured at baseline.

<sup>g</sup> This item was only asked of those who had had 5 or more drinks in one sitting in the prior 30 days (at 18 months after random assignment). Since having 5 or more drinks in one sitting was not randomly assigned, the contrast between treatment and control groups on this item is not a true experimental impact estimate.

<sup>h</sup> This item was only asked of those who had used illegal drugs in the prior 30 days. Since the status of having used illegal drugs was not randomly assigned, the contrast between treatment and control groups on this item is not a true experimental impact estimate.

<sup>i</sup> This item was only asked of those who had been arrested in the prior 12 months. Because the status of having been arrested is endogenously determined, the contrast between treatment and control groups on this item is not a true experimental impact estimate.

*Table reads:* At the time of the 18-month follow-up survey, the unadjusted mean value on the construct "risky behaviors" was 49.3 for the treatment group, and the model-adjusted mean was 49.9 for the control group. The ITT treatment estimate was negative 0.5 (effect size = -0.05) and the TOT estimate was negative 0.6. There was not a statistically significant difference in this outcome between the treatment and control groups (p=0.45).

### **Services Received by Control Group Members**

The logic model for the impact of youth corps on corpsmembers' outcomes in the areas of education, employment, civic engagement, life skills, and reduction of risky behaviors posits that the services received and experiences obtained via participation in youth corps will have positive causal effects on those outcomes. The basis of the impact evaluation is the comparison of outcomes of individuals who were randomized to the treatment group (enrollment in youth corps) to the outcomes of individuals randomized to the control group. It is important to understand, however, that other education and training programs, work experiences, and community service opportunities may have been available to the youth who were randomized to the control group (and hence embargoed from enrolling in youth corps for 18 months). In this section we present results from the 18-month follow-up survey that will help to describe some of the experiences of control group members for the time between random assignment and the 18-month follow-up survey.

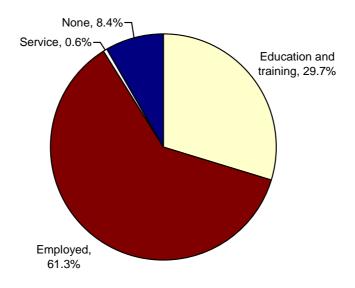
There were 488 control group respondents to the 18-month follow-up survey. Between the time of random assignment and the survey, Exhibit 3.13 shows that:

- 29.7 percent were enrolled in an education, vocational or training program<sup>33</sup>;
- 61.3 percent were not enrolled in an education, vocational or training program, but did have one or more jobs during that time frame;
- 0.6 percent were not doing either of the above, but did report that they had spent most of their time over the year prior to the 18-month follow-up survey participating in national service, community service, or volunteer work (e.g., AmeriCorps, Peace Corps, faith-based volunteer service);
- 8.4 percent fell into none of the above categories. Half of these respondents indicated that they had spent most of their time in the year prior to the 18-month follow-up survey looking for a job.

The numbers above indicate that 91.6 percent of the control group members were involved in educational, employment, or volunteer activities. Additional details about the experiences of control group members follow.

<sup>&</sup>lt;sup>33</sup> The structure of the 18-month follow-up survey does not allow for the calculation of a directly comparable number of treatment group members that had been enrolled in an education, vocational or training program during that period.





Source: 18-month follow-up survey.

*Education and Training:* Enrolled in an education, vocational, or training program between random assignment and the 18-month follow-up survey.

*Employed:* Not enrolled in an education, vocational, or training program, but held one or more jobs between random assignment and the 18-month follow-up survey.

*Service:* Not enrolled in an education, vocational, or training program, and did not hold one or more jobs, between random assignment and the 18-month follow-up survey, but had spent most time in the year prior to the 18-month follow-up survey participating in national service, community service, or volunteer work (e.g., AmeriCorps, Peace Corps, faith-based volunteer service)

None: None of the above.

*Exhibit reads*: In the period between random assignment and the 18-month follow-up survey, 29.7 percent of control group members were enrolled in an education, vocational, or training program.

Among the control group members who had been enrolled in an educational, vocational, or training program between random assignment and the 18-month follow-up survey, Exhibit 3.14 shows that:

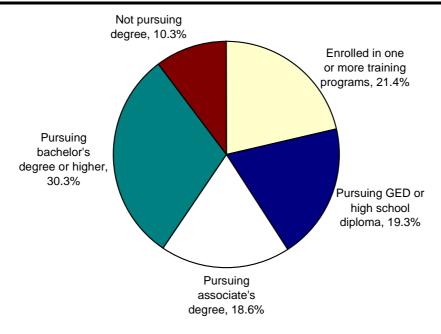
- 68.3 percent were in an educational program and pursing a degree, including
  - 19.3 percent that pursued a GED or high school diploma,
  - 18.6 percent that pursued an associate's degree, and
  - 30.3 percent that pursued a bachelor's degree or higher;
- 10.3 percent were in an educational program, but not pursuing a degree; and
- 21.4 percent were in one or more training programs.

Among those who were in one or more training programs:

- The average number of weeks in these programs was 16.9 (range 1 day to 76 weeks);
- The average number of hours in these programs was 519.7 (range 0.5 to 1,623 hours).







*Source*: 18-month follow-up survey.

*Exhibit reads*: Among the 145 control group members who were enrolled in an education, vocational, or training program during the period between random assignment and the 18-month follow-up survey, 18.6 percent were pursuing an associate's degree.

As indicated in Exhibit 3.15, among the control group members who were not enrolled in an educational, vocational or training program, and who had one or more jobs between random assignment and the 18-month follow-up survey:

- The average percentage of weeks during which one or more jobs were held was 63.0 (range <1 to 100 percent);</p>
- The average number of hours worked per week per job was 37.3 (range 2 to 90); and
- 90 percent of the jobs held were half-time or more (i.e., 20 or more hours in an average work week).

#### Exhibit 3.15

Employment by Control Group Members (Excludes Those that Were in Education or Training)

Employment between Random Assignment and 18-month Follow-up Survey	Mean or Percent	Minimum	Maximum
Mean percent of weeks that one or more jobs were held	63.0	<1	100
Number of hours worked per week per job	37.3	2	90
Percent of jobs that were half time or more (i.e., 20 or more hours in an average week)	90.0%		

Source: 18-month follow-up survey.

*Table reads*: Among the 299 control group members who were not enrolled in an education, vocational, or training program during the period between random assignment and the 18-month follow-up survey, but who held one or more jobs, the average percent of weeks that one or more jobs were held during the period from random assignment to the 18-month follow-up survey was 63.0 (e.g., if there were 80 weeks between when a respondent was randomly assigned and when the 18-month follow-up survey was completed, and the respondent was employed for 40 of those weeks, then her percent of weeks employed would be 50 percent).

# **Chapter 4: Subgroup Analyses**

This evaluation includes an extensive set of subgroup analyses based on subgroups of study participants. Two factors motivated these analyses. First, the Corporation was interested in exploring whether there was evidence of any particularly beneficial effects on certain subgroups. Second, the Corporation and the study team wanted to build upon findings from the 1996 random assignment study of the Conservation and Youth Service Corps (Jastrzab et al. 1996), which found significant beneficial treatment impacts on subgroups defined by race and ethnicity and gender (especially for African American males). Appendix F presents more detailed findings from the 1996 study. This chapter summarizes the findings from the subgroup analyses, and additional details are presented in Appendix C.

# **Subgroups Tested**

The subgroups analyzed are listed in Exhibit 4.1. Some of these subgroups were selected because of a particular policy interest, e.g., impacts of youth corps participation on youth from disadvantaged circumstances. Other subgroups were selected because the study team hypothesized that the program experience, and thus the program impacts, might differ based upon that subgroup characteristic because the program experience might differ (e.g., applied to youth corps as a full-time rather than as a part-time corpsmember).

Subgroups were defined based on characteristics measured in the baseline survey. For many of the subgroups the decision of how to define each level of the subgroup is readily apparent and determined by individual characteristics (e.g., gender: male vs. female; race and ethnicity). For other subgroups some elaboration is warranted and provided below.

- Disadvantaged while growing up: individuals who reported in the baseline survey that they and/or their family received any of the following forms of public assistance during their childhood were classified as "disadvantaged while growing up": a) public assistance (TANF, welfare); b) public housing/Section 8/other housing vouchers; c) foster care; d) free or reduced price school lunch; e) WIC; f) food stamps; g) social security; h) unemployment insurance, workers' compensation, disability insurance.
- Disadvantaged now: individuals who reported in the baseline survey that they and/or their family had received one of the following forms of public assistance in the prior 12 months were classified as "disadvantaged now": a) public assistance (TANF, welfare); b) public housing/Section 8/ other housing vouchers; c) foster care; d) free or reduced price school lunch; e) WIC; f) food stamps; g) social security; h) unemployment insurance, workers' compensation, disability insurance.
- *Full-time youth corps participation:* at the time of random assignment corps identified individuals as being full-time, part-time, or reduced part-time applicants. Due to the small number of applicants classified as reduced part-time, the study team combined part-time and reduced part-time into a single "part-time" group.
- Joined youth corps for civic engagement: individuals who listed at least one of the following reasons for applying to youth corps were classified as "joined youth corps for civic engagement": a) to help other people/perform a community service; b) to learn about or work with different ethnic/cultural groups; c) to get involved in issues.

## **Subgroup Results**

There were no significant differences between the categories of each subgroup in the impact estimates for the three key outcomes described earlier in the report (see the section "Key Outcomes and Other Outcomes" early on in Chapter 3). Thus, for the study's three primary indicators of impacts in the areas of employment, education, and civic engagement, there was no evidence that youth corps was particularly beneficial for any of our selected subgroups of participants.

The study team also explored whether the impacts for all of the remaining outcome measures differed between the categories of each subgroup (e.g., the impacts for males versus the impacts for females, for the gender subgroup variable). The study did not find evidence suggesting particular benefit or harm of program participation for any subgroup (i.e., the number of significant tests was equivalent to what would be expected to occur by chance, and/or the significant results were mixed in regards to which group was favored). For more details on the analytic approach and results, see Appendix C.

Due to the large number of outcomes tested in these subgroup analyses, the reader should take caution to view the results as exploratory rather than confirmatory. Exploratory results are appropriately used to generate hypotheses and to guide future and ongoing research, but should not be the basis for major policy decisions.

Subgroup	Categories
Race and ethnicity	African American: 20.7% (n=315) <sup>a</sup> Hispanic: 25.6% (n=389) White: 44.4% (n=676) [The fourth category of race ("other") is not included in the subgroup analysis]
Gender	Male: 64.8% (n=988) Female: 35.2% (n=536)
Race/ethnicity and gender	African American Male: 13.4% (n=184) African American Female: 9.5% (n=131) Hispanic Male: 18.9% (n=260) Hispanic Female: 9.3% (n=128) White Male: 31.9% (n=440) White Female: 17.1% (n=235)
Education level	Less than HS: 44.4% (n=653) HS/GED: 26.5% (n=390) more than HS/GED: 29.1% (n=428)
Disadvantaged growing up	Yes: 44.2% (n=682) No: 55.8% (n=860)
Disadvantaged now (within the 12 months prior to the baseline survey)	Yes: 31.8% (n=490) No: 68.2% (n=1,052)
Enrolled in full-time youth corps program	Yes: 70.9% (n=1,094) No: 29.1% (n=449)
Age less than 22 years	Yes: 68.5% (n=1,057) No: 31.5% (n=485)
Joined youth corps for reasons associated with civic engagement	Yes: 29.6% (n=435) No: 70.4% (n=1,035)

#### Exhibit 4.1

sample.

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# **Chapter 5: Variations in Impacts by Program**

### **Overview of the Analysis**

This chapter reports on analyses conducted to determine whether treatment effects varied across the 21 youth corps programs in this study. These analyses were motivated by the question of whether particular programs were associated with producing impacts on outcomes. The analyses focus first on the three key outcomes. Additional analyses explore variation in impacts among sites for other outcomes for which positive average impacts were found in the main analyses: educational expectations, hourly wages, annual income, number of employers, and ability to make ends meet (see Chapter 3).<sup>34</sup>

For each outcome, the analysis approach involved a test of whether there were significant differences among programs in the impact of youth corps. This can occur when, for example, there are positive impacts for all 21 programs, but where the impacts are larger for some programs than others. It can also occur when the overall impact is not significantly different than zero, but where the impacts for some programs are negative (better outcomes in the control group) and are positive in other programs.

For outcomes where the test indicated significant variation in impacts among programs, the next step of the analysis was to produce a graphical display of the impact estimate for each program. The graphical display addresses the question of whether there were any specific programs that produced particularly large treatment effects. Ideally, the last step in the analysis would be to model the variation in impact estimates to determine whether any program model or program implementation characteristics were significant predictors of the program-level impact estimates. However, this step could not be undertaken because there were no measures of program models or implementation available. The study did not include a process or implementation component in which the corps programs and their activities would be observed to identify similarities and differences across programs. For technical details on these analyses, see Appendix A.

## **Program Sizes and Precision of Estimates**

There was considerable variation in the number of study participants (treatment and control group members) across programs (size). The size of the analysis sample ranged from fewer than 10 in some programs to over 100 in the largest programs.<sup>35</sup> Consequently, the precision of the impact estimates varied

<sup>&</sup>lt;sup>34</sup> Because the results presented in Chapter 3 indicated no impact of youth corps on outcomes in the civic engagement and life skills, or risky behaviors areas, those outcomes are not explored in the current chapter. In the area of civic engagement and life skills, the finding that one impact estimate was significant out of 21 outcomes tested was consistent what would have been expected if youth corps had no impact in this area, and the study team therefore concluded that youth corps did not impact civic engagement and life skills. Similarly, in the risky behaviors domain, one significant finding out of 10 outcomes tested is consistent with no impact in that area, and a similar conclusion was made that youth corps did not impact this area.

<sup>&</sup>lt;sup>35</sup> The low enrollment figures for some study sites were surprising because the study only included programs that projected an intended enrollment of at least 50 participants during the random assignment period. Discussions with the operators of programs represented by fewer than 50 members in the study indicated that shortfalls in numbers of participants were associated with recruitment difficulty and/or delay (due to delayed receipt of funding).

considerably among the programs. Programs with greater numbers of study participants have more precise impact estimates, which are indicated by narrower confidence intervals in the graphical depictions. In order to more clearly distinguish between large programs (which have more than 100 study participants), medium programs (which have 50–100 study participants), and small programs (which have fewer than 50 study participants) in the graphical displays of the impact estimates for programs (Exhibits 5.1 to 5.6), the size of the plotting symbol used to mark the impact estimate is shown as proportional to the program size. Therefore, large programs have large plotting symbols (and narrow confidence intervals).

### **Summary of Results**

As reported in Chapter 3, there were no overall significant impacts of youth corps on the three key outcome variables (respondent is employed or in school; educational attainment; volunteered in prior 12 months). The results of the current analyses, however, indicated significant variation of impacts across programs for all three outcomes. Some programs had impact estimates that were below zero and therefore favored the control group. Other programs had impact estimates that were above zero and therefore favored the treatment group. However, only a few programs had impact estimates that were significantly different than zero for any of the three outcomes. For example, in one program there was a significant positive impact of youth corps on attainment of a high school diploma or GED or above, but there was also a program with a significant negative impact on the same outcome.

Among the six educational and employment outcomes where there were significant treatment effects of youth corps overall (Chapter 3),<sup>36</sup> there were two where impacts varied significantly across programs: respondent expects to complete some college or above, and the ability to make ends meet. For both outcomes, the impact estimates were positive for most programs, and several were significantly greater than zero.

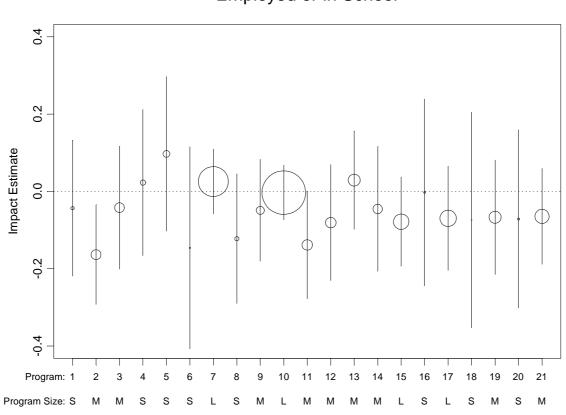
# **Results for the Three Key Outcomes**

*Key outcome: The probability that the respondent is employed or in school at the time of the 30-month tracking survey.* As described in Chapter 3, there was no overall impact of youth corps on whether the respondent was employed or in school 30 months after random assignment. There was, however, significant variation among programs in the impact estimates. The impact estimates and 95 percent confidence intervals for each of the 21 programs included in the study are shown in Exhibit 5.1. The exhibit shows that none of the 21 programs had impacts on whether the respondent is employed or in school that were significantly greater than zero, and one program had a significant negative impact. This can be ascertained from the exhibit by noting that the impact estimate is negative, and the 95 percent confidence interval for the impact estimate does not include zero (program 2).

<sup>&</sup>lt;sup>36</sup> The six significant educational and employment outcomes were: respondent expects to complete some college or above; respondent expects to complete a graduate degree; among those that had worked for pay in past 12 months, amount respondent was paid per hour in his/her regular job; among those that had worked for pay in past 12 months, number of employers worked for in the last 12 months; respondent's total personal income in the last year; and, at the end of the month, respondent usually has just enough to make ends meet or above (vs. not enough to make ends meet).

#### Exhibit 5.1

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Probability that Respondent Was Employed or In School (30 months after random assignment)<sup>a</sup>



Employed or in School

*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

<sup>a</sup> Respondent was employed or in school at the time of the 30-month tracking survey.

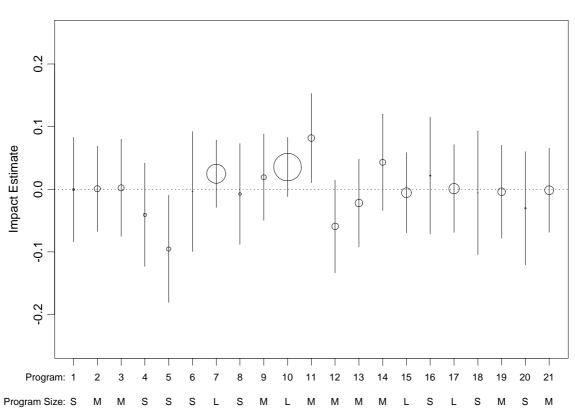
*Exhibit reads:* There is a significant negative impact for Program 2. This can be ascertained by noting that the estimate is negative and the 95 percent confidence interval does not include zero.

#### **Chapter 5: Variations in Impacts by Program**

*Key outcome: Respondent's educational attainment at the time of the 30-month tracking survey.* There was significant variation among programs in the impact of youth corps on the proportions of enrollees that had attained a high school diploma or GED or above, and that had attained a bachelor's degree or above, 30 months after random assignment. For the proportion that had attained a high school diploma or GED or above, there was one program with a significant positive impact, and another program with a significant negative impact (Exhibit 5.2). For the proportion that had attained a bachelor's degree or above, there was one program with a significant negative impact (Exhibit 5.3). As indicated in Chapter 3, overall, there was no significant overall impact of youth corps on educational attainment.

#### Exhibit 5.2

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Educational Attainment (30 months after random assignment)<sup>a</sup>



### Attained High School Diploma or GED or Above

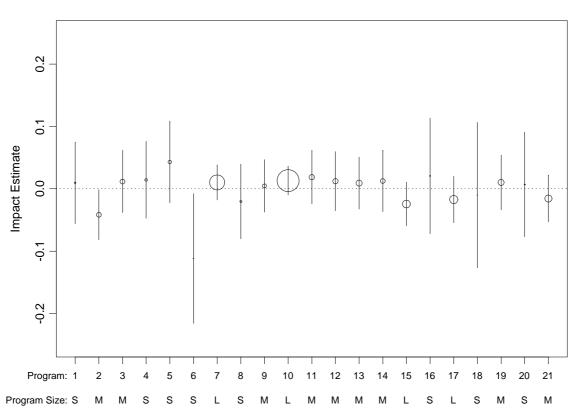
*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

<sup>a</sup> Educational attainment at the time of the 30-month tracking survey.

*Exhibit reads:* There is a significant negative impact for Program 5 and a significant positive impact for Program 11. This can be ascertained by noting the estimates and that the 95 percent confidence intervals for these programs do not include zero.

#### Exhibit 5.3

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Educational Attainment (30 months after random assignment)<sup>a</sup>



### Attained Bachelors Degree or Above

*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

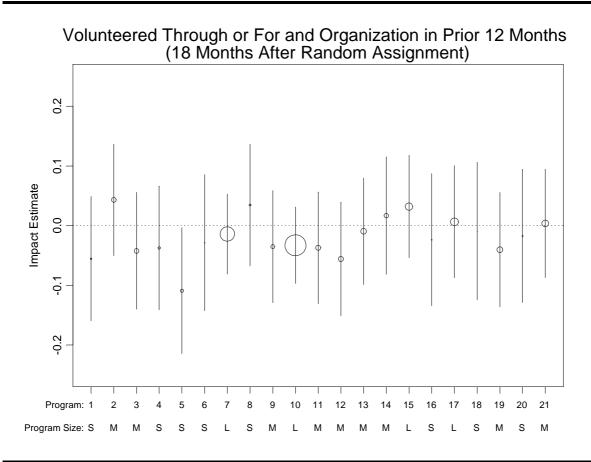
<sup>a</sup> Educational attainment at the time of the 30-month tracking survey.

*Exhibit reads:* There are significant negative impacts for Programs 2 and 6. This can be ascertained by noting that the estimates for these programs are negative and the 95 percent confidence intervals do not include zero.

*Key outcome: Whether or not the respondent volunteered through or for an organization in the year prior to the 18-month follow-up survey.* Exhibit 5.4 shows the variation among programs in impacts on volunteering through or for an organization in the prior 12 months. This outcome was measured 18 months after random assignment. As noted earlier, the follow-up period likely coincided with the time some members of the treatment group were enrolled in the youth corps program. There were no programs with a positive significant impact on this outcome, and there was a single program with a significant negative impact.

#### Exhibit 5.4

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Volunteered through or for an Organization in Prior 12 Months (18 months after random assignment)<sup>a</sup>



*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

<sup>a</sup> The survey instructed respondents to not include volunteering through youth corps in the response to this item. *Exhibit reads:* There is a significant negative impact for Program 5. This can be ascertained by noting that the estimate is negative and the 95 percent confidence interval does not include zero.

#### **Chapter 5: Variations in Impacts by Program**

#### Other education and employment related outcomes with significant overall impacts of youth corps. In

addition to looking across programs on the three key outcome measures, the study team also looked at whether the other outcomes that were significant for the overall study sample were also significant at the individual program level. Among the education and employment related outcomes with significant positive overall impacts of youth corps (Chapter 3), there was no significant variation across programs in treatment impacts on:

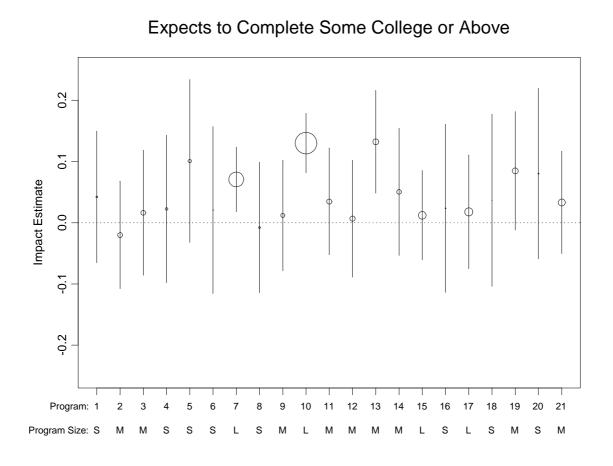
- Hourly wages;
- Annual income;
- Number of employers in prior 12 months; and
- Respondent expects to earn a graduate degree.

There was significant variation of treatment effects among programs for two outcomes:

- Respondent expects to complete some college or above (see Exhibit 5.5); and
- Ability to make ends meet (see Exhibit 5.6).

#### Exhibit 5.5

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Respondent Expectation of Completing Some College or Above (18 months after random assignment)<sup>a</sup>



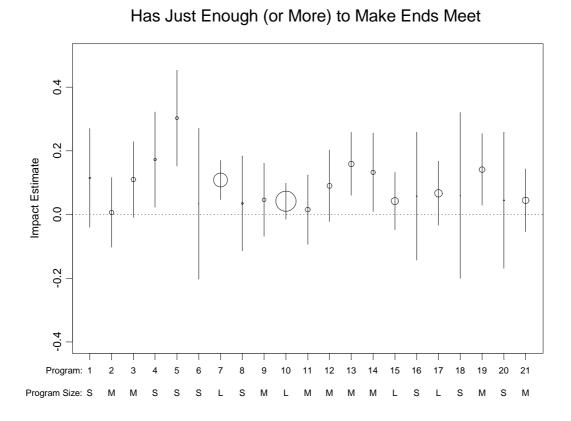
*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

<sup>a</sup> Highest level of education that respondent expects to attain asked during follow-up survey (approximately 18 months after random assignment).

*Exhibit reads:* There are significant positive impacts for Programs 7, 10 and 13. This can be ascertained by noting that the estimates for these programs are positive and the 95 percent confidence intervals do not include zero.

#### Exhibit 5.6

Program-Level Estimates and 95 Percent Confidence Intervals of Impact of Youth Corps on Ability to Make Ends Meet (18 months after random assignment)<sup>a</sup>



*Note:* The sizes of the plotting symbols for the impact estimates are proportional to the number of study participants (i.e., treatment and control group members) in the program. Large programs have large plotting symbols and generally have narrower confidence intervals. In the "program size" legend shown along the x-axis, "S" indicates small programs with fewer than 50 study participants, "M" indicates medium size programs with 50–100 study participants, and "L" indicates large programs with more than 100 study participants.

<sup>a</sup> Respondent indicated that at the end of the month, usually has just enough or more than enough to make ends meet (asked at follow-up survey, approximately 18 months after random assignment).

*Exhibit reads:* There are significant positive impacts for Programs 4, 5, 7, 13, 14 and 19. This can be ascertained by noting that the estimates for these programs are positive and the 95 percent confidence intervals do not include zero.

# **Chapter 6: Length of Time in Youth Corps Program**

This chapter reports on nonexperimental, exploratory analyses of the relationship between length of time in the youth corps program and outcomes. The question was whether there were differences in outcomes by length of time that a corpsmembers spent in the program. Equally plausible hypotheses predict that increased participation could be related to better or to worse outcomes. It is possible that the impacts of youth corps are larger for people who participate in the program for longer periods of time. However, it is also possible that we would observe a correlation between the length of participation and corpsmember outcomes even if longer participation had no impact on corpsmembers' outcomes. For example, if more motivated corpsmembers stay in the program longer, and motivation yields better outcomes (e.g., more motivated people are more likely to complete higher education), then we would expect to see a positive association between length of time in the program and corpsmembers' outcomes. However, if more motivated individuals—or individuals with more skills—tend to leave the program for better outside opportunities, then we would expect to see a negative association between length of time in the program and corpsmembers' outcomes. Therefore, the analyses presented in this chapter are purely descriptive they cannot be used to identify the reasons behind the associations we measure between length of participation and corpsmembers' outcomes.

The measures of intensity of service receipt reported in this chapter are measures of the number of months spent in youth corps programs, and indicators for whether corpsmembers enrolled in service full-time or part-time. As will be explained in more detail subsequently, there are important limitations to the data used in these analyses.

The results presented in this chapter indicate that:

- Over half (51.7%) of those randomized to the treatment group spent six or more months in youth corps.
  - At 18 months after random assignment, greater time in youth corps:
    - Did not consistently predict positive or negative outcomes;
    - Was associated with
      - Lower likelihood of having worked in a regular job in the prior 12 months,
      - Fewer employers,
      - Less time spent in volunteer activities, and
      - Greater involvement working in one's neighborhood to fix or improve something.
- Full-time enrollment combined with having served six or more months in youth corps was associated with:
  - Lower likelihood of working or being in school at the time of the 30-month tracking survey.
- At 18 months after random assignment, relative to part-time enrollees, full-time enrollees were more likely to report:
  - Having had 5 or more alcoholic drinks in one sitting in the prior 30 days, and
  - Having used illegal drugs in the prior 30 days.

### Lengths and Terms of Service

When applicants are accepted into the youth corps program, they are assigned to a "term of service," which indicates for how long and for how many hours they are expected to serve in the program (applicants sometimes indicate on their application their desired length and time of service). Among the corpsmembers in this study, the length of a term of service varied across programs, typically ranging from 6 to 12 months. Also, the total expected hours<sup>37</sup> of service per corpsmember varied among three levels of participation: enrolled as reduced part-time (expected to serve between 300 and 899 hours), enrolled as part-time (expected to serve between 900 and 1,499 hours), and enrolled as full-time (expected to serve for 1,500 or more hours). Corpsmembers are not limited to one term of service, and some youth corps members are invited to re-enroll in youth corps following the completion of their initial term of service (this study assessed first terms of service). Other corpsmembers may leave the program before completing their full term of service, either because they elect to pursue other options, or, in some cases, because they are asked to leave the program by administrators (e.g., for disciplinary or attendance problems).

Among the 893 treatment group members who did participate in youth corps, 890 provided information on their program completion/enrollment status at the time of the 18-month follow-up survey. Of these 890 treatment group members:

- 48.9 percent reported that they completed their first term of service and 11.9 percent of these corpsmembers were in their second term at the time of the 18-month follow-up survey;
- 2.6 percent reported that they were still in their first term of service; and
- 48.1 percent reported that they left youth corps before completing their first term of service.<sup>38</sup> The pie chart in Exhibit 6.1 displays the reasons that respondents provided as to why they left the program early.

It should be noted that youth corps vary considerably in their requirements related to attendance and their expectations and definitions regarding program completion.<sup>39</sup> For some corps, successful completion is defined as attending all the required activities and remaining in the program for the originally specified length of time. For other corps, successful completion includes a transition to other positive activities (such as another job or school), even if the corpsmember leaves the program early. Thus, successful completion may not necessarily be defined only by time in the program. And, although significant discretion is frequently accorded, corps that receive AmeriCorps funding generally impose clearer guidelines about what comprises program completion. AmeriCorps rules state that an AmeriCorps

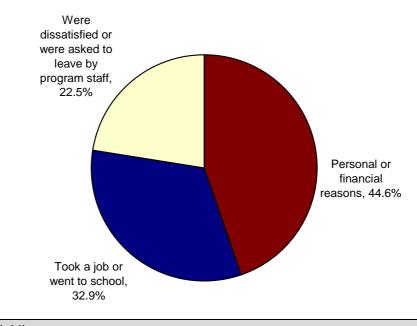
<sup>&</sup>lt;sup>37</sup> As noted in Chapter 2, program applicants indicated on their application whether they wished to enroll at a reduced part-time status (300 to 899 hours), part-time status (900 to 1,499 hours), or full-time status (1,500 or more hours). Analyses in this study on service hours utilize the *expected* enrollment status as indicated at the time of program application; the study does not have data on *actual* enrollment status.

<sup>&</sup>lt;sup>38</sup> See the next paragraph on the definition of "completion" of a term of service. Also, note that a survey respondent who indicated leaving the program early still may have been categorized as a "program completer" by program managers.

<sup>&</sup>lt;sup>39</sup> It should also be noted that this study did not include a process or implementation component in which the corps programs and their activities would be observed to identify similarities and differences across programs. Any reported information regarding program requirements or implementation is based on the study team's experience and understanding of the corps, as developed on previous studies and related activities.

program may release a corpsmember from completing a term of service for compelling personal reasons, as determined by the program. Examples of compelling circumstances include serious illness, military service obligations, accepting an opportunity to make the transition from welfare to work, or accepting an employment opportunity if the program includes the promotion of employment among its corpsmembers as an approved objective.<sup>40</sup>

#### Exhibit 6.1 Reasons Why Treatment Group Respondents Did Not Complete their Term of Service



Source: 18-month follow-up survey.

*Exhibit reads*: Among the treatment group respondents that left the program early, 22.5 percent said that they left because they were dissatisfied or were asked to leave by program staff.

## **Calculation of Time Spent in Youth Corps**

The measure of time spent in the program was defined as the number of months between program entry and either exit from the youth corps program or completion of a respondent's first term of service. The date of exit was obtained from responses to items on the follow-up survey, and analysis of those responses indicated that many respondents were not able to accurately recall their exit date. Some respondents did not provide a response to the question while others provided dates that were implausible. The date of entry was also obtained from responses to items on the follow-up survey, and was also subject to recall error. When respondents did not provide a date of entry on the survey, or if the entry date was clearly implausible, the date of random assignment was used as a proxy for date of entry. Details on the decision rules for assigning entry and exit dates are explained in Appendix D.

<sup>&</sup>lt;sup>40</sup> The citation for these AmeriCorps guidelines is 45 CFR §2522.230.

#### **Chapter 6: Length of Time in Youth Corps Program**

Among the 1,055 individuals randomly assigned to the treatment group, the number of months between entry and exit could not be determined for 101 individuals. Among the remaining 954, the mean number of months in youth corps was 6.2 and ranged from zero to 25 months. The distribution of the number of months in youth corps is shown in Exhibit 6.2.

#### Exhibit 6.2 Number of Months in Youth Corps Number of Months in Youth Corps Frequency Percent 0 (never enrolled) 17.0% 162 2.9 <1 28 1-3 177 18.6 4-5 94 9.9 6-12 394 41.3 13-18 81 8.5 19-25 <sup>a</sup> 18 1.9 Total: 954 100.0

Source: 18-month follow-up survey.

<sup>a</sup> The timing of the 18-month survey varied sufficiently enough for some members to have been enrolled for more than 18 months by the time that they completed the survey.

Exhibit reads: 17.0 percent of treatment group respondents to the 18-month follow-up survey spent 0 months (i.e., never enrolled) in the youth corps program.

## **Relationships of Time in Youth Corps to Outcomes**

For the 954 treatment group members with nonmissing values on the number of months of participation in youth corps, the study team examined the relationships between the length of time spent in the corps and each of the outcomes in the education, employment and earnings, civic engagement and life skills, and risky behaviors domains.<sup>41</sup> The relationships were estimated in linear regression models with covariates to control for baseline demographics,<sup>42</sup> the baseline measure of the outcome (if available) and differences among programs. The reader is strongly cautioned to bear in mind the limitations of this type of analysis. For the reasons described at the beginning of this chapter, this analysis is purely descriptive and, because time in the program was not assigned to participants in an experimental design framework, this is not an impact analysis.

The study team conducted 55 tests of whether length of time in program was related to the education, employment, income, earnings, civic engagement, life skills, or risky behaviors outcomes. Among the four significant associations, there were two where greater time in youth corps was associated with better outcomes and two where greater time was associated with less desirable outcomes. In the employment and earnings domain, greater time spent in the corps was associated with lower likelihood of having worked in a regular job in the 12 months prior to the 18-month follow-up survey. Note that the 18-month

<sup>41</sup> The full listings of each of the outcomes in each of these domains are in Exhibits 3.1–3.12.

<sup>42</sup> Demographic covariates included: age, sex, marital status, education level, race/ethnicity, and an indicator for whether the respondent lived in stable housing during the three months prior to the baseline survey.

follow-up period included time when many treatment group members were enrolled in youth corps. More time in the corps was also associated with lower number of employers. In the civic engagement domain, greater time in program was associated with fewer weeks that respondent had performed volunteer activities in the 12 months prior to the 18-month follow-up survey, but greater involvement in working in their neighborhoods to fix or improve something.

The findings regarding employment fit with a plausible explanation—that greater time in the corps translates into a longer period of time receiving the youth corps stipend, which reduces the marginal value of work in a regular job and may enable longer serving members to work for fewer employers. However, it is more difficult to speculate on why longer time in the corps would be related to a decrease in volunteer activities<sup>43</sup> but an increase in involvement in neighborhood improvements. This could be due to survey respondents not counting their time in youth corps as volunteerism (because they receive a stipend), but including their youth corps work that focused on neighborhood improvements when responding to this survey question. Alternately, perhaps each of these is a chance finding resulting from the large number of tests that were conducted.

Because of concerns that the results reported above could be sensitive to the assumption of a linear relationship between months in the program and outcomes, the research team fit a similar set of models to the data but where the measure of time in the program was a dichotomous indicator for whether a treatment group member was in a youth corps program for six months or more (1 if time in the program was six or more months, 0 if less than six months). The results using the dichotomous measure were similar to those from the continuous measure, which indicates that the results reported above were not particularly sensitive to the assumption of a linear relationship. Two of the four outcomes that had significant relationships to time in program using the continuous measure of time were also significant using the dichotomous measure. The latter models indicated that respondents who had been in youth corps for six or more months were less likely to have worked in a regular job in the prior 12 months, and spent fewer weeks on average in volunteer activities in the prior 12 months. The one additional significant association from the models with the dichotomous measure was that those who had been in youth corps for six or more months were less likely to have been working or in school at the time of the 30-month tracking survey.

# **Relationships of Full-time/Part-time Enrollment Status and Time Enrolled in Youth Corps to Outcomes**

Individuals who enroll as full-time youth corps members would be expected to receive a greater dose of youth corps "treatment" per month than those who enroll as part-time or reduced part-time members. The study team therefore investigated an additional measure of intensity that combined an indicator for whether respondents had enrolled as full-time or part-time corpsmembers with the indicator for having spent six or more months in youth corps. At the time of random assignment the programs identified individuals as being full-time, part-time, or reduced part-time enrollees.<sup>44</sup> Because of the small number of reduced part-time enrollees, the study team combined part-time with reduced part-time for the purposes of this analysis; this group is hereafter referred to as part-time enrollees. For each of the outcomes in the

<sup>&</sup>lt;sup>43</sup> Note that the 18-month follow-up survey question does not explicitly exclude time spent in youth corps.

<sup>&</sup>lt;sup>44</sup> Full-time members were expected to serve 1,500 or more hours per year. The expectations for part-time and reduced part-time were 900 to 1,499 hours and 300 to 899 hours, respectively.

#### **Chapter 6: Length of Time in Youth Corps Program**

education, employment and earnings, civic engagement and life skills, and risky behaviors domains, the study team tested for differences in outcomes among the following four groups:

- Part-time enrollees who spent fewer than six months in youth corps (19.9%, n=190)
- Part-time enrollees who spent six or more months in youth corps (28.4%, n=271)
- Full-time enrollees who spent fewer than six months in youth corps (10.2%, n=97)
- Full-time enrollees who spent six or more months in youth corps (41.5%, n=396)

Across the 55 tests, 5 indicated significant differences among the four groups in outcomes. In three of the findings, greater intensity was associated with less desirable outcomes:

- Full-time enrollees who spent six or more months in youth corps were less likely to be working or in school at the time of the 30-month tracking survey than respondents who served fewer months or were part-time enrollees.
- At 18 months after random assignment, full-time respondents were more likely than part-time enrollees to report having had five or more alcoholic drinks in one sitting in the prior 30 days.
- At 18 months after random assignment, full-time respondents were more likely than part-time enrollees to report having used any illegal drugs in the prior 30 days.
- For two of the tests where significant associations were found at 18 months after random assignment, there was not a consistent direction of the relationship between intensity and outcomes. Full-time enrollees who spent less than 6 months in the corps were the most likely to have asked friends or family to volunteer with them in the prior 12 months. The next highest group was full-time enrollees who stayed in youth corps 6 or more months, followed by part-time enrollees who spent fewer than 6 months in youth corps. The group that was part-time and served 6 or more months was the least likely to have asked friends or family to volunteer with them in the prior 12 months. Also, among those who drank, the number of days in the prior 30 days when the respondent had had five or more alcoholic drinks was highest for those who were part-time but served less than six months, but was lowest for those who were part-time and served more than six months.

The findings regarding part-time and full-time enrollees likely reflect differences in the characteristics of individual corpsmembers who enroll part-time and full-time, rather than a causal effect of corpsmembers' enrollment status.

# **Chapter 7: Relationships of AmeriCorps Funding Support to Outcomes**

This chapter investigates whether receipt of AmeriCorps funding support is related to outcomes of youth corps corpsmembers. Some youth corps programs and members receive funding from the AmeriCorps program. The level of this funding varies greatly from corps to corps, and sometimes even from member to member within a program. Corpsmembers could receive AmeriCorps support in the following ways:

#### Three categories of AmeriCorps support

- Full AmeriCorps funding (stipend and eligibility for Segal AmeriCorps Education Award)
- Segal AmeriCorps Education Award only (stipend and other support funded through other sources)
- No AmeriCorps support
- 1. Some corps programs receive all or part of their funding from AmeriCorps, either directly or through their state commissions. Some or all corpsmembers receive stipends funded with AmeriCorps monies and corpsmembers may also receive a Segal AmeriCorps Education Award upon the successful completion of their youth corps experience for education costs (e.g., tuition, fees) at qualified institutions of higher education, for educational training, or to repay qualified student loans.
- 2. Other corps enroll (some or all of) their corpsmembers in the Corporation's Segal AmeriCorps Education Award program through the Corporation's grant to The Corps Network. This is a secondary form of AmeriCorps funding wherein corpsmembers, upon the successful completion of their youth corps experience, receive a Segal AmeriCorps Education Award. At the time of this study, the Segal AmeriCorps Education Award was \$4,725 for full-time service (at least 1,700 hours), \$2,362.50 for part-time service (at least 900 hours), and was pro-rated for shorter periods of service. Corpsmembers in this category do not receive any other form of AmeriCorps support (such as a stipend that is funded with AmeriCorps monies as described above).
- 3. Other programs in this study did not receive any form of AmeriCorps funding during the 2004/2005 funding cycle. Therefore, their corps members did not receive any support from AmeriCorps.

This chapter provides descriptive data on demographic characteristics and outcomes measured at baseline and follow-up among youth corps corpsmembers by the three categories of AmeriCorps support (AmeriCorps-stipended and Segal AmeriCorps Education Award, Segal AmeriCorps Education Award only, or non-AmeriCorps).<sup>45</sup>

Program applicants were not randomized to receive or not receive AmeriCorps funding. Instead, the characteristics of the youth corps programs and the characteristics of individuals within programs determined whether and what level of AmeriCorps support was received. Corpsmember characteristics (e.g., interest in service, education attainment and aspirations) that influenced the type of AmeriCorps funding that was received may be related to outcomes measured at follow-up, even in the absence of any

<sup>&</sup>lt;sup>45</sup> Programs can apply for AmeriCorps grants that cover all or some participants. Non-AmeriCorps programs can access Segal AmeriCorps Education Awards for some or all participants through The Corps Network (or their state Service Commission) education award only program. Some programs do not receive either kind of AmeriCorps funding support.

#### **Chapter 7: Relationships of AmeriCorps Funding Support to Outcomes**

financial support. Therefore, the analyses presented in this chapter are purely descriptive and cannot support causal inferences.

The first challenge to the analyses presented in this chapter was identifying the treatment group members who received AmeriCorps support, and the type of that support. The study team used multiple data sources to make the determinations but some uncertainty remains as to whether each individual did or did not receive AmeriCorps funding support, and the level of that support. Details on the data used and the decision rules for making the determinations are presented in Appendix E.

The study team identified 286 treatment group respondents to the follow-up survey who were AmeriCorps-stipended (i.e., received their stipend and a Segal AmeriCorps Education Award from AmeriCorps), 230 treatment group respondents who were eligible for only a Segal AmeriCorps Education Award, and 473 treatment group respondents who did not receive any form of AmeriCorps funding.<sup>46</sup> The study team then tested for differences among the three groups in demographic characteristics and in each of the outcomes in the education, employment and earnings, civic engagement and life skills, and risky behaviors domains. The aim of this analysis is to investigate whether the three groups are descriptively different from one another. (For detailed model specifications, see Appendix A.)

Comparisons of the demographics (Exhibit 7.1) and survey responses at baseline (Exhibit 7.2) indicate that the three groups of corpsmembers comprised different types of individuals. The majority of these differences were sustained through the study period. The reader is reminded that these descriptive differences do not imply that receipt of AmeriCorps funding, or the type of that support, caused these differences.

AmeriCorps-stipended, Segal AmeriCorps Education Award only (Education Award Program, or EAP), and non-AmeriCorps corpsmembers demonstrated some demographic differences at baseline. Fewer AmeriCorps-stipended corpsmembers than either EAP or non-AmeriCorps corpsmembers were African American, were younger (ages 18 through 21), or had children; more AmeriCorps-stipended members were single. Additionally, fewer corpsmembers who received EAP awards were Hispanic, compared to those who were AmeriCorps-stipended or non-AmeriCorps.

<sup>&</sup>lt;sup>46</sup> The level of AmeriCorps support could not be determined for 66 treatment group respondents; they are excluded from this analysis.

Demographics (Measured at Baseline) of Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means			p-Values	
Demographic	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded	EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
Gender						
Male	50.3%	59.1%	64.1%	0.10	0.31	0.42
Race/Ethnicity						
White, non-Hispanic	59.4	50.3	34.9	0.31	0.20	0.77
African American	3.1	37.5	35.1	0.01 *	0.86	0.17
Hispanic	27.3	7.0	21.1	0.75	0.01 *	0.27
Highest Level of Education Attainment <sup>a</sup>						
Some high, middle, or junior high school	22.1	35.1	49.0	0.09	0.19	0.51
High school diploma or GED	19.7	37.5	30.1	0.11	0.57	0.18
Some college or postsecondary school	23.3	15.5	11.4	0.14	0.38	0.28
Associate's degree or 2 years of college	2.2	1.1	1.4	0.64	0.82	0.50
Bachelor's degree, 4 to 5 years of college	32.0	10.8	7.7	0.08	0.55	0.20
Master's, PhD or other graduate degree	0.7	0.0	0.4	0.54	0.20	0.17

Demographics (Measured at Baseline) of Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means				p-Values	
Demographic	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded		EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
Age							
Under 18	21.7	4.6	7.1	0.32		0.32	0.24
18 through 21	32.6	69.6	66.3	<0.003	**	0.52	0.00 *
22 through 25	41.0	25.3	23.5	0.17		0.75	0.28
26 or older	4.7	0.4	3.1	0.62		0.04	0.16
US Citizen (Y)	98.9	99.5	95.2	0.13		0.07	0.34
Military Service (Y)	2.0	1.3	0.9	0.42		0.56	0.67
Marital Status							
Married	1.4	1.4	3.3	0.16		0.06	0.97
Single	98.3	97.6	93.2	<0.003	**	0.01	* 0.62
Other	0.4	1.1	3.6	<0.003	**	0.06	0.27
Has Health Insurance (Y)	65.4	53.6	51.2	0.02		0.50	0.03
Has Bank Account (Y)	75.2	55.2	46.4	0.02		0.48	0.27
Years Lived in Current Community							
Less than 1 year	17.8	15.9	23.1	0.35		0.11	0.72
1 to 4 years	29.0	19.5	21.0	0.42		0.64	0.35
5 or more years	53.2	64.6	55.9	0.78		0.17	0.30
Housing Situation in Prior 3 Months							
Stable	94.5	95.6	94.3	0.89		0.35	0.67
Transient	5.0	3.0	2.9	0.28		0.94	0.42
Shelter/Homeless	0.3	1.4	1.3	0.17		0.90	0.17
Other	0.2	0.0	1.6	0.18		0.14	0.30

Demographics (Measured at Baseline) of Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means				p-Values	
Demographic	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded		EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
Has Child/Children (Y)	4.4	24.5	21.3	<0.003	**	0.73	0.06

*Note*: p-values are unadjusted, stars indicate significant differences after Bonferoni adjustment for all pair-wise comparisons among the AmeriCorps-Stipended, EAP Only, and Not AmeriCorps-Funded groups: \* p < 0.05/3, \*\* p < 0.01/3.

<sup>a</sup> The means and p-values for this item are calculated for those corpsmembers who completed the 30-month tracking survey, because this item is measured and analyzed from the 30-month tracking survey. The means and p-values for all other items in this table are calculated for those corpsmembers who completed the 18-month follow-up survey. *Table reads:* The percentage of the individuals in the AmeriCorps-Stipended group, the EAP Only group, and the Not AmeriCorps-Funded groups who were male was 50.3, 59.1, and 64.1 percent, respectively. The percentage male was not statistically significantly different between any of the three groups.

#### **Chapter 7: Relationships of AmeriCorps Funding Support to Outcomes**

As shown in Exhibit 7.2, corpsmembers who reported more favorable baseline characteristics tended to receive the full level of AmeriCorps support, which includes both a stipend and a Segal AmeriCorps Education Award ("AmeriCorps-stipended"). These corpsmembers were more likely to be working or in school at baseline, had higher levels of educational expectations and attainment, and had more favorable employment and earnings backgrounds than did corpsmembers who received only the Segal AmeriCorps Education Award ("EAP") or no AmeriCorps support ("not AmeriCorps-funded"). AmeriCorps-stipended corpsmembers also reported higher baseline levels of civic engagement and more participation in volunteer activities than did the EAP and non-AmeriCorps corpsmembers. Furthermore, AmeriCorps-stipended corpsmembers reported fewer incidences of risky behaviors at baseline. These trends of more favorable outcomes for the AmeriCorps-stipended corpsmembers continued through both follow-up surveys (see Exhibit 7.3).

Many corps that offer the EAP program do not, however, enroll all of their corpsmembers as EAP. They attempt to identify program applicants most likely to use the award. Moreover, few differences were found between the EAP corpsmembers and the non-AmeriCorps corpsmembers at baseline. The EAP and non-AmeriCorps corpsmembers did not have any significant differences in any domain, except for one difference in the construct "neighborhood and civic obligation," where EAP members had slightly higher levels than non-AmeriCorps members.

At the 18-month follow-up, however, more EAP members than non-AmeriCorps members expected to complete some college or above, and had discussed going to college or vocational schools with someone (parents, adult relatives, teachers/school counselors, mentors, employer(s), other adults, or friends). EAP corpsmembers also had, on average, a greater desire to work in the healthcare, social services, or education fields in two years, and fewer reported incidences of risky behavior. We cannot, however, determine if the expectation of receipt of an educational award upon the conclusion of one's youth corps program resulted in these differences at follow-up.

Exhibits 7.2 and 7.3 present only those outcomes for which significant differences were found. Tables that present the results of all analyses can be found in Appendix E.

The reader is cautioned that the results in Exhibit 7.3 do not support any causal inferences about the effect of AmeriCorps stipend receipt on individuals. The results suggest a strong nonrandom selection of individuals to the three groups. The analyses of outcomes measured at baseline demonstrate that AmeriCorps-stipended individuals had more favorable outcomes on most of the measures at baseline than did the EAP and non-AmeriCorps members (Exhibit 7.2). This means that the AmeriCorps-stipended individuals were in many regards better off than the EAP and non-AmeriCorps members before they had any experience with youth corps. The descriptive results in Exhibit 7.3 show that those better outcomes persisted in the follow-up period.

Significant Results from the Comparison of Outcomes (at Baseline) between Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means				p-Values		
ltem	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorp Stipended Not AmeriCo Funded	vs.	EAP Only vs. Not AmeriCorps- Funded	AmeriCor Stipended EAP On	vs.
Working or in School at Baseline								
Respondent is working or in school at baseline	74.8%	47.1%	43.8%	<0.003	**	0.59	<0.003	**
Educational Expectations and Attainment Items								
Highest level of education respondent has attained at baseline								
HS/GED or above (vs. some high school)	77.4	62.3	49.8	<0.003	**	0.06	0.02	
Some college or above	57.1	25.1	19.0	<0.003	**	0.25	<0.003	**
Associate's degree or above	34.6	10.0	8.1	<0.003	**	0.59	<0.003	**
Bachelor's degree or above	32.4	9.1	6.9	<0.003	**	0.5	<0.003	**
Graduate degree	0.7	0.0	0.4	0.54		0.17	0.09	
Highest level of education respondent expects to complete								
HS/GED or above (vs. some high school)	97.9	89.2	94.1	0.02		0.18	0.02	
Some college or above	91.0	71.2	67.1	<0.003	**	0.45	<0.003	**
Associate's degree or above	82.1	49.9	45.1	<0.003	**	0.4	<0.003	**
Bachelor's degree or above	73.6	32.3	26.6	0.00	**	0.28	<0.003	**
Graduate degree	46.6	14.0	16.9	<0.003	**	0.46	<0.003	**
Respondent would like to be attending school 2 years from now	81.6	72.5	62.9	<0.003	**	0.05	0.07	

Significant Results from the Comparison of Outcomes (at Baseline) between Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means			p-Values	
ltem	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded	EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
Employment and Earnings Items						
Respondent has ever been promoted on a job	43.4	20.1	25.4	<0.003 **	0.22	<0.003 **
Respondent would like to be working 2 years from now	61.3	84.0	84.7	<0.003 **	0.87	<0.003 **
Respondent participated in any job readiness training in the last 12 months	40.5	23.2	32.0	0.09	0.06	<0.003 **
At the end of the month, respondent usually has:						
Just enough to make ends meet or above (vs. not enough to make ends meet)	82.5	69.3	71.3	0.01 *	0.68	0.02
Some money left over	52.3	39.1	36.3	<0.003 **	0.61	0.03
Civic Engagement-Related Items						
Respondent volunteered through or for an organization in the last 12 months	67.0	37.6	34.3	<0.003 **	0.54	<0.003 **
Neighborhood and Civic Obligation $(\alpha=0.72)$ a	51.3	49.0	47.4	<0.003 **	0.02 *	0.01 *
Community-Based Activism (α=0.79) a	51.7	47.3	48.4	0.02	0.44	0.01 *
Grass Roots Efficacy (α=0.65) a	52.2	48.1	48.0	<0.003 **	1.00	0.04
National Voting Participation $(\alpha=0.63)a$	53.4	49.7	47.8	<0.003 **	0.27	0.05

Significant Results from the Comparison of Outcomes (at Baseline) between Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

		Means			p-Values	
ltem	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps Funded	EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
Respondent has volunteered and has spoken about service/volunteer experience with other volunteers/ friends/relatives in past 12 months	61.4	27.1	26.9	<0.003 **	0.97	<0.003 **
Number of weeks that respondent performed volunteer activities in the last 12 months	7.6	5.3	2.7	<0.003 **	0.06	0.16
Number of volunteer hours in past 12 months	101.6	56.7	44.4	0.01 *	0.49	0.06
In the last 12 months, how often has respondent attended any public meeting where there was a discussion of community affairs (1- Never 5-Always)	2.0	1.7	1.8	0.06	0.23	0.00 *
In the last 12 months, how often has respondent attended any club or organizational meeting (1-Never 5-Always)	2.8	2.2	2.1	<0.003 **	0.36	<0.003 **
Life Skills-Related Items						
Appreciation of Cultural and Ethnic Diversity ( $\alpha$ =0.76) <sup>a</sup>	54.0	49.8	50.3	0.01 *	0.5	<0.003 **
Risky Behavior Items						
Respondent has ever been arrested for any criminal offense	9.1	10.3	18.3	<0.003 **	0.02	0.71

Significant Results from the Comparison of Outcomes (at Baseline) between Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

*Note:* p-values are unadjusted, stars indicate significant differences after Bonferoni adjustment for all pair-wise comparisons among the AmeriCorps-Stipended, EAP Only, and Not AmeriCorps-Funded groups: p < 0.05/3, p < 0.01/3.

<sup>a</sup> Constructs were built from several survey items. They were scaled such that the control group mean and standard deviation are 50 and 10, respectively. The impact estimates can be converted to standardized effect size units by dividing by 10 (the control group standard deviation).  $\alpha$ =Cronbach's alpha index of internal reliability.

*Table reads:* The percentage of the individuals in the AmeriCorps-Stipended group, the EAP Only group, and the Not AmeriCorps-Funded group who were working or in school at baseline was 74.8, 47.1, and 43.8 percent, respectively. The percentages were significantly different for the AmeriCorps-Stipended versus the Not AmeriCorps-Funded group, and the AmeriCorps-Stipended versus the EAP Only group.

		Means				p-Value	s		
Item	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCor Stipendec Not AmeriCor Funder	l vs. ·ps-	EAP Only Not AmeriCorj Funded	0S-	AmeriCo Stipendeo EAP Or	d vs.
Working or in School at 30-Month Tracking	(30-month survey)	(30-month survey)	(30-month survey)						
Working or in school at 30-month tracking	78.7%	63.1%	62.1%	<0.003	**	0.87		0.01	*
Educational Expectations and Attainment Items	(30-month survey)	(30-month survey)	(30-month survey)	<0.003		0.07		0.01	
Highest level of education respondent has attained									
HS/GED or above (vs. some high school)	94.4	78.3	74.7	<0.003	**	0.54		<0.003	**
Some college or above	73.4	43.8	34.1	<0.003	**	0.12		<0.003	**
Associate's degree or above	40.5	14.3	9.9	<0.003	**	0.29		<0.003	**
Bachelor's degree or above	36.7	10.5	8.0	<0.003	**	0.47		<0.003	**
Graduate degree	1.6	0.0	0.3	0.11		0.17		0.03	
Educational Expectations and Attainment Items	(18-month survey)	(18-month survey)	(18-month survey)						
Highest level of education respondent expects to complete									
HS/GED or above (vs. some high school)	100.0	99.6	98.9	0.02		0.26		0.32	
Some college or above	96.8	93.3	84.7	<0.003	**	0.01	*	0.25	
Associate's degree or above	91.3	71.4	65.4	<0.003	**	0.25		<0.003	**
Bachelor's degree or above	85.2	52.5	46.0	0.00	**	0.25		<0.003	**
Graduate degree	59.1	19.4	18.6	<0.003	**	0.86		<0.003	**

		Means			p-Values	
ltem	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded	EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
In the past 12 months, respondent has discussed going to college or vocational schools with someone	76.8	76.6	60.5	<0.003 **	<0.003 **	0.97
Employment and Earnings Items	(18-month survey)	(18-month survey)	(18-month survey)			
In the last 12 months, respondent has worked for pay	89.6	77.0	82.5	0.05	0.27	0.01 *
Respondent worked in a regular job in the last 12 months	87.9	68.9	80.0	0.04	0.04	<0.003 **
Respondent has ever been promoted on a job	32.0	22.6	17.8	<0.003 **	0.24	0.06
Respondent would like to be working 2 years from now	66.0	73.7	80.5	<0.003 **	0.13	0.15
Respondent has ever been fired from a job in the last 12 months	7.1	10.2	14.6	0.01 *	0.12	0.24
Respondent's total personal income in the last year <sup>a</sup>	11388.0	10167.0	8687.0	0.00 *	0.17	0.22
At the end of the month, respondent usually has:						
Some money left over	47.9	36.3	28.0	<0.003 **	0.11	0.04
Respondent would like to work in a service field (healthcare/social services/education) job in 2 years	47.8	51.1	37.7	0.05	0.02 *	0.58

		Means				p-Values		
ltem	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCon Stipendeo Not AmeriCon Fundeo	l vs. rps-	EAP Only vs. Not AmeriCorps- Funded	AmeriCon Stipendeo EAP On	d vs.
Civic Engagement-Related Items	(18-month survey)	(18-month survey)	(18-month survey)					
Respondent volunteered through or for an organization in the last 12 months	62.3	42.2	40.3	<0.003	**	0.73	<0.003	**
Neighborhood and Civic Obligation ( $\alpha$ =0.72) <sup>b</sup>	50.5	49.1	47.9	<0.003	**	0.04	0.07	
Community-Based Activism ( $\alpha$ =0.79) <sup>b</sup>	51.7	48.9	48.0	<0.003	**	0.20	0.01	*
Connection to Community ( $\alpha$ =0.77) <sup>b</sup>	51.6	49.5	49.2	0.01	*	0.64	0.06	
Social Trust (α=0.60) <sup>b</sup>	52.6	48.4	48.6	<0.003	**	0.89	0.05	
Grass Roots Efficacy ( $\alpha$ =0.65) <sup>b</sup>	51.6	49.3	47.7	<0.003	**	0.06	0.01	*
Respondent has engaged in volunteer activities with family members	36.9	24.2	21.1	<0.003	**	0.49	0.02	
Respondent has volunteered and has spoken about service/volunteer experience with other volunteers/friends/relatives in past 12 months	53.8	30.2	29.4	<0.003	**	0.87	<0.003	**
Respondent has asked friends, parents, children, or other family members to volunteer with him/her in any activities in the last 12 months	38.0	22.9	21.7	<0.003	**	0.79	0.00	*
In past 12 months, friends, parents, children, or other family members have volunteered with respondent because respondent asked	33.2	18.2	18.0	<0.003	**	0.96	0.00	*

		Means			p-Values	
Item	AmeriCorps- Stipended	EAP Only	Not AmeriCorps- Funded	AmeriCorps- Stipended vs. Not AmeriCorps- Funded	EAP Only vs. Not AmeriCorps- Funded	AmeriCorps- Stipended vs. EAP Only
In the last 12 months, how often has respondent attended any public meeting where there was a discussion of community affairs (1-Never 5-Always)	2.0	1.7	1.6	<0.003 **	0.36	0.03
In the last 12 months, how often has respondent attended any club or organizational meeting (1-Never 5-Always)	2.2	2.1	1.8	<0.003 **	0.04	0.49
Life Skills-Related Outcomes (no significant results)						
Risky Behavior Items	(18-month survey)	(18-month survey)	(18-month survey)			
Respondent has ever been arrested for any criminal offense	3.8	5.4	8.9	0.02 *	0.13	0.48
Respondent has ever been convicted for any criminal offense	0.4	1.1	3.9	<0.003 **	0.01 *	0.28
In the past 12 months, number of days respondent was incarcerated $^{\circ}$	1.1	1.3	7.0	<0.003 **	<0.003 **	0.89
During the past 12 months, respondent ever felt so sad or hopeless almost every day for two weeks or more in a row that he/she stopped doing some usual activities $^{\circ}$	9.0	19.2	19.5	<0.003 **	0.95	0.01 *

# Comparison of Outcomes (at 18-Month Follow-up and 30-Month Tracking) between Corpsmembers Who Were AmeriCorps-Stipended, Corpsmembers Who Received the Segal AmeriCorps Education Award (EAP) Only, and Corpsmembers Who Were Not AmeriCorps-Funded

*Note*: p-values are unadjusted, stars indicate significant differences after Bonferoni adjustment for all pair-wise comparisons among the AmeriCorps-Stipended, EAP Only, and Not AmeriCorps-Funded groups: p < 0.05/3, p < 0.01/3.

<sup>a</sup> The hourly rate was calculated as a weighted average over all jobs in the prior 12 months. Wages were weighted by the number of hours worked at each job. <sup>b</sup> Constructs were built from several survey items. They were scaled such that the control group mean and standard deviation are 50 and 10, respectively. The impact estimates can be converted to standardized effect size units by dividing by 10 (the control group standard deviation).  $\alpha$ =Cronbach's alpha index of internal reliability. <sup>c</sup> Item was asked at follow-up only.

*Table reads:* The percentage of the individuals in the AmeriCorps-Stipended group, the EAP Only group, and the Not AmeriCorps-Funded group who were working or in school at the time of the 30-month tracking survey was 78.7, 63.1, and 62.1 percent, respectively. The percentages were significantly different for the AmeriCorps-Stipended versus the Not AmeriCorps-Funded group, and the AmeriCorps-Stipended versus the EAP Only group.

# **Chapter 8: Satisfaction with the Youth Corps Experience**

The ability of youth corps to influence member outcomes is based on the programs' ability to attract and retain corpsmembers. To accomplish this, programs must maintain a high level of corpsmember satisfaction with their program experience. This chapter presents descriptive results regarding corpsmembers' satisfaction with their youth corps experience. As part of the 18-month follow-up survey, treatment group members were asked about their experience in the corps. Responses were collected about corpsmembers' overall satisfaction with youth corps, if they would join youth corps again, and if they would recommend youth corps to a friend. The results in this chapter are not impact analysis results; that is, they do not contrast treatment group outcomes to those in the counterfactual (control) condition. The current chapter presents descriptive results based on the survey responses of treatment group members only.

Of the 1,055 treatment group members who responded to the 18-month follow-up survey, 162 never enrolled and therefore could not report on youth corps experiences. This chapter focuses on the survey responses of the 893 treatment group members who did enroll in youth corps. These 893 respondents include those who left the program early, those who had completed and left the program, and those who were still enrolled in youth corps at the time of the survey, including some members who re-enrolled in a youth corps program for a second term.

Ninety percent of enrollees were satisfied or very satisfied with their overall youth corps experience; less than 5 percent reported they were somewhat or very dissatisfied (Exhibit 8.1). Additionally, 83.3 percent indicated that knowing what they knew then, if they had to decide over again whether to join youth corps, they would enroll again, and 87.0 percent said they would recommend it to a friend if a friend said he or she was interested in joining (Exhibits 8.2 and 8.3).

Exhibit 8.1

tem Description	Youth Corps Members
low satisfied were you with your overall (YOUTH CORPS) e	experience?
Very satisfied	60.0%
Somewhat satisfied	29.9
Neither dissatisfied nor satisfied	5.6
Somewhat dissatisfied	2.7
Very dissatisfied	1.9

*Note:* Based on survey responses of 893 treatment group members who enrolled in youth corps and completed the 18-month follow-up survey.

#### **Chapter 8: Satisfaction with the Youth Corps Experience**

Exhibit 8.2 Would Join Youth Corps Again	
Item Description	Youth Corps Members
Knowing what you know now, if you had to decide all over again whether to join (YOUTH CORPS), what would you decide?	
whether to join (1001H CORPS), what would you decide?	
Would enroll	83.3%
	83.3% 9.9

Exhibit 8.3			
Would Recommend Youth Corps to a Friend			
Item Description	Youth Corps Members		
If a good friend of yours told you that he or she were interested in joining youth corps, would you			
Recommend it	87.0%		
Not sure	8.1		
Advise against it	4.8		
Note: Based on survey responses of 893 treatment group members who enrolled in yout	h corps and completed the follow-up		
survey.			

Interestingly, although the overall impact analyses reported in Chapter 3 indicated no significant impacts of youth corps on the highest level of education attained, or on the probability of being employed or in school at the time of the 30-month tracking survey, 79 to 90 percent indicated that they were somewhat or very satisfied with their youth corps experience in terms of

- Advancing their education;
- The encouragement received to continue education;
- Gaining skills for getting a better job/career;
- Finding a job/earning money;
- Exploring future job/education interests; and
- Having an experience that would look good on their résumé (Exhibit 8.4).

Youth Corps Members 80.8%
80.8%
80.8%
86.1
90.5
79.8
75.9
83.5
91.1
81.8
89.6
85.5

Furthermore, almost two-thirds indicated that their youth corps affiliation gave them connections that helped to get a job, and over three-quarters said that their time in youth corps had put them at an advantage when trying to find a job (Exhibit 8.5).

survey.

Item Description	Youth Corps Members		
How has your experience in (YOUTH CORPS) influenced your career choices?	Yes, a lot	Yes, a little	No
(YOUTH CORPS) affected the career I chose	26.2%	29.0%	44.8%
(YOUTH CORPS) gave me exposure to new career options	54.1	31.4	14.5
My (YOUTH CORPS) affiliation gave me connections that helped me get a job	36.4	27.5	36.1
My time in (YOUTH CORPS) put me at an advantage when trying to find a job	46.0	31.1	22.9
My priorities in what I wanted in a job changed	32.5	33.0	34.6

*Note:* Based on survey responses of 893 treatment group members who enrolled in youth corps and completed the follow-up survey.

## **Chapter 9: Interpretation of Study Findings**

This evaluation report presents the findings from the national evaluation of youth corps. The focus of this evaluation was to estimate the impacts of youth corps on corpsmembers' outcomes. These estimates were presented in earlier chapters. This chapter focuses on providing plausible interpretations for these impact estimates. It is important to emphasize that like many impact evaluations, this evaluation was not designed to provide a definitive explanation for the impact results. Therefore, the interpretations provided in this chapter are necessarily speculative and not intended to be definitive. Nonetheless, we believe that thoughtful speculation on potential explanations of the impact findings could be helpful in interpreting the evaluation results.

The remainder of this chapter is divided into two parts. In the first part, we discuss possible explanations for the lack of statistically significant impact estimates found for the evaluation's three key outcomes. In the second part, we discuss possible explanations for the positive impacts found on measures of the treatment group's financial well-being.

## **Interpretation of Impacts on Key Outcomes**

A key question we have considered is why the evaluation's estimates of the impacts of youth corps on the three key outcomes—(1) educational attainment, (2) employed or in school, and (3) volunteering—were not statistically significant. Potential reasons for the nonsignificant impact estimates might be related to the study sample size, timing of the follow-up surveys, attrition, the representativeness of the study sites, and the possibility that the true impact of youth corps is close to or equal to zero. Each of these possibilities is discussed in turn below.

#### Sample Size

One possible explanation for nonsignificant impact estimates is that the sample size was not large enough, and therefore did not have adequate power to detect small but meaningful treatment effects. For the current evaluation, the analytic samples for the 18-month and 30-month follow-up survey included 1,543 and 1,349 survey respondents, respectively. These samples are larger than the samples included in some other impact evaluations of youth programs<sup>47</sup> and smaller than the samples included in some other impact evaluations.<sup>48</sup>

<sup>&</sup>lt;sup>47</sup> The Quantum Opportunities Program Demonstration conducted key analyses of survey-based outcomes with follow-up samples of fewer than 1,400 respondents (Schirm et al. 2006). The prior randomized evaluation of the impacts of youth corps (Jastrzab et al. 1996) was based a follow-up sample of 626 respondents, and the study of the eight-year impact of AmeriCorps on alumni (Yamaguchi et al. 2008) was based on survey responses of 1,697 respondents for the analysis of the State and National sample, and 543 survey respondents for the National Civilian Community Corps sample. Results from the National Supported Work Youth sample were based on interviews of 861 youth (Manpower Demonstration Research Corporation 1980)

<sup>&</sup>lt;sup>48</sup> The sample size of the current study is smaller than the number in the Impact Evaluation of the U.S. Department of Education's Student Mentoring Program, which conducted key analyses based on approximately 2,300 respondents (Bernstein et al. 2009). At the same time, the evaluation of the student mentoring program reported Minimum Detectable Effects of greater than 10 percentage points on most survey-based outcomes. The current study sample size is considerably smaller than those of the evaluations of Job Corps (n=11,313, Schochet et al. 2001) and JTPA (n=4,004 youth, Orr et al. 1996).

Based on data collected in this evaluation, the study team has estimated that the evaluation had 80 percent power to detect differences of 8 to 10 percentage points between the treatment and control groups on the key outcome measures. Put differently, the Minimum Detectable Effects for key outcomes ranged from 8 to 10 percentage points. This means that the probability of detecting smaller impacts would be less than 80 percent. (See Appendix A for more discussion.)

Two similar evaluations found impacts greater than 8 to 10 percentage points on outcomes that resemble this study's key outcomes. The 1996 youth corps evaluation reported a 16 percentage point impact on the outcome *worked for pay since program enrollment* (Jastrzab et al. 1996, Exhibit D.5). And, a national evaluation of Job Corps (a program that offers training and other services to youths and young adults) found a 13 percentage point impact on attainment of a high school diploma or GED (Schochet et al. 2001, Table V.7). If the impacts of these programs were in fact as large as these estimates suggested, and youth corps generates impacts of a similar size, this would suggest that the youth corps evaluation was adequately powered to detect the expected impacts.

However, other evaluations of similar programs found impacts of less than 8 to 10 percentage points on outcomes analogous to those included in the youth corps evaluation, indicating that this study may not have been sufficiently powered. For example, the national evaluation of Job Corps found statistically significant impacts of the program on the proportion of youth that were employed or in an education or training program. For the quarters corresponding to approximately 30 months after random assignment the impacts were statistically significant, but only in the range of 2–3 percentage points (Schochet et al. 2001, Table VI.9). If the impacts on being employed or in school are similarly small for youth corps as for Job Corps, then the power to detect youth corps' effects would be less than 80 percent.

Another evaluation, a national evaluation of AmeriCorps, found positive but nonsignificant effects of the program of 4 percentage points on the percentage of individuals who volunteered in the past 12 months. If the impacts for key outcomes are of a similar size for youth corps, the best estimate is that the probability of detecting youth corps' effects would be less than 80 percent.

Given the small estimates of employment impacts reported for Job Corps and AmeriCorps, the study team cannot rule out the possibility that the evaluation lacked adequate power to detect similarly small employment impacts and impacts on other related outcomes. The impacts of youth corps could be small and positive, and in some cases comparable to the impacts of other similar programs that have been evaluated.

#### Length of Follow-up Period

Another possible explanation for the nonsignificant impact estimates is that the follow-up period was not long enough. The 18- and 30-month follow-up periods are shorter than in many evaluations and may have limited the study's ability to detect impacts on educational and employment outcomes. Although the study found some significant positive impacts of youth corps on educational aspirations, 30 months is shorter than the time needed to complete a college degree, thus diminishing the opportunity to find impacts on educational attainment. Also, the 18-month follow-up period may be too short to capture

employment effects.<sup>49</sup> The Job Corps study (Schochet et al. 2001) found that effects on employment and wages were negative for approximately the first year and a half after random assignment, and positive impacts did not emerge until about 30 months after random assignment. Additionally, 14.5 percent of sample members had not finished their participation in youth corps by the time of the survey, and an additional 41.3 percent of sample members had been out of the corps for only six months to one year (41.3% of sample members participated in the corps for 6 to 12 months),<sup>50</sup> thus reducing the opportunity for employment effects to emerge. These possibilities suggest the potential that a third follow-up survey administered at a later point in time may have produced different results.

#### Attrition

Sample attrition can represent a threat to the validity of study inferences if the nonrespondents systematically differ from the respondents. While the response rate to the follow-up survey was reasonably high (78%), the lower and more differential response rate for the 30-month survey (63% overall, 66% and 57% for treatment and control groups, respectively) is a limitation of the study. However, the results in Chapter 2 indicate that among both 18-month and 30-month survey respondents, the treatment and control groups are in balance on all but 3 of the 59 baseline measures tested, thus reducing the concern about attrition bias. It is noteworthy that one of the three unbalanced baseline measures is the proportion of survey respondents that were working or in school at baseline (and working or in school at the 30-month follow-up is a key outcome). Two complementary approaches were used to mitigate the potential for this imbalance to bias the results. The first was that the baseline measure of working or in school was included as a covariate in the statistical models used to estimate impacts (see Puma et al. 2009). Additionally, the sample weights were adjusted to account for survey nonresponse. In selecting youth corps for the evaluation, the sampling weights were constructed to reflect the probability that corps were selected for inclusion in the evaluation. If all sample members had responded to the survey, these weights would ensure that the sample included in the evaluation was representative of the youth corps applicants at eligible sites. However, the subset of sample members who responded to the evaluation surveys may not be representative of this population if certain types of applicants, or applicants at certain types of corps, were more likely to respond to the survey than others. To address this potential problem, we adjusted our sampling weights on the factors used in stratifying eligible sites, to ensure that the weighted sample of survey respondents is representative of the population from which it was selected.

Additionally, the study team conducted sensitivity tests of whether or not the higher attrition rates from the 30-month follow-up survey introduced additional bias beyond that from the 18-month follow-up survey. No evidence to support this hypothesis was found, further reducing the concern that attrition biased the study results (see Appendix H for more details).

#### **Representativeness of the Study Sites**

The sample of sites was selected to be representative of a national population of 59 youth corps programs that were members of The Corps Network in 2005 and that were expected to enroll at least 50 corpsmembers that year. Of the 34 programs that were randomly selected to be included in the study, only

<sup>&</sup>lt;sup>49</sup> Employment-related outcomes, other than "working or in school at the 30-month survey" were measured in the 18-month follow-up survey, and not in the 30-month follow-up survey. Educational attainment was measured in the 30-month follow-up survey.

<sup>&</sup>lt;sup>50</sup> See Chapter 6 for more detailed information on length of time spent in youth corps.

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18 were successfully recruited to participate. A convenience sample of 3 additional sites brought the total number of study sites to 21. While it is impossible to know for certain whether the study sites differ from the full population on some unmeasured characteristics, the analyses presented in Chapter 2 indicate that the study sites were not statistically different from the full target population on a range of measureable characteristics. Additional analyses presented in Appendix I indicate that omission of the 3 convenience sites does not substantively changes the impact estimates relative to those estimated from the full sample. There is nothing in the results to suggest that the study sites are not representative of the population from which they were drawn.

#### **True Impact of Participation**

Finally it is possible that the true impact of participation in youth corps is close to or equal to zero. The true impact of the program, relative to a counterfactual in which youth corps were not available, could be small or zero if the services offered by the program are ineffective. Alternatively, the impact of the program could be small or zero if these services are effective, but if control group members accessed similarly effective services from alternative programs or services providers. As in most evaluations, it is difficult to distinguish between these two possible explanations. Since it is plausible that control group members could have received some similar services from outside of youth corps, this possibility is considered in the discussion below.

It is possible that control group members showed similar gains to those of treatment group members on the key outcomes because control group members may have had work or educational experiences or participated in services that are similar to those offered by the program to members of the treatment group. Because the evaluation did not include a process or implementation study, there are limited data on the services received by control group members. One recommendation for future impact studies is to include a process evaluation that would enable researchers to clearly describe the contrast between treatment and control group members in the services received. A process evaluation could also have isolated differences in programs' models, target populations, and activities that may help explain impact results.

There is, however some evidence from the current study that suggests that control group members may have availed themselves of similar services. Data from the 18-month survey indicate that many control group members participated in educational or employment activities in the first 18 months after random assignment: 30 percent of control group members enrolled in education, vocational or training programs, and an additional 61 percent who did not enroll in such programs had one or more jobs during that time frame. About a half of 1 percent were doing neither of those activities but did spend most of their time in national service, community or volunteer work, leaving only 8 percent who were not engaged in education, work or service. If control group members were able to access similar services to treatment group members, this would provide a plausible explanation for the nonsignificant impact estimates found for the key outcomes. In other words, youth corps may have provided services to corpsmembers that are similar to services they would have received even if they did not participate in youth corps.

In some random assignment evaluations, the program being evaluated will refer control group members to alternative services. This can reduce the magnitude of the impact estimates. In this evaluation, we have no evidence of the extent to which control group members were referred to other programs with services, or how these services may have been similar to those offered by youth corps programs. Programs participating in the study were instructed not to make direct referrals calls to other programs, but were

permitted to provide control group members with a list of local employment and educational programs serving similar populations.

It is also possible that the evaluation findings are at least in part a product of the economic environment in which the evaluation was conducted. Since the study was conducted prior to the current recession, there were surely better employment opportunities for the control group members than we would expect to see today. (Of course, there were also better employment opportunities for treatment group members as well.) In 2007 the unemployment rate among youth aged 16 to 24 years was 10.8 percent, while it had risen to 19.1 percent in 2010.<sup>51</sup> Unemployment rates were higher for African American youth (20.5% and 33.4% in 2007 and 2010, respectively), and Hispanic (11.8% and 22.1% in 2007 and 2010, respectively). However, we cannot say whether favorable outcomes for control group members, and the relatively small estimated impacts, can be attributed to the strong economy in which the evaluation was conducted.

It is unclear whether the lack of stronger impacts on corpsmembers is due to the effectiveness of the programs in the study, the participation of control group members in similar programs or services, the economic conditions prevailing at the time, or other factors. We recommend that future evaluations of youth corps collect more detailed information on the services received by sample members so that the differences in services received by the treatment and control groups can be more fully assessed.

### **Interpretation of Impacts on Measures of Financial Well-Being**

While there were no significant impacts on the three key outcomes (educational attainment, employed or in school, volunteering), the results of this impact evaluation did indicate that treatment group members experienced significant beneficial impacts of participation on their financial well-being. In this evaluation, we found evidence that for the year prior to the 18-month survey, youth corps had a positive impact on annual income, hourly wages, and the ability to make ends meet. Unfortunately, because the survey covered the period in which many sample members were participating in youth corps, the data do not allow us to assess to what extent the positive effects persist after leaving the corps. The results from this evaluation parallel those reported in Jastrzab et al. (1996), which found positive employment-related impacts and attributed them in part to youth corps employment and stipends received by corpsmembers.

We would argue that the positive impacts on earnings and other measures of financial well-being are attributable at least in part to the stipends received by corpsmembers. Stipends were typically set equal to the minimum wage rate, and the results reported in Chapter 6 indicate that a little over half of treatment group members spent six or more months in the corps. However, it is important to recognize that we have no data on the number of hours per week for which individuals were paid, and this prevents us from identifying the contribution of program stipends to the estimated impacts. Suppose for example that the average corpsmember received a youth corps stipend for 20 hours per week. Since the 2006 national minimum wage rate was \$5.15 per hour, 20 hours per week for six months would translate into a total of \$2,472 in stipend payments. Because this is approximately twice as large as the estimated impact of youth corps must have reduced income from other sources. However, if the average corpsmember received

<sup>&</sup>lt;sup>51</sup> Bureau of Labor Statistics, Economic News Release, Table 2. Employment status of the civilian noninstitutional population 16 to 24 years of age by sex, race, and Hispanic or Latino ethnicity, July 2007–2010, <u>http://www.bls.gov/news.release/youth.t02.htm</u>

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youth corps stipends for only 10 hours per week over six months, or total stipends of \$1,236—which is approximately equal to the estimated impacts on total annual income—this would suggest that the entire impact on income reported earlier could be attributed to youth corps stipends. Finally suppose corpsmembers only received youth corps stipends for 5 hours per week over six months, or total stipends of \$618. This would suggest that about half of the impact on income could be attributed to youth corps stipends, with the other half attributable to the effects of youth corps on other income, such as earnings from outside of youth corps. Since we have no data on the number of hours for which treatment group members received stipends, we cannot identify the contribution of youth corps stipends to the impact on income and other measures of well-being.

In addition, we found that youth corps had a positive effect on the hourly wage reported by corpsmembers. While the mechanism behind this effect is unclear, it could have operated through decisions by corpsmembers about whether to quit existing jobs or take on additional jobs outside of youth corps. While a corpsmember is serving in youth corps and receiving a stipend from the corps, he or she may be less likely to have an additional job, and may be especially unlikely to keep or take on a low-paying additional job. Because corpsmembers did not report their youth corps stipend as a part of their hourly wages on the follow-up survey, the finding that there was a significant impact on hourly wages (among those who had worked for pay in the year prior to the 18-month follow-up survey) may reflect the treatment group's opportunity to drop lower paying additional jobs while relying on a youth corps stipend. Alternatively, the youth corps experience may have made corpsmembers into more skilled or more desirable employees, which could have increased their wages.

Among those who had worked for pay, treatment group members reported working for fewer employers over the initial 18-month follow-up time frame, which may be an indication of job stability. The youth employment market is frequently described as "churning," with young people moving from one low-paying job to another without gaining important job skills from their work experience.<sup>52</sup> The lower number of employers reported by treatment group members may reflect greater tenacity in keeping, and perhaps subsequently advancing in, a job. Alternatively, this finding may reflect the opportunity for treatment group members to drop or not take on jobs while receiving the youth corps stipend.

Overall, the evaluation also found a positive impact on corpsmembers' ability to make ends meet. While this is likely attributable to the positive impact on income, it may also be partially attributable to the effects of the financial literacy education provided by many youth corps.

Similar to the 1996 study, corpsmembers in the current study reported high levels of satisfaction with their youth corps experience. Ninety percent reported being somewhat or very satisfied with the experience overall, and 80 percent or more reported being somewhat or very satisfied with their experience in terms of gaining skills for a better job or career, finding a job and earning money, exploring future job and/or education interests, the encouragement received to continue with their education, and having an experience that would look good on their resume. These high levels of satisfaction do not conflict with the study's findings that there were no impacts on measures of two of the study's key outcomes—educational attainment, and being employed or in school at the 30-month tracking survey. There were no impacts on those measures because the control group made gains similar to the youth corps treatment group. The high levels of satisfaction may reflect the gains that treatment group members saw

<sup>&</sup>lt;sup>52</sup> See for example, Neumark (2002).

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in their own lives and those of their corpsmember peers. For example, the proportion of treatment group members who were working or in school grew from 50 percent at baseline to 67 percent at the 30-month tracking survey, the proportion with a high school diploma or above increased from 57 to 82 percent, and the proportion with some college or above increased from 27 to 47 percent over the same time period. In reporting high levels of satisfaction, the treatment group members were reflecting on their own positive experiences, not comparing their experiences and outcomes to the control group, as occurs in an impact study.

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