



# AmeriCorps Alumni Outcomes

*Final Survey Technical Report*

August 2016

Corporation for  
NATIONAL &  
COMMUNITY  
SERVICE 

# New Methods for Assessing AmeriCorps Alumni Outcomes: Final Survey Technical Report

August 22, 2016

## Authors

Eric Friedman  
Brian Freeman  
Benjamin Phillips  
Lily Rosenthal  
David Robinson  
Haleigh Miller  
Allan Porowski

## Submitted To

Office of Research and Evaluation  
Corporation for National and Community Service  
For inquiries, please contact [evaluation@cns.gov](mailto:evaluation@cns.gov)

## About this Document

This document was produced pursuant to a contract between the Corporation for National and Community Service and ICF International (Contract Number: GS-23F-8182H; CNSHQ13F0091).

Abt Associates Inc. | 55 Wheeler Street | Cambridge, MA 02138 | [www.icfi.com](http://www.icfi.com)

This document was commissioned as an independent study by the Corporation for National and Community Service. Views expressed in the document do not necessarily reflect the official viewpoints of the agency or its staff. This document is in the public domain. Authorization to reproduce it in whole or in part is granted. This document has been formatted to be readable by assistive technologies, in accordance with Section 508 regulations.

## Recommended Citation

Friedman, E., et al. (2016). *New Methods for Assessing AmeriCorps Alumni Outcomes: Final Survey Technical Report*. (Prepared for the Corporation for National and Community Service, Office of Research and Evaluation). Cambridge, MA: Abt Associates Inc.

## About CNCS

The Corporation for National and Community Service (CNCS) is a federal agency that improves lives, strengthens communities, and fosters civic engagement through service and volunteering. Each year, CNCS engages five million Americans of all ages and backgrounds through AmeriCorps, Senior Corps, the Social Innovation Fund, the Volunteer Generation Fund, and other programs, and leads the President's national call to service initiative, United We Serve. For more information, visit [NationalService.gov](http://NationalService.gov)

## Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>I. INTRODUCTION.....</b>	<b>10</b>
Context.....	10
Purpose.....	10
Organization of the Report.....	11
<b>II. METHODOLOGY.....</b>	<b>11</b>
Survey Development Process.....	11
Survey Sampling.....	14
Survey Administration.....	15
Response Rates.....	18
Nonresponse Bias Analysis.....	18
Psychometric Analysis.....	19
Analytic Approaches.....	20
Limitations.....	21
<b>III. DEMOGRAPHICS OF AMERICORPS ALUMNI.....</b>	<b>22</b>
Age.....	22
Gender.....	22
Race and Ethnicity.....	22
Parental Education.....	23
Current State of Residence.....	23
<b>IV. AMERICORPS SERVICE EXPERIENCE.....</b>	<b>24</b>
Service Setting.....	24
Satisfaction with Service Experience.....	25
Exposure to Diversity and New Communities.....	31
Service Experience Measures.....	31
<b>V. INFLUENCE OF NATIONAL SERVICE ON CIVIC ENGAGEMENT.....</b>	<b>33</b>
Civic Engagement.....	33
Civic Self-Efficacy.....	35
Voting Behavior.....	36
<b>VI. INFLUENCE OF NATIONAL SERVICE ON SENSE OF COMMUNITY.....</b>	<b>37</b>
<b>VII. INFLUENCE OF NATIONAL SERVICE ON SELF-EFFICACY AND CAREER-ORIENTED SKILLS.....</b>	<b>40</b>
Cultural Competency.....	40
Self-Efficacy.....	43
Career-Oriented Skills.....	48

<b>VIII. INFLUENCE OF NATIONAL SERVICE ON CAREER PATHWAYS AND EMPLOYMENT OUTCOMES.....</b>	<b>55</b>
Employment Status Before and After AmeriCorps.....	55
Employment through AmeriCorps Connections .....	56
Use of AmeriCorps Network .....	58
Impact of Education Award on Career Path.....	59
Current Career Status, Trajectory, and Transitions.....	61
<b>IX. INFLUENCE OF NATIONAL SERVICE ON POST-SECONDARY EDUCATION OUTCOMES .....</b>	<b>64</b>
Post-Secondary Education .....	64
Current Educational Enrollments.....	66
Use of Education Award to Continue Education.....	67
<b>X. CONCLUSION .....</b>	<b>68</b>
Key Findings.....	68
Successes and Challenges of Data Collection .....	73
Recommendations for Improvements to the Data Collection Process.....	74
Recommendations for Next Steps Based on Findings .....	75
<b>REFERENCES .....</b>	<b>77</b>

## Table of Exhibits

Exhibit ES-1. Employment Sector by Program .....	6
Exhibit ES-2. Highest Level of Education of AmeriCorps Alumni and Their Parents.....	7
Exhibit II-1: Survey Items Mapped to Research Questions.....	12
Exhibit II-2. Universe and Sample Sizes for AmeriCorps Alumni Outcomes Survey .....	15
Exhibit II-3. First Replicate Survey Sample .....	15
Exhibit II-4. Second Replicate Survey Sample .....	16
Exhibit II-5. AmeriCorps Alumni Outcomes Survey Responses .....	16
Exhibit II-6. Cumulative Responses by Mode.....	17
Exhibit III-1. Current Age .....	22
Exhibit III-2. Highest Education Level of the Person or People Who Raised You.....	23
Exhibit III-3. Region of Residence.....	23
Exhibit IV-1. Team-based Service or Individual Placement by Program* .....	24
Exhibit IV-2. Type of Host Organization(s) Served in by Program .....	25
Exhibit IV-3. AmeriCorps Service Experience by Program. ....	27
Exhibit IV-4. Overall Satisfaction with AmeriCorps Service .....	28
Exhibit IV-5. AmeriCorps was a Defining Personal Experience .....	29
Exhibit IV-6. AmeriCorps was a Defining Professional Experience by Cohort .....	31
Exhibit IV-7. Team-based Service or Individual Placement .....	31
Exhibit IV-8. Type of Host Organization(s) Served in.....	32
Exhibit IV-9. Team-based Service or Individual Placement by Type of Host Organization* .....	33
Exhibit V-1. Civic Engagement Pre- and Post-AmeriCorps.....	34
Exhibit V-2. Civic Engagement Pre-AmeriCorps by Program .....	35
Exhibit VI-1. Sense of Community Pre- and Post-AmeriCorps.....	38
Exhibit VI-2. Sense of Community Pre-AmeriCorps by Program .....	39
Exhibit VI-3. Sense of Community Post-AmeriCorps by Program.....	40
Exhibit VII-1. Cultural Competency Pre- and Post-AmeriCorps.....	41
Exhibit VII-2. Cultural Competency Pre-AmeriCorps by Program.....	42
Exhibit VII-3. Cultural Competency Post-AmeriCorps by Program .....	43
Exhibit VII-4. Self-Efficacy Pre- and Post-AmeriCorps .....	45
Exhibit VII-5. Self-Efficacy Pre-AmeriCorps by Program .....	46
Exhibit VII-6. Self-Efficacy Post-AmeriCorps by Program .....	47
Exhibit VII-7. Interpersonal Skills.....	48
Exhibit VII-8. Influence of AmeriCorps on Interpersonal Skills by Program.....	49
Exhibit VII-9. Personal Conduct and Workplace Behaviors .....	49
Exhibit VII-10. Applied Academic Skills .....	50
Exhibit VII-11. Critical Thinking Skills .....	51
Exhibit VII-12. Applied Academic Skills by Program .....	52
Exhibit VII-13. Workplace Skills.....	53
Exhibit VII-14. Workplace Skills by Program .....	54
Exhibit VIII-1. Employment Status at Three Time Points .....	56
Exhibit VIII-2. AmeriCorps Opened up a Career Path .....	58
Exhibit VIII-3. Contact with AmeriCorps Network .....	58
Exhibit VIII-4. Access AmeriCorps Network for Career Advice, Job Opportunities, or Professional Networking.....	59
Exhibit VIII-5. Use of AmeriCorps Education Award .....	59
Exhibit VIII-6. Use of AmeriCorps Education Award by Program .....	60

Exhibit VIII-7. Used Education Award for Student Loan Repayment to Pursue a Career Path.....	61
Exhibit VIII-8. Current School or Career Transition by Cohort.....	62
Exhibit VIII-9. Current Status by Cohort.....	63
Exhibit VIII-10. Employment Sector by Program.....	64
Exhibit IX-1. Highest Level of Education Prior to AmeriCorps*.....	64
Exhibit IX-2. Highest Level of Education*.....	65
Exhibit IX-3. Highest Level of Education of AmeriCorps Alumni and Their Parents.....	66
Exhibit IX-4. Current Educational Enrollments by Cohort.....	67
Exhibit IX-5. Used Education Award to Continue Education or Pursue Career Path.....	67
Exhibit IX-6. AmeriCorps was a Worthwhile Experience for Furthering Educational Goals*.....	68
Exhibit X-1. Impact of Service and Variation by Service Experience and Life Stage.....	72
Exhibit X-2. Previous Data Collection Efforts by the Abt Team Compared to AmeriCorps Alumni Outcomes Survey Effort.....	73

## EXECUTIVE SUMMARY

### Background

This research brief presents the results of the 2016 AmeriCorps Alumni Outcomes Survey, conducted by Abt Associates and its research affiliate, Abt SRBI, on behalf of the Corporation for National and Community Service. The AmeriCorps program engages more than 80,000 Americans in intensive service each year at nonprofits, schools, public agencies, and community and faith-based groups across the country. AmeriCorps provides opportunities for individuals to carry out national service as members within three main program streams: AmeriCorps State and National (ASN), AmeriCorps National Civilian Conservation Corps (NCCC) and AmeriCorps Volunteers in Service to America (VISTA).

The 2016 AmeriCorps Alumni Outcomes Survey builds on CNCS's previous research by exploring how national service experiences successfully encourage national service alumni to stay civically engaged, develop and utilize skills gained through service, and/or pursue service-oriented careers and post-secondary education and employment. Findings from this study will help CNCS and other interested stakeholders answer the following three core research questions:

- **Research Question #1:** In what ways does participating in a national service program influence members' career pathways, civic engagement, development of career-oriented soft and hard skills, and sense of community?;
- **Research Question #2:** In what ways, if any, do member outcomes vary by life stage and by types of service experience?; and
- **Research Question #3:** What are the post-secondary and employment outcomes of AmeriCorps alumni, and does national service serve as a pathway to post-secondary and/or employment success?

The AmeriCorps Alumni Outcomes Survey supports CNCS's mission to improve lives, strengthen communities, and foster civic engagement through service and volunteering. The survey can also inform future policy and program decisions by helping CNCS learn about the types of national service programs and service experiences that most influence the long-term civic engagement and career choices of former members.

### Methodology

The development of the 2016 AmeriCorps Alumni Outcomes Survey instrument began with the instrument used for a similar pilot survey of AmeriCorps alumni in 2015, which in turn was based in part on the AmeriCorps Exit Survey. The 2016 survey aimed to collect much of the same information from alumni as the 2015 pilot survey had and also collect more information about 1) specific hard and soft career skills alumni gained or developed during service; 2) how alumni used the AmeriCorps education award; and 3) how skills, work experience, and connections made during service influenced alumni's career paths.<sup>1</sup> Any survey questions taken from the exit survey were preserved with wording changes kept to a minimum to allow CNCS to perform additional analyses of responses to the same questions by

---

<sup>1</sup> For more information on the process used to develop new survey items, see Appendix A (Survey Development Process).

various program alumni over time. The 2016 survey instrument contains a total of 45 questions that were designed to collect the information needed to answer the study research questions.

The potential respondent universe for the 2016 AmeriCorps Alumni Outcomes Survey consists of alumni of one of the three primary AmeriCorps programs—AmeriCorps State and National (ASN),<sup>2</sup> AmeriCorps National Civilian Community Corps (NCCC), or AmeriCorps Volunteers in Service to America (VISTA)—and whose last term of service ended in 2005, 2010, or 2013, corresponding to 10, 5, and 2 years before the survey administration. The respondent universe was also restricted to participants with a total service time greater than or equal to 84 days to ensure that participants had sufficient exposure to the AmeriCorps program for it to have had an impact. Finally, the survey sample was further limited to participants for whom an email address and one of either a mailing address or phone number was available. This decision was made to maximize the effectiveness of the planned outreach attempts, especially when seeking responses from the older cohorts. Nevertheless, out-of-date contact information proved to be a real challenge, with the lowest survey response rate achieved from the 2005 cohort.

The 2016 AmeriCorps Alumni Outcomes Survey opened on May 31, 2016, with survey invitations emailed and mailed to the first survey replicate of 11,917 alumni. Phone follow-up to sample members who had not already completed a web survey began on June 6, 2016 and continued until the survey closed on July 13, 2016. CNCS approved a second replicate of 5,998 alumni on June 29, 2016, which was deemed necessary to ensure the design quota of 3,150 total responses was met. When Abt SRBI projected that the survey design quota had been effectively reached for each program and cohort, a final reminder was sent on July 11, 2016 and the survey was closed on July 13, 2016.<sup>3</sup> A total of 3,772 complete responses were received, for an overall response rate of 21 percent.

Survey response rates were found to vary slightly but significantly by certain alumni characteristics.<sup>4</sup> The study team developed analysis weights to adjust for these differences in nonresponse by alumni characteristic as well as the different number of alumni in each program.

In an effort to boost response rates, the Abt team proposed – and OMB approved – the use of a small charitable donation incentive as an experiment to try to boost response rates. Half of the survey sample was offered the incentive of a \$2 donation to be made to the National Head Start Association for each completed survey. Unfortunately, the small incentive proved to have a negligible effect. While there is some evidence that more significant and prepaid incentives would help boost response rates, OMB has been reluctant to approve such incentives for CNCS data collection efforts in the past.

---

<sup>2</sup> Includes America’s Promise, Education Award Program (EAP), Homeland Security, and Tribes and Territories.

<sup>3</sup> Response quota was met or exceeded for every program and cohort (100 to 140 percent of quota achieved) and every stratum except NCCC 2005 (94 percent of quota achieved).

<sup>4</sup> Alumni from NCCC were more likely to respond than were those from ASN or VISTA, controlling for other factors. Alumni with higher levels of education were much more likely to respond than those with lower levels of education. Older alumni were the most likely to respond and younger alumni the least likely to do so.

## Key Findings

The 2016 AmeriCorps Alumni Outcomes findings are in line with those from previous studies that showed significant reported impacts of AmeriCorps service on future civic engagement, with AmeriCorps alumni contributing to their communities after service in a variety of ways. The key findings below are organized by research question, first presenting how participating in a national service program influenced members' career pathways, civic engagement, development of career-oriented soft and hard skills, and sense of community (Research Question #1). Next we present the key findings related to post-secondary and employment outcomes of AmeriCorps alumni, exploring how national service is serving as a pathway to post-secondary and/or employment success (Research Question #3). Finally we present how member outcomes varied by life stage and by types of service experience (Research Question #2).

### **Research Question #1: Impact of Service upon Civic Engagement, Career Skills and Sense of Community**

AmeriCorps service is found to have a significant positive effect on civic engagement; respondents were more likely to engage in all community service activities asked about in the survey post-AmeriCorps compared to pre-AmeriCorps. The biggest changes in likelihood of participating in civic engagement activities were seen in two items that indicate real action in alumni's current communities, with 71 percent very or completely likely to be helping to keep their communities safe and clean (compared to 42 percent prior to AmeriCorps service) and 70 percent very or completely likely to donate money or goods to a cause (compared to 40 percent prior to AmeriCorps service). Also, 91 percent of AmeriCorps alumni were registered to vote in the last presidential election, and of those, 94 percent voted, which is much higher than the national average of 58 percent of eligible voters who voted in 2012.<sup>5</sup>

AmeriCorps service is also perceived to have a significant effect upon alumni's sense of community in their current places of residence, with the biggest changes appearing in items that suggest an understanding of and a plan to address community needs. For example, 81 percent of respondents agreed or strongly agreed that they are aware of the important needs in their communities post-AmeriCorps, compared to 49 percent prior to AmeriCorps. Also, 79 percent of respondents agreed or strongly agreed that they are or plan to become actively involved in issues that positively affect their communities post-AmeriCorps, compared to 47 percent prior to AmeriCorps. AmeriCorps service seems to have had the strongest effect upon NCCC members; NCCC alumni were least likely to answer strongly agree or agree across all sense of community items pre-AmeriCorps, but those differences shrink to insignificance for all but two of the sense of community items post-AmeriCorps.

The survey data demonstrate a positive effect of AmeriCorps service upon cultural competency. The perceived impact was largest for the item "confidence interacting with people from different cultures or backgrounds," with 72 percent of respondents strongly agreeing and agreeing before AmeriCorps, and 93 percent strongly agreeing and agreeing after AmeriCorps. Again, the data suggest AmeriCorps service having the strongest effect in this regard on NCCC members. NCCC alumni reported more changes relating to broadened horizons and cross-cultural understanding than other program alumni. For

---

<sup>5</sup> <http://bipartisanpolicy.org/library/2012-voter-turnout/>

example, 87 percent of NCCC alumni agreed or strongly agreed that they “learned more about the ‘real world’ or ‘the rest’ of the world” compared to 79 percent and 76 percent of ASN and VISTA alumni respectively. Also, 80 percent of NCCC alumni agreed or strongly agreed that they re-examined their beliefs and attitudes about other people compared to 68 percent and 61 percent of ASN and VISTA alumni respectively. One respondent described the impact of service as follows:

---

*“I taught 4th grade in a rural, segregated school in the Mississippi Delta for three years... Although I had volunteered within underserved communities before, I had never felt fully a part of these communities (having been raised in middle class privilege), and had not truly understood the issues and challenges facing children in high needs populations... My students and their families changed my life: after my service in the Delta I moved to Massachusetts and taught at an inner city middle school for 5 years. I got my masters degree and have continued to teach at an elementary school in another district. I serve as the upper elementary representative on a district-wide Equity and Diversity Committee that works to help increase the cultural proficiency of teachers and staff throughout the district... My experiences during my time of service influence how I look at the world, work with my students, and live my life.”*

---

The survey found positive effect of AmeriCorps service upon self-efficacy measures as well. Some of the more notable shifts in competency pertained to an increased capacity among respondents to overcome opposition and deal with unforeseen circumstances. Once again, of the three programs, NCCC participants were the least likely to answer strongly agree or agree to the various self-efficacy measures prior to AmeriCorps; however, these differences became insignificant post-AmeriCorps.

### **Research Question #3: Impact of Service upon Members’ Post-Secondary and Employment Outcomes**

The survey found that AmeriCorps service had significant impacts upon alumni’s employment and career pathways. More than half of respondents (51 percent) said that serving in AmeriCorps opened up a career path for them that they might not have otherwise considered. More than two-fifths (42 percent) of alumni who were employed within six months after their AmeriCorps service said that their employment resulted from a connection made during their AmeriCorps service. These results did differ significantly by program, with 42 percent of AmeriCorps State and National alumni indicating that their employment resulted from a connection made during their AmeriCorps service compared to 46 percent for VISTA and just 15 percent for NCCC. The low percentage for NCCC may be explained by the fact that NCCC members serve with multiple organizations across a region during their service, whereas VISTA and ASN members are much more likely to serve with and build lasting connections with one organization.

One respondent described the impact of AmeriCorps on their educational and career trajectory in this way:

---

*“Before AmeriCorps, I had flunked out of college and was working dead end customer service and food service jobs. After AmeriCorps, I had my choice of several colleges who were willing to overlook my early struggle in school. I developed a passion for teaching while serving in a school. When I returned to college, I studied education and soon after school I began working with individuals with autism. I’ve now received a master’s degree in behavior analysis and therapy and specialize in autism and behavioral disorders.”*

---

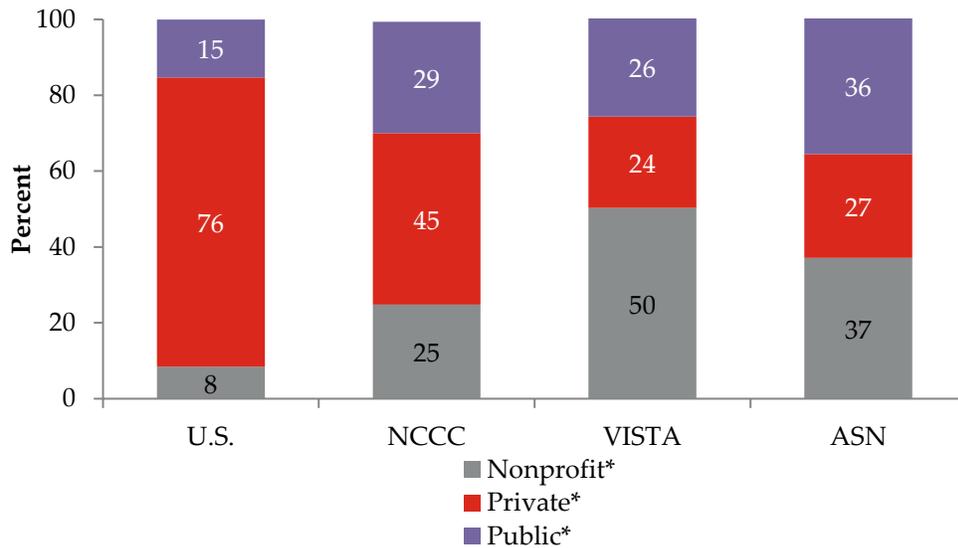
When seeking a job or career advice, one-third of alumni reported contacting their AmeriCorps network some of the time. Thirteen percent contact this network often or always, but more than half (53 percent) reported never contacting their AmeriCorps network when looking for work or career advice. This finding suggests some potential for growth in terms of building up an AmeriCorps alumni network and communicating the value of this network to alumni. Furthermore, nine percent of respondents answered that their AmeriCorps experience did not help them develop a career path, often citing a lack of knowledge and underappreciation of the AmeriCorps experience among future employers. This finding presents an opportunity to engage employers in a career network for alumni and to emphasize the career skills developed during service to interest employers in the AmeriCorps alumni talent pool.

Almost two-fifths of employed alumni are working in the nonprofit or social service sector, while just over one-third are in the public sector and around one-quarter are in the private sector. In contrast, many more U.S. workers are employed in the private sector (76 percent) than in the public sector (15 percent) or the nonprofit sector (8 percent).<sup>6</sup> Employment by sector did vary significantly by AmeriCorps program as well, with the highest percentage of nonprofit employment (50 percent) seen among VISTA alumni (see Exhibit ES-1 below).

---

<sup>6</sup> U.S. private and public sector employment percentages are estimated using seasonally adjusted preliminary July 2016 data from the U.S. Bureau of Labor Statistics (BLS): 122 million Americans employed in the private sector and 22 million Americans employed in the public sector ([http://www.bls.gov/news.release/empsit.t17.htm#ces\\_table1.f.p](http://www.bls.gov/news.release/empsit.t17.htm#ces_table1.f.p)). The proportion of U.S. private sector employment in nonprofit organizations is estimated at 10 percent from a 2014 BLS study ([http://www.bls.gov/opub/ted/2014/ted\\_20141021.htm](http://www.bls.gov/opub/ted/2014/ted_20141021.htm)). This figure may slightly underestimate nonprofit employment since only 501(c)3 organizations were counted.

### Exhibit ES-1. Employment Sector by Program



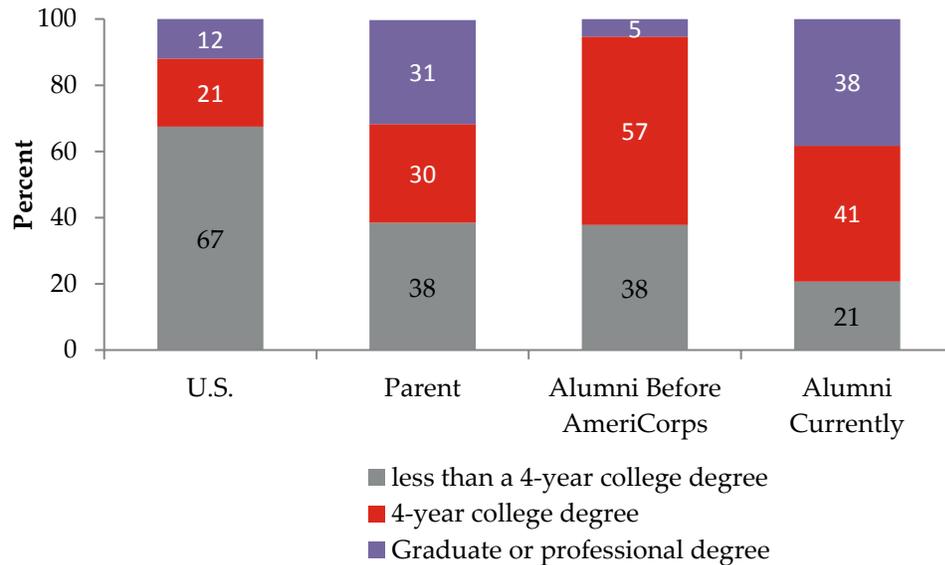
\* Difference between programs is statistically significant at the p = 0.05 level.

The education award is helping many AmeriCorps alumni further their education and pay back student loans. More than two-fifths (42 percent) of alumni used the education award to pursue college or graduate school, and one-third of alumni used the award to repay student loans. Survey respondents also indicated that the education award allowed them to pursue a career path, including 28 percent who used the award to supplement their income and allow them to continue working in lower-paying jobs at nonprofit organizations.

Regarding educational outcomes, the survey corroborates a finding of an administrative data match completed by the Abt team on behalf of CNCS earlier this year, namely that AmeriCorps alumni are considerably better educated than the population at large. According to the survey responses, nearly two-fifths of alumni currently have a graduate degree, and another two-fifths have a four-year degree as their highest educational attainment. According to the U.S. Census Bureau, 33 percent of adults aged 25 or older had a bachelor's degree or higher in 2015.<sup>7</sup> AmeriCorps alumni, per the survey, more than double that rate with roughly 79 percent having a bachelor's degree or higher. This current educational attainment did vary by program, with roughly two-fifths of AmeriCorps State and National and VISTA alumni reporting having a graduate degree, whereas just one-fifth of NCCC alumni had attained a graduate degree at the time of the survey. This also represents an improvement compared to the educational attainment of alumni members' parents or primary caregivers, among whom 61 percent have a bachelor's degree or higher.

<sup>7</sup> <http://www.census.gov/hhes/socdemo/education/data/cps/2015/tables.html>

## Exhibit ES-2. Highest Level of Education of AmeriCorps Alumni and Their Parents



### Research Question #2: Variations in Impacts Based on Service Experience and Life Stage

The 2016 survey found significant positive associations between alumni's satisfaction level with their AmeriCorps service and the studied outcomes, controlling for outcomes before AmeriCorps (if applicable), AmeriCorps program, and demographic variables (race/ethnicity, gender, and parental education). The survey also showed small negative associations between the age of respondents – used as a proxy for life stage – and the various outcomes, with older alumni scoring slightly lower on outcomes than younger alumni.

The vast majority of respondents reported high satisfaction levels with AmeriCorps; 87 percent of alumni were satisfied or very satisfied with their overall service experience. More than 90 percent of alumni strongly agreed or agreed with the statements “I felt I made a difference in the life of at least one person,” “I felt I made a contribution to the community,” and “I gained an understanding of the community(s) where I served.” Alumni who were in an individual placement had a slightly less positive service experience than alumni performing team-based service or in some other arrangement – an average score of 3.9 versus 4.1, a finding that held up when controlling for AmeriCorps program.

While a high percentage of alumni were satisfied or very satisfied with their AmeriCorps service, there was some variation in the satisfaction levels which allowed for an analysis of the effect of service experience upon the various outcomes of interest. For example, one of the largest identified associations was with career-oriented skills, where a difference of one point on the service experience scale is associated with a difference of 0.7 points on the impact of AmeriCorps on career-oriented skills scale. Also, alumni who rated their service one point higher than other alumni on the service experience scale were four percentage points more likely to be employed and seven percentage points more likely to have a graduate degree than similar alumni.

The 2016 survey found either no impact or very small negative impacts of service on the various outcomes of interest as respondent's age increased. This variation by life stage could be explained by the fact that older alumni have had more opportunities for other significant experiences in their lives to affect the outcomes of interest, which minimized the impact of AmeriCorps on those same outcomes.

### Recommendations for Future Surveys

The study team provides the following recommendations for CNCS' future survey research based on their experience administering the 2016 AmeriCorps Alumni Outcomes Survey:

- **Budget 15 months for survey efforts in the future** to allow more time for each phase of the project.
- **Keep the estimated burden to a maximum of 20 minutes per survey** to increase response rates.
- **Implement panel maintenance strategies** to maintain up-to-date contact information for new cohorts of AmeriCorps alumni.
- **Include a small and creative nonmonetary incentive** with a mailed survey invitation or contact update request.

### Recommendations for Next Steps in Research

The 2016 AmeriCorps Alumni Outcomes Survey effort provided a wealth of information on the perceived impacts of national service on range of outcomes important to alumni's current communities. CNCS now has multiple descriptive studies that suggest positive impacts of national service on AmeriCorps members and their civic engagement and contributions to society as a whole. Some of the strongest impacts were seen among former NCCC members, with significant differences in pre-service scores on cultural competency and sense of community compared to ASN and VISTA disappearing in the higher post-service scores on those same scales. CNCS might **explore the characteristics of NCCC program design** – such as team vs. individual placement and multiple placements per year – **to identify the specific factors contributing to the positive experience and positive changes** NCCC members are reporting post-service.

While the 2016 survey effort achieved enough responses to produce meaningful estimates of desired outcomes for the AmeriCorps alumni population, the strength of the evidence is limited by the self-reported and descriptive nature of the data collection effort. CNCS might **explore more rigorous studies, involving pre- and post-service surveys or including a comparison group**, for example those who applied to AmeriCorps but did not end up serving as members.

CNCS may also want to review and compare the educational and employment outcome data gathered by the 2016 survey and by the National Student Clearinghouse and planned U.S. Census Longitudinal Employer-Household Dynamics (LEHD) administrative data matches. Based on the Abt team's experience with the 2016 survey and the NSC match completed earlier this year, at least a portion of the outcome data of interest can be obtained via an administrative data match for a small fraction of the cost of a survey. The survey, of course, did gather far more information on other outcomes and is flexible enough – within burden constraints – to produce more in-depth data that might simply not exist in administrative datasets. However, if CNCS is interested in basic information on educational enrollment,

degree attainment and fields of study, **administrative data matches are relatively affordable to pursue year after year.**

Given the limitations of each kind of data collection effort, the Abt team recommends that CNCS continue to **build the evidence base using a range of methods to document the impacts of national service** on AmeriCorps members, the communities in which they serve, and the communities in which they later reside. These impacts are proving to be significant and important for the health of civic society and our country as a whole.

## I. INTRODUCTION

This technical report presents the results of the 2016 AmeriCorps Alumni Outcomes Survey, conducted by Abt Associates Inc. and its research affiliate, Abt SRBI, on behalf of the Corporation for National and Community Service (CNCS).

### Context

The Corporation for National and Community Service (CNCS) is a federal agency that has helped millions of Americans improve the lives of their fellow citizens through service. The AmeriCorps program engages more than 80,000 Americans in intensive service each year at nonprofits, schools, public agencies, and community and faith-based groups across the country. AmeriCorps provides opportunities for individuals to carry out national service as members within three main program streams: AmeriCorps State and National (ASN), AmeriCorps National Civilian Conservation Corps (NCCC) and AmeriCorps Volunteers in Service to America (VISTA). Through the AmeriCorps Alumni Outcomes Survey, CNCS aims to obtain rigorous, research-based information on the experiences of former national service members.

The 2016 AmeriCorps Alumni Outcomes Survey builds on CNCS's previous research by exploring how national service experiences successfully encourage a representative sample of national service alumni to stay civically engaged, develop and utilize skills gained through service, and/or pursue service-oriented careers and post-secondary and employment. Findings from this study will help CNCS and other interested stakeholders answer the following three core research questions:

- **Research Question #1:** In what ways does participating in a national service program influence members' career pathways, civic engagement, development of career-oriented soft and hard skills, and sense of community?;
- **Research Question #2:** In what ways, if any, do member outcomes vary by life stage and by types of service experience?; and
- **Research Question #3:** What are the post-secondary and employment outcomes of AmeriCorps alumni, and does national service serve as a pathway to post-secondary and/or employment success?

### Purpose

The AmeriCorps Alumni Outcomes Survey supports CNCS's mission to improve lives, strengthen communities, and foster civic engagement through service and volunteering. The survey documents the long-term civic participation, career pathways, education outcomes, and skill acquisition of AmeriCorps alumni. Data collected via the survey enables AmeriCorps to increase its effectiveness in encouraging members to stay civically engaged, develop career-focused soft and hard skills, and pursue service-oriented careers. It can also inform future policy and program decisions by helping CNCS learn about the types of national service programs and service experiences that most influence the long-term civic engagement and career choices of former members. Further, it will provide additional insight into how short-term benefits of service measured by the AmeriCorps Member Exit Survey grow, diminish, or change over time.

Although the survey was designed to provide direction for future AmeriCorps efforts, results from this survey may be of interest and use to other agencies and organizations that support or provide similar opportunities to address community needs through service.

## Organization of the Report

This report begins with a description of the study data collection procedure and analysis methodology. It then describes the demographics and service experiences of AmeriCorps alumni. The following sections explore the influence of national service on civic engagement, sense of community, self-efficacy and career-oriented skills, career pathways and employment, and post-secondary education. Differences in outcomes by life stage and service experience are also highlighted. The report concludes with key findings from the survey and recommendations for CNCS.

## II. METHODOLOGY

This section will briefly describe the AmeriCorps alumni outcomes survey data collection and analysis methodology. Details on the methodology can be found in the Final Survey Technical Report Appendixes.

### Survey Development Process

#### Survey Question Sources

The development of the 2016 AmeriCorps Alumni Outcomes Survey instrument began with the instrument used for a similar pilot survey of AmeriCorps alumni in 2015 as a starting point. The 2015 instrument was based in part on the AmeriCorps Exit Survey, and any questions taken from the exit survey and that met the 2016 survey needs were preserved with wording changes kept to a minimum. These minimal changes would allow CNCS to perform additional analyses of responses to the same questions by various program alumni over time.

The 2016 survey aimed to collect much of the same information from alumni as the 2015 pilot survey had and also collect more information about 1) specific hard and soft career skills alumni gained or developed during service; 2) how alumni use the AmeriCorps education award; and 3) how skills, work experience, and connections made during service influence alumni's career paths.<sup>8</sup>

The 2016 survey includes five new questions addressing the following career skills acquired or increased through AmeriCorps service:

1. Interpersonal skills
2. Personal qualities
3. Applied academic skills
4. Critical thinking skills
5. Non-industry specific workplace skills typically learned or performed through service in the three AmeriCorps programs (AmeriCorps State and National, VISTA, NCCC)

---

<sup>8</sup> For more information on the process used to develop new survey items, see Appendix A (Survey Development Process).

## Survey Pilot Procedures

To test the instrument used in 2016, a sample of 150 alumni was drawn from the sampling frame (see Appendix Exhibit A-1). Due to expectations that all or almost all NCCC alumni would be sampled for the survey, the pilot survey sample was drawn solely from ASN and VISTA. More recent cohorts were oversampled in an effort to obtain more responses.<sup>9</sup>

A total of 15 complete responses were obtained. The median length of response to the survey was 27.5 minutes, excluding the pilot-only questions. Several pilot respondents had very long completion times, suggesting that they started the survey, put it aside, and completed it much later. Therefore, the response burden estimate of 25 minutes appeared reasonable. All pilot respondents indicated that the survey instructions were clear and easy to follow and that the order of the questions made sense. Pilot respondents suggested changes to several items, and while some items were clarified based on this feedback, it was determined that some changes should not be made in order to maintain direct comparability with the AmeriCorps Exit Survey. Eight of the fifteen pilot respondents felt that the survey was too long. In response, the Abt team and CNCS identified 12 questions to drop from the survey and one question was added, reducing the estimated response burden by three minutes, from 25 to 22 minutes.

## Survey Items Mapped to Research Questions

The 2016 survey instrument contains a total of 45 questions that were designed to collect the information needed to answer the study research questions, with one additional question asking if the respondent would be willing to be contacted for a follow-up survey in the future. Exhibit II-1 below maps each survey question to the study's research questions. The exhibit also describes the analytic approaches used to interpret the survey results for each research question.<sup>10</sup>

### Exhibit II-1: Survey Items Mapped to Research Questions

1.1	In what ways does participating in a national service program influence members' career pathways?	Career Pathways: 4, 15, 16-23, 39b	Descriptive analysis
1.2	In what ways does participating in a national service program influence members' civic engagement?	Civic Engagement Pre-Service: 8  Civic Engagement Post-Service: 31, 34-37	Descriptive analysis  Paired t-test
1.3	In what ways does participating in a national service program influence members' development of career-oriented soft and hard skills?	Career Skills Pre-Service: 6-7  Career Skills Post-Service: 24-30	Descriptive analysis  Paired t-test

<sup>9</sup> For more information on the survey pilot procedures, see Appendix A (Survey Development Process).

<sup>10</sup> Analytic approaches are described in more detail later in this section.

RQ#	Research Question	Relevant Survey Items	Analytic Approaches
1.4	In what ways does participating in a national service program influence members' sense of community?	Sense of Community Pre-Service: 9  Sense of Community Post-Service: 38	Descriptive analysis  Paired t-test
2.1	In what ways, if any, do member outcomes vary by life stage?	Civic Engagement, Career Skills, and Sense of Community Indicators, Pre- and Post-Service (see previous rows for survey item numbers)  Life Stage: 40	Descriptive analysis  Linear regression (life stage as a predictor of member post-service outcomes, controlling for pre-service outcomes and demographics)
2.2	In what ways, if any, do member outcomes vary by types of service experiences?	Civic Engagement, Career Skills, and Sense of Community Indicators, Pre- and Post-Service (see previous rows for survey item numbers)  Service Experiences: 10-12	Descriptive analysis  Linear regression (type of service experience as a predictor of member post-service outcomes, controlling for pre-service outcomes and demographics)
3.1	What are the employment outcomes of AmeriCorps alumni, and does national service serve as a pathway to employment success?	1, 1a, 1b, 1c, 2, 2a, 2a1, 15, 16-23, 39b	Descriptive analysis
3.2	What are the post-secondary outcomes of AmeriCorps alumni, and does national service serve as a pathway to post-secondary success?	1, 2, 2b, 2b1, 3, 5, 39a, 44	Descriptive analysis  This Research Question was also answered through the analysis of NSC data on postsecondary enrollment and completion (presented in a separate report)

### Survey Domains

The survey instrument in Appendix H is color-coded to identify which of the various survey domains each survey question corresponds to. The survey domains are:

- Career Pathways
- Career Skills
- Civic Engagement
- Demographic/Service Control
- Education
- Life Stage
- Sense of Community
- Service Experience

## Survey Sampling

### Eligibility Criteria

The potential respondent universe for the 2016 AmeriCorps Alumni Outcomes Survey consists of alumni of AmeriCorps programs:

- Whose last term of service ended in 2005, 2010, or 2013, corresponding to 10, 5, and 2 years before the survey administration;
- Whose last term of service was in one of the following AmeriCorps programs: AmeriCorps State and National (ASN);<sup>11</sup> AmeriCorps National Civilian Community Corps (NCCC); and AmeriCorps Volunteers in Service to America (VISTA);
- For whom total length of service across all terms of service is greater than or equal to 84 days full time equivalency (FTE), which is equivalent to completing at least one reduced half time term of service;
- For whom length of service in most recent term was greater than zero days;
- For whom total length of service did not exceed the time elapsed between the minimum age of service and their exit year;<sup>12</sup>
- For whom length of service of most recent term did not exceed the time elapsed between the minimum age of service and their exit year.<sup>13</sup>

The restriction to participants with a total service time greater than or equal to 84 days FTE is to ensure that participants have sufficient exposure to AmeriCorps program for it to have an impact.

The restriction to participants with a service time in their final term of greater than zero days is to ensure that the alumni were correctly associated with the eligible program. Information besides total length of service is only available regarding the most recent program; programs in which the participant served during earlier terms are not known.

### Sample Distributions across Programs and Cohorts

The universe is stratified by time since last service (10, 5, and 2 years; or 2005, 2010, and 2013 alumni) and program (ASN, NCCC, and VISTA). The sample drawn was limited to participants for whom an email address and one of either a mailing address or phone number is available. The focus on participants for whom contact information is available represents a trade-off between coverage error on the one hand and nonresponse and sampling error on the other.<sup>14</sup> The study team recognizes that restricting the sampling

---

<sup>11</sup> Includes America's Promise, Education Award Program (EAP), Homeland Security, and Tribes and Territories.

<sup>12</sup>  $((\text{exit year of last term} - \text{year of birth} - x) \times 365.25)$ , where  $x$  = minimum age of service - 1. For individuals who served multiple terms or who served one term with ASN, minimum age of service of 17 was used. For individuals who served one term with NCCC or VISTA, minimum age of service of 18 was used. One was subtracted from minimum age of service to account for rounding error due to exit year only being available without month and date.

<sup>13</sup>  $((\text{exit year of last term} - \text{year of birth} - x) \times 365.25)$ , where  $x$  is as defined above and minimum date of service is 17 for people whose last term of service was in ASN and 18 for people whose last term of service was in NCCC or VISTA.

<sup>14</sup> For more information on the tradeoff between coverage and nonresponse error, see Appendix B (Survey Sampling).

frame to participants with an email address and either a phone number or mailing address was not a complete solution to the problem of contact information. Much of the contact information in the sampling frame was collected when the participant applied to AmeriCorps and has not been updated since. As described below, the data collection procedure included multiple steps to improve the quality of contact information and increase the likelihood of successfully reaching a participant.

Desired sample sizes for the nine program by cohort strata were calculated using optimal allocation procedures.<sup>15</sup> The size of the universe, the population from which the sample was drawn, and the desired sample sizes for the nine strata are shown in Exhibit II-2, below.

## Exhibit II-2. Universe and Sample Sizes for AmeriCorps Alumni Outcomes Survey

Cohort	Program			Total
	ASN	VISTA	NCCC	
<i>Universe</i>				
2005	17,628	4,493	883	<b>23,004</b>
2010	24,954	6,294	730	<b>31,978</b>
2013	18,483	4,574	1,307	<b>24,364</b>
<b>Total</b>	<b>61,065</b>	<b>15,361</b>	<b>2,920</b>	<b>79,346</b>
<i>Sample Frame</i>				
2005	7,566	2,137	527	<b>10,230</b>
2010	24,805	6,277	729	<b>31,811</b>
2013	18,479	4,573	1,304	<b>24,356</b>
<b>Total</b>	<b>50,850</b>	<b>12,987</b>	<b>2,560</b>	<b>66,397</b>
<i>Responses Expected</i>				
2005	491	182	153	<b>826</b>
2010	613	356	176	<b>1,145</b>
2013	551	271	357	<b>1,179</b>
<b>Total</b>	<b>1,655</b>	<b>808</b>	<b>686</b>	<b>3,149</b>

## Survey Administration

### Summary of Data Collection Schedule

The 2016 AmeriCorps Alumni Outcomes Survey opened on May 31, 2016, roughly two weeks after the data collection effort was approved by OMB on May 15, 2016. An advance postcard was mailed to the first survey replicate of 11,917 alumni on May 23, 2016, and survey invitations were emailed and mailed on May 31, 2016, one week later after the Memorial Day holiday (see Exhibit II-3 for survey sample by program and cohort). Phone follow-up to sample members who had not already completed a web survey began on June 6 and continued until the survey closed on July 13, 2016. Email and mailed reminders were sent according to the Data Collection Schedule in Appendix C.

### Exhibit II-3. First Replicate Survey Sample

Cohort	Program			Total
	ASN	VISTA	NCCC	
2005	1,312	447	347	<b>2,106</b>
2010	4,272	1,130	729	<b>6,131</b>
2013	2,081	567	1,032	<b>3,680</b>
<b>Total</b>	<b>7,665</b>	<b>2,144</b>	<b>2,108</b>	<b>11,917</b>

<sup>15</sup> For more information, see Appendix B (Survey Sampling).

As of June 28, 2016, roughly two-thirds of the way through the planned data collection period, alumni in the first sample replicate had completed 2,079 surveys. An additional 1,071 completed interviews were required to reach the 3,150 called for in the design. Less the 500 expected completes (i.e., 200 phone + 300 web) from existing sample, Abt SRBI estimated that an additional 571 completed surveys were needed.<sup>16</sup> The projected shortfall of 571 completed surveys led the study team to recommend adding sample in order to reach the design quota of 3,150 total responses. Accounting for the finite pool of NCCC sample remaining, this yielded the following amount of sample to be added:

**Exhibit II-4. Second Replicate Survey Sample**

Cohort	Program			Total
	ASN	VISTA	NCCC	
2005	2,853	744	180	<b>3,777</b>
2010	0	458	0	<b>458</b>
2013	1,031	552	180	<b>1,763</b>
<b>Total</b>	<b>3,884</b>	<b>1,755</b>	<b>360</b>	<b>5,998</b>

CNCS agreed to add the second replicate on June 29, 2016, and Abt SRBI sent the initial survey invitation email to the additional sample members on July 1, 2016. The Data Collection Schedule in Appendix C indicates the full set of reminders sent to both sample replicates.

When Abt SRBI projected that the survey design quota had been effectively reached for each program and cohort, a final reminder was sent on July 11, 2016 and the survey was closed on July 13, 2016.<sup>17</sup> A total of 3,772 complete responses were received, for an overall response rate of 21 percent. Overall, 819 surveys were completed over the phone and 2,953 surveys were completed online. Exhibit II-5 below shows the number of survey responses by program and cohort. Exhibit II-6 on the next page displays cumulative survey responses by mode overlaid with the survey invitation and reminder timeline.

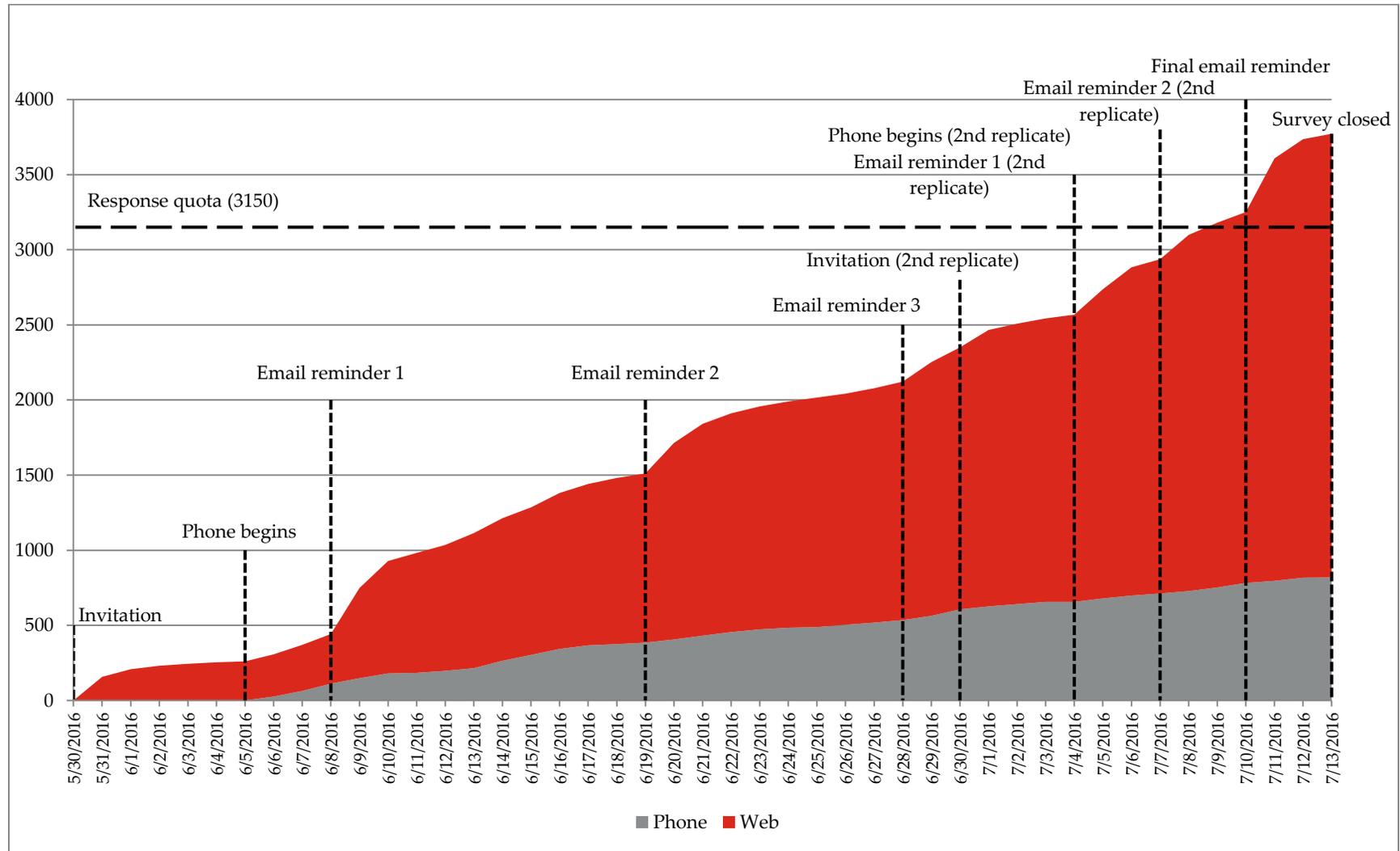
**Exhibit II-5. AmeriCorps Alumni Outcomes Survey Responses**

Cohort	Program			Total
	ASN	VISTA	NCCC	
2005	498	188	144	<b>830</b>
2010	922	420	260	<b>1,602</b>
2013	669	295	376	<b>1,340</b>
<b>Total</b>	<b>2,089</b>	<b>903</b>	<b>780</b>	<b>3,772</b>

<sup>16</sup> For more details on the expected completed estimates, see Appendix C (Data Collection Protocol and Schedule).

<sup>17</sup> Response quota was met or exceeded for every program and cohort (100 to 140 percent of quota achieved) and every stratum except NCCC 2005 (94 percent of quota achieved).

**Exhibit II-6. Cumulative Responses by Mode**



The intentional sampling approach and a few other factors, such as the survey length and the shortened data collection period, led to the lower than expected survey response rate, which necessitated the addition of the second survey replicate two-thirds of the way through the data collection period. The factors leading to the lower than anticipated response rate are described in detail in Appendix C.

## Response Rates

The response rate is the proportion of interviews completed out of eligible cases sampled.<sup>18</sup> Overall, a weighted response rate of 22 percent was achieved.<sup>19</sup> By cohort, the highest response rates were achieved for NCCC alumni (32 percent), then alumni from VISTA (25 percent), and finally ASN alumni (20 percent).<sup>20</sup> By cohort, response rates were equal for alumni whose last term of service was in 2010 or 2013 (23 percent) and lowest for alumni whose last term of service was in 2005 (14 percent).<sup>21</sup>

An experiment was conducted to test whether a promise to provide a charitable donation on behalf of alumni who completed surveys would increase response rates. Although charitable donations have generally been found to be less effective than monetary incentives, it was thought that the commitment to public service on the part of AmeriCorps alumni might increase the effectiveness of charitable donations as an incentive.<sup>22</sup> Alumni were assigned at random with 50 percent probability into two conditions: a treatment condition (a promised \$2 donation to the National Head Start Association) and the control condition (no promise of an incentive). There was no statistically significant difference between the proportion of alumni in the treatment condition who responded (21.2 percent) and the proportion of alumni in the control condition who responded (20.9 percent).<sup>23</sup>

## Nonresponse Bias Analysis

The study team analyzed both unit and item nonresponse. Unit nonresponse explores the extent to which different characteristics of alumni were associated with nonresponse to the survey as a whole, while item nonresponse explores the extent to which different characteristics of alumni were associated with response rates to specific questions asked in the survey.

Unit nonresponse bias—the difference between respondents and the entire sample—was generally small. Exceptions were education and term type. Looking first at education, alumni with a bachelor’s degree or

---

<sup>18</sup> The rate is described as “estimated” because an adjustment is made to account for alumni who were determined to be ineligible during the course of the survey. Only deceased alumni were treated as being ineligible, on the assumption that they had died prior to the survey being fielded. Only a very small number of deceased alumni were identified in the course of the survey (see Appendix D for details).

<sup>19</sup> Following OMB (2006), response rates are reported in both weighted and unweighted forms. The weighted response rate is calculated using the design weight, which is the inverse of the probability of selection. In each of the nine strata (i.e., the three cohorts of 2005, 2010, and 2013 by the three programs of ASN, NCCC, and VISTA), the design weight is calculated as  $N/n$ , where  $N$  is the total number of alumni eligible for selection in that stratum and  $n$  is the total number of alumni actually selected in that stratum. Unweighted response rates can be found in Appendix D.

<sup>20</sup> For more detail, see Appendix Exhibit D-2.

<sup>21</sup> For more detail, see Appendix Exhibit D-3.

<sup>22</sup> See, e.g., Edwards et al. (2002) and Warriner et al. (1996), although both focus on mail surveys.

<sup>23</sup>  $\chi^2_{DF=1} = 0.353; p > .1$ . Unweighted proportions; includes ineligible alumni. No significant difference is obtained regardless of whether design weights were used or ineligible alumni are excluded.

above prior to their last term of service were over-represented among respondents while those with unknown education were under-represented. Alumni who had served a full term were over-represented.

Because bivariate analyses of survey response do not account for correlations between explanatory variables, survey response was modeled using logistic regression. The results of the model include the following:

- Alumni from NCCC were far more likely to respond than were those from ASN or VISTA, controlling for other factors.
- Alumni from more recent cohorts were much more likely to respond than those from 2005.
- Alumni with higher levels of education were much more likely to respond than those with lower levels of education.
- Older alumni were the most likely to respond and younger alumni the least likely to do so.
- The percentage of education award used had a modest effect; a much stronger effect, however, was seen for those for whom the amount of the education award was not known.
- Term type also had a modest effect, with alumni who had served full-time in their last term of service being somewhat more likely to respond than those who had not served full-time.
- After controlling for other factors, gender, total term length, and number of terms of service were not significantly associated with survey response.

Item response rates—the percentage of eligible respondents answering a given item—were high, with an average of 99.7%. The lowest response rate for a specific item was 94.2%, well above the point at which OMB (2006) requires an item-specific nonresponse analysis. Text box items had the lowest item response rates and checkbox items the highest.

Finally, the data were weighted. Weighting took place in three steps:

- Base weights were calculated for each stratum as the inverse of probability of selection.
- Nonresponse was adjusted for by collapsing the propensity scores (i.e., probabilities of response estimated from the logit model described above) into five adjustment classes which were weighted as the inverse of the response rate of the adjustment class.
- Raking ensured that the weighted distribution of respondents matched the alumni population with respect to cohort, program, age × sex, education, last term of service type, total length of service, and education award usage.

The margin of error for the whole sample was  $\pm 2.04\%$ . Minimum detectable effects were 6.1% for comparisons between ASN and NCCC, 5.6% between ASN and VISTA, 7.3% between NCCC and VISTA, 6.4% between 2005 and 2010, 6.8% between 2005 and 2013, and 5.9% between 2010 and 2013.

## Psychometric Analysis

The AmeriCorps alumni survey several scale questions composed of a series of items hypothesized to measure different aspects of a single underlying domain or construct. The survey includes a scale of AmeriCorps alumni's service experience as well as scales assessing alumni's civic engagement, sense of community, cultural competency, and self-efficacy both before and since AmeriCorps. The survey also includes scales that assess current civic self-efficacy and the extent to which AmeriCorps helped alumni acquire or increase career-oriented skills.

To determine how to condense the information in these scales into a limited number of composite measures, the study team undertook a psychometric analysis of each scale. The psychometric analyses involved exploratory factor analyses and examinations of internal consistency (see Appendix E for details).

Overall, the scales in the survey show a high degree of internal consistency. All scales (with the exception of the service experience scale) appear to correspond to a single underlying theoretical construct, and all scales and subscales have a Cronbach's alpha of 0.80 or higher (except for the negative aspects of service subscale, which will not be used in the analysis). The five domains of the career-oriented skills scale (interpersonal skills, personal conduct and workplace behaviors, applied academic skills, critical thinking skills, and workplace skills) appear to load on a single factor as well.

Scale composites were created by taking the mean of all relevant items. The benefit of this approach is its transparency and interpretability (the composite is on the same scale as the constituent items). Creating scale composites using factor loadings would reduce transparency and interpretability and complicate comparisons between pre-AmeriCorps and post-AmeriCorps versions of the same scale. In addition, since the factor loadings for all items in a scale are positive and relatively similar, the practical difference between a simple mean composite and a factor-loaded composite would be minimal.

The following scale composites were created:

- One service experience subscale (positive aspects of service experience only, negative subscale omitted)
- Two civic engagement scales (pre-AmeriCorps and post-AmeriCorps)
- One civic self-efficacy scale
- Two sense of community scales (pre-AmeriCorps and post-AmeriCorps, voting item omitted)
- Two cultural competency scales (pre-AmeriCorps and post-AmeriCorps)
- Two self-efficacy scales (pre-AmeriCorps and post-AmeriCorps)
- One career-oriented skills scale (combining the interpersonal skills, personal conduct and workplace behaviors, applied academic skills, critical thinking skills, and workplace skills items)

## Analytic Approaches

This report uses the following analytic methodologies to address the study research questions:

### Descriptive Comparisons

Weighted percentages representing the estimated proportion of AmeriCorps alumni who fall into each response category are reported. Categorical survey questions are presented in text, tables, or bar charts. In bar charts, only a subset of response options is presented. For continuous variables, weighted median, mean, standard deviation, minimum, and maximum are presented. If there is a significant difference in response patterns by program or cohort (using a linear regression for continuous variables and a chi-square test for categorical variables), these differences are mentioned in the report.<sup>24</sup> Complete tables for

---

<sup>24</sup> Statistical tests were conducted in SAS using the PROC SURVEYFREQ or PROC SURVEYREG procedure to account for the stratified sampling design and include a finite population correction (since a large proportion of

each survey item (overall and disaggregated by program and cohort) are presented in Appendix G. Significant differences by program or cohort are denoted by asterisks.

### **Pre-Post Scale Comparisons**

To address Research Question #1 (In what ways does participating in a national service program influence members' career pathways, civic engagement, development of career-oriented soft and hard skills, and sense of community?), the study team conducted comparisons of alumni outcomes before and after participation in AmeriCorps. All outcome scales with a pre-AmeriCorps and post-AmeriCorps version (civic engagement, sense of community, cultural competency, and self-efficacy) were compared with a paired t-test. Paired t-tests account for the correlation between pre-AmeriCorps and post-AmeriCorps responses provided by the same individual. The average differences between pre and post scores are presented along with a p-value.

### **Regression Models**

To address Research Question #2 (In what ways, if any, do member outcomes vary by life stage and by types of service experience?), the study team conducted linear regressions of outcome measures to test whether life stage and service experience measures are significant predictors of the outcome after controlling for the corresponding pre-AmeriCorps outcome measure (if applicable), AmeriCorps program, and demographic variables (race/ethnicity, gender, and parental education). Regressions where life stage or service experience are significant predictors of the outcome are described in the text along with a p-value.

### **Qualitative Analysis**

The AmeriCorps Alumni Outcomes Survey contains two types of text response questions: short responses explaining the selection of an "other" category in a survey item, and long responses describing the alumna's or alumnus' experience in and after AmeriCorps. Where possible, the short responses were upcoded to existing closed-ended responses to the survey question.<sup>25</sup> The long responses were coded to a set of key themes in NVivo.<sup>26</sup> Frequencies of key themes in each item are described in the text.

### **Limitations**

As with any survey in which not all invited individuals participate, the accuracy of population estimates based on the AmeriCorps Alumni Outcomes Survey are tempered by the possibility of differential nonresponse. The study team weighted survey responses on all information available on the sample frame, but unmeasured differences between respondents and nonrespondents could lead to error in population estimates. Also, since the survey is cross-sectional (rather than longitudinal), it relies on alumni to report their attitudes and beliefs as of many years ago (before they served in AmeriCorps).

---

the NCCC universe completed surveys). See Appendix D (Response Rates and Nonresponse Adjustment) for more details.

<sup>25</sup> Short responses to the following survey questions were upcoded: Q1.1, Q1.2, Q1.3, Q1.4, Q1c, Q2, Q3, Q5, Q10, Q11, Q16.1, Q16.2, Q16.3, Q16.4, Q16b, Q23, and Q44.

<sup>26</sup> Long responses to the following survey questions were coded in NVivo: Q2a1, Q2b1, Q13a, Q14a, Q15a, and Q21a.

Given the lag between administration of the survey and the time period referenced, it is possible that responses to pre-AmeriCorps attitude and belief scales will be subject to recall bias. To reduce the potential for respondents to purposely report higher scores on the post-AmeriCorps scales, the study team placed pre-AmeriCorps attitudes and belief scales at the beginning of the survey and post-AmeriCorps attitudes and beliefs scales near the end of the survey. Finally, since the study lacks an appropriate comparison group, no inferences about the impact of AmeriCorps relative to a counterfactual condition can be drawn.

### III. DEMOGRAPHICS OF AMERICORPS ALUMNI

This section describes the demographics of AmeriCorps alumni.

#### Age

The average age of AmeriCorps alumni is 34 (the median is 31). As expected, the average age differs from cohort to cohort, decreasing with more recent cohorts (38 for the 2005 cohort, 34 for the 2010 cohort, and 31 for the 2013 cohort). On average, NCCC are the youngest alumni (28) compared to ASN alumni (34) and VISTA alumni (37). This report will use age as a proxy measurement for life stage in order to address Research Question #2 (In what ways, if any, do member outcomes vary by life stage and service experience?).

#### Exhibit III-1. Current Age

Age	Median	Mean	Standard Deviation	Minimum	Maximum
Age (in years)	31	34	48	18	91

Notes: (N=3772, Missing=20)

Source: AmeriCorps Alumni Outcomes Survey Q40 (In what year were you born?)

#### Gender

A larger proportion of AmeriCorps alumni are female compared to male. Sixty eight percent of alumni are female, while only 31 percent are male. One percent of alumni identify as other gender.

By program, VISTA had the largest proportion of female alumni (73 percent female), followed by ASN (68 percent) and NCCC (55 percent). The 2005 cohort had more women than the other cohorts included in the survey (73 percent female), followed by the 2013 cohort (68 percent) and finally the 2010 cohort (65 percent).

#### Race and Ethnicity

The majority, 63 percent, of AmeriCorps alumni are White (not Hispanic/Latina/o). Fifteen percent are Black, 12 percent are Hispanic/Latino, and the remaining 10 percent are some other race. This distribution is similar to the race and ethnicity makeup of the United States at large. NCCC has the largest proportion of White (not Hispanic/Latina/o) alumni, 84 percent, compared to 69 percent White in VISTA and 61 percent White in ASN.

## Parental Education

The parents of AmeriCorps alumni varied in their highest educational attainment. About one third of parents of AmeriCorps alumni had completed a graduate degree, while about one quarter had completed a bachelor’s degree. Twenty percent of the parents of AmeriCorps alumni had completed a high school diploma or less education (see Exhibit III-2).

**Exhibit III-2. Highest Education Level of the Person or People Who Raised You**

Highest Education Level of the Person or People Who Raised You	n	(%)
Less than high school	142	5
High school degree (HS Diploma or GED)	513	15
Some college	326	10
2-year college degree (AA)	199	5
Technical or vocational degree or certificate	127	3
4-year college degree (BA, BS)	1020	26
Some graduate school	124	4
Graduate or professional degree (MA, MS, MD, JD, Ph.D., etc.)	1294	31
Other	11	0

Notes: (N=3772, Missing=16)

Source: AmeriCorps Alumni Outcomes Survey Q44 (What is the highest level of education completed by the person or people who raised you?)

This finding suggests AmeriCorps service members are coming from families that are more educated than the average population across the country. According to the U.S. Census Bureau, 32.5 percent of adults aged 25 or older in the U.S. had a bachelor’s degree or higher in 2015.<sup>27</sup> By comparison, roughly 61 percent of the parents of AmeriCorps members have a bachelor’s degree or higher.

## Current State of Residence

AmeriCorps alumni are now spread across the country. The largest concentrations of alumni are in California, New York, Texas, and Florida, which is consistent with the total population distribution around the country. There are also large AmeriCorps alumni populations in Washington, Pennsylvania, Minnesota, and Massachusetts though the concentrations in these states are less consistent with national population levels (See Appendix Exhibit G-131). There are fewer alumni in the Southeast and Southwest states than would be predicted based on the distribution of the U.S. population (see Exhibit III-3 below).

**Exhibit III-3. Region of Residence**

Current Region of Residence	AmeriCorps Alumni (%)	U.S. Population, 2016 Q1 (%)
-----------------------------	-----------------------	------------------------------

<sup>27</sup> <https://www.census.gov/hhes/socdemo/education/data/cps/2015/tables.html>

New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)	7	5
Mideast (Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania)	19	15
Great Lakes (Illinois, Indiana, Michigan, Ohio, and Wisconsin)	13	14
Plains (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota)	9	7
Southeast (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia)	18	26
Southwest (Arizona, New Mexico, Oklahoma, and Texas)	7	13
Rocky Mountain (Colorado, Idaho, Montana, Utah, and Wyoming)	6	4
Far West (Alaska, California, Hawaii, Nevada, Oregon, and Washington)	20	17
U.S. Territory (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands) or outside the U.S.	1	N/A

Notes: (N=3772, Missing=81)

Source: AmeriCorps Alumni Outcomes Survey Q45 (What U.S. state do you currently live in?); Bureau of Economic Analysis<sup>28</sup>

#### IV. AMERICORPS SERVICE EXPERIENCE

This section describes AmeriCorps alumni’s service experience.

##### Service Setting

Approximately half of alumni performed their service on a team with other AmeriCorps members, while one-third of alumni were in individual placements and the rest had other AmeriCorps members at their host organization but did not work on a team with them (Appendix Exhibit G-85). As expected, nearly 100 percent of NCCC alumni reported performing team-based service, compared to half of ASN alumni and 28 percent of VISTA alumni (see Exhibit IV-1 below).

##### Exhibit IV-1. Team-based Service or Individual Placement by Program\*

Team-based Service or Individual Placement	ASN (%)	VISTA (%)	NCCC (%)
Team-based service	50	28	98
Individual placement	28	46	1

<sup>28</sup> <http://www.bea.gov/iTable/iTableHtml.cfm?reqid=70&step=30&isuri=1&7022=36&7023=0&7033=-1&7024=non-industry&7025=0&7026=91000,92000,93000,94000,95000,96000,97000,98000&7027=2016&7001=336&7028=2&7031=0&7040=-1&7083=levels&7029=36&7090=70>

There were other AmeriCorps members at my organization, but I did not typically work on a team with them	18	23	0
Other	4	3	0

Notes: (N=3772, Missing=0)

\* Difference between programs is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q10 (Did you perform the majority of your AmeriCorps service as part of a team of service members or in an individual placement?)

Half of alumni served at a nonprofit or community-based organization, while two-fifths worked in a K-12 public school (Appendix Exhibit G-86). NCCC and VISTA alumni were most likely to serve at a nonprofit or community-based organization (80 percent and 73 percent, respectively, compared to 45 percent of ASN alumni; see Exhibit IV-2 below). Seventy-two percent of NCCC alumni served in an environmental agency or park and over a third served at a public agency not related to the environment.

### Exhibit IV-2. Type of Host Organization(s) Served in by Program

Type of Host Organization(s) Served in	ASN (%)	VISTA (%)	NCCC (%)
Preschool*	5	2	5
K-12 public school*	49	18	38
College campus*	4	11	5
Nonprofit or community-based organization*	45	73	80
Faith-based organization*	5	8	32
Senior center*	1	2	6
Environmental agency or park at the local, state, or national level*	13	5	72
Other public agency (not related to the environment)*	5	7	36
Other*	3	3	8

Notes: (N=3772, Missing=0)

Percentages do not sum to 100 because multiple responses were permitted.

\* Difference between programs is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q11 (In what type of service setting or for what type of host organization(s) did you perform your AmeriCorps service? Please select all that apply.)

### Satisfaction with Service Experience

Question 12 in the survey contains a series of statements related to each alumni's service experience. The data were collected using a Likert scale, and then analyzed based on the percent of respondents who strongly agreed, agreed, neither agreed nor disagreed, disagreed, and strongly disagreed. Overall, a majority of alumni reported positive service experiences, strongly agreeing or agreeing with positive statements and strongly disagreeing or disagreeing with negative statements (see Appendix Exhibit G-87). Over 90 percent of alumni strongly agreed or agreed with the statements "I felt I made a difference in the life of at least one person," "I felt I made a contribution to the community," and "I gained an understanding of the community(s) where I served." Approximately two-thirds or fewer alumni strongly agreed or agreed with the statements "I did things I never thought I could do," "I re-examined my beliefs

and attitudes about other people,” “I figured out what my next steps are in terms of career/professional goals,” or “I figured out what my next steps are in terms of educational goals.” Very few alumni strongly agreed or agreed with negative statements about their service experience.

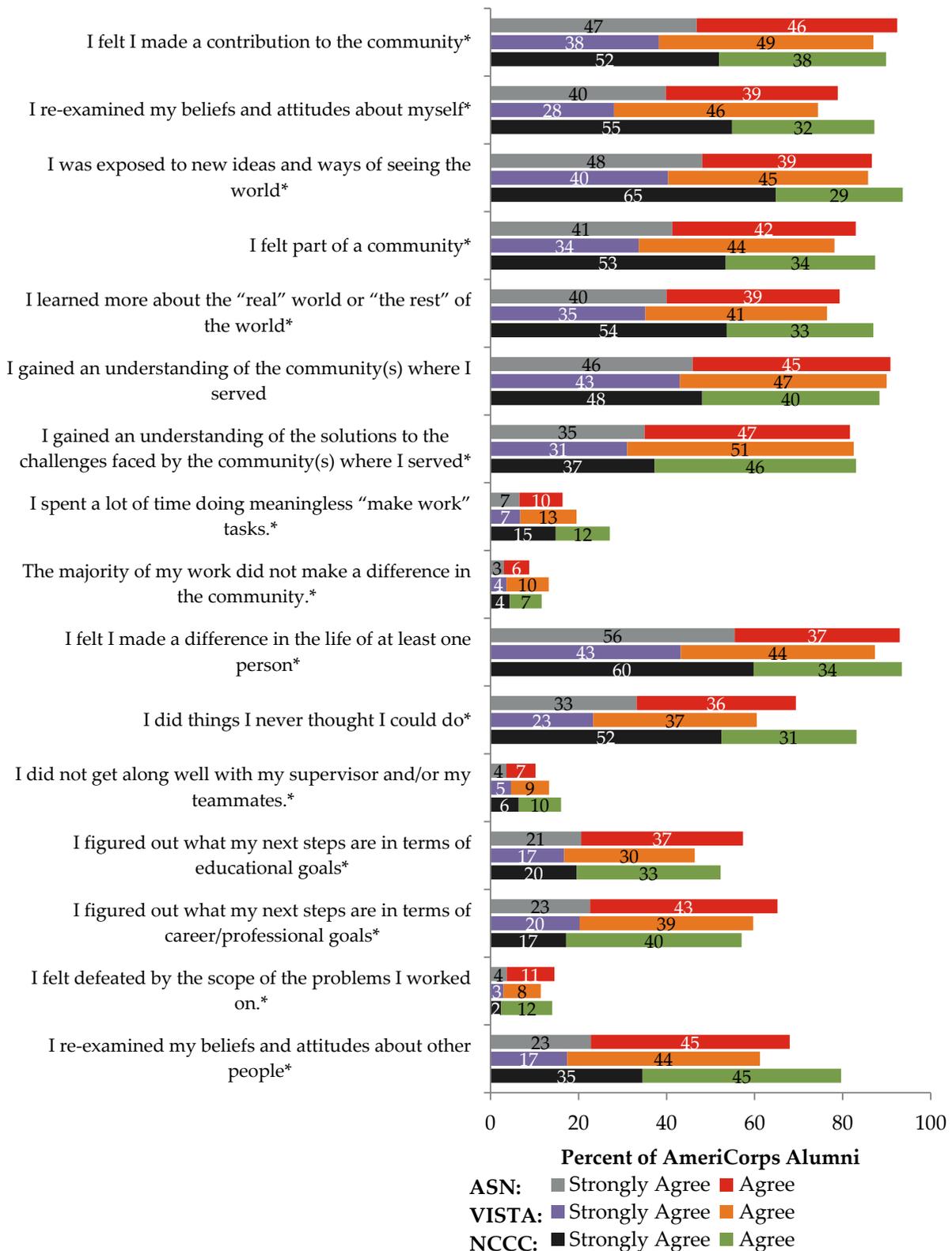
Responses varied slightly by AmeriCorps program (see Exhibit IV-3 below). NCCC alumni reported more changes relating to broadened horizons and cross-cultural understanding than other program alumni:

- Eighty-seven percent of NCCC alumni agreed or strongly agreed that they “learned more about the ‘real world’ or ‘the rest’ of the world” compared to 79 percent and 76 percent of ASN and VISTA alumni respectively.
- Eighty percent of NCCC alumni agreed or strongly agreed that they re-examined their beliefs and attitudes about other people compared to 68 percent and 61 percent of ASN and VISTA alumni respectively.

NCCC alumni also reported more personal growth in the following measures:

- Eighty-three percent of NCCC alumni agreed or strongly agreed that they did things they never thought they could do compared to 69 percent and 60 percent of ASN and VISTA alumni respectively
- Eighty-seven percent of NCCC alumni agreed or strongly agreed that they re-examined beliefs and attitudes about themselves compared to 79 percent and 74 percent of ASN and VISTA alumni respectively.

### Exhibit IV-3. AmeriCorps Service Experience by Program



\* Difference between programs is statistically significant at the p = 0.05 level.

Eighty-seven percent of alumni were satisfied or very satisfied with their overall service experience (see Appendix Exhibit G-88). NCCC alumni were more likely to be very satisfied (61 percent) than ASN alumni (54 percent) or VISTA alumni (45 percent). There were also differences by cohort; three-fifths of 2005 alumni were very satisfied with their overall service experience, compared to half of alumni from the 2010 and 2013 cohorts.

When asked to elaborate on why AmeriCorps was or was not a satisfying service experience, respondents identified several contributing factors, most of which reflect a positive service experience (see Exhibit IV-4 below). A total of 15 percent of respondents identified the relationships and connections made during AmeriCorps, as well as the opportunity it gave them for personal growth as important factors in their service experience. Respondents also viewed their opportunity to make a positive impact in their work (16 percent), the ability to engage in larger issues and expand their understanding (9 percent), as well as professional job skills in a chosen field (13 percent) and general professional skills and experience gained (7 percent) as primary reasons for their satisfactory service experience. One respondent’s answer encapsulates many of these reasons for satisfaction with the AmeriCorps service experience:

*“AmeriCorps allowed me the chance to give back, to travel, to experience new cultures and viewpoints, to be exposed to the issues facing various communities, to build my leadership, problem-solving and communication skills, to meet and work with other service-minded young people and honestly it was a huge resume builder.”*

Another response goes more in-depth about the impact of the service experience on the respondent:

*“I felt AmeriCorps enabled me to serve in a much-needed capacity in a struggling community. The work not only provided me with additional skills, experience, and brought me into contact with a new community, the placement also made me more aware of issues of diversity, racism, systemic inequality, and institutional failure. This brought more urgency and meaning to my career goals and aspirations, pushing me to commit to further understanding and improving the tough issues I encountered.”*

However, nine percent of respondents reported being dissatisfied with their service experience. Most of these respondents cited dissatisfaction with their particular host organization and the lack of ability to engage in meaningful tasks and grow professionally, while others expressed frustration with the difficulty of living on such a small stipend. One respondent explains his/her frustration, saying:

*“It just wasn’t [a satisfying service experience]. I enjoyed the work I was able to do when I was allowed to do it, but I never felt like I made much of an impact; I spent most of my time sending out form thank you notes to our donors. That’s not what I wanted to do with my life OR what I wanted from my AmeriCorps experience.”*

When separating the data by program, the factors mentioned above remained fairly consistent, with one exceptions. One is that significantly more NCCC alumni (23 percent) experienced personal growth than ASN (14 percent) and VISTA (11 percent) alumni.

**Exhibit IV-4. Overall Satisfaction with AmeriCorps Service**

Theme Coded from Open-Ended Responses	(%)
Had a positive impact on others	16
Personal growth, clarified life direction or outlook	15
Relationships & connections formed	15

Skills and experience gained, created opportunities	13
Dissatisfied with program or organization, barriers, challenges	9
Opportunity to engage in larger issues, expanded understanding	9
Professional skills and experience gained	7

Notes: (N=3772, Missing=145)

Percentages do not sum to 100 because multiple themes could have been included in a single response.

Source: AmeriCorps Alumni Outcomes Survey Q13a (Please tell us more about why you were [lower case fill from Q13] with your AmeriCorps service experience: [open-ended text box].)

Eighty-two percent of alumni agree or strongly agree that AmeriCorps was a defining personal experience (see Appendix Exhibit G-89). NCCC alumni were more likely to strongly agree (60 percent) than ASN alumni (43 percent) or VISTA alumni (37 percent). When respondents were asked how AmeriCorps was or was not a defining personal experience, most explained that it provided general professional skills and experience (34 percent, see Exhibit IV-5 below) and led to personal growth (25 percent) and. One respondent provided his/her account of these two reasons:

*“AmeriCorps was a defining experience for me because it not only made me more empathetic to those in need, but made me realize how much of a difference can be made by a small group of dedicated people with limited resources. I was stretched beyond my comfort zone and knowledge/ability level and that can’t help but change you. Having worked in journalism after my service, I think it’s also given me a level of credibility and even surprise from people who find out I did a year of service in AmeriCorps, meaning I’m not just talking the talk, but have walked the walk.”*

Respondents also described their AmeriCorps service as a defining personal experience because it was an opportunity to engage in larger issues and expand their understanding (13 percent). One respondent detailed,

*“It showed me that I mattered. I made friends who I still have to this day. I serve in a community that I started in with AmeriCorps. I trust people more. I am willing to do in order to see a difference rather than shrug my shoulders and walk away.”*

There were no notable differences in response patterns by program and cohort.

#### **Exhibit IV-5. AmeriCorps was a Defining Personal Experience**

<b>Theme Coded from Open-Ended Responses</b>	<b>(%)</b>
Skills and experience gained, created opportunities	34
Personal growth	25
Opportunity to engage in larger issues, expanded understanding	13
Helped clarify my career path, discovered passion (career & education)	7
Not sure, was not a defining personal experience, no personal impact	6
Relationships & connections formed	4
Introduced me to a new community or culture	3

Notes: (N=3772, Missing=219)

Percentages do not sum to 100 because multiple themes could have been included in a single response.

Source: AmeriCorps Alumni Outcomes Survey Q14a (Please explain how AmeriCorps was or was not a defining personal experience: [open-ended text box])

Seventy-three percent of alumni agree or strongly agree that AmeriCorps was a defining professional experience, somewhat less than the proportion of alumni who agree or strongly agree that AmeriCorps was a defining personal experience (see Appendix Exhibit G-90). Alumni from the 2005 cohort were more likely to strongly agree (39 percent) than alumni from the 2010 and 2013 cohorts (31 percent each). When asked to explain why AmeriCorps was or was not a defining professional experience, more than one fourth (27 percent) of respondents stated that their AmeriCorps experience helped them clarify their career path or discover their passion, for instance, in teaching, or in pursuing a graduate degree in a specific field. The following examples indicate how AmeriCorps was a defining professional experience for two separate respondents:

*It defined my career for me. Gave me a launch pad into a career in social services when I was struggling to be hired elsewhere. I feel my Americorps experience significantly changed my life. It strongly impacted my confidence, skill level, knowledge of community issues, and advanced my career."*

*"Americorps helped me identify the issues and beliefs I cared most about, and allowed me to inventory my professional strengths to help identify a career path where I could put my strengths to work on issues I cared about."*

Among these 27 percent, not all respondents answered that the AmeriCorps experience led them to their career path in their field of service. Many respondents viewed AmeriCorps as helping to define a career path by demonstrating to them what they did not want to pursue as a career/field of study. As one respondent says,

*"I learned more about what I did not want to do than what I did want to do during my time in AmeriCorps, which is very valuable information."*

Additionally, respondents felt that AmeriCorps was a defining professional experience because they gained professional experience and job skills in their chosen field (13 percent), gained more general job experience and professional development (12 percent), and had the opportunity to engage in larger issues and expand their understanding of relevant concepts such as poverty, and education (6 percent). In contrast, 9 percent of respondents answered that their AmeriCorps experience did not help them find a career path, often citing lack of knowledge and underappreciation of the AmeriCorps experience among future employers, as well as a lack of "hard" skills that translate into future professional opportunities:

*"The soft skills were defining, but employers don't understand AmeriCorps or know how to utilize those skills in the workplace."*

When looking at the data by AmeriCorps program, NCCC respondents were the least likely to state that their service led to a career path; a slightly lower than average percentage of the NCCC participants identified AmeriCorps as helping them clarify a career path (22 percent), and a higher than average percentage of NCCC participants (12 percent) responded that AmeriCorps did not open up a career path. This finding makes sense given that NCCC members spend one year working with a variety of organizations in a different locations, so by design these alumni may be less likely to find work for an organization with which they served or in the field in which they served. There were no notable differences when separating the data by cohort.

**Exhibit IV-6. AmeriCorps was a Defining Professional Experience by Cohort**

Theme Coded from Open-Ended Responses	(%)
Helped clarify my career path, discovered passion (career & education)	27
Professional skills and experience gained	13
Skills and experience gained, created opportunities	12
Not sure, didn't open a career path or didn't find a job	9
Opportunity to engage in larger issues, expanded understanding	6

Notes: (N=3772, Missing=206)

Percentages do not sum to 100 because multiple themes could have been included in a single response.

Source: AmeriCorps Alumni Outcomes Survey Q15a (Please explain how AmeriCorps was or was not a defining professional experience: [open-ended text box])

**Exposure to Diversity and New Communities**

Eighty-three percent of alumni served on a diverse AmeriCorps team (Appendix Exhibit G-113). Among those alumni who served on a diverse team, 70 percent said that the experience caused a somewhat or very positive change in their views of people with different backgrounds (Appendix Exhibit G-114). NCCC alumni were most likely to report working on a diverse team (93 percent), followed by ASN alumni (85 percent) and VISTA alumni (76 percent).

Eighty percent of alumni agree or strongly agree that AmeriCorps exposed them to new communities and cultures (Appendix Exhibit G-115). Among those 80 percent of alumni exposed to new communities, 94 percent agree or strongly agree that the experience broadened their perspective on society and understanding of different communities (Appendix Exhibit G-116). NCCC alumni were most likely to strongly agree that AmeriCorps exposed them to new communities and cultures (63 percent, compared to 44 percent of ASN alumni and 39 percent of VISTA alumni). Alumni from the 2005 cohort who were exposed to new communities and cultures were most likely to strongly agree that the experience broadened their perspective (57 percent, versus 48 percent for 2010 alumni and 47 percent for 2013 alumni).

**Service Experience Measures**

The second study research question (In what ways, if any, do member outcomes vary by life stage and by types of service experience?) necessitates the creation of a series of measures of AmeriCorps service experience to use as predictors of civic, career, and educational outcomes in a linear regression model. These service experience measures are simplified versions of survey items described earlier in this section. The first service experience measure indicates whether the alumna or alumnus performed team-based service, were in an individual placement, or had some other arrangement (see Exhibit IV-7 below).

**Exhibit IV-7. Team-based Service or Individual Placement**

Team-based Service or Individual Placement	(%)
Team-based service	48
Individual placement	31

There were other AmeriCorps members at my organization, but I did not typically work on a team with them or Other	22
---	----

Notes: (N=3772, Missing=0)

Source: AmeriCorps Alumni Outcomes Survey Q10 (Did you perform the majority of your AmeriCorps service as part of a team of service members or in an individual placement?)

The second service experience measure describes the type of organization(s) in which alumni served. Approximately half of alumni served in educational organizations, half in nonprofit organizations, and one-fifth in public agencies (see Exhibit IV-8 below). Note that many alumni served in more than one type of organization.

**Exhibit IV-8. Type of Host Organization(s) Served in**

Type of Host Organization(s) Served in	n	(%)
Educational organization (preschool, K-12 public school, or college campus)	1730	49
Nonprofit, community-based, or faith-based organization, or senior center	2313	54
Environmental agency or park at the local, state, or national level or other public agency (not related to the environment)	1120	19

Notes: (N=3772, Missing=0)

Percentages do not sum to 100 because multiple responses were permitted.

Source: AmeriCorps Alumni Outcomes Survey Q11 (In what type of service setting or for what type of host organization(s) did you perform your AmeriCorps service? Please select all that apply.)

To represent alumni’s satisfaction with AmeriCorps across a range of areas, the study team constructed a service experience scale by taking the average of all positively-phrased items in survey question 12.<sup>29</sup> All of the items were on a five-point scale (1 = Strongly Disagree to 5 = Strongly Agree). The average score on the positive service experience scale was 4.0. In other words, the average response across the positive service experience items was “Agree.”

There are several correlations between the service experience measures. Alumni who were in an individual placement had a slightly less positive service experience than alumni performing team-based service or in some other arrangement (average score of 3.9 versus 4.1), a finding that held up after controlling for AmeriCorps program. Alumni who served in an educational organization had slightly more positive service experiences than alumni who served in nonprofit or public organizations (average score of 4.1 versus 4.0). In addition, alumni serving in education or public organizations were more likely to work on a team than alumni serving in nonprofit organizations (see Exhibit IV-9 below).

---

<sup>29</sup> Negatively-phrased items (items 8, 9, 12, and 15) were excluded from the scale because an exploratory factor analysis suggested that they contributed to a different theoretical construct than the positively-phrased items. This construct had insufficient internal consistency to serve as a separate measure. See Appendix E (Psychometric Analysis) for more details.

**Exhibit IV-9. Team-based Service or Individual Placement by Type of Host Organization\***

<b>Team-based Service or Individual Placement</b>			
Team-based service	51	45	66
Individual placement	25	33	21
There were other AmeriCorps members at my organization, but I did not typically work on a team with them or Other	24	22	12

Notes: (N=3772, Missing=0)

\* Difference between type of host organizations is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q10 (Did you perform the majority of your AmeriCorps service as part of a team of service members or in an individual placement?) and Q11 (In what type of service setting or for what type of host organization(s) did you perform your AmeriCorps service? Please select all that apply.)

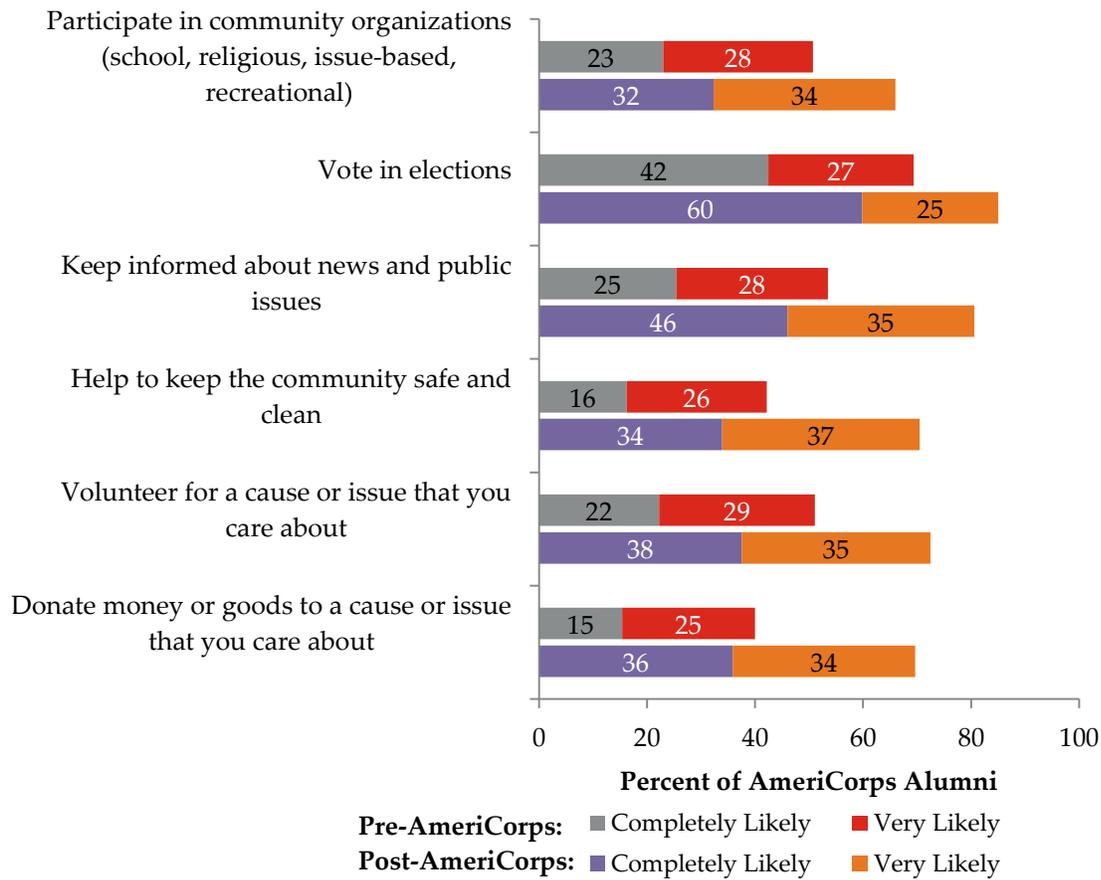
**V. INFLUENCE OF NATIONAL SERVICE ON CIVIC ENGAGEMENT**

This section describes the impact of AmeriCorps on alumni’s civic engagement, civic self-efficacy, and voting behavior. It also explores differences in impacts by life stage and service experience.

**Civic Engagement**

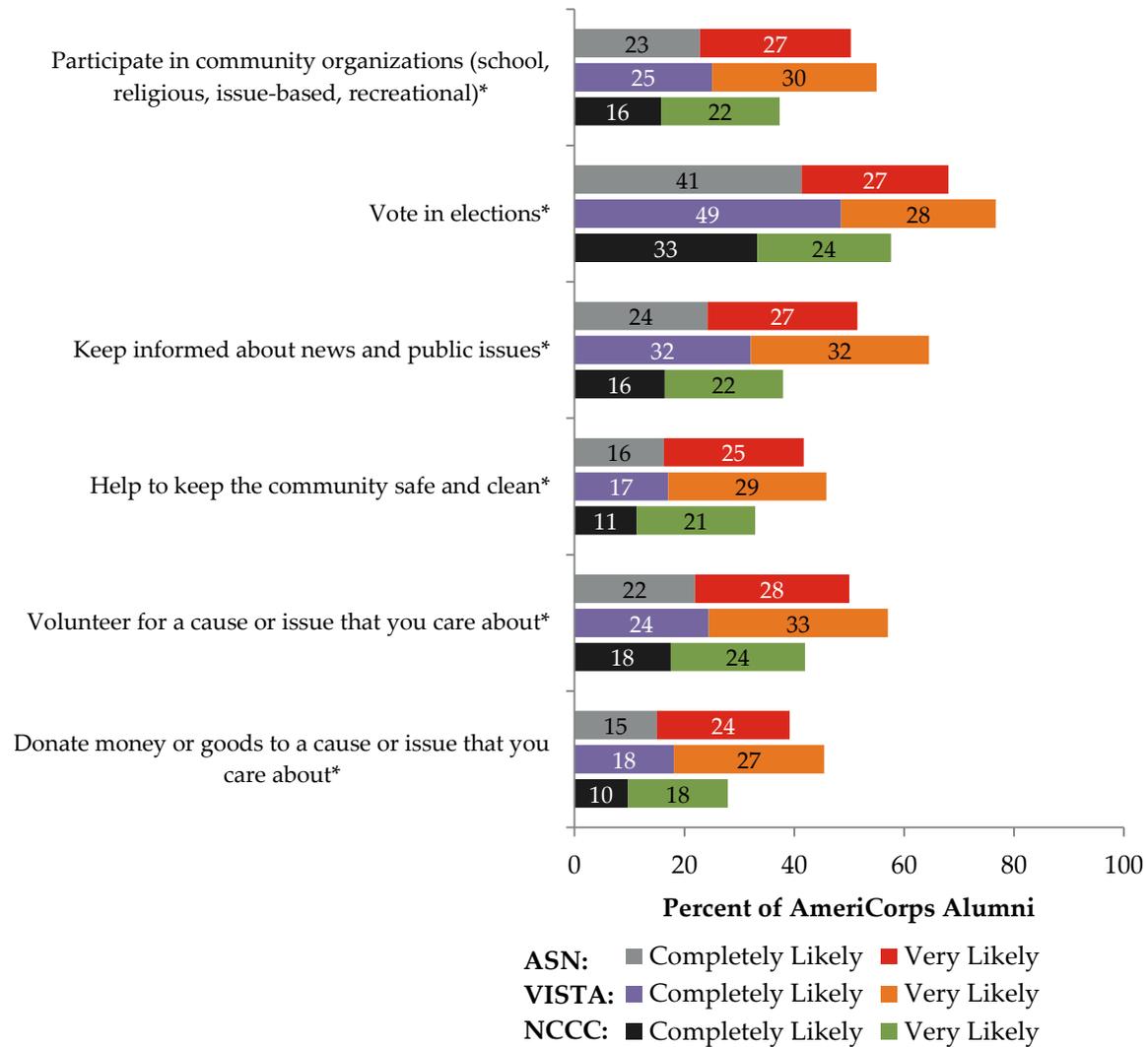
The survey included two questions (Q8 and Q31) asking respondents about their pre-AmeriCorps civic engagement and post-AmeriCorps civic engagement. Respondents ranked their likelihood of participating in a range of civic engagement activities on a scale from 1 to 5, where 1 = “Not at All Likely,” 2 = “Slightly Likely,” 3 = “Moderately Likely,” 4 = “Very Likely,” and 5 = “Completely Likely.” Overall, respondents were more likely to engage in all activities post-AmeriCorps compared to pre-AmeriCorps (see Exhibit V-1). The average difference between the pre- and post-AmeriCorps answers was 0.6 on a 5-point scale (p < .0001). The biggest changes seen in pre- and post- AmeriCorps civic engagement were on two items that indicate real action in alumni’s current communities, with 71 percent very or completely likely to be helping to keep their communities safe and clean (compared to 42 percent prior to AmeriCorps service) and 70 percent very or completely likely to donate money or goods to a cause (compared to 40 percent prior to AmeriCorps service).

### Exhibit V-1. Civic Engagement Pre- and Post-AmeriCorps



Pre-AmeriCorps, VISTA alumni were most likely to be involved across all of the civic engagement activities listed, followed by ASN and then NCCC (see Exhibit V-2). Post-AmeriCorps, however, the only significant differences between programs are on the “vote in elections” and “keep informed about news and public issues” items; VISTA had the highest likelihood, followed by ASN and then NCCC. On the same post-AmeriCorps civic engagement items, the 2005 cohort was slightly more likely to participate than the 2010 and 2013 cohorts (there were no significant differences pre-AmeriCorps).

## Exhibit V-2. Civic Engagement Pre-AmeriCorps by Program



\* Difference between programs is statistically significant at the  $p = 0.05$  level.

There is a positive association between the service experience scale and civic engagement post-AmeriCorps, controlling for civic engagement pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .0001$ ). A difference of one point on the service experience scale is associated with a difference of 0.4 points on the post-AmeriCorps civic engagement scale.

### Civic Self-Efficacy

The survey included one question (Q37) asking respondents about their civic self-efficacy. Respondents expressed how well they thought they would be able to do each civic activity on a scale from 1 to 5, where 1 = "Definitely Couldn't," 2 = "Probably Couldn't," 3 = "Not Sure," 4 = "Probably Could," and 5 = "Definitely Could." AmeriCorps alumni reported a high degree of civic self-efficacy; on average 85 percent of alumni said that currently they probably or definitely could do each activity, with most of the remainder answering "not sure." The weighted responses had an average of 4.2 (just above "probably").

Respondents felt most confident in their abilities to express views in front of a group of people (91 percent probably or definitely could) and identify individuals or groups who could help with a problem (89 percent probably or definitely could), but they felt less confident in being able to get others to care about a problem and creating a plan to address a problem (79 percent indicated they probably or definitely could for each of these last two items).

### Exhibit V-3. Civic Self-Efficacy

How well do you think you would be able to do each of the following?					
Create a plan to address the problem	1	3	16	49	30
Get other people to care about the problem	1	3	17	52	27
Organize and run a meeting	1	4	10	36	49
Express your views in front of a group of people	1	1	7	33	58
Identify individuals or groups who could help you with the problem	0	2	8	44	45
Express your views on the Internet or through social media	1	3	10	36	50
Call someone on the phone you had never met before to get their help with the problem	1	4	12	38	45
Contact an elected official about the problem	2	3	11	39	45

Notes: (N=3772, Missing=11-13)

Source: AmeriCorps Alumni Outcomes Survey Q37 (If you found out about a problem in your community that you wanted to do something about, how well do you think you would be able to do each of the following?)

There is a positive association between the service experience scale and civic self-efficacy, controlling for program, race/ethnicity, gender, parental education, age, and service setting ( $p < .0001$ ). A difference of one point on the service experience scale is associated with a difference of 0.3 points on the civic self-efficacy scale.

### Voting Behavior

The survey asked a few questions (Q34 to Q36) about current alumni voting behaviors. The responses showed that 91 percent of alumni registered to vote in last presidential election. Of those, 94 percent voted, which is much higher than the national average of 58 percent of eligible voters who voted in 2012.<sup>30</sup> VISTA alumni were most likely to have voted (98 percent), followed by ASN (94 percent) and NCCC (89 percent) alumni. The responses also showed that two-fifths of alumni voted in all elections offered in the last 12 months, while one-third voted in some elections. Forty-six percent of VISTA alumni and 48 percent of the 2005 cohort voted in all elections in the last 12 months.

<sup>30</sup> <http://bipartisanpolicy.org/library/2012-voter-turnout/>

## VI. INFLUENCE OF NATIONAL SERVICE ON SENSE OF COMMUNITY

This section describes the impact of AmeriCorps on alumni's sense of community. It also explores differences in impacts by life stage and service experience.

The survey included two questions (Q9 and Q38) asking respondents about their sense of community before and after AmeriCorps. The data were collected using a Likert scale, and then analyzed based on the percent of respondents who strongly agreed, agreed, neither agreed nor disagreed, disagreed, and strongly disagreed. More alumni strongly agree or agree to all sense of community items post-service compared to pre-service, with the largest shift in response frequencies coming from agree to strongly agree (see Exhibit VI-1 below). The biggest changes appear in items that suggest an understanding of and a plan to address community needs:

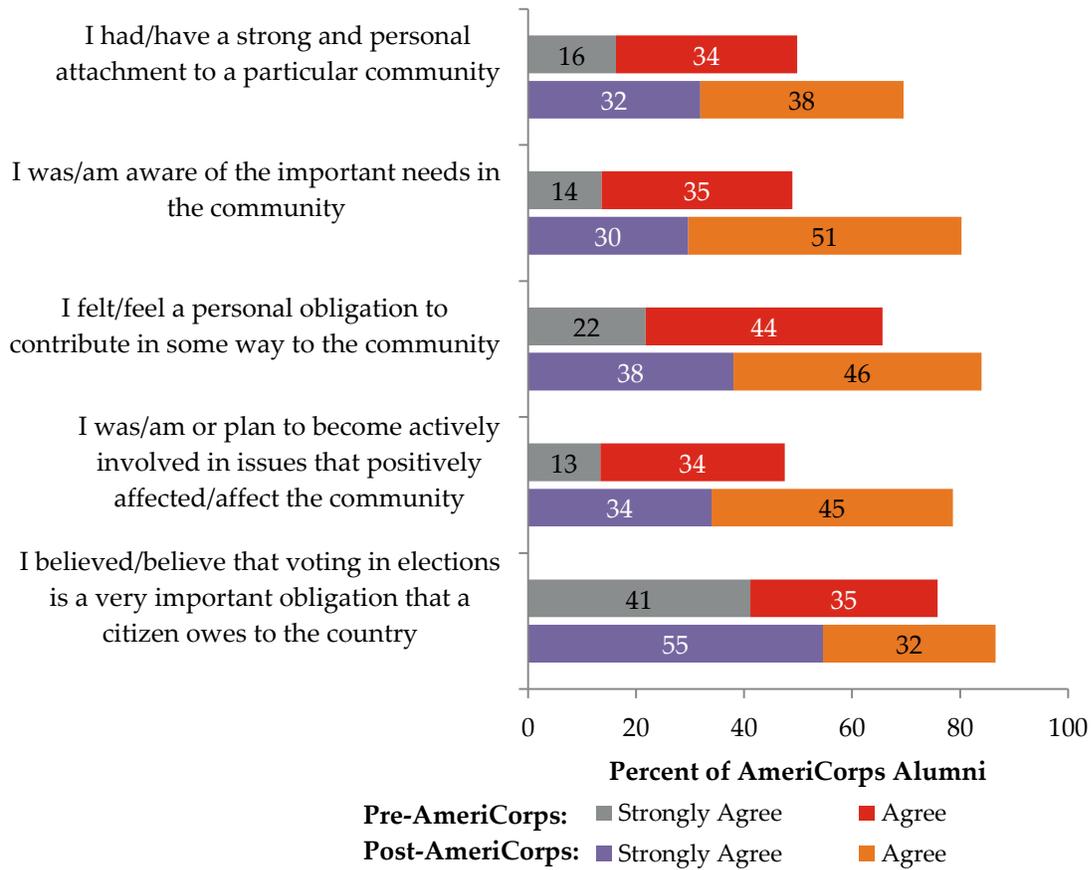
- Eighty-one percent of respondents agreed or strongly agreed that they are aware of the important needs in their communities post-AmeriCorps, compared to 49 percent prior to AmeriCorps.
- Seventy-nine percent of respondents agreed or strongly agreed that they are or plan to become actively involved in issues that positively affect their communities post-AmeriCorps, compared to 47 percent prior to AmeriCorps.

There was an average difference between the pre- and post-AmeriCorps sense of community scales of 0.6 on a 5-point scale ( $p < .0001$ ).<sup>31</sup>

---

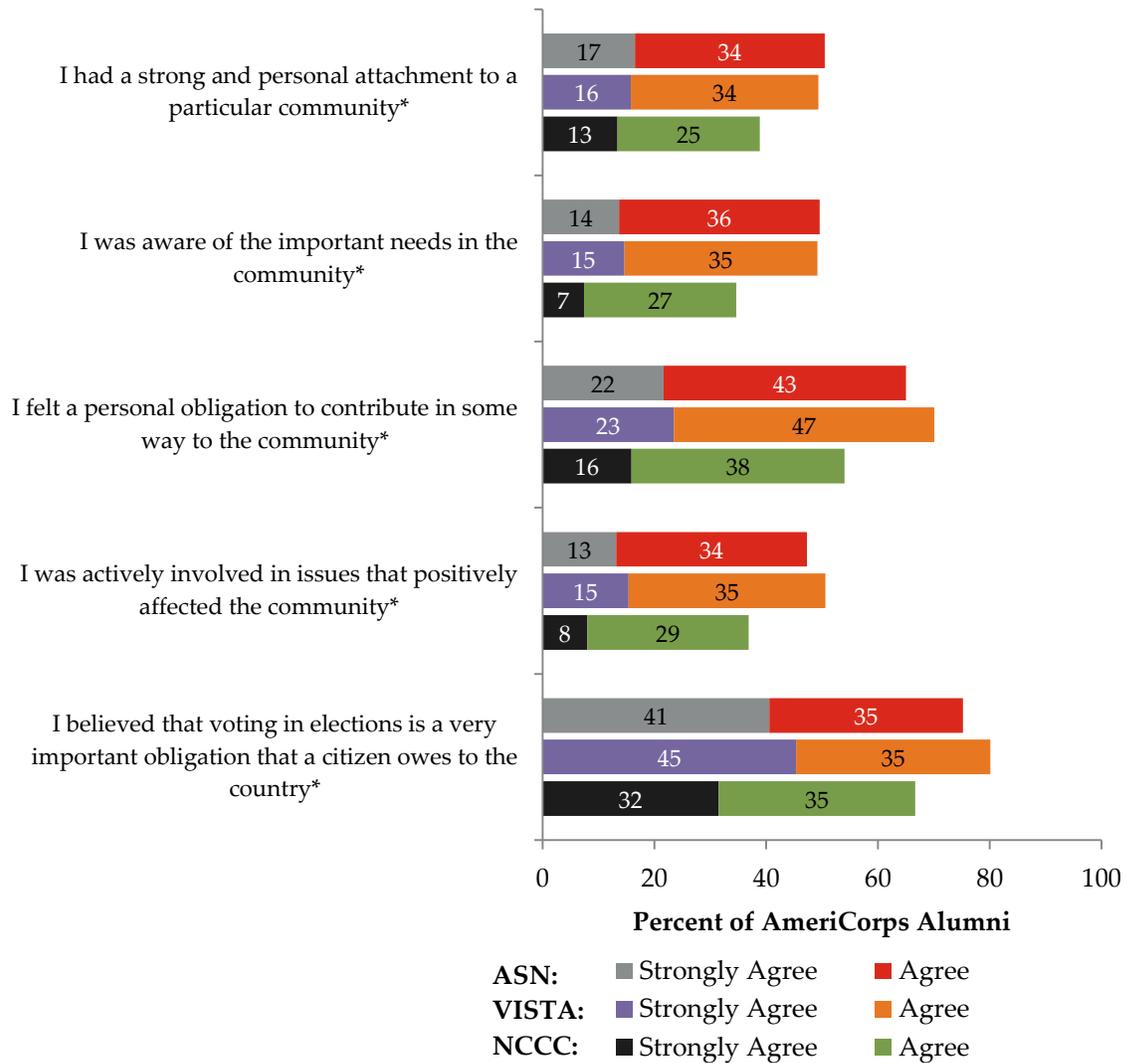
<sup>31</sup> The item "I believed/believe that voting in elections is a very important obligation that a citizen owes to the country" was excluded from the sense of community scale because it appears to measure a different underlying construct. See Appendix E (Psychometric Analysis) for more details.

**Exhibit VI-1. Sense of Community Pre- and Post-AmeriCorps**



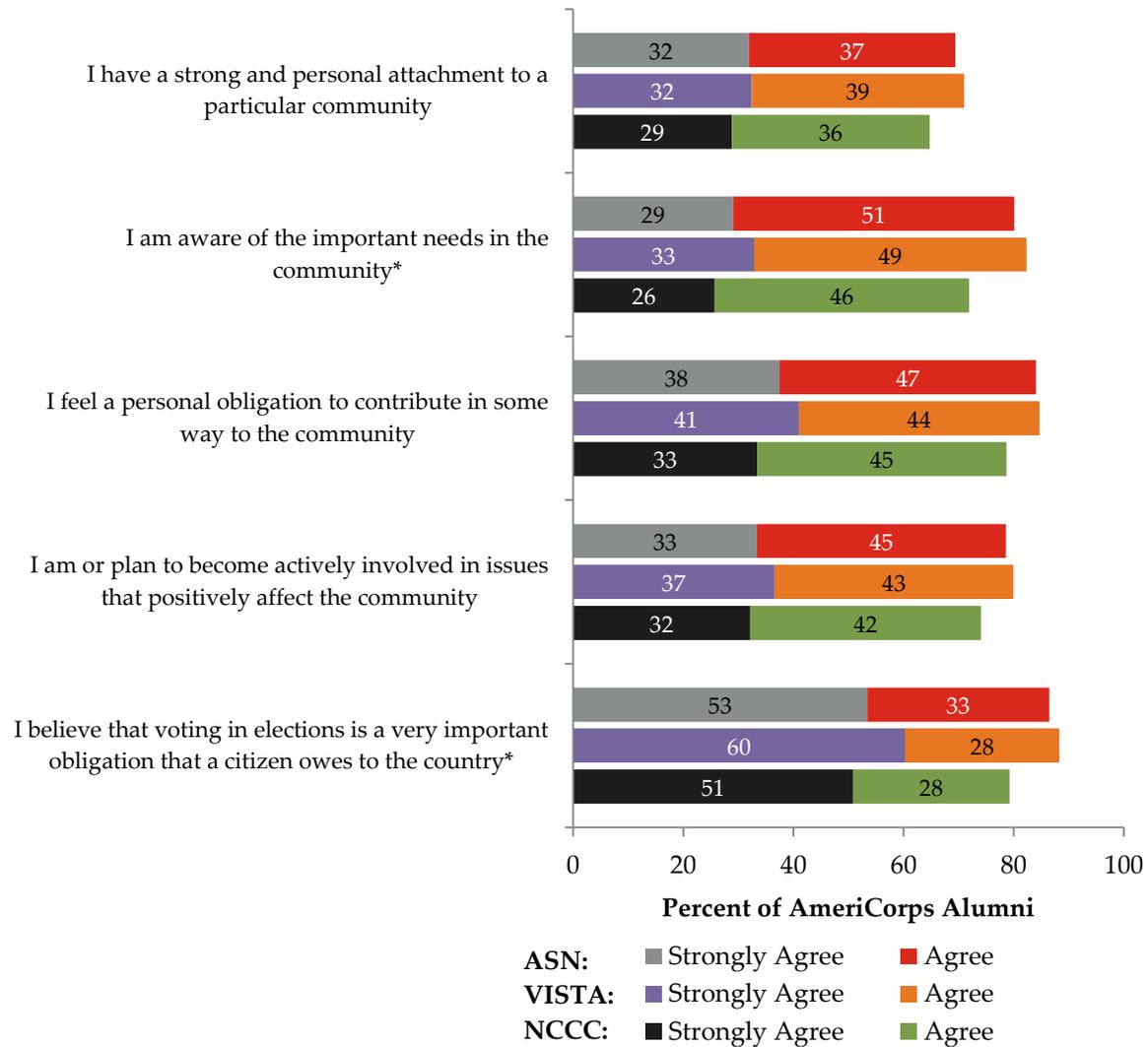
NCCC alumni were least likely to answer strongly agree or agree across all sense of community items pre-AmeriCorps (see Exhibit VI-2). However, differences with other programs shrink to insignificance for all but two items post-AmeriCorps (see Exhibit VI-3).

**Exhibit VI-2. Sense of Community Pre-AmeriCorps by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

**Exhibit VI-3. Sense of Community Post-AmeriCorps by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

There is a positive association between the service experience scale and sense of community post-AmeriCorps, controlling for sense of community pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting (p < .0001). A difference of one point on the service experience scale is associated with a difference of 0.4 points on the post-AmeriCorps sense of community scale.

**VII. INFLUENCE OF NATIONAL SERVICE ON SELF-EFFICACY AND CAREER-ORIENTED SKILLS**

This section describes the impact of AmeriCorps on alumni’s cultural competency, self-efficacy, and career-oriented skills. It also explores differences in impacts by life stage and service experience.

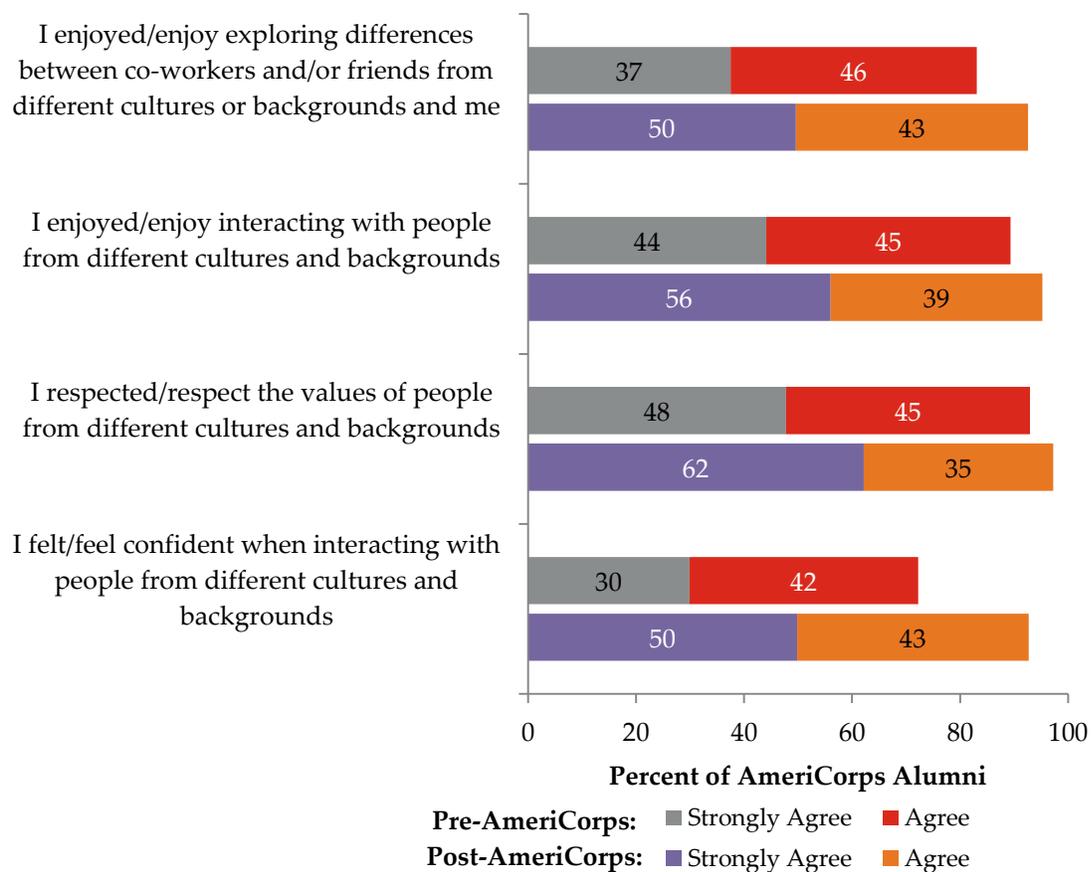
**Cultural Competency**

One of the indicators used in the survey to measure career-oriented skills was cultural competency (Q6 and Q29). The survey asked respondents to identify their competency on various items both before and

after their AmeriCorps experience. The data were collected using a Likert scale, and then analyzed based on the percent of respondents who strongly agreed, agreed, neither agreed nor disagreed, disagreed, and strongly disagreed.

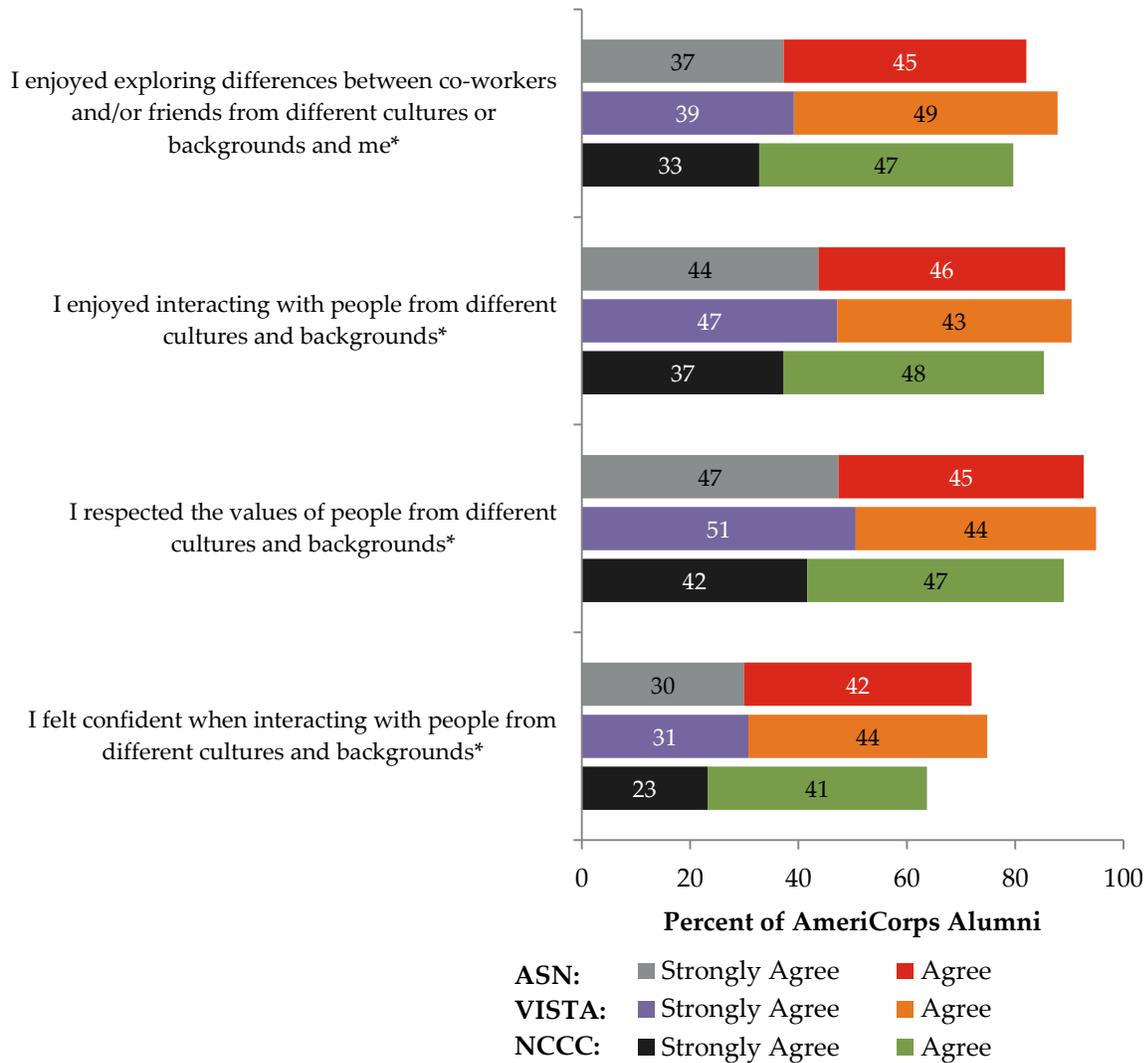
The data demonstrate that for all cultural competency items, participants viewed themselves as more competent after AmeriCorps than before. This difference was largest for the item “confidence interacting with people from different cultures or backgrounds,” with 72 percent of respondents strongly agreeing and agreeing before AmeriCorps, and 93 percent strongly agreeing and agreeing after AmeriCorps (see Exhibit VII-1 below). The average difference between the pre- and post-AmeriCorps cultural competency measures was 0.3 on a 5-point scale ( $p < .0001$ ).

**Exhibit VII-1. Cultural Competency Pre- and Post-AmeriCorps**



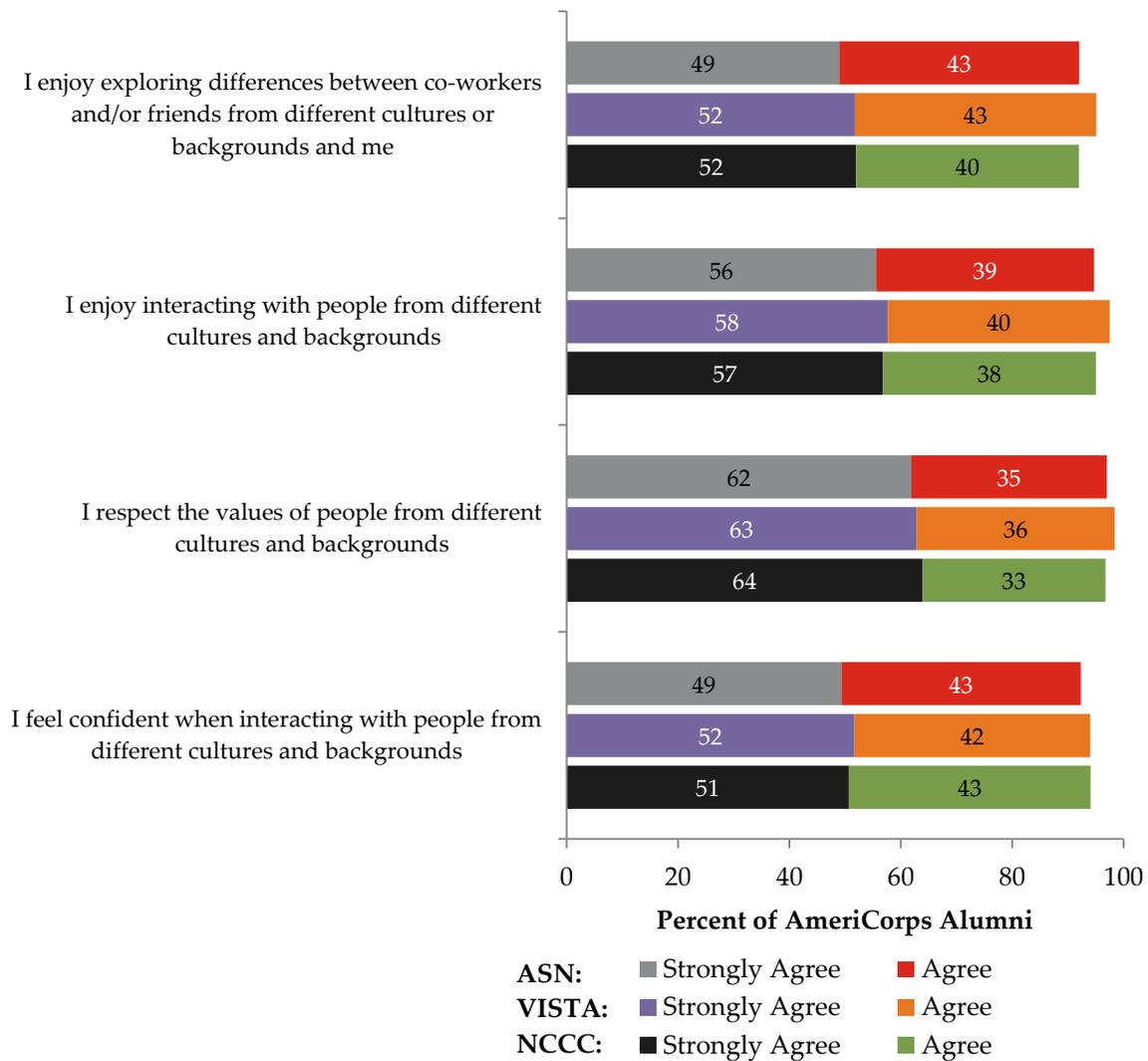
Prior to AmeriCorps, NCCC alumni were least likely to answer strongly agree or agree to the cultural competency items (see Exhibit VII-2). However, these differences became insignificant post-AmeriCorps (see Exhibit VII-3).

**Exhibit VII-2. Cultural Competency Pre-AmeriCorps by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

### Exhibit VII-3. Cultural Competency Post-AmeriCorps by Program



\* Difference between programs is statistically significant at the  $p = 0.05$  level.

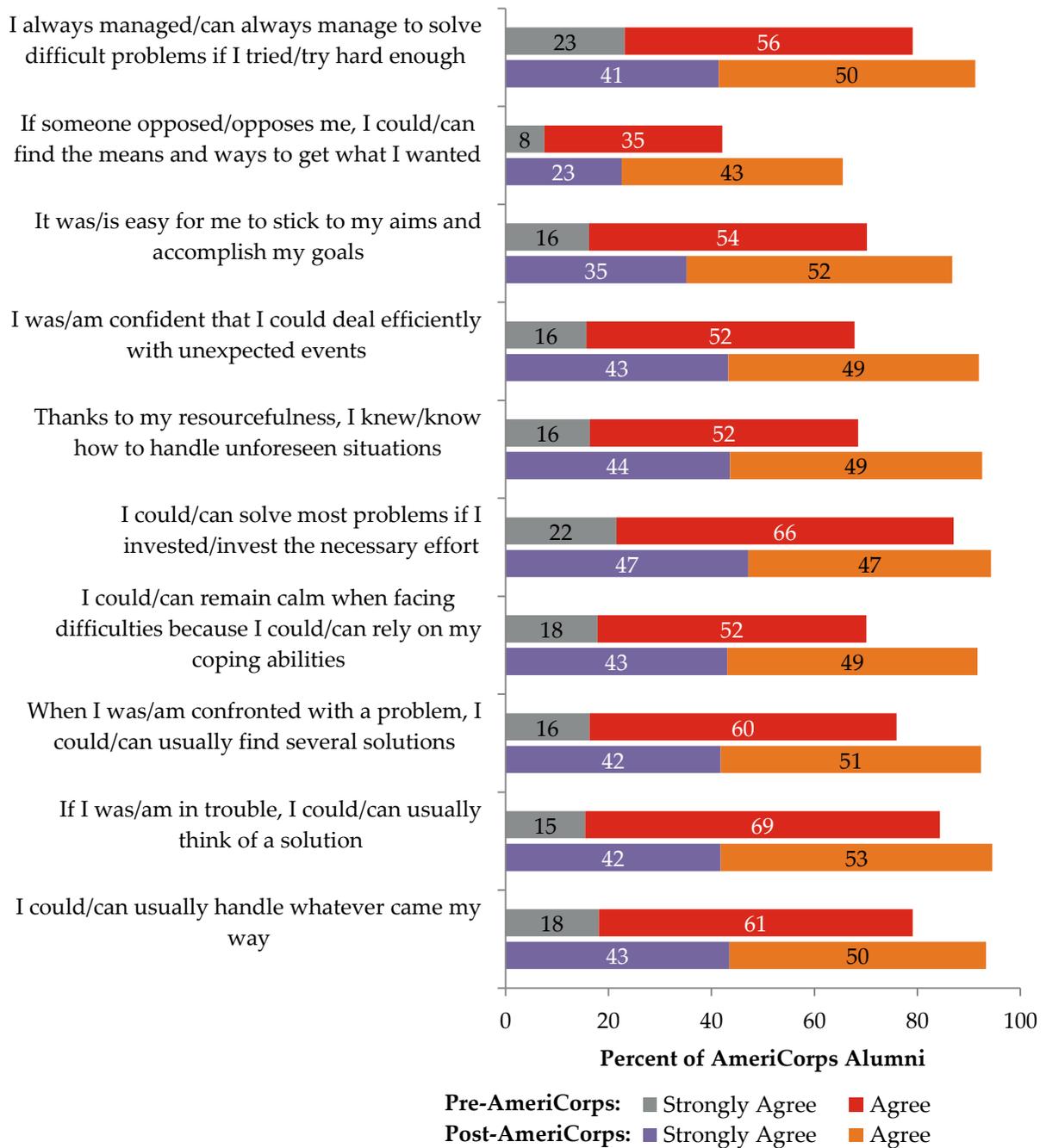
There is a positive association between the service experience scale and cultural competency post-AmeriCorps, controlling for cultural competency pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .0001$ ). A difference of one point on the service experience scale that is associated with a difference of 0.3 points on the post-AmeriCorps cultural competency scale.

### Self-Efficacy

Other questions in the survey (Q7 and Q30) examined self-efficacy among respondents. The survey asked respondents to identify their competency on various self-efficacy items both before and after their AmeriCorps experience. The data were collected using a Likert scale, and then analyzed based on the percent of respondents who strongly agreed, agreed, neither agreed nor disagreed, disagreed, and strongly disagreed.

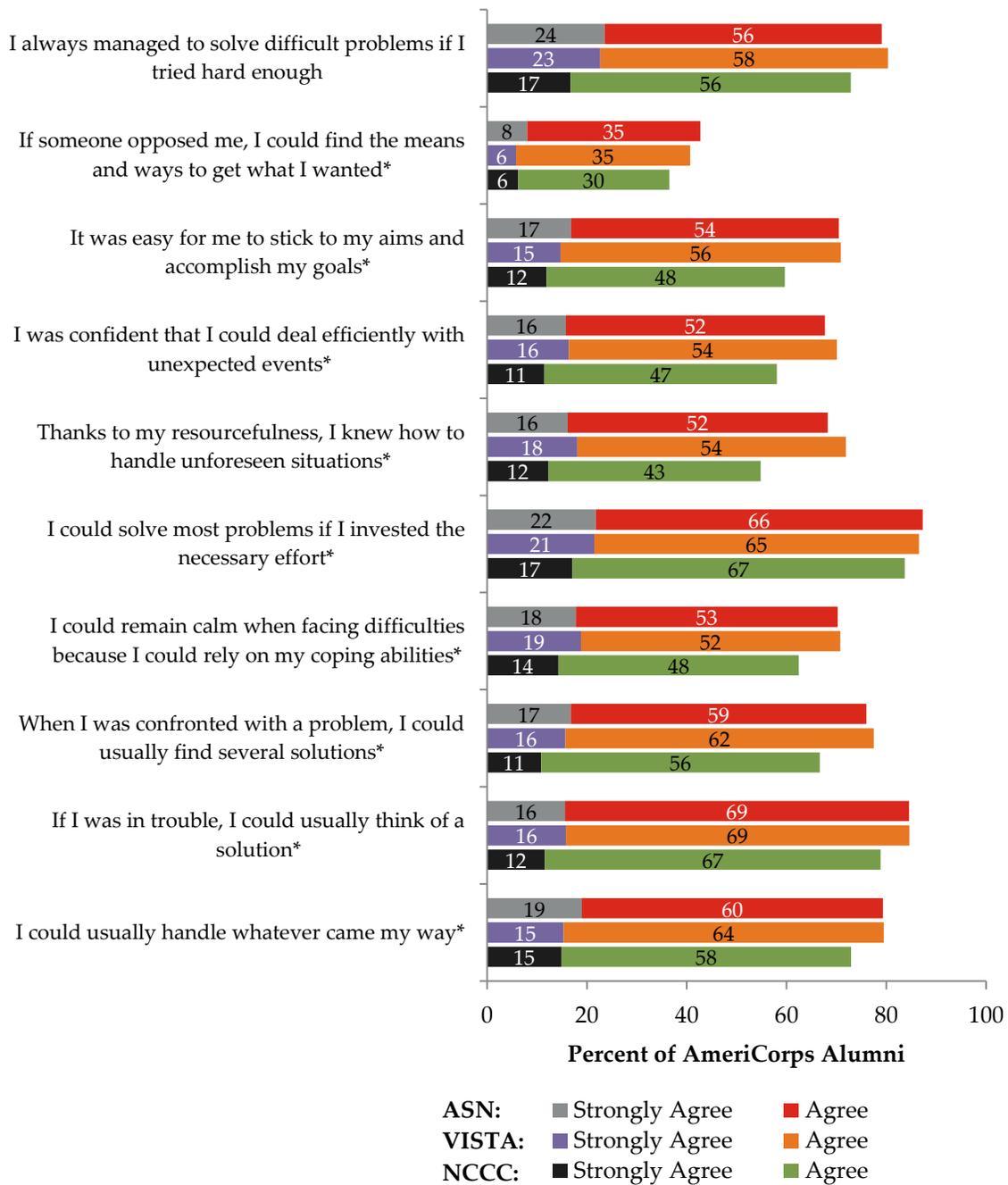
There were significant increases in self-efficacy after AmeriCorps compared to before. Not only did more respondents shift from disagree categories to agree categories, but there was also a large shift from agree to strongly agree. Some of the more notable shifts in competency pertained to an increased capacity among respondents to overcome opposition and deal with unforeseen circumstances (see items 2, 4, 5, and 7 in Exhibit VII-4 below). The average difference between pre-AmeriCorps competency and post-AmeriCorps competency was 0.5 on a 5-point scale ( $p < .0001$ ).

**Exhibit VII-4. Self-Efficacy Pre- and Post-AmeriCorps**



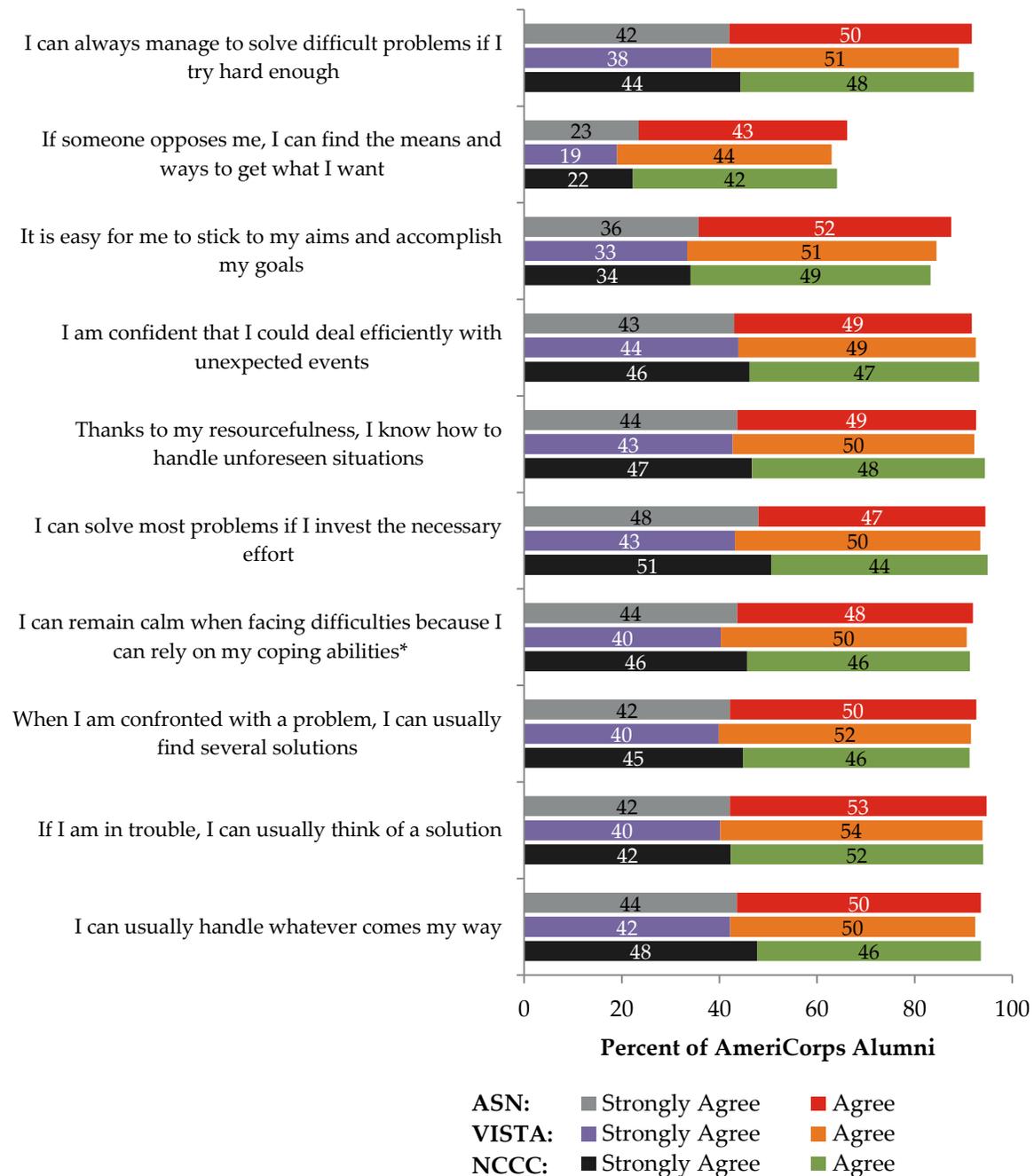
Similar to the findings of cultural competency measures, of the three programs, NCCC participants were the least likely to answer strongly agree or agree prior to AmeriCorps, however, these differences became insignificant post-AmeriCorps (see Exhibits VII-5 and VII-6).

### Exhibit VII-5. Self-Efficacy Pre-AmeriCorps by Program



\* Difference between programs is statistically significant at the p = 0.05 level.

### Exhibit VII-6. Self-Efficacy Post-AmeriCorps by Program



\* Difference between programs is statistically significant at the p = 0.05 level.

There is a positive association between the service experience scale and self-efficacy post-AmeriCorps, controlling for self-efficacy pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting (p < .0001). A difference of one point on the service experience scale is associated with a difference of 0.3 points on the post-AmeriCorps self-efficacy scale. There is also a small negative association between age and self-efficacy post-AmeriCorps, controlling for self-efficacy pre-AmeriCorps,

program, race/ethnicity, gender, parental education, service experience, and service setting ( $p < .05$ ). A difference of ten years is associated with a difference of -0.05 on the post-AmeriCorps self-efficacy scale. This might be explained by the fact that older alumni could have had more personal and professional influences on their self-efficacy, thus minimizing the impact of their AmeriCorps service.

### Career-Oriented Skills

Additionally, the survey examined the influence of AmeriCorps on critical career-oriented hard and soft skills. The survey asked respondents to rate the influence of AmeriCorps on their interpersonal skills, personal conduct, applied academic skills, critical thinking skills, and workplace skills (Q24 to Q28). Respondents ranked the influence of AmeriCorps on a scale from 1 to 4, where 1 = “not at all,” 2 = “very little,” 3 = “somewhat,” 4 = “a great deal.”<sup>32</sup>

Alumni felt that AmeriCorps most helped them to develop the interpersonal skills of listening to other people’s opinions, getting along with others in their work environment, and collaborating on projects as a team member to achieve a shared goal (see Exhibit VII-7). Eighty-seven percent of respondents felt that these skills were developed during their service experience (they answered “somewhat” or “a great deal”). Across programs, NCCC alumni were most likely to say that AmeriCorps improved their interpersonal skills “a great deal” (see Exhibit VII-8).

#### Exhibit VII-7. Interpersonal Skills

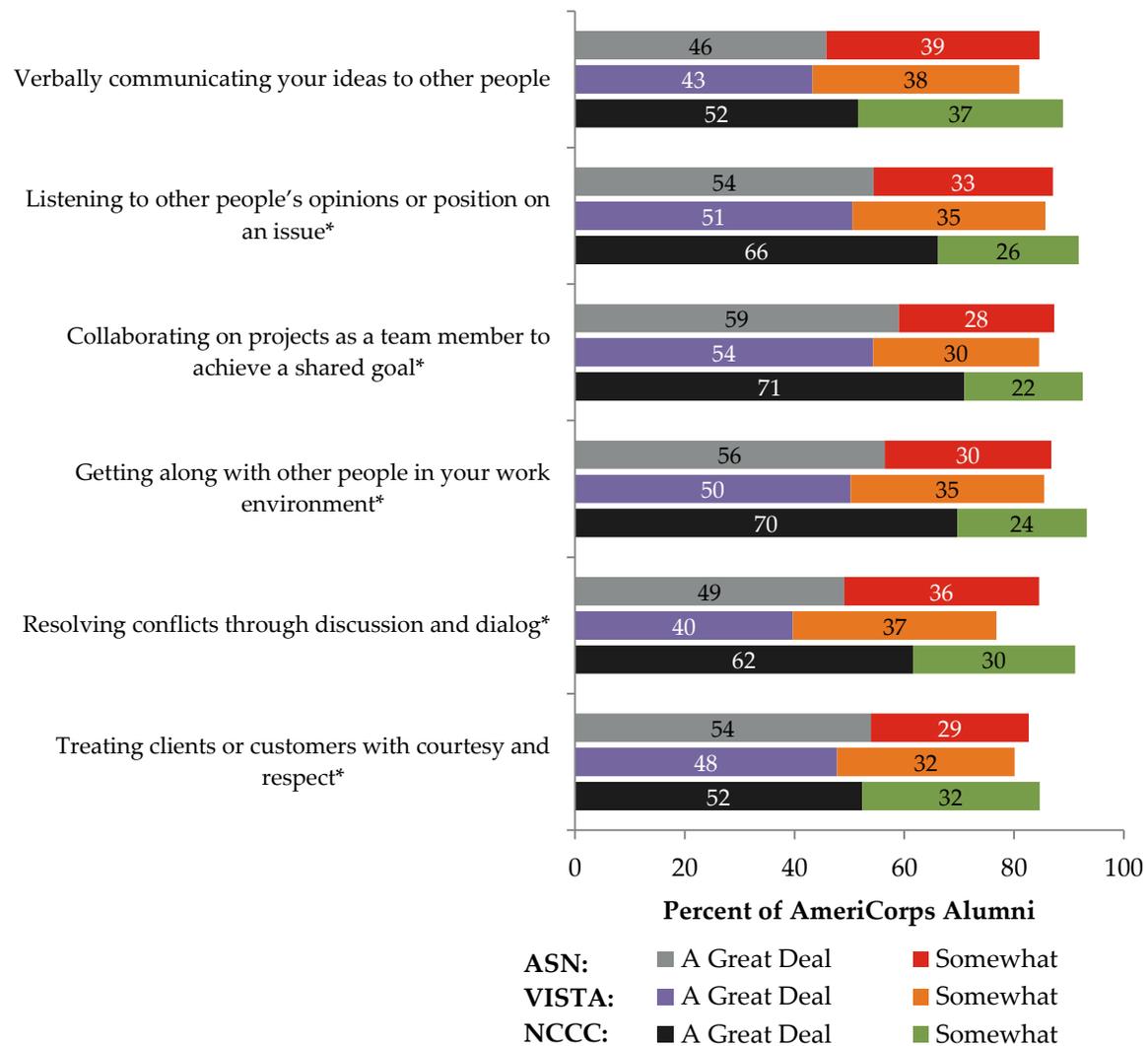
Extent of AmeriCorps Influence	Not at All (%)	Very Little (%)	Somewhat (%)	A Great Deal (%)	Not Sure (%)
Verbally communicating your ideas to other people	6	7	39	46	3
Listening to other people's opinions or position on an issue	6	6	33	54	2
Collaborating on projects as a team member to achieve a shared goal	5	6	28	59	2
Getting along with other people in your work environment	5	7	31	56	2
Resolving conflicts through discussion and dialog	6	9	36	48	2
Treating clients or customers with courtesy and respect	7	9	30	53	2

Notes: (N=3772, Missing=5-6)

Source: AmeriCorps Alumni Outcomes Survey Q24 (To what extent did your AmeriCorps experience help you acquire or increase each of the following interpersonal skills?)

<sup>32</sup> “Not Sure” was also an option, but it was not included in scale averages.

**Exhibit VII-8. Influence of AmeriCorps on Interpersonal Skills by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

Regarding personal conduct and workplace behaviors, respondents felt that AmeriCorps most helped them develop skills to adapt to new situations (90 percent of respondents answered “a great deal,” or “somewhat”), followed by seeking new information to learn new or better ways of doing things (86 percent of respondents answered “a great deal,” or “somewhat”) and setting priorities for multiple tasks (85 percent answered “a great deal,” or “somewhat”). Of all the skills measured in the survey, the lowest impact was reported on “being honest when you make a mistake.”

**Exhibit VII-9. Personal Conduct and Workplace Behaviors**

Extent of AmeriCorps Influence	Not at All (%)	Very Little (%)	Somewhat (%)	A Great Deal (%)	Not Sure (%)
Conducting yourself in a professional manner	7	10	35	47	2

Extent of AmeriCorps Influence	Not at All (%)	Very Little (%)	Somewhat (%)	A Great Deal (%)	Not Sure (%)
Setting priorities for multiple tasks	5	9	34	51	2
Adapting to new situations	4	5	27	63	1
Being honest when you make a mistake	8	10	34	44	3
Seeking new information to learn new or better ways of doing things	5	7	33	53	2
Following through to complete assigned tasks	6	9	33	50	2

Notes: (N=3772, Missing=4-6)

Source: AmeriCorps Alumni Outcomes Survey Q25 (To what extent did your AmeriCorps experience help you acquire or increase each of the following personal conduct and workplace behaviors?)

Compared to other work-related skills, respondents indicated that their AmeriCorps service did the least to advance various applied academic skills. Sixty-one percent or more of respondents felt that AmeriCorps helped them at least somewhat develop their reading and writing skills, while roughly 35 percent indicated that AmeriCorps developed these skills very little or not at all. A majority – 54 percent – of respondents felt AmeriCorps did little or nothing to improve their basic math skills.

#### Exhibit VII-10. Applied Academic Skills

Extent of AmeriCorps Influence	Not at All (%)	Very Little (%)	Somewhat (%)	A Great Deal (%)	Not Sure (%)
Reading and understanding work-related materials (e.g., emails, memos, reports)	16	20	32	29	3
Writing to support project- or business-related activities (e.g., emails, memos, reports, grant proposals)	16	18	30	34	2
Writing for public communication or educational purposes (e.g., newsletter articles, blog posts, brochures, training materials)	19	17	29	32	2
Doing basic math calculations that support project- or business-related activities (e.g., keeping financial records, estimating costs, monitoring expenditures)	29	25	26	17	3

Notes: (N=3772, Missing=5)

Source: AmeriCorps Alumni Outcomes Survey Q26 (To what extent did your AmeriCorps experience help you acquire or increase each of the following applied academic skills?)

Respondents indicated that AmeriCorps service either somewhat or greatly increased many of their critical thinking skills, with the largest impact reported for “coming up with new ideas to make work more efficient or more effective” (84 percent of respondents answered “a great deal,” or “somewhat”) and “developing plans and agendas” (82 percent of respondents answered “a great deal,” or “somewhat”, see Exhibit VII-11). The smallest impact was reported for “summarizing information from different sources,” with 25 percent of respondents saying this skill was developed very little or not at all. In addition, VISTA alumni reported largest impacts on writing skills (see Exhibit VII-12).

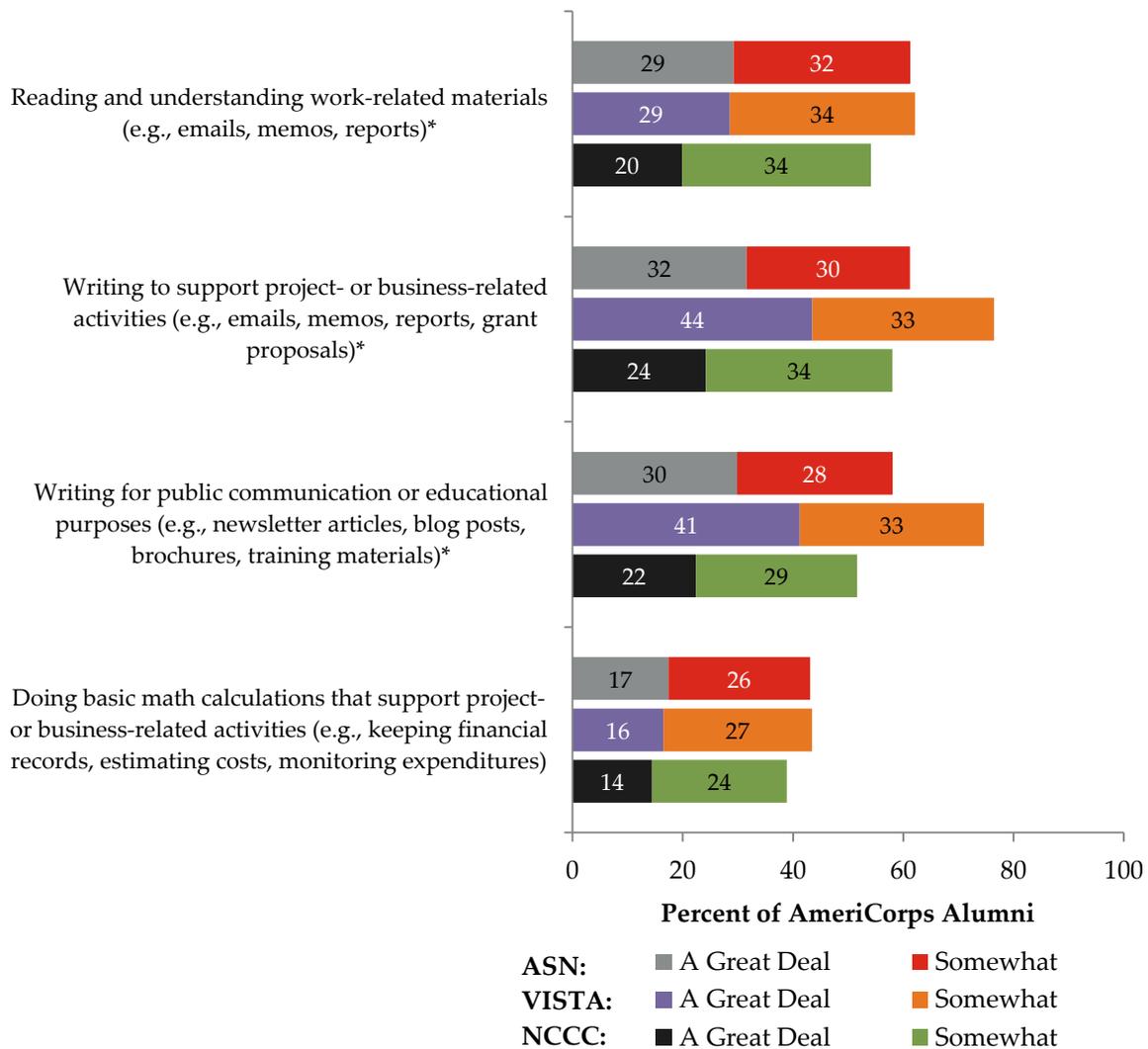
**Exhibit VII-11. Critical Thinking Skills**

<b>Extent of AmeriCorps Influence</b>	<b>Not at All (%)</b>	<b>Very Little (%)</b>	<b>Somewhat (%)</b>	<b>A Great Deal (%)</b>	<b>Not Sure (%)</b>
Gathering, organizing, and maintaining information	8	11	36	43	2
Summarizing information from different sources	11	14	37	36	2
Defining and describing a problem for your supervisor, team, or other stakeholders	8	10	38	42	2
Coming up with new ideas to make work more efficient or more effective	6	8	35	49	2
Analyzing input from others to inform decision making	7	10	39	42	2
Developing plans and agendas	7	9	33	49	2

Notes: (N=3772, Missing=3-6)

Source: AmeriCorps Alumni Outcomes Survey Q27 (To what extent did your AmeriCorps experience help you acquire or increase each of the following critical thinking skills?)

### Exhibit VII-12. Applied Academic Skills by Program



\* Difference between programs is statistically significant at the p = 0.05 level.

Regarding common workplace skills, respondents indicated that AmeriCorps most strongly developed their skills in community outreach (82 percent of respondents answered “a great deal,” or “somewhat”), project management (77 percent of respondents answered “a great deal,” or “somewhat”), and planning, coordinating and managing meetings or events (76 percent of respondents answered “a great deal,” or “somewhat”, see Exhibit VII-13).

The skills that respondents reported being least developed by their AmeriCorps experience include working with the media and public relations (57 percent of respondents answered “very little,” or “not at all”) and grant writing or fundraising (55 percent of respondents answered “very little,” or “not at all”). Across programs, VISTA alumni felt their workplace skills were most developed (see Exhibit VII-14).

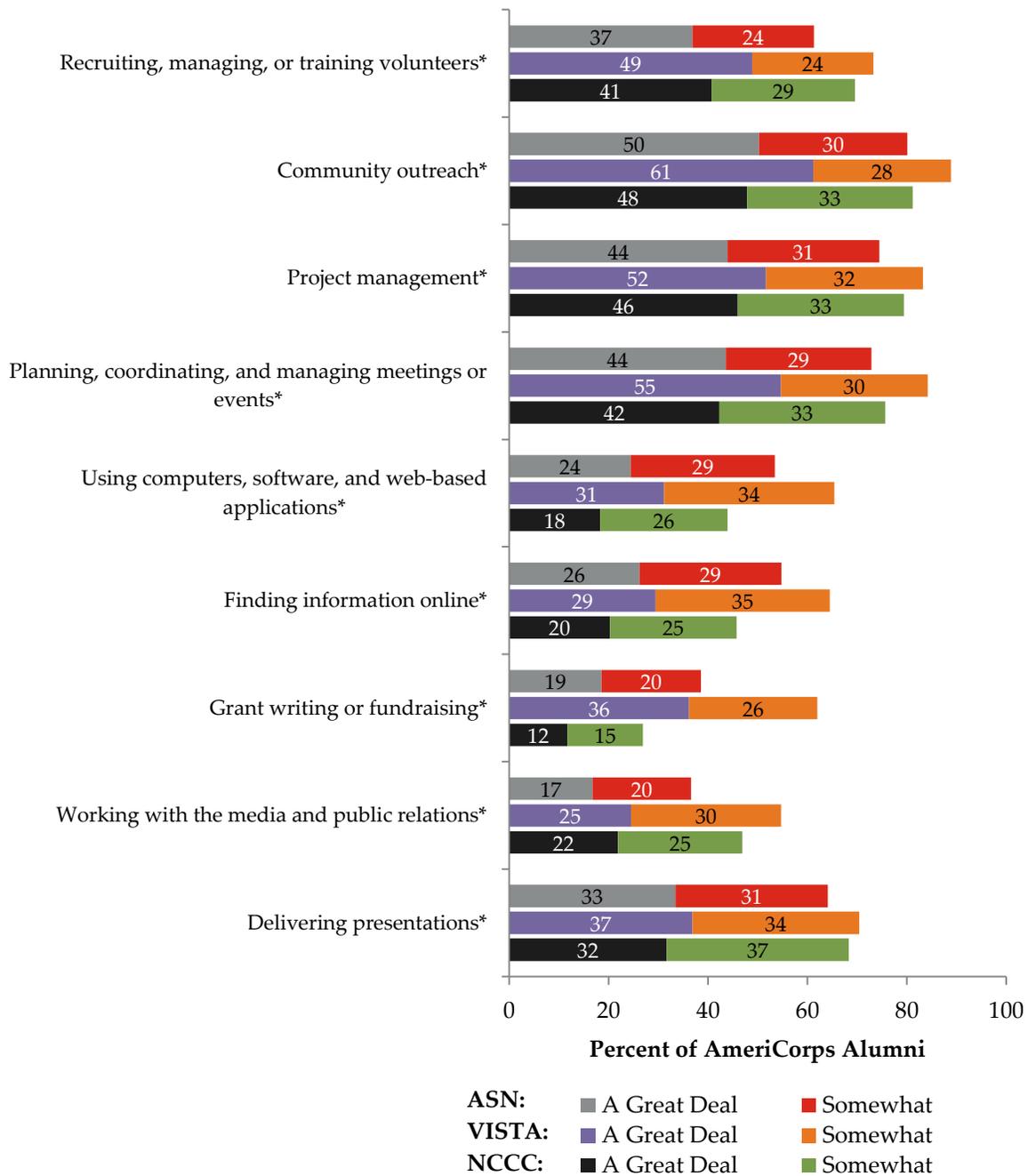
**Exhibit VII-13. Workplace Skills**

Extent of AmeriCorps Influence	Not at All (%)	Very Little (%)	Somewhat (%)	A Great Deal (%)	Not Sure (%)
Recruiting, managing, or training volunteers	20	14	25	39	2
	8	9	30	52	2
Project management	9	13	31	46	2
	10	13	30	46	2
Using computers, software, and web-based applications	22	21	30	26	2
	22	20	30	27	2
Grant writing or fundraising	37	18	21	22	2
	36	21	22	18	2
Delivering presentations	18	15	31	34	2

Notes: (N=3772, Missing=5-7)

Source: AmeriCorps Alumni Outcomes Survey Q28 (To what extent did your AmeriCorps experience help you acquire or increase each of the following workplace skills?)

**Exhibit VII-14. Workplace Skills by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

The average score across all of the career-oriented skills items was 3.1 of 4.<sup>33</sup> There is a positive association between the service experience scale and impact of AmeriCorps on career-oriented skills, controlling for self-efficacy pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .0001$ ). A difference of one point on the service experience scale is associated with a difference of 0.7 points on the impact of AmeriCorps on career-oriented skills scale. There is also a small positive association between serving at a nonprofit and impact of AmeriCorps on career-oriented skills, controlling for self-efficacy pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .001$ ). Serving at a nonprofit is associated with a difference of 0.1 points on the impact of AmeriCorps on career-oriented skills scale. Finally, there is a small negative association between age and impact of AmeriCorps on career-oriented skills, controlling for self-efficacy pre-AmeriCorps, program, race/ethnicity, gender, parental education, service experience, and service setting ( $p < .001$ ). A difference of ten years is associated with a difference of -0.05 on the impact of AmeriCorps on career-oriented skills scale. Note that respondents could report that AmeriCorps had little impact on their skill development if they felt that a particular skill was well-developed before AmeriCorps.

## VIII. INFLUENCE OF NATIONAL SERVICE ON CAREER PATHWAYS AND EMPLOYMENT OUTCOMES

### Employment Status Before and After AmeriCorps

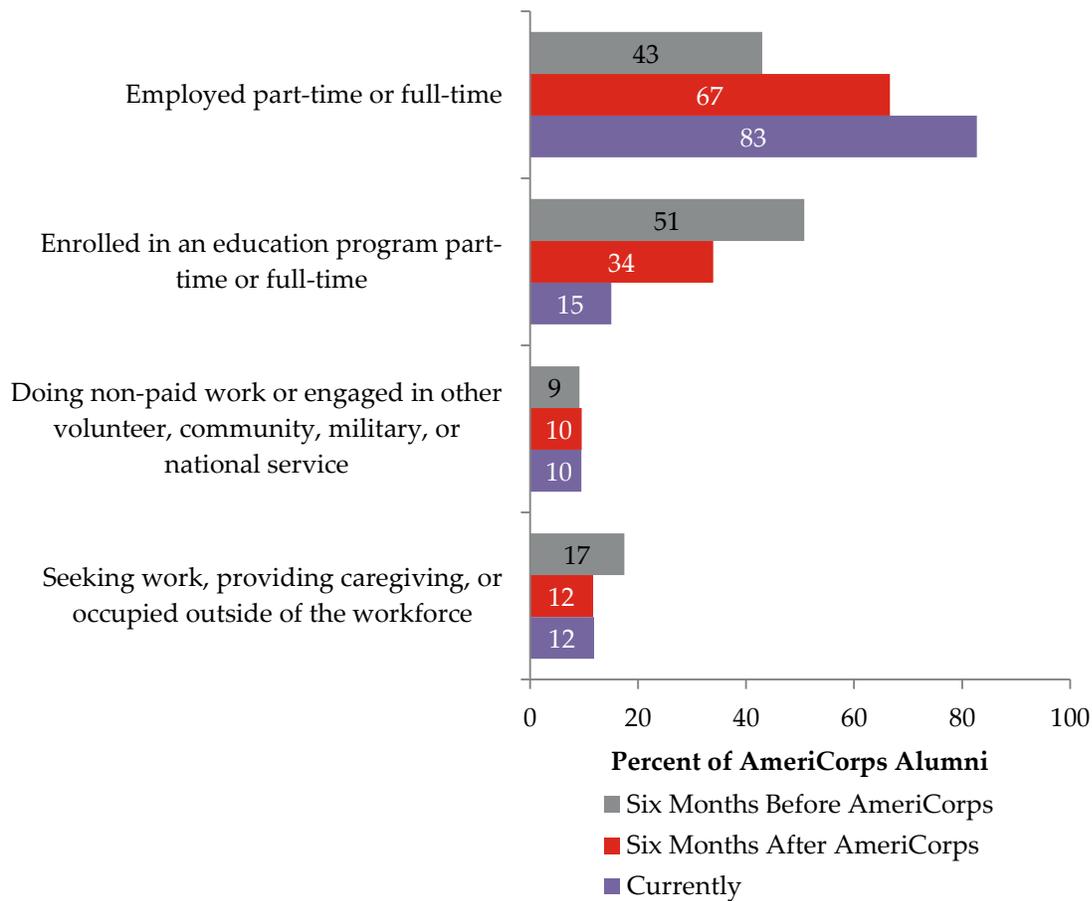
The survey included two questions (Q4 and Q16) asking respondents about their employment status in the six months before their AmeriCorps service and six months after their AmeriCorps service. Roughly two-fifths were employed before their service, and roughly two-thirds reported being employed within six months after their service. More than four-fifths (83 percent) of respondents reported being employed at the time they completed the survey. While just over half of the respondents were enrolled in an education program prior to service, one third were furthering their education six months after their service and just 15 percent are currently enrolled in an education program.

Seventeen percent of respondents were seeking work, providing caregiving or were otherwise occupied outside the workforce prior to their AmeriCorps service, and that percentage dropped to 12 percent both in the six months following their service and at the time of the survey. Around 10 percent of respondents reported doing non-paid work or being engaged in other service at all time points. See Exhibit VIII-1 below for a summary of the employment status of AmeriCorps alumni at three time points (immediately before and after service and currently).

---

<sup>33</sup> “Not sure” responses were excluded. The remaining responses options were “Not at All,” “Very Little,” “Somewhat,” and “A Great Deal,” so an average score of 3.1 corresponds to an average impact just above “Somewhat.”

### Exhibit VIII-1. Employment Status at Three Time Points



There are some significant differences in these survey results by program and cohort. Six months prior to service, NCCC respondents were more likely to be employed (55 percent) than ASN (43 percent) or VISTA (40 percent). The 2005 cohort was more likely to be enrolled in education prior to service (56 percent) than the 2010 or 2013 cohorts (48 and 49 percent) and less likely to be seeking work (13 percent for 2005 versus 19 percent for 2010 and 2013).

Six months after service, ASN alumni (36 percent) and NCCC alumni (40 percent) were more likely to be enrolled in education than VISTA (27 percent).

### Employment through AmeriCorps Connections

The 2016 survey asked a number of questions to determine if respondents gained employment after their AmeriCorps service in their AmeriCorps host organizations or as a result of a connection made during their service (Q17 to Q21a). Approximately one-fifth (19 percent) of respondents reported being employed in an existing position at their AmeriCorps host organization, and an additional four percent reported being employed in new position at their host organization. While around one-fifth of ASN and VISTA alumni reported being employed at their host organization, only five percent of NCCC alumni

were employed by one of their host organizations, which likely had to do with NCCC program design with service members working on a range of projects and with different organizations across a region over the course of one year. Alumni from earlier cohorts were more likely to have been hired by their host organization (22 percent 2005, 19 percent 2010) than alumni from the 2013 cohort (15 percent).

Fifteen percent of respondents said that a new position was created at the host organization to do the work they were doing, whether or not they ended up being employed in that position. These results also varied significantly by program: fourteen percent of ASN alumni said that a new position was created at the host organization to do the work they were doing compared to 21 percent for VISTA and five percent for NCCC.

More than two-fifths (42 percent) of alumni who were employed within six months after their AmeriCorps service said that their employment resulted from a connection made during AmeriCorps service. These results differed by program, with 42 percent of ASN alumni saying that their employment resulted from a connection made during AmeriCorps service compared to 46 percent for VISTA and 15 percent for NCCC.

More than half (51 percent) said that serving in AmeriCorps opened up a career path for them that they might not have otherwise considered. There were small but significant variations in the responses to this question by program and cohort. Roughly half of ASN and VISTA alumni indicating that AmeriCorps service opened up a career path for them compared to 45 percent of NCCC alumni. Fifty-five percent of the 2005 cohort alumni answered this question positively compared to 49 percent of the 2010 cohort and 50 percent of the 2013 cohort.

The open-ended responses to whether or not AmeriCorps opened up a career path (Q21a) were mixed (see Exhibit VIII-2 below). Nearly one-fourth (24 percent) of respondents described their AmeriCorps service as opening up a career path because of professional skills and experience gained. Just over one-fifth (22 percent) of respondents said AmeriCorps helped clarify a career path and 16 percent respondents answered that it did not open up a career path.

For those who felt that AmeriCorps opened up a career path, this was mostly attributed to the experience gained and the clarification they obtained as to what career path to pursue. As one of the participants describes,

*“My AmeriCorps experience completely defined what I have done with my career since that time. I did not know about capacity building in a nonprofit setting. I did not really understand that development was a viable career option. Thanks to my service year, I found an interest in grant writing, a way I could use my creative writing degree to make a living, and I would not have had the opportunity to experience this without serving.”*

The most common reason that respondents answered that they were unsure or that AmeriCorps did not open up a career path – reported roughly 20 percent of the time – was that their professional interests remained the same. For example, one respondent explains that he/she had already defined a career path:

*It did not directly open up a career path for me, as my path has not changed since before my AmeriCorps service, however the experience may have indirectly helped me to obtain admission to medical school.*

In addition, a number of respondents were unsure whether AmeriCorps opened up a career path because they went back to school after their service and might have gained employment based on the degree received rather than the service itself. While some respondents pursued a career in a different sector than their AmeriCorps service, many of them noted that while AmeriCorps might not have opened up a particular career path, it gave them the tools and experience necessary to excel in their personal and professional lives beyond their service. While not directly opening up a career path, some respondents acknowledge their service experience helping them in future pursuits. Other respondents identified that the skills gained through AmeriCorps helped them with their careers.

**Exhibit VIII-2. AmeriCorps Opened up a Career Path**

Theme Coded from Open-Ended Responses	(%)
Professional skills and experience gained	24
Helped clarify my career path, discovered passion (career & education)	22
Did not open up a career path	16
Not sure	9
Professional connections made	7
Enhanced my resume	6
Led directly to a job at host organization	5
Professional interests remained the same	5

Notes: (N=3772, Missing=204)

Percentages do not sum to 100 because multiple themes could have been included in a single response.

Source: AmeriCorps Alumni Outcomes Survey Q21a (Please tell us more about how your AmeriCorps service experience did or did not open up a career path for you)

**Use of AmeriCorps Network**

The survey included two questions regarding the use of alumni’s AmeriCorps network for pursuing or developing career opportunities (Q22 and Q23). Regarding the frequency of contact with their network, alumni responses were fairly evenly distributed across the various response options (see Exhibit VIII-3), with the most common response being every few months. Roughly one-fifth maintain daily or weekly contact with their AmeriCorps network, and one-fifth report never utilizing this network. These responses varied significantly by program, with NCCC alumni more likely to use the network daily or weekly or every few months (63 percent) than ASN or VISTA alumni (42 percent each). Also, the most recent 2013 cohort is more likely to use the AmeriCorps network daily or weekly or every few months (51 percent) compared to the 2005 and 2010 cohorts (39 percent each).

**Exhibit VIII-3. Contact with AmeriCorps Network**

Frequency	(%)
Never	22
Once every few years	16

Frequency	(%)
Once or twice a year	19
Every few months	25
Daily or weekly	18

Notes: (N=3772, Missing=0)

Source: AmeriCorps Alumni Outcomes Survey Q22 (How frequently do you maintain contact with your 'AmeriCorps network,' meaning other members or people you first met or worked with through your AmeriCorps service (this includes people you still engage with socially, professionally, or educationally)?)

When seeking a job or career advice, one-third of alumni reported contacting their AmeriCorps network some of the time. Thirteen percent contact this network often or always, but more than half (53 percent) reported never contacting their AmeriCorps network when looking for work or career advice. The 2013 cohort is more likely to use AC network sometimes, often or always (54 percent), compared to the 2005 cohort (44 percent) and the 2010 cohort (39 percent).

#### Exhibit VIII-4. Access AmeriCorps Network for Career Advice, Job Opportunities, or Professional Networking

Frequency	(%)
Never	53
Sometimes	32
Often	8
Always	5
Depends	2

Notes: (N=3772, Missing=1)

Source: AmeriCorps Alumni Outcomes Survey Q23 (When you are seeking career advice, job opportunities, or doing professional networking, how frequently do you access your AmeriCorps network?)

#### Impact of Education Award on Career Path

The 2016 survey asked three questions regarding the influence of the AmeriCorps education award on alumni's career paths (Q2, Q2a, and Q2a1). One quarter of alumni either did not receive, use, or have not yet used the education award. More than two-fifths (42 percent) of alumni used the education award to pursue college or graduate school, and one-third of alumni used the award to repay student loans (see Exhibit VIII-5).

#### Exhibit VIII-5. Use of AmeriCorps Education Award

AmeriCorps Education Award	(%)
I did not qualify to receive an education award	7
I chose to receive a stipend instead of an education award	4
I did not use my education award, and I do not plan to use it	2
I have not yet used my education award	11
To attend college	20
To repay student loans	34

AmeriCorps Education Award	(%)
To attend graduate school	22
To attend a technical or vocational training program	2
I transferred my education award to a family member	1
Other	5

Notes: (N=3772, Missing=0)

Percentages do not sum to 100 because multiple responses were permitted.

Source: AmeriCorps Alumni Outcomes Survey Q2 (How did you use your AmeriCorps education award? Please select all that apply.)

Education award use varied by AmeriCorps program and cohort. One-third of NCCC alumni used the award to attend college, compared to one-fifth of ASN and 12 percent of VISTA. ASN alumni were most likely to use the award to attend graduate school (23 percent), followed by VISTA alumni (18 percent) and NCCC alumni (13 percent). Around one-third of 2010 and 2013 cohort alumni have not yet used the education award, compared to 11 percent of the 2005 cohort alumni.

#### Exhibit VIII-6. Use of AmeriCorps Education Award by Program

AmeriCorps Education Award	ASN (%)	VISTA (%)	NCCC (%)
I did not qualify to receive an education award*	6	11	6
I chose to receive a stipend instead of an education award*	2	14	0
I did not use my education award, and I do not plan to use it	2	2	2
I have not yet used my education award*	12	7	13
To attend college*	21	12	33
To repay student loans	33	37	31
To attend graduate school*	23	18	13
To attend a technical or vocational training program*	2	1	6
I transferred my education award to a family member	1	0	0
Other	6	4	4

Notes: (N=3772, Missing=0)

\* Difference between programs is statistically significant at the  $p = 0.05$  level.

Percentages do not sum to 100 because multiple responses were permitted.

Source: AmeriCorps Alumni Outcomes Survey Q2 (How did you use your AmeriCorps education award? Please select all that apply.)

Just over one-fifth (22 percent) of all respondents who used the education award to repay loans said the award allowed them to pursue a career path that they otherwise would not have been able to pursue. This result did not vary significantly by program or cohort.

Respondents who said the education award allowed them to pursue a career path were very positive, citing several uses in particular as helpful in furthering their career and educational paths. More than one-third of respondents (37 percent) used the award to pay off student loans, 28 percent used the award

to supplement their income and allow them to continue working in lower-paying jobs at nonprofit organizations, while 25 percent used it to pay for education or classes. An additional 7 percent of respondents were able to use the award to save money.

**Exhibit VIII-7. Used Education Award for Student Loan Repayment to Pursue a Career Path**

Theme Coded from Open-Ended Responses	(%)
Helped payment of student loans	37
Could take a lower paying job, such as work at a non-profit	28
Could afford education or classes	25
Able to save money	7
Able to start a business or organization	2
Didn't help, no comment, not applicable	1

Notes: (N=310, Missing=2)

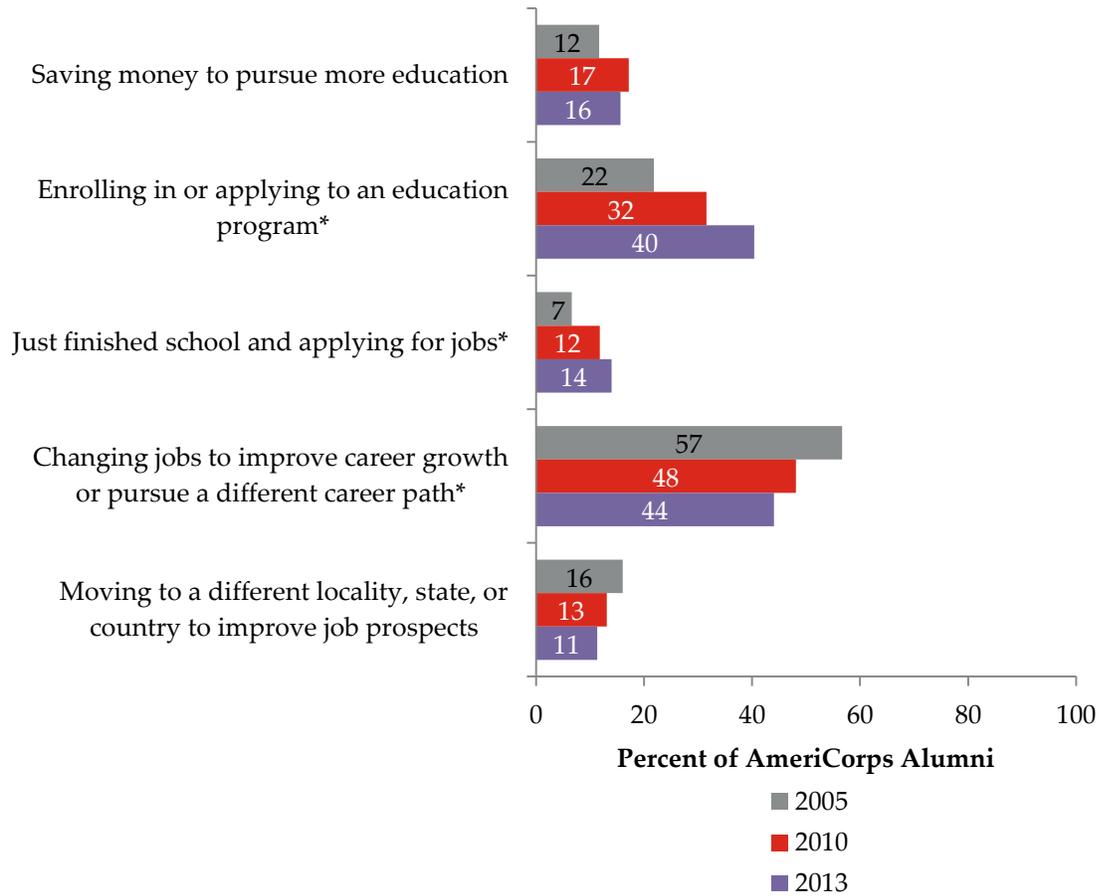
Source: AmeriCorps Alumni Outcomes Survey Q2a1 (In what way did the use of the award for student loan repayment allow you to pursue a career path that you might otherwise not have been able to? )

Finally, the survey asked respondents if AmeriCorps was a worthwhile experience for furthering their professional goals (Q39b). Four-fifths of alumni agree or strongly agree that AmeriCorps was a worthwhile experience in terms of furthering professional goals. Alumni from the 2005 cohort were more likely to agree or strongly agree (85 percent) compared to 2013 cohort (81 percent) and the 2010 cohort (77 percent).

**Current Career Status, Trajectory, and Transitions**

There were some significant differences in current employment status, satisfaction with career trajectory, and transition status by program and cohort. First, in one item that did not differ by program or cohort, seventy-nine percent of alumni reported being satisfied or very satisfied with their career trajectory. Roughly one-third of alumni reported being in a school or career transition, and these responses did vary by program and cohort. ASN (35 percent) and NCCC (37 percent) alumni are more likely to be in a transition than VISTA alumni (31 percent). Also, 2005 alumni are least likely to be in a transition (30 percent), followed by 2010 alumni (34 percent) and 2013 alumni (39 percent). Among alumni in transition, half are changing jobs to improve career growth or pursue a different career path, and one-third are enrolling in or applying to an education program. Alumni in earlier cohorts are more likely to be changing jobs while alumni in later cohorts are more likely to be enrolling in education (see Exhibit VIII-8 below).

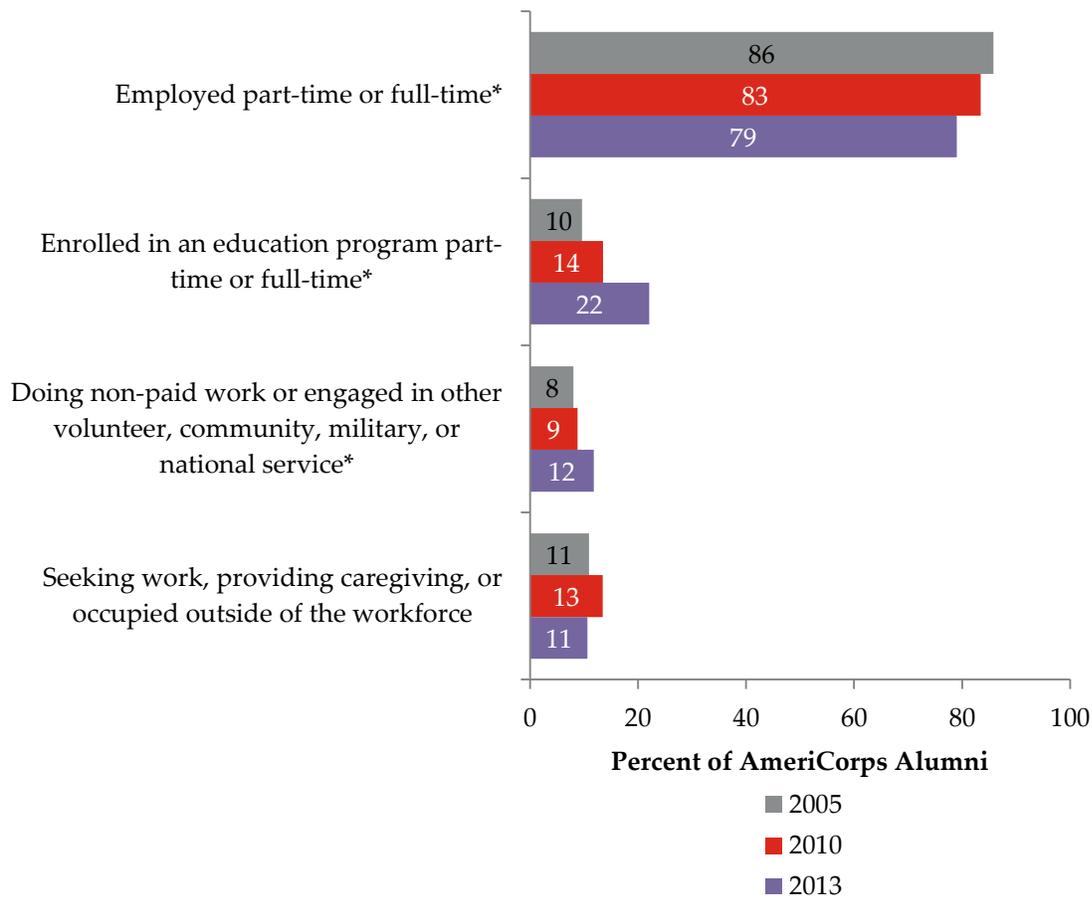
**Exhibit VIII-8. Current School or Career Transition by Cohort**



\* Difference between cohorts is statistically significant at the  $p = 0.05$  level.

Current employment status does not differ significantly by program. NCCC alumni were found to be much more likely to be currently enrolled in education than ASN or VISTA alumni (26 percent, compared to 15 percent and 13 percent). Alumni in earlier cohorts are slightly more likely to be employed, and alumni in later cohorts are slightly more likely to be enrolled in education or doing non-paid work (see Exhibit VIII-9).

**Exhibit VIII-9. Current Status by Cohort**



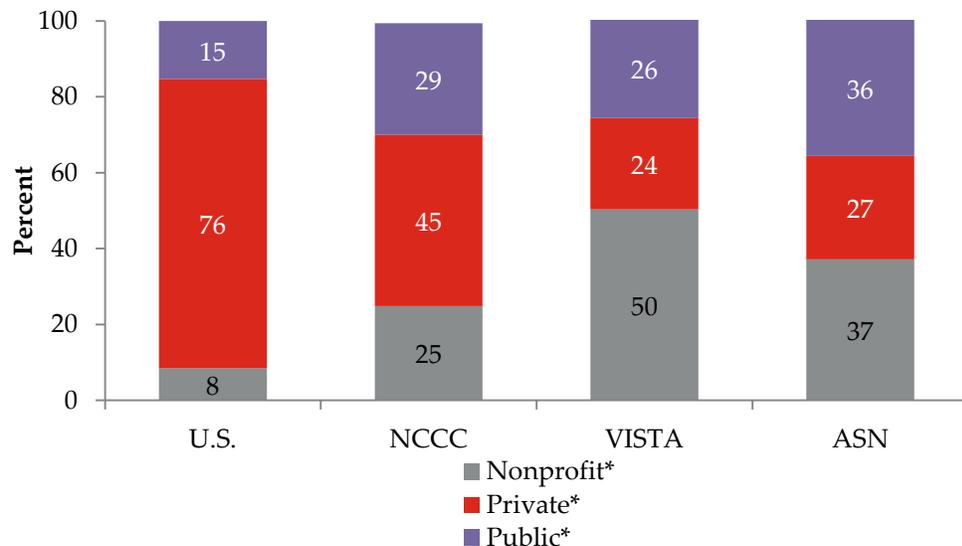
\* Difference between cohorts is statistically significant at the  $p = 0.05$  level.

Almost two-fifths of employed alumni are working in the nonprofit or social service sector, while just over one-third are in the public sector and around one-quarter are in the private sector. In contrast, many more U.S. workers are employed in the private sector (76 percent) than in the public sector (15 percent) or the nonprofit sector (8 percent).<sup>34</sup> Fully half of currently employed VISTA alumni are working in the nonprofit sector, compared to 37 percent of ASN alumni and one-quarter of NCCC alumni. Conversely,

<sup>34</sup> U.S. private and public sector employment percentages are estimated using seasonally adjusted preliminary July 2016 data from the U.S. Bureau of Labor Statistics (BLS): 122 million Americans employed in the private sector and 22 million Americans employed in the public sector ([http://www.bls.gov/news.release/empsit.t17.htm#ces\\_table1.f.p](http://www.bls.gov/news.release/empsit.t17.htm#ces_table1.f.p)). The proportion of U.S. private sector employment in nonprofit organizations is estimated at 10 percent from a 2014 BLS study ([http://www.bls.gov/opub/ted/2014/ted\\_20141021.htm](http://www.bls.gov/opub/ted/2014/ted_20141021.htm)). This figure may slightly underestimate nonprofit employment since only 501(c)3 organizations were counted.

45 percent of employed NCCC alumni are working in the private sector, compared to 27 percent of ASN alumni and 24 percent of VISTA alumni (see Exhibit VIII-10 below).

**Exhibit VIII-10. Employment Sector by Program**



\* Difference between programs is statistically significant at the p = 0.05 level.

There is a significant positive association between the service experience scale and current employment status, which was found after controlling for employment status in the six months prior to AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .01$ ). A difference of one point on the service experience scale is associated with a 4 percentage point difference in likelihood of being employed. There is also a small negative association between age and current employment status, controlling for employment status in the six months prior to AmeriCorps, program, race/ethnicity, gender, parental education, service experience, and service setting ( $p < .001$ ). A difference of ten years is associated with a -0.7 percentage point difference in likelihood of being employed.

## IX. INFLUENCE OF NATIONAL SERVICE ON POST-SECONDARY EDUCATION OUTCOMES

### Post-Secondary Education

This section presents AmeriCorps alumni’s educational attainment pre- and post-AmeriCorps. Before participating in AmeriCorps, just over half of alumni had a four-year college degree. About one-fifth had completed some college, a two-year degree, or a technical or vocational degree or certificate. Five percent had a graduate degree. NCCC alumni were the least likely to have a bachelor’s degree as their highest level of education pre-AmeriCorps (43 percent), while VISTA alumni were most likely (65 percent). An additional 12 percent of VISTA alumni had completed graduate work pre-AmeriCorps (see Exhibit IX-1).

**Exhibit IX-1. Highest Level of Education Prior to AmeriCorps\***

Highest Level of Education Prior to AmeriCorps	ASN (%)	VISTA (%)	NCCC (%)
Less than high school	3	0	1

High school degree (HS Diploma or GED)	15	8	29
Some college	18	10	20
2-year college degree (AA)	5	4	4
Technical or vocational degree or certificate	1	1	2
4-year college degree (BA, BS)	52	65	43
Some graduate school	3	3	0
Graduate or professional degree (MA, MS, MD, JD, Ph.D., etc.)	5	9	0
Other	0	0	0

Notes: (N=3772, Missing=1)

\* Difference between programs is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q5 (What was the highest level of education you had completed prior to first serving in AmeriCorps?)

Nearly two-fifths of alumni currently have a graduate degree, and another two-fifths have a four-year degree as their highest educational attainment. Among ASN and VISTA alumni, two-fifths have a graduate degree, but only one-fifth of NCCC alumni have a graduate degree (see Exhibit IX-2).

**Exhibit IX-2. Highest Level of Education\***

Highest Level of Education	ASN (%)	VISTA (%)	NCCC (%)
Less than high school	1	0	0
High school degree (HS Diploma or GED)	4	3	7
Some college	10	7	19
2-year college degree (AA)	5	3	9
Technical or vocational degree or certificate	1	1	7
4-year college degree (BA, BS)	31	36	33
Some graduate school	8	10	7
Graduate or professional degree (MA, MS, MD, JD, Ph.D., etc.)	39	40	19
Other	0	0	0

Notes: (N=3772, Missing=0)

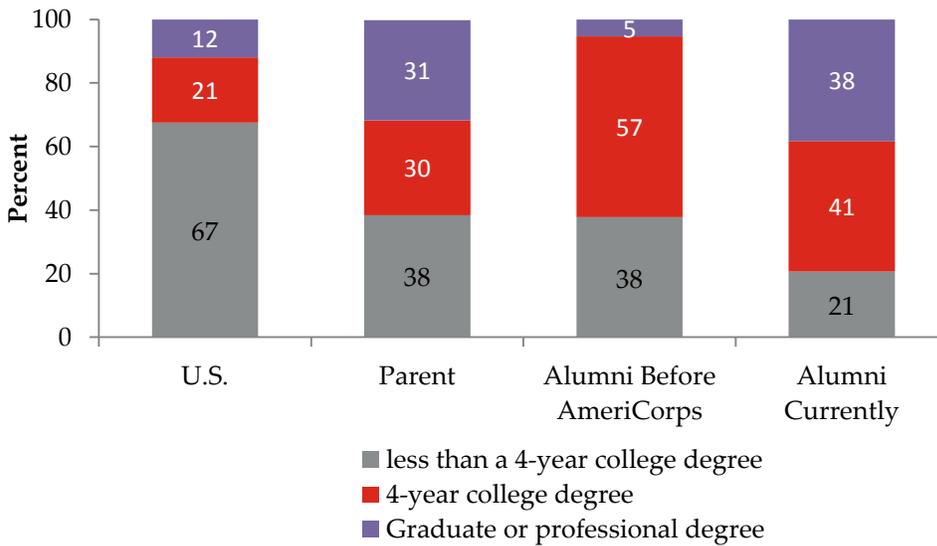
\* Difference between programs is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q3 (Please select the highest level of education you have completed.)

When compared to their parents, AmeriCorps alumni tend to have higher educational attainment (see Exhibit IX-3 below). Forty one percent of AmeriCorps alumni have a bachelor’s degree, while 30 percent of AmeriCorps parents have a bachelor’s degree. Thirty eight percent of AmeriCorps alumni have a master’s degree, versus 31 percent of AmeriCorps parents. According to the U.S. Census Bureau, 33 percent of adults aged 25 or older had a bachelor’s degree or higher in 2015.<sup>35</sup>

<sup>35</sup> <http://www.census.gov/hhes/socdemo/education/data/cps/2015/tables.html>

**Exhibit IX-3. Highest Level of Education of AmeriCorps Alumni and Their Parents**



There is a small negative association between age and having at least a bachelor’s degree currently, controlling for attainment of a bachelor’s degree pre-AmeriCorps, which program alumni participated in, race/ethnicity, gender, parental education, service experience, and service setting ( $p < .05$ ). A difference of ten years is associated with a -0.2 percentage point difference in likelihood of having attained at least a master’s degree.

There is a positive association between the service experience scale and having at least a master’s degree currently, controlling for attainment of a master’s degree pre-AmeriCorps, attainment of a bachelor’s degree pre-AmeriCorps, program, race/ethnicity, gender, parental education, age, and service setting ( $p < .001$ ). A difference of one point on the service experience scale is associated with a seven percentage point difference in likelihood of currently having a graduate degree.

Serving in the nonprofit or public sector is negatively associated with having at least a master’s degree currently, controlling for attainment of a master’s degree pre-AmeriCorps, attainment of a bachelor’s degree pre-AmeriCorps, program, race/ethnicity, gender, parental education, and age. Non-profit sector service is associated with a negative 5 percentage point difference in likelihood of having a graduate degree ( $p < .05$ ), and public sector service is associated with a negative 6 percentage point difference in likelihood of currently having a graduate degree ( $p < .05$ ). Differences by service sector may be driven by alumni who have served in a K-12 setting, who may be more likely to embark on a teaching career which requires a master’s degree.

### Current Educational Enrollments

Among the 2005, 2010, and 2013 cohorts, there are differences in current educational enrollment (Q1.2). Within the 2010 cohort of AmeriCorps alumni, two-thirds of alumni currently enrolled in classes are working towards graduate degrees. Among the 2005 cohort, 57 percent are enrolled in graduate programs, as are 55 percent of the 2013 cohort. Fewer alumni from the 2005 and 2010 cohorts are

currently pursuing a bachelor’s degree (15 percent and 13 percent, respectively) compared to 30 percent of the 2013 cohort who are currently working towards a bachelor’s degree.

**Exhibit IX-4. Current Educational Enrollments by Cohort**

Current Enrollments by School Type	2005 (%)	2010 (%)	2013 (%)
High school or GED program	3	1	3
Earning college credits in a non-degree program	1	1	1
Enrolled in a certificate, technical, or vocational program	14	8	4
Attending community college*	17	8	13
Attending a university or four-year degree program*	15	13	30
Attending a graduate school program*	57	66	55
Other	1	5	0

Notes: (N=647, Missing=0)

Percentages do not sum to 100 because multiple responses were permitted.

\* Difference between cohorts is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q1.2 (What education program are you currently engaged in? Please select all that apply.)

**Use of Education Award to Continue Education**

AmeriCorps alumni from different service programs elected to use their education award differently (Q2, Q2b, and Q2b1). Across AmeriCorps service programs, one-fifth of alumni used the Education Award to pay for college or graduate school. Alumni who served through NCCC were most likely to use the Education Award for college (33 percent). ASN alumni were most likely to use the Education Award for graduate school (23 percent), followed by VISTA alumni (18 percent). However, 14 percent of VISTA alumni chose to receive a stipend rather than the Education Award, a much higher proportion than either of the other programs examined. Half of the alumni who used the Education Award for graduate school or college said it allowed them to pursue a career path that otherwise would not have been open to them.

**Exhibit IX-5. Used Education Award to Continue Education or Pursue Career Path**

Theme Coded from Open-Ended Responses	(%)
Could afford education or classes	72
Able to save money	10
Enabled career switch	9
Helped payment of student loans	4
Didn't help, no comment, not applicable	2
Could take a lower paying job, such as work at a non-profit	1
Able to start a business or organization	1

Notes: (N =972)

Source: AmeriCorps Alumni Outcomes Survey Q2.1a (In what ways [if not for student loan repayment] did the Ed Award allow you to continue your education or pursue a career path that you might otherwise not have been able to?)

Out of the respondents who used their education award to continue education or pursue a career path, the majority (72 percent) used the money to continue their education, including not only paying for education or classes, but also covering living expenses while an individual was in school. Significant groups of the respondents to this question said the education award allowed them to save money (10 percent), make a career switch (9 percent), and help pay off student loans (4 percent).

Nearly three-quarters of AmeriCorps alumni agree or strongly agree that AmeriCorps was a worthwhile experience in terms of furthering their educational goals. One-third, 43 percent, and 42 percent of VISTA, ASN, and NCC alumni, respectively, strongly agree that AmeriCorps was a worthwhile experience for furthering their educational goals.

**Exhibit IX-6. AmeriCorps was a Worthwhile Experience for Furthering Educational Goals\***

AmeriCorps was a Worthwhile Experience for Furthering my Educational Goals and Future Educational Endeavors	ASN (%)	VISTA (%)	NCCC (%)
Strongly Disagree	3	6	4
Disagree	5	11	8
Neither Agree nor Disagree	17	22	17
Agree	33	30	30
Strongly Agree	43	32	42

Notes: (N=3772, Missing=8)

\* Difference between programs is statistically significant at the p = 0.05 level.

Source: AmeriCorps Alumni Outcomes Survey Q39a (How much do you agree or disagree with the following statement: Participating in AmeriCorps was a worthwhile experience in terms of furthering my educational goals and future educational endeavors.)

**X. CONCLUSION**

This section summarizes the key findings from the 2016 AmeriCorps Alumni Outcomes survey and provides recommendations for next steps should CNCS wish to continue exploring the impact of national service on outcomes of interest to program stakeholders.

**Key Findings**

The Abt team fielded the 2016 AmeriCorps Alumni Outcomes survey, achieving enough responses for each program and cohort to allow for meaningful analysis and accurate estimates for the studied population as a whole. General findings are in line with those from previous studies and surveys that showed significant reported impacts of AmeriCorps service on future civic engagement, with AmeriCorps alumni contributing to their communities after service in a variety of ways. The 2016 survey provides detailed findings on each of the study’s research questions, including how AmeriCorps service developed specific job and self-efficacy skills, opened career pathways, and contributed directly to educational and employment outcomes.

While the overall survey response rate was 21 percent, suggesting the possibility of non-response bias, the Abt team found that after controlling for other factors, gender, total term length, and number of terms

of service were not significantly associated with survey response. This suggests the portion of the survey sample that responded to the survey is not biased toward those who served long terms or multiple terms and therefore may have had a more positive AmeriCorps experience and feel more connected to the program. NCCC alumni were far more likely to respond than were alumni from ASN or VISTA, controlling for other factors. NCCC, with its predominant service experience involving teams of service members kept together for one year as they serve various organizations in multiple locations across a region, may foster more camaraderie, loyalty and identification with the AmeriCorps program. However, because NCCC is a much smaller service program than ASN and VISTA, the NCCC responses are appropriately weighted to avoid their skewing the overall survey results.

The key findings below are organized by research question, first presenting how participating in a national service program influence members' career pathways, civic engagement, development of career-oriented soft and hard skills, and sense of community (Research Question #1). Next we present the key findings related to post-secondary and employment outcomes of AmeriCorps alumni, exploring how national service is serving as a pathway to post-secondary and/or employment success (Research Question #3). Finally we present how the measured member outcomes varied by life stage and by types of service experience (Research Question #2).

### **Research Question #1: Impact of Service upon Civic Engagement, Career Skills and Sense of Community**

AmeriCorps service is found to have a significant positive effect on civic engagement; respondents were more likely to engage in all community service activities post-AmeriCorps compared to pre-AmeriCorps. The biggest changes seen in pre- and post- AmeriCorps civic engagement were on two items that indicate real action in alumni's current communities, with 71 percent very or completely likely to be helping to keep their communities safe and clean (compared to 42 percent prior to AmeriCorps service) and 70 percent very or completely likely to donate money or goods to a cause (compared to 40 percent prior to AmeriCorps service). Also, 91 percent of AmeriCorps alumni were registered to vote in the last presidential election, and of those, 94 percent voted, which is much higher than the national average of 58% of eligible voters who voted in 2012.<sup>36</sup>

AmeriCorps service is also perceived to have a significant effect upon alumni members' sense of community in their current places of residence across the country. The biggest changes in measures from pre- to post-service appear in items that suggest an understanding of and a plan to address community needs. For example, 81 percent of respondents agreed or strongly agreed that they are aware of the important needs in their communities post-AmeriCorps, compared to 49 percent prior to AmeriCorps. Also, 79 percent of respondents agreed or strongly agreed that they are or plan to become actively involved in issues that positively affect their communities post-AmeriCorps, compared to 47 percent prior to AmeriCorps. AmeriCorps service seems to have had the strongest effect upon NCCC members; NCCC alumni were least likely to answer strongly agree or agree across all sense of community items

---

<sup>36</sup> <http://bipartisanpolicy.org/library/2012-voter-turnout/>

pre-AmeriCorps, but those differences shrink to insignificance for all but two of the sense of community items post-AmeriCorps.

The survey data demonstrate a positive effect of AmeriCorps service upon cultural competency. For all cultural competency items, participants viewed themselves as more competent after AmeriCorps than before their service. This difference was largest for the item “confidence interacting with people from different cultures or backgrounds,” with 72 percent of respondents strongly agreeing and agreeing before AmeriCorps, and 93 percent strongly agreeing and agreeing after AmeriCorps. Again the data suggest AmeriCorps service having the strongest effect in this regard on NCCC members. Prior to AmeriCorps, NCCC alumni were least likely to answer strongly agree or agree to the cultural competency items. However, these differences became insignificant in the post-AmeriCorps measures.

NCCC alumni reported more changes relating to broadened horizons and cross-cultural understanding than other program alumni. For example, 87 percent of NCCC alumni agreed or strongly agreed that they “learned more about the ‘real world’ or ‘the rest’ of the world” compared to 79 percent and 76 percent of ASN and VISTA alumni respectively. Also, 80 percent of NCCC alumni agreed or strongly agreed that they re-examined their beliefs and attitudes about other people compared to 68 percent and 61 percent of ASN and VISTA alumni respectively.

The survey found positive effect of AmeriCorps service upon self-efficacy measures as well. Some of the more notable shifts in competency pertained to an increased capacity among respondents to overcome opposition and deal with unforeseen circumstances. Once again, of the three programs, NCCC participants were the least likely to answer strongly agree or agree to the various self-efficacy measures prior to AmeriCorps, however, these differences became insignificant post-AmeriCorps.

### **Research Question #3: Impact of Service upon Members’ Post-Secondary and Employment Outcomes**

The survey found that AmeriCorps service had significant impacts upon alumni’s employment and career pathways. More than half of respondents (51 percent) said that serving in AmeriCorps opened up a career path for them that they might not have otherwise considered. More than two-fifths (42 percent) of alumni who were employed within six months after their AmeriCorps service said that their employment resulted from a connection made during AmeriCorps service. These results did differ significantly by program, with 42 percent of ASN alumni indicating that their employment resulted from a connection made during AmeriCorps service compared to 46 percent for VISTA and just 15 percent for NCCC. The low percentage for NCCC may be explained by the fact that NCCC members serve with multiple organizations across a region during their service, whereas VISTA and ASN members are much more likely to serve with and build lasting connections with one organization.

When seeking a job or career advice, one-third of alumni reported contacting their AmeriCorps network some of the time. Thirteen percent contact this network often or always, but more than half (53 percent) reported never contacting their AmeriCorps network when looking for work or career advice. This finding suggests some potential for growth in terms of building up an AmeriCorps alumni network and communicating the value of this network to alumni. Furthermore, nine percent of respondents answered that their AmeriCorps experience did not help them develop a career path, often citing a lack of knowledge and underappreciation of the AmeriCorps experience among future employers. This finding

presents an opportunity to engage employers in a career network for alumni and to emphasize the career skills developed during service to interest employers in the AmeriCorps alumni talent pool.

Almost two-fifths of employed alumni are working in the nonprofit or social service sector, while just over one-third are in the public sector and around one-quarter are in the private sector. In contrast, many more U.S. workers are employed in the private sector (76 percent) than in the public sector (15 percent) or the nonprofit sector (8 percent).<sup>37</sup> Fully half of currently employed VISTA alumni are working in the nonprofit sector, compared to 37 percent of ASN alumni and one-quarter of NCCC alumni. Conversely, 45 percent of employed NCCC alumni are working in the private sector, compared to 27 percent of ASN alumni and 24 percent of VISTA alumni.

The education award is helping many AmeriCorps alumni further their education and pay back student loans. More than two-fifths (42 percent) of alumni used the education award to pursue college or graduate school, and one-third of alumni used the award to repay student loans. Survey respondents also indicated that the education award allowed them to pursue a career path, including 28 percent who used the award to supplement their income and allow them to continue working in lower-paying jobs at nonprofit organizations.

The survey corroborates a finding of an administrative data match completed by the Abt team on behalf of CNCS earlier this year, namely that AmeriCorps alumni are considerably better educated than the population at large. According to the survey responses, nearly two-fifths of alumni currently have a graduate degree, and another two-fifths have a four-year degree as their highest educational attainment. According to the U.S. Census Bureau, 33 percent of adults aged 25 or older had a bachelor's degree or higher in 2015.<sup>38</sup> AmeriCorps alumni, per the survey, more than double that rate with roughly 79 percent having a bachelor's degree or higher. This current educational attainment did vary by program, with roughly two-fifths of ASN and VISTA alumni reporting having a graduate degree, whereas just one-fifth of NCCC alumni had attained a graduate degree at the time of the survey.

## **Research Question #2: Variations in Impacts Based on Service Experience and Life Stage**

The 2016 survey found significant positive associations between alumni's satisfaction level with their AmeriCorps service and the studied outcomes, controlling for outcomes before AmeriCorps (if applicable), AmeriCorps program, and demographic variables (race/ethnicity, gender, and parental education). The survey also showed small negative associations between the age of respondents – used as a proxy for life stage – and the various outcomes, with older alumni having scoring slightly lower on outcomes than younger alumni.

---

<sup>37</sup> U.S. private and public sector employment percentages are estimated using seasonally adjusted preliminary July 2016 data from the U.S. Bureau of Labor Statistics (BLS): 122 million Americans employed in the private sector and 22 million Americans employed in the public sector ([http://www.bls.gov/news.release/empsit.t17.htm#ces\\_table1.f.p](http://www.bls.gov/news.release/empsit.t17.htm#ces_table1.f.p)). The proportion of U.S. private sector employment in nonprofit organizations is estimated at 10 percent from a 2014 BLS study ([http://www.bls.gov/opub/ted/2014/ted\\_20141021.htm](http://www.bls.gov/opub/ted/2014/ted_20141021.htm)). This figure may slightly underestimate nonprofit employment since only 501(c)3 organizations were counted.

<sup>38</sup> <https://www.census.gov/hhes/socdemo/education/data/cps/2015/tables.html>

The vast majority of respondents reported high satisfaction levels with AmeriCorps; 87 percent of alumni were satisfied or very satisfied with their overall service experience. More than 90 percent of alumni strongly agreed or agreed with the statements “I felt I made a difference in the life of at least one person,” “I felt I made a contribution to the community,” and “I gained an understanding of the community(s) where I served.” Alumni who were in an individual placement had a slightly less positive service experience than alumni performing team-based service or in some other arrangement – an average score of 3.9 versus 4.1, a finding that held up when controlling for AmeriCorps program.

While 82 percent of alumni agree or strongly agree that AmeriCorps was a defining personal experience, a slightly lower 73 percent of alumni agree or strongly agree that AmeriCorps was a defining professional experience. This suggests some room for improvement in terms of communicating the value of the AmeriCorps experience as a means for developing service members’ career skills, pathways and prospects for employment.

While a high percentage of alumni were satisfied or very satisfied with their AmeriCorps service, there was some variation in the satisfaction levels which allowed for an analysis of the effect of service experience upon the various outcomes of interest, such as alumni’s sense of community, self-efficacy, career skills, as well as on their educational and employment outcomes. The exhibit below summarizes the association of a one point difference on the service experience scale with these various outcomes. For example, one of the largest identified associations was with career-oriented skills, where a difference of one point on the service experience scale is associated with a difference of 0.7 points on the impact of AmeriCorps on career-oriented skills scale. Also, alumni who rated their service one point higher than other alumni on the service experience scale were four percentage points more likely to be employed and seven percentage points more likely to have a graduate degree than similar alumni.

**Exhibit X-1. Impact of Service and Variation by Service Experience and Life Stage**

Outcome of Interest	Change pre-service to post-service*	Change per one point difference in service experience**	Change per ten-year difference in age**
Civic engagement (5-point scale)	0.6	0.4	no impact
Civic self-efficacy (4-point scale)	n/a	0.3	no impact
Sense of community (5-point scale)	0.6	0.4	no impact
Cultural competency (5-point scale)	0.3	0.3	no impact
Self-efficacy (5-point scale)	0.5	0.3	-0.05
Career-oriented skills (4-point scale)	n/a	0.7	-0.05
Employed (percent)	43	4	-0.7
Graduate degree (percent)	33	7	no impact

\*Pre-post comparisons, no controls (see Section II for methodological details).

\*\*Regression models, all controls (see Section II for methodological details).

The 2016 survey found either no impact or very small negative impacts of service on the various outcomes of interest as respondent’s age increased. This variation by life stage could be explained by the

fact that older alumni have had more opportunities for other significant experiences in their lives to affect the outcomes of interest, which minimized the impact of AmeriCorps on those same outcomes.

### Successes and Challenges of Data Collection

The 2016 AmeriCorps Alumni Outcomes survey achieved an overall response rate that is in line with recent survey efforts for the population and with similar web surveys with a significant amount of phone follow-up. The AmeriCorps Alumni Pilot Survey in 2015, which was fielded similarly to three different cohorts of AmeriCorps alumni over a similar data collection period, achieved a 20 percent overall response rate. The 2016 survey improved just slightly on last years' experience – with a 21 percent response rate – despite a significantly increased survey length. Exhibit X-2 below presents two recent survey efforts conducted by the Abt team and shows how their strategies and results compare with this year's AmeriCorps Alumni outcome survey.

**Exhibit X-2. Previous Data Collection Efforts by the Abt Team Compared to AmeriCorps Alumni Outcomes Survey Effort**

Strategy	Health Profession Opportunity Grants (HPOG)	Career Pathways Intermediate Outcomes (CPIO)	AmeriCorps Alumni Outcomes Survey
Elapsed time between program and survey	15 months	36 months	24, 60, or 120 months
Collect full contact info and 3 alternate contacts	Yes	Yes	No
Contact information updates	3 (\$5 postpaid)	4 (\$2 prepaid)	0
Accurint lookup	Multiple	Multiple	Single
Advance mailing	Yes (no incentive)	Yes (\$5 prepaid)	Yes (no incentive)
Survey completion incentive	\$30	\$40	\$2 charitable (50%)
Telephone calls	Up to 10 per phone number, with multiple numbers being called per person	Up to 10 per phone number, with multiple numbers being called per person	Up to five per person
Completion rate after telephone calls	34%	28%	21%
In-person follow-up after telephone calls	Yes	Yes	No

While the AmeriCorps Alumni Outcomes survey achieved a lower response rate than the other two surveys above, there were considerably more resources invested in the other surveys in collecting full contact information for the survey sample, providing cash incentives for survey completion, and in phone and in-person follow-up.

One of the challenges with the 2016 survey effort and with survey data collection more generally is the time required to design the survey materials, request and receive both IRB and OMB approval, field the survey and analyze and report the results. The 2016 project timeline of 12 months allowed for little flexibility once the OMB approval process took longer than expected. This necessitated a shortened data collection period – from a planned three months down to six weeks – which did not allow for the ideal sequence of email followed by phone outreach once the series of email reminders had been completed. If

possible, CNCS might budget 15 months for survey efforts in the future to allow more time for each phase of the project.

Another significant challenge with the 2016 survey effort was the survey length; the survey completion time was estimated at 22 minutes but ended up taking closer to 25 minutes by web and more than 30 minutes by phone. In the Abt team's experience, potential respondents are reluctant to begin surveys that take longer than 20 minutes to complete. Future survey efforts might aim to keep the estimated burden to a maximum of 20 minutes per survey to increase response rates.

Finally, a known challenge going into the 2016 survey effort was the quality of the alumni contact information, especially for the older cohorts. While an Accurint check improved some of the address and phone information, many alumni were likely attempted via old email accounts that would not produce "bounceback" messages but were likely no longer the primary email addresses for alumni sample members. Without an ongoing effort to maintain contact information for alumni, it will be difficult to reach older cohorts of alumni based on their contact information collected during their service.

The Abt team proposed – and OMB approved – the use of a small charitable donation incentive as an experiment to try to boost response rates. Unfortunately the small incentive proved to have a negligible effect. While there is some evidence that more significant and prepaid incentives would help boost response rates, OMB has been reluctant to approve such incentives for CNCS data collection efforts in the past.

### **Recommendations for Improvements to the Data Collection Process**

As mentioned in the previous section, two recommendations for improvements to survey data collection are 1) allow 15 months or more for a new survey data collection effort; and 2) limit the estimated survey completion time to a maximum of 20 minutes. As also mentioned in the previous section, a major hurdle to improving response rates to CNCS surveys is the lack of current contact information for many AmeriCorps alumni. In the years after their service, many alumni move and change their phone numbers and email addresses. Even if phone numbers or email addresses are still active, it is not guaranteed that alumni are still using them. To bolster future data collection efforts, CNCS could begin implementing strategies to maintain up-to-date contact information for new cohorts of AmeriCorps alumni.

The first step of so-called panel maintenance efforts would be a request for AmeriCorps members to provide multiple alternate contacts upon enrollment and/or upon program exit. These contacts should be family members or close friends who would be expected to be familiar with the member's whereabouts in the future. AmeriCorps members could also be required to update their contact information as they are completing the program. In addition to email addresses, mailing addresses, and phone numbers, members could be asked to connect via social media and consent to receive text messages from CNCS. Each exiting member could be sent a copy of the electronic CNCS alumni newsletter with an encouragement to subscribe and provide their email address.

The next common step in panel maintenance efforts is to email or mail regular contact information update requests to all alumni. These requests can be paired with an incentive to encourage response. Prepaid incentives work by activating the norm of reciprocity; recipients are more inclined to respond

because they have already received something in exchange for their expected cooperation, and these requests achieve higher response than do those with promised incentives across a variety of modes (Cantor, O'Hare, and O'Connor, 2006; Church, 1993; Edwards et al., 2002; Goldstein and Jennings, 2002; Singer et al., 1999; Warriner et al., 1996; Yammarino, Skinner, and Childers, 1991). In general, research suggests that incentives sent along with a survey invitation are more cost-effective than incentives promised upon survey completion, which are in turn more effective than lottery incentives (Shettle and Mooney, 1999).

Because OMB is unlikely to approve a monetary incentive for contact information updates or for actual survey efforts, CNCS could instead include a small and creative nonmonetary incentive with a mailed letter. Low-cost, lightweight AmeriCorps-branded items such as patches, magnets, window stickers, or sheets of personalized return address labels could be useful pre-incentives. Higher-value or bulkier AmeriCorps-branded items, such as t-shirts, backpacks, or water bottles, could be offered either to all respondents or by lottery. If alumni do not reply to contact update requests, CNCS can follow up with the alternate contacts provided at enrollment or at exit.

### **Recommendations for Next Steps Based on Findings**

The 2016 AmeriCorps Alumni Outcomes Survey effort provided a wealth of information on the perceived impacts of national service on range of outcomes important to alumni's current communities. CNCS has multiple descriptive studies that suggest positive impacts of national service on AmeriCorps members and their civic engagement and contributions to society as a whole. Some of the strongest impacts were seen among former NCCC members, with significant differences in pre-service scores on cultural competency and sense of community compared to ASN and VISTA disappearing in the higher post-service scores on those same scales. CNCS might explore the characteristics of NCCC program design to identify the specific factors contributing to the positive experience and positive changes NCCC members are reporting post-service.

While the 2016 survey effort achieved enough responses to produce meaningful estimates of desired outcomes for the AmeriCorps alumni population, the strength of the evidence is limited by the self-reported and descriptive nature of the data collection effort. CNCS might explore more rigorous studies, involving pre- and post-service surveys or including a comparison group, for example those who applied to AmeriCorps but did not end up serving as members.

CNCS may also want to review and compare the educational and employment outcome data gathered by the 2016 survey and by the National Student Clearinghouse and planned U.S. Census Longitudinal Employer-Household Dynamics (LEHD) administrative data matches. Based on the Abt team's experience with the 2016 survey and the NSC match completed earlier this year, at least a portion of the outcome data of interest can be obtained via an administrative data match for a small fraction of the cost of a survey. The survey, of course, did gather far more information on other outcomes and is flexible enough – within burden constraints – to allow for more in-depth data collection on education outcomes that might simply not exist in administrative datasets. However, if CNCS is interested in basic information on educational enrollment, degree attainment and fields of study, administrative data matches are relatively affordable to pursue year after year.

Given the limitations of each kind of data collection effort, the Abt team recommends that CNCS continue to build the evidence base using a range of methods to document the impacts of national service on AmeriCorps members, the communities in which they serve, and the communities in which they later reside. These impacts are proving to be significant and important for the health of civic society and our country as a whole.

## REFERENCES

- Academic Innovations (2001). Secretary's Commission on Achieving Necessary Skills (SCANS): Final Report Available. Retrieved from <http://www.academicinnovations.com/report.html>
- Achieve (2012). Understanding the Skills in the Common Core State Standards. Retrieved from <http://www.achieve.org/files/Understanding-Skills-CCSS.pdf>
- American Association for Public Opinion Research (9<sup>th</sup> ed.). (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. Oakbrook Terrace, IL.
- Bertoni, N., Burkey, A., Caldaro, M., Keeter, S., DiSogra, C., & McGeeney, K. (2015). Advance Postcard Mailing Improves Web Panel Survey Participation. Paper presented at the annual conference of the American Association for Public Opinion Research, Hollywood, FL.
- Boyle, T., Heyworth, J., Landrigan, J., Mina, R., & Fritschi, L. (2012). The Effect of Lottery Scratch Tickets and Donation Offers on Response Fraction: A Study and Meta-Analysis. *Field Methods*, 24, 112-132.
- Brennan, M., Seymour, P., & Gendall, P. (1993). The Effect of a Monetary Incentive on Mail Survey Response Rates: New Data. *Marketing Bulletin*, 4, 43-52.
- Cantor, D., O'Hare, B. C., & O'Connor, K. S. (2<sup>nd</sup> ed.) (2006). The Use of Incentives to Reduce Nonresponse in Random Digit Dial Telephone Surveys. In J.M. Lepkowski, C. Tucker, J.M. Brick, E.D. de Leeuw, L. Japac, P.J. Lavrakas, M.W. Link, and R.L. Sangster (Eds.) *Advances in Telephone Survey Methodology*. 471-498.
- Career Technical Education (CTE) (2012). The Common Career Technical Core (CCTC). National Association of State Directors of Career Technical Education Consortium/National Career Technical Education Foundation, Retrieved from <http://www.careertech.org/CCTC>.
- Church, A. H. (1993). Estimating the Effect of Incentives on Mail Survey Response Rates: A Meta-Analysis. *Public Opinion Quarterly*, 5, 62-79.
- Common Core State Standards Initiative (2016). Retrieved from <http://www.corestandards.org/read-the-standards/>
- Conley, D. T. Council of Chief State School Officers (2014). The Common Core State Standards: Insight into Their Development and Purpose. Retrieved from [http://www.ccsso.org/Documents/2014/CCSS\\_Insight\\_Into\\_Development\\_2014.pdf](http://www.ccsso.org/Documents/2014/CCSS_Insight_Into_Development_2014.pdf)
- Corporation for National and Community Service (2015a). Request for Quote (RFQ): Expert Consultants – New Methods for Assessing AmeriCorps Alumni Outcomes. Washington, DC.
- Corporation for National and Community Service (2015b). AmeriCorps Alumni Outcomes: Technical Memo. Corporation for National and Community Service. Washington, DC.
- Corporation for National and Community Service, Office of Research and Policy Development (2008a). Improving Lives and Communities: Perspectives on 40 Years of VISTA Service. Washington, DC.
- Corporation for National and Community Service, Office of Research and Policy Development (2008b). Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni, Washington, DC.
- Crawford, S. D., McCabe, S. E., Saltz, B., Boyd, C. J., Freisthler, B., & Paschall, M. J. (2004). Gaining Respondent Cooperation in College Web-Based Alcohol Surveys: Findings from Experiments at Two

- Universities. Paper presented at the annual conference of the American Association for Public Opinion Research, Phoenix, AZ.
- De Leeuw, E., Callegaro, M., Hox, J., Korendijk, E., & Lensvelt-Mulders, G. (2007). The Influence of Advance Letters on Response in Telephone Surveys: A Meta-Analysis. *Public Opinion Quarterly*, 71, 413-443.
- Dillman, D., Smyth, J., & Christian, L. M. (3<sup>rd</sup> ed.) (2009). *Mail and Internet Surveys: The Tailored Design Method*.
- Dykema, J., Stevenson, J., Klein, L., Kim, Y., & Day, B. (2012). Effects of E-Mailed Versus Mailed Invitations and Incentives on Response Rates, Data Quality, and Costs in a Web Survey of University Faculty. *Social Science Computer Review*, 31, 359-370.
- Edwards, P., Roberts, I., Clarke, M., DiGuseppi, C., Pratap, S., Wentz, R., & Kwan, I. (2002). Increasing Response Rates to Postal Questionnaires: Systematic Review. *British Medical Journal*, 324, 1183-1185.
- Ennis, M.R. (2008). Competency Models: A Review of the Literature and The Role of the Employment and Training Administration (ETA). Retrieved from [http://www.careeronestop.org/CompetencyModel/Info\\_Documents/OPDRLiteratureReview.pdf](http://www.careeronestop.org/CompetencyModel/Info_Documents/OPDRLiteratureReview.pdf)
- Furse, D. H. & Stewart, D.W. (1982). Monetary Incentives versus Promised Contribution to Charity: New Evidence on Mail Survey Response. *Journal of Marketing Research*, 19, 375-380.
- Goldstein, K. M. & Jennings, M. K. (2002). The Effect of Advance Letters on Cooperation in a List Sample Telephone Survey. *Public Opinion Quarterly*, 66, 608-617.
- Harmon, M. A., Westin, E.C., & Levin, K. Y. (2005). Does Type of Pre-Notification Affect Web Survey Response Rates? Paper presented at the annual conference of the American Association for Public Opinion Research, Miami, FL.
- Hubbard, R. & Little, E.L. (1988). Promised Contributions to Charity and Mail Survey Responses: Replication with Extension. *Public Opinion Quarterly*, 52, 223-230.
- Kaplowitz, M. D., Hadlock, T. D, & Levine, R. (2004). A Comparison of Web and Mail Survey Response Rates. *Public Opinion Quarterly*, 68, 94-101.
- Kohut, A., Keeter, S., Doherty, C., Dimock, M., & Christian, L. (2012). Assessing the Representativeness of Public Opinion Surveys. Washington, DC: Pew Research Center.
- Lin, I. & Schaeffer, N. C. (1995). Using Survey Participants to Estimate the Effect of Nonparticipation. *Public Opinion Quarterly*, 59, 236-258.
- Link, M.W. & Mokdad, A. (2005). Advance Letters as a Means of Improving Respondent Cooperation in Random Digit Dial Studies: A Multistate Experiment. *Public Opinion Quarterly*, 69, 572-587.
- National Association of Colleges and Employers (NACE) (2013). Job Outlook: The Candidate Skills/Qualities Employers Want. Retrieved from <http://naceweb.org/s10022013/job-outlook-skills-quality.aspx>
- Office of Management and Budget (2006). Standards and Guidelines for Statistical Surveys. Washington, D.C.

- Olson, L., Schneiderman, M., & Armstrong, R. V. (1993). Increasing Physician Response Rates without Biasing Survey Results. Proceedings of the Survey Research Methods Section, American Statistical Association, Alexandria, VA. 1036-41.
- Pedersen, M. J. & Nielsen, C. V. (2014). Improving Survey Response Rates in Online Panels: Effects of Low-Cost Incentives and Cost-Free Text Appeal Interventions. *Social Science Computer Review*. Online early release, December 17. Retrieved from <http://ssc.sagepub.com/content/early/2014/12/17/0894439314563916.abstract>
- Robertson, D. H., & Bellenger, D. N. (1978). A New Method of Increasing Mail Survey Responses: Contributions to Charity. *Journal of Marketing Research*, 16, 632-633.
- Schaeffer, D. R., & Dillman, D. A. (1998). Development of a Standard E-Mail Methodology: Results of an Experiment. *Public Opinion Quarterly*, 62, 378-397.
- Shettle, C., & Mooney, G. (1999). Monetary Incentives in U.S. Government Surveys. *Journal of Official Statistics*, 15, 231-250.
- Singer, E., Van Hoewyk, J., Gebler, N., Raghunathan, T., & McGonagle, K. (1999). The Effect of Incentives on Response Rates in Interviewer-Mediated Surveys. *Journal of Official Statistics*, 15, 217-230.
- Singer, E. (2002). The Use of Incentives to Reduce Nonresponse in Household Surveys. In R. M. Groves, D. A. Dillman, J. L., Eltinge, & R. J. A. Little (Eds.) *Survey Nonresponse* (pp. 163-178). New York: John Wiley and Sons.
- Skinner, S. J., Ferrell, O. C., & Pride, W. M. (1984). Personal and Impersonal Incentives in Mail Surveys: Immediate versus Delayed Inducements. *Journal of the Academy of Marketing Science*, 12, 106-114.
- U.S. Department of Labor, Employment and Training Administration (ETA). U.S. Department of Education, National Center For Education Statistics by Act, Inc. (2000). The Secretary's Commission on Achieving Necessary Skills (SCANS). Workplace Essential Skills: Resources Related to the SCANS Competencies and Foundation Skills. Retrieved from <http://wdr.doleta.gov/opr/fulltext/document.cfm?docn=6147>
- U.S. Department of Labor, Employment and Training Administration (ETA) (2016). Industry Competency Initiative. Competency Model Clearinghouse. Retrieved from [http://www.careeronestop.org/CompetencyModel/pyramid\\_definition.aspx](http://www.careeronestop.org/CompetencyModel/pyramid_definition.aspx)
- U.S. Department of Labor (1991). The Secretary's Commission on Achieving Necessary Skills (SCANS). What Work Requires of Schools: A SCANS Report for America 2000. Retrieved from <http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf>
- Warriner, K., Goyder, J., Gjertsen, H., Hohner, P., & McSpurren, K. (1996). Charities, No; Lotteries, No; Cash, Yes: Main Effects and Interactions in a Canadian Incentives Experiment. *Public Opinion Quarterly*, 60, 542-562.
- Workforce Data Quality Campaign (2016). Industry Skill Gaps. Retrieved from <http://www.workforcedqc.org/state-solutions/industry-skills-gaps>
- Yammarino, F. J., Skinner, S. J., & Childers, T. L. (1991). Understanding Mail Survey Behavior: A Meta-Analysis. *Public Opinion Quarterly*, 55, 613-639.