Return on Investment Study: AmeriCorps Seniors Foster Grandparent Program and Senior Companion Program

Submitted to:

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December 18, 2020

This report was commissioned by AmeriCorps' Office of Research and Evaluation under Blanket Purchase Agreement # CNSHQ14A0006 and Contract # 95332A19F-0062. Information in this report is in the public domain. Please, direct communications related to this report to Lily Zandniapour at lazandniapour@cns.gov and Colin White at cwhite@cns.gov. Cite this report as follows: Modicamore, D., Naugler, A., Casey, B., Miller, B., Munaretto, C., & Pershing, J. (2020). Return on Investment Study: AmeriCorps Seniors Foster Grandparent Program and Senior Companion Program. ICF.





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Executive Summary

Foster Grandparent and Senior Companion Programs

AmeriCorps contracted with ICF Incorporated, LLC (hereafter ICF) to explore and quantify the return on investment (ROI) of several programs that rely on national service—AmeriCorps State and National Program and AmeriCorps Seniors—as a major resource to sustain operations. ROI analyses have the potential to help AmeriCorps measure the performance of programs and build the base of evidence for future resource allocation decisions. In addition, ROI study results will help AmeriCorps communicate the value of its programming to relevant stakeholders.

AmeriCorps Seniors¹ is composed of three programs with separate streams of funding: the Foster Grandparent Program (FGP), the Senior Companion Program (SCP), and the Retired and Senior Volunteer Program (RSVP). This study measures the ROI for two of these three AmeriCorps Seniors programs: FGP & SCP. Unlike

Key Results

This study estimates that the AmeriCorps Seniors Foster Grandparent Program (FGP) and Senior Companion Program (SCP) generate an ROI of \$3.50 per funder dollar. FGP alone has an ROI of \$2.75 per funder dollar. SCP has an ROI of \$5.08 per funder dollar.

The return on each dollar of federal support for the program is even higher. The magnitude of the results is driven by savings on healthcare, savings on assisted living costs, and the value of in-kind services.

FGP & SCP, RSVP supports programming in six diverse focus areas. Evaluation data that cover the full range of RSVP programming are not yet available. For that reason, RSVP is not included in this ROI analysis.

Foster Grandparent Program

FGP engages volunteers ages 55 and over to serve as role models, mentors, and friends to children. The program provides a way for seniors to stay active by serving children and youth in their communities. FGP volunteers serve at thousands of local organizations that (AmeriCorps, 2017a):

- Help children learn to read and provide one-on-one tutoring
- Mentor troubled teenagers and young mothers
- Care for premature infants or children with disabilities
- Help children who have been abused or neglected

¹ As of September 29, 2020, the Seniors Corps program's name was changed to AmeriCorps Seniors.

FGP not only benefits children, but also helps the volunteers stay active and engaged with the community. Volunteers in this program may qualify to earn a tax-free hourly stipend. For fiscal year (FY) 2018, AmeriCorps reported that there were roughly 22,435 FGP volunteers serving nationwide.²

Senior Companion Program

SCP engages volunteers to provide assistance and companionship primarily to elderly individuals—and also to people with disabilities—who have difficulty with daily living tasks, such as shopping or paying bills. The program aims to keep individuals independent longer and provide respite to their caregivers.

Senior Companions help an average of two to four adults live independently in their own homes. SCP provides services to the elderly and to people with disabilities, provides caregivers a respite from their caregiving responsibilities, and helps the senior volunteer stay active and engaged.

Volunteers in this program may qualify to earn a tax-free hourly stipend if they meet certain income eligibility requirements. For FY18, AmeriCorps reported that there were roughly 10,655 SCP volunteers serving nationwide.

Return on Investment Study Methods

The methodology for the FGP & SCP ROI study consists of the following components:

- 1. Measuring and monetizing program benefits. This included using data from previous evaluations and other third-party sources to determine the benefits to FGP & SCP participants, FGP & SCP volunteers, caregivers, private insurance companies, other healthcare payers, and the federal government. The benefits realized across these six stakeholder groups include:
 - FGP & SCP Participants. Program participants benefit from in-kind services, reduced spending on assisted living facilities, and reduced out-of-pocket (OOP) medical care costs due to improved health outcomes that result from the services they receive.
 - FGP & SCP AmeriCorps Seniors Volunteers. These AmeriCorps Seniors volunteers' benefits include the stipends they receive during their service and reduced OOP medical care costs due to improved health outcomes after serving.
 - Caregivers. Individuals who receive respite from their caregiving activities due to the services offered by SCP experience reduced OOP medical care costs due to the improved health and well-being they experience.
 - Private Insurance Companies. These healthcare payers benefit from reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.

² Unless otherwise cited, all information provided by AmeriCorps for this report was received through ICF's personal communication in 2020 with AmeriCorps.

- Other Healthcare Payers. A variety of additional healthcare payers (e.g., community and neighborhood clinics, worker's compensation, or homeowner's or liability insurance) benefit from reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.
- Federal Government. Medicare and Medicaid have reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.

This ROI analysis monetized program benefits in 2019 dollars.

- 2. <u>Assessing program costs</u>. Program costs for these two AmeriCorps Seniors programs were provided directly by AmeriCorps and consist of federal funds and budgeted match funds for each program for FY18 (i.e., October 1, 2017 September 30, 2018).³
- 3. <u>Calculating the ROI</u>. The ROI analysis includes three ROI calculations:
 - Total benefits per federal dollar
 - Total benefits per funder dollar
 - Federal government benefits per federal dollar

This analytical framework includes only those benefits that 1) could be reasonably monetized given the available data, and 2) likely would not have occurred without FGP & SCP. Figure ES-1 shows how the programs can result in FGP & SCP participant, FGP & SCP AmeriCorps Seniors volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits.

³ The most recent year for which cost data were available.

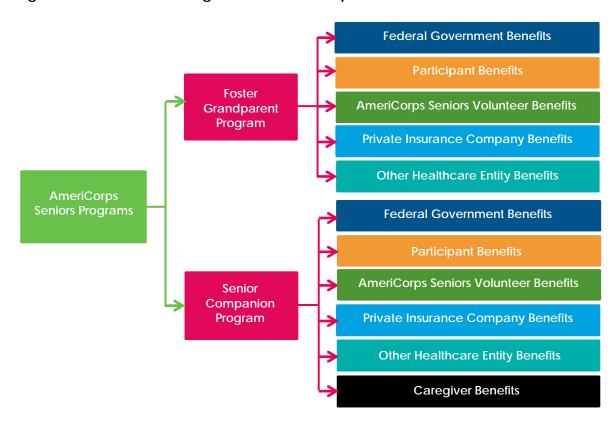


Figure ES-1. Benefits among Stakeholder Groups Derived from FGP & SCP

<u>Figure ES-2</u> shows the benefits and costs that are included in each of the three types of ROI calculations.

Figure ES-2. Benefits and Costs Included in the ROI Calculations

ROI Calculation*	Benefits (numerator)	Costs (denominator)
Total Benefits per Federal Dollar	All participant, volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits derived from FGP & SCP	Federal AmeriCorps funding
Total Benefits per Funder Dollar	All participant, volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits derived from FGP & SCP	Federal AmeriCorps fundingBudgeted match and all other funding
Federal Government Benefits per Federal Dollar	Reduced healthcare spending (Medicare and Medicaid) attributable to FGP & SCP	Federal AmeriCorps funding

^{*}Note: AmeriCorps is the only source of federal support for FGP & SCP, so the cost of AmeriCorps's support to these programs is the sole component of the denominator for two ROI calculations: 1) total benefits per federal dollar, and 2) federal government benefits per federal dollar. Total benefits per funder dollar includes all support to these programs, including AmeriCorps support and budgeted match funding from non-federal entities.

ROI Results

<u>Figure ES-3</u> summarizes the ROI results for FGP & SCP. The results are expressed as cost-benefit ratios and are interpreted as the amount of dollars returned for every dollar of investment (or cost).⁴

Figure ES-3. ROI Results for FGP & SCP

	AmeriCorps Seniors Program		
ROI Calculation	FGP & SCP Combined	FGP	SCP
Total Benefits per Federal Dollar	\$4.57	\$3.45	\$7.29
Total Benefits per Funder Dollar	\$3.50	\$2.75	\$5.08
Federal Government Benefits per Federal Dollar	\$0.69	\$0.16	\$1.97

Combined, FGP & SCP generate strong positive ROIs for two of the three ROI calculations: total benefits per federal dollar and total benefits per funder dollar—a return of \$4.57 and \$3.50 for every dollar invested, respectively. When only federal government benefits are considered, the return for FGP & SCP combined is \$0.69 for every dollar invested.

For FGP alone, this analysis estimates a return of \$3.45 in total benefits per federal dollar and \$2.75 per funder dollar. The results for FGP are lower than those for SCP, particularly FGP's return of the federal government benefits per federal dollar of \$0.16. However, the lower ROIs for FGP are primarily due to a major limitation in this study: the lack of data availability to measure the long-term benefits to a large proportion of FGP participants. The participants' benefits for FGP captured in this study primarily consist of the value of services provided by FGP volunteers, as measured by multiplying the number of hours of services provided by a market rate for those services. The long-term benefits to the children and youth who are served by FGP programs are not captured because those outcome data are not available. Those benefits are likely considerable. For example, the one-on-one tutoring that is provided by FGP may lead to improved educational outcomes and higher educational attainment, which may, in turn, lead to increased earnings and tax revenue through employment, as well as reduced government spending on public assistance. All of these can drive a strong, long-term ROI. Even with this limitation, however, these ROI results for FGP still demonstrate strong total benefits per federal dollar and total benefits per funder dollar.

⁴ ROIs are often expressed as percentages when measuring the financial return to a single entity from that entity's investment. Although this is consistent with one of the three ROI metrics reported (e.g., federal government benefits per federal dollar), since the other ROIs lend themselves to a cost-benefit ratio, that ratio is consistently used for all three metrics. Although not shown as a ratio, the results should be interpreted as the return for every dollar of investment.

SCP generates a strong positive return for all three ROI calculations. Total benefits per federal dollar are \$7.29, while total benefits per all funder dollars are \$5.08. The federal government alone realizes a return of \$1.97 for every tax dollar invested.

The magnitude of the positive ROI calculations is driven by several factors, including:

- Healthcare expenditure savings. Volunteers, caregivers, program participants, private insurance companies, other healthcare payers, and the federal government all realize savings in healthcare expenditures from the improvement in health outcomes of participants, volunteers, and caregivers. Healthcare savings stem from reduced emergency department visits, reduced inpatient hospital stays, and overall improved health and wellness.
- Assisted living expenditure savings. Many of the individuals who receive services
 from SCP volunteers report that they can stay in their homes while receiving the
 services rather than having to move into an assisted living facility. This generates
 significant cost savings for these program participants.
- Value of in-kind services. FGP & SCP program participants (and their households)
 receive services that are provided in-kind by volunteers at no cost to themselves or
 their families. These services have monetary value and do not displace labor, but
 instead add the capacity needed to address unmet needs in communities
 nationwide.

Introduction

AmeriCorps contracted with ICF Incorporated, LLC (hereafter ICF) to explore and quantify the return on investment (ROI) of several programs that rely on national service—AmeriCorps and AmeriCorps Seniors—as a major resource to sustain operations. ROI analyses measure the performance of programs and build the base of evidence for future resource allocation decisions. ROI study results demonstrate the value of AmeriCorps programming to relevant stakeholders.

This project began with a comprehensive literature review process to assess the feasibility of ROI analyses of several national service programs. These feasibility studies included thorough reviews of these programs' recent evaluations, detailed logic models, proposed ROI analysis methodologies for each program, and a scorecard mechanism that determined the viability of conducting an ROI for each selected program.

Upon completion of five feasibility studies, AmeriCorps selected four programs to be the subject of ROI studies: College Possible, the Community Technology Empowerment Project (CTEP), Minnesota Reading Corps, and AmeriCorps Seniors' Foster Grandparent and Senior Companion Programs. This ROI study measures the benefits of AmeriCorps Seniors' Foster Grandparent Program (FGP) and Senior Companion Program (SCP) against its costs based on the analytical approach and data sources specified in its respective feasibility study.

Study Overview

This study is organized into five sections:

- Program Description describes the program's design, activities, and objectives, along with the role that national service (specifically AmeriCorps Seniors volunteers) plays in its operation. The section also provides a brief history of past evaluations and outlines the factors that made this program a strong selection for an ROI study.
- ROI Methodology outlines how this analysis used various data sources to monetize benefits derived from FGP & SCP and describes its program costs.
- Benefits, Costs, and ROI Results provides a detailed description of the benefits and costs that are inputs into the ROI analyses and presents the results of the three ROI calculations.
- Recommendations for Further Research explores ways in which AmeriCorps and others could further build the evidence base for this program and similar programs, including how to address limitations of this study.
- Conclusion summarizes key points from the ROI study overall.

Program Description

AmeriCorps Seniors is a network of national service programs for Americans 55 years and older, made up of three primary programs that each take a different approach to improving lives and fostering civic engagement. Through three AmeriCorps Seniors programs—FGP, SCP, and Retired and Senior Volunteer Program (RSVP)—volunteers⁵ commit their time to address critical community needs, including academic tutoring and mentoring, elderly care, disaster relief support, and more (AmeriCorps, 2017b). These AmeriCorps Seniors programs not only generate important benefits for service recipients and their communities, but also for AmeriCorps Seniors volunteers themselves. This study measures the ROI for two of the three AmeriCorps Seniors programs: FGP & SCP.

Foster Grandparent Program

FGP engages volunteers ages 55 and over to serve as role models, mentors, and friends to children. The program provides a way for seniors to stay active by serving children and youth in their communities. FGP volunteers serve at thousands of local organizations that (AmeriCorps, 2017a).

- Help children learn to read and provide one-on-one tutoring
- Mentor troubled teenagers and young mothers
- Care for premature infants or children with disabilities
- Help children who have been abused or neglected

FGP not only benefits children, but also helps the volunteers stay active and engaged with the community. Volunteers in this program may qualify to earn a tax-free hourly stipend. For fiscal year (FY) 2018, AmeriCorps reported that there were roughly 22,435 FGP volunteers serving nationwide.⁶

Senior Companion Program

SCP engages volunteers to provide assistance and companionship primarily to elderly individuals—and also to people with disabilities—who have difficulty with daily living tasks, such as shopping or paying bills. The program aims to keep seniors independent longer and provide respite to family caregivers.

Senior Companions help an average of two to four adults live independently in their own homes. SCP provides services to the elderly, provides caregivers a respite from their caregiving responsibilities, and helps the senior volunteer stay active and engaged.

⁵ AmeriCorps Seniors nomenclature refers to "volunteers." AmeriCorps's nomenclature for national service as a whole refers to those same individuals as "members." This feasibility study uses the term "volunteers." ⁶ Unless otherwise cited, all information provided by AmeriCorps for this report was received through ICF's personal communication in 2020 with AmeriCorps.

SCP volunteers receive pre-service orientation, training from the organization where they serve, and may qualify to earn a tax-free hourly stipend. For FY18, AmeriCorps reported that there were roughly 10,655 SCP volunteers serving nationwide.

FGP & SCP Evaluation History

A series of evaluations provides insight into the impacts of FGP & SCP on volunteers, caregivers, and program participants.⁷ Four relevant studies are described below.

University of Maine (2018): SCP

This brief study by the University of Maine (2018) Center on Aging quantifies the costs and benefits of that organization's implementation of SCP. The study used the average hourly cost of nursing home care for a semi-private room in Maine to estimate the value of the program's independent living assistance services. It compares those costs to an estimate of program costs gleaned from AmeriCorps's annual progress report for FY16–17 to demonstrate significant cost savings of leveraging SCP volunteers versus having to reside in a nursing home facility.

Some of the assumptions made by the University of Maine (2018) risk overestimating the monetary value of SCP services. However, this study provides a basic model for using data from the commercial marketplace for senior care to estimate the value of an hour of SCP service.

Georges et al. (2017): Does the Senior Companion Respite Service Matter for the Health and Well-being of Caregivers?

In 2014, AmeriCorps launched an evaluation to assess the impact of SCP respite services on caregivers to inform policy discussion and strengthen the program's respite services. This evaluation by Georges et al. (2017) and had two primary objectives. The first objective was to describe the types of services caregivers received, how caregivers' expectations for respite services aligned with the respite services they received, and their satisfaction with respite services received. The second objective was to provide preliminary descriptive results on the extent to which there was a change in caregivers' self-rated health and well-being following the start of respite services.

The final analysis sample consisted of 56 caregivers who completed both baseline and follow-up surveys. The report used descriptive analysis to examine the types of services caregivers received, the number of hours the Senior Companion volunteer provided respite support, the alignment between expectations of respite services and the services received, and overall satisfaction with respite services. Importantly, the analysis compared changes in caregivers' self-rated health and well-being before and after

⁷ "Participants" refers to elderly individuals who are receiving care through SCP. This group is distinct from caregivers who benefit from the program because SCP provides a respite from their caregiving responsibilities. Caregivers may themselves be elderly, but are not the direct recipient of care provided by SCP volunteers.

benefiting from the respite care provided by SCP. Selected results of Georges et al. (2017) include the following:

- General health. Forty percent of caregivers who rated their health as fair/poor prior
 to receiving respite support subsequently rated their health as good at follow-up,
 indicating an improvement in overall perceived health.
- <u>Functional limitations</u>. A lower proportion of caregivers reported functional limitations at follow-up compared to baseline. This was particularly the case for those who, prior to the start of respite support, rated their health as fair/poor.
- Social and emotional connectedness. An average loneliness score was calculated based on caregivers' responses to questions about their social and emotional connectedness. At follow-up, a higher proportion of caregivers had lower loneliness scores, and a higher proportion reported fewer symptoms of depression. About 50 percent had a change in their loneliness score, which suggested a reduction in perception of loneliness at follow-up. Moreover, about 80 percent of respondents for the questions on emotional connectedness suggested they felt more emotionally connected at follow-up.
- <u>Depression symptoms</u>. Many caregivers also reported fewer symptoms of depression, with up to 42 percent of caregivers reporting a fewer number of depression symptoms in the follow-up survey.

The researchers also compared caregivers' self-reported health and well-being ratings to similar data from the general population, using a sample from the Health and Retirement Study (HRS; University of Michigan, 2020). The HRS comparison sample used in this analysis consisted of people providing care to a family member or friend (i.e., caregivers not receiving SCP's respite services). A comparison of the average score in self-rated health showed caregivers had significantly lower average self-rated health than HRS caregivers did at baseline. However, at follow-up, the caregivers had closed that gap, and as a result, there were no significant differences in the average score between the two groups. Of note, ICF's ROI analysis focuses on monetizing the impacts in this study related to caregivers' improved health outcomes from baseline to follow-up, specifically in terms of estimated medical cost savings.

Georges et al. (2018): Longitudinal Study of Foster Grandparent and Senior Companion Programs: Service Delivery Implications and Health Benefits to the Volunteers

This study—launched in 2014—was designed to evaluate FGP & SCP, and it had three objectives. The first was to describe the demographic profile, knowledge of national service, and motivation for volunteering among first-time FGP & SCP volunteers. The second was to assess volunteers' retention, satisfaction, and level of engagement with FGP & SCP. Lastly, the study aimed to examine how participation in national service

⁸ The University of Michigan Health and Retirement Study is a longitudinal panel study that surveys a representative sample of approximately 20,000 people in America. The HRS is supported by the National Institute on Aging and the Social Security Administration.

contributed to changes in self-rated health and well-being. This ROI study focuses on Georges et al.'s (2018) third objective. It monetizes the impacts on volunteers' health and well-being in terms of medical cost savings.

The Georges et al. (2018) longitudinal study recruited first-time volunteers with FGP or SCP between July and November 2015, and all individuals who had not previously volunteered with FGP or SCP were eligible to enroll. These first-time volunteers completed a baseline survey prior to the start of their service and then two follow-up surveys over a two-year period to capture a variety of measures. The first follow-up survey was administered nine months after the baseline survey and the second follow-up survey was administered 21 months after the baseline survey. The analysis sample consisted of the 841 volunteers who completed the three surveys.

The analysis examined changes in self-reported health outcomes for FGP & SCP stayers and leavers. Stayers were defined as FGP or SCP volunteers who stayed in national service through the two follow-up periods, and leavers represented those who left national service before the first or second follow-up period. Results indicate that FGP & SCP volunteers' self-rated health improved among stayers, but leavers reported a decline in their health. Moreover, a higher proportion of stayers also reported improved self-rated health in their first two years of service.

This evaluation also compared the self-reported health of FGP & SCP stayers to similar adult volunteers and non-volunteers in the general population. The researchers used propensity score matching (PSM) to match FGP & SCP volunteers with a sample of volunteer and non-volunteer participants in the 2012 and 2014 HRS datasets. Self-rated health was significantly higher for both FGP/SCP stayers and HRS volunteers compared to HRS non-volunteers at both baseline and second follow-up. At baseline, the percentage difference in average self-rated health between FGP & SCP stayers and HRS non-volunteers was 11 percent, which increased to 22 percent at second follow-up. Additionally, results indicate that FGP & SCP stayers who reported fair/poor health at baseline had 55 percent higher odds of improving their health compared to HRS non-volunteers. The increase in average self-rated health was due to both an increase in the average self-rated health among FGP & SCP volunteers and a decrease among HRS non-volunteers.

Georges et al. (2014): Descriptive Report for the Senior Companion Program Independent Living Pilot/Feasibility Survey

This evaluation of individuals who received independent living services from a Senior Companion volunteer was comprised of a cross-sectional and a pilot pre-post survey. The former had a sample size of 557 SCP program participants and captured their demographic characteristics as well as measured the program's impact on their perceived self-efficacy, life satisfaction, self-reported health and medical conditions, and other social and emotional health outcomes. The latter had a sample size of 20 new SCP program participants and asked similar questions related to perceived health outcomes and demographics.

Some results from these Georges et al. (2014) surveys include the following:

- On average, program participants have been receiving SCP services for 4.1 years.
 The average number of hours per week with an SCP volunteer is 8.7 hours.
- SCP program participants are predominantly female and racially diverse, and the majority (83 percent) are low-income (i.e., have an income level below \$20,000 annually).
- More than 90 percent of respondents agreed that they were satisfied with their Senior Companion, and that the Senior Companion Program had met their expectations.
- Ninety-seven percent of respondents reported having been diagnosed with at least one medical condition and more than two-thirds (68 percent) reported being diagnosed with more than one.
- Because of SCP, 90 percent agreed that they were less lonely.
- Because of SCP, 73 percent agreed that they were able to remain living at their home.

Selection of FGP & SCP for the AmeriCorps ROI Project

Based on a comprehensive feasibility study, ICF recommended making FGP & SCP the subject of an ROI analysis due to:

- <u>The scale of program operations</u>. Both programs operate nationwide and represent a significant ongoing investment by AmeriCorps. An ROI of the programs could provide AmeriCorps with important information on the value of the programs for future resource allocation decisions, such as whether the programs merit expansion.
- Interest in measuring health and well-being benefits to volunteers due to their engagement with the programs. Quantifying the benefits to AmeriCorps Seniors volunteers is an important frontier for AmeriCorps. Those benefits have been long assumed but have been challenging to measure in a rigorous way. An ROI approach that includes volunteer benefits would provide a methodology AmeriCorps could use for other programs. AmeriCorps may also be able to adapt this approach to capture additional benefits to volunteers of FGP & SCP, beyond the health benefits that were the focus of Georges et al. (2018).

ROI Methodology

The methodology for the FGP & SCP ROI study consists of the following components:

1. <u>Measuring and monetizing program benefits</u>. This includes using data from previous evaluations and other third-party sources to determine the benefits to FGP & SCP participants, FGP & SCP AmeriCorps Seniors volunteers, caregivers, private insurance companies, other healthcare payers, and the federal government. The benefits realized across these six stakeholder groups include:

- FGP & SCP Participants. Program participants benefit from in-kind services, reduced spending on assisted living facilities, and reduced out-of-pocket (OOP) medical care costs due to improved health outcomes that result from the services they receive.
- FGP & SCP AmeriCorps Seniors Volunteers. These AmeriCorps Seniors volunteers' benefits include the stipends they receive during their service and reduced OOP medical care costs due to improved health outcomes after serving.
- Caregivers. Individuals who receive respite from their caregiving activities due to
 the services offered by SCP experience reduced OOP medical care costs due to
 the improved health and well-being they experience.
- Private Insurance Companies. These healthcare payers benefit from reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.
- Other Healthcare Payers. A variety of additional healthcare payers (e.g., community and neighborhood clinics, worker's compensation, or homeowner's or liability insurance) benefit from reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.
- Federal Government. Medicare and Medicaid have reduced medical care costs due to improved health outcomes of program participants, volunteers, and caregivers.

This ROI analysis monetized program benefits in 2019 dollars.

- 2. <u>Assessing program costs</u>. Program costs for these two AmeriCorps Seniors programs were provided directly by AmeriCorps and consist of federal funds and budgeted match funds for each program for FY18 (i.e., October 1, 2017 September 30, 2018).⁹
- 3. Calculating the ROI. The ROI analysis includes three ROI calculations:
 - a. Total benefits per federal dollar
 - b. Total benefits per funder dollar
 - c. Federal government benefits per federal dollar

This analytical framework includes only those benefits that could be reasonably monetized given the available data and that likely would not have occurred without FGP & SCP.

<u>Figure 1</u> shows how both these programs map to FGP & SCP participant, FGP & SCP AmeriCorps Seniors volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits.

⁹ FY18 was the most recent year cost data could be provided by AmeriCorps for these AmeriCorps Seniors programs.

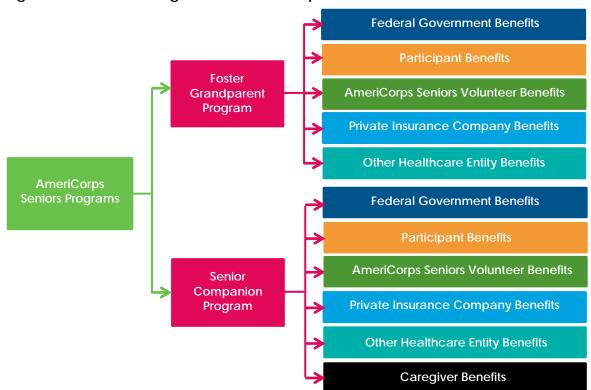


Figure 1. Benefits among Stakeholder Groups Derived from FGP & SCP

Monetizing Benefits and Costs

This analysis monetized an array of benefits, and included FGP & SCP benefits and costs in 2019 dollars.

Benefits

FGP & SCP result in monetizable benefits to several stakeholders. <u>Figure 2</u> summarizes these benefits and provides the data sources used by stakeholder group.

Figure 2. Benefits Realized from FGP & SCP by Stakeholder Group

Stakeholder Group	Benefits	Data Sources*
FGP Participants	 In-kind services 	AmeriCorps ¹⁰
	received	National Wage Estimates (U.S. Bureau of Labor Statistics, 2019)
		Consumer Price Index (CPI; BLS, n.d.)
		Schonfeld & Associates, Inc. (n.d.)
SCP Participants	In-kind services	AmeriCorps
	received	National Wage Estimates (BLS, 2019)
	 Reduced spending on 	CPI (BLS, n.d.)
	assisted living	Georges et al. (2014)
	facilities	• Pray et al. (2010)
	Reduced OOP medical costs due to decreased hospital visits	Genworth (2020)
		Consumer Expenditure Survey (BLS, 2020)
		 Healthcare Cost and Utilization Project (HCUP; Agency for Healthcare Research and Quality, 2016)
		Lutheran Senior Services (LSS) ¹¹
		Schonfeld & Associates, Inc. (n.d.)
FGP & SCP	• Stipends	AmeriCorps ¹⁰
AmeriCorps Seniors Volunteers	Reduced OOP	Georges et al. (2018)
Volunteers	medical costs due to improved health	 Medical Expenditure Panel Survey (MEPS; AHRQ, 2020)
		• CPI (BLS, n.d.)
Caregivers (SCP)	Reduced OOP	AmeriCorps ¹⁰
	medical costs due to	Georges et al. (2017)
	improved	• MEPS (AHRQ, 2020)
	health	• CPI (BLS, n.d.)

¹⁰ AmeriCorps, personal communication, 2020.

¹¹ Lutheran Senior Services, personal communication, April 22, 2020. All references to Lutheran Senior Services refer to data received through ICF's personal communication with that organization.

Stakeholder Group	Benefits	Data Sources*
Private Insurance	Reduced	AmeriCorps ¹²
Companies & Other Healthcare Payers	medical costs due to the	• HCUP (AHRQ, 2016)
rieaiiricare rayeis	improved	• LSS ¹³
	health of	• CPI (BLS, n.d.)
	participants, volunteers, and	Georges et al. (2017)
	caregivers	• MEPS (AHRQ, 2020)
		Georges et al. (2018)
Federal Government	Reduced	AmeriCorps ¹²
	Medicare and Medicaid costs	• HCUP (AHRQ, 2016)
	due to	• LSS ¹³
	improved health of participants, volunteers, and caregivers	• CPI (BLS, n.d.)
		Georges et al. (2017)
		• MEPS (AHRQ, 2020)
		Georges et al. (2018)
		American Hospital Association (2020)

^{*}Note: The usage of these data sources is discussed in more detail below.

Benefits to FGP & SCP Participants

Benefits to FGP & SCP participants include in-kind services received by FGP & SCP participants, cost savings related to aging in place for SCP participants, and reduced OOP medical costs for SCP participants due to fewer hospital visits.

In-Kind Services

FGP & SCP participants—children and elderly or disabled adults, respectively—benefit from the in-kind services they receive from these AmeriCorps Seniors programs. These in-kind services provided by AmeriCorps Seniors volunteers augment, but do not displace, labor, and address unmet community needs nationwide. To monetize these benefits, this analysis calculated the number of hours served by FGP & SCP volunteers by program activity using data provided by AmeriCorps for FY18. The analysis estimated the value of those service hours by estimating hourly wages and overhead.

¹² AmeriCorps, personal communication, 2020.

¹³ Lutheran Senior Services, personal communication, April 22, 2020. All references to Lutheran Senior Services refer to data received through ICF's personal communication with that organization.

<u>Hourly wages</u>. The analysis used national wage estimates from the U.S. Bureau of Labor Statistics (BLS, 2019) for 2018 to monetize the labor of those hours served by FGP & SCP volunteers. Specifically, this analysis matched a BLS occupation to a program activity type based on the duties and responsibilities carried out by program volunteers. ¹⁴ It used the 25th percentile hourly wage or annual salary data (depending on data availability) for each of the matched BLS occupations, given that volunteers who provide these different services in FGP & SCP do not necessarily obtain the qualifications or skillset required by those who pursue these professions for a living.

<u>Overhead</u>. Overhead includes employer-paid benefits, administrative expenses, and other general expenses that third-party providers would pass on to clients when offering similar services. This analysis estimated overhead using a median overhead rate calculated across all industry types from Schonfeld & Associates, Inc. (n.d.). The analysis applied that overhead rate to the hourly wage totals calculated previously. The value of these services, expressed in 2019 dollars, is shown in the last column of <u>Figure 3</u>.

Figure 3. In-Kind Service Cost Savings by AmeriCorps Seniors Program

Program Activity	FY18 Hours (number of hours)	BLS Hourly Wage (2019\$)*	Overhead Rate (%)	Cost of In-Kind Services (2019\$)
FGP				
Tutoring and Classroom/Education Assistance	17,035,180	\$10.76	24.28%	\$227,783,069
Mentoring	2,250,267	\$17.72	24.28%	\$49,549,052
Person-based Care	270,895	\$9.63	24.28%	\$3,241,715
SCP				
Independent Living Assistance	9,332,031	\$10.69	24.28%	\$123,976,357

Sources: AmeriCorps, BLS (2019), Schonfeld & Associates, Inc. (n.d.)

*Note: the hourly wage provided by BLS was originally in 2018 dollars and an inflation rate was used to express this wage in 2019 dollars above. Also, the hourly wage data is representative of the 25th percentile for each BLS occupation and numbers may not sum due to rounding.

¹⁴ This analysis used the annual salary of a Teacher Assistant (SOC: 25-9041) for the "Tutoring and Classroom/Education Assistance" activity type; the hourly wage for a Child, Family, and School Social Worker (SOC: 21-1021) for the "Mentoring" activity type; the hourly wage for a Childcare Worker (SOC: 39-9011) for the "Person-based Care" activity type; and the hourly wage for Personal Care Aids (SOC: 39-9021) for the "Independent Living Assistance" activity type.

These in-kind services represent one-time benefits for the given program year because only one year of costs is considered in the ROI analysis.

Reduced Spending on Assisted Living Facilities

SCP volunteers provide independent living assistance in the homes of elderly or disabled individuals. This allows program participants to remain in their homes longer (i.e., to age in place) instead of living in assisted living facilities, which represents cost savings to SCP participants. ¹⁵ This analysis measured reduced spending on assisted living facilities, but not for nursing homes. This is because the qualifications, skillset, and duties of SCP volunteers more closely align with those of individuals who work at assisted living facilities. Additionally, nursing homes tend to provide more comprehensive personal and medical care to residents, which includes daily responsibilities not required or expected of SCP volunteers.

Estimating the number of SCP participants who age in place longer due to SCP. Georges et al. (2014) found that 49 percent of the surveyed population of SCP participants indicated that they strongly agreed that they can remain living in their home independently due to SCP (see Figure 4). This analysis first applied this percentage to the number of individuals served by SCP during FY18 (i.e., 29,530) to estimate what portion of the SCP national population strongly believed the program allowed them to remain living at home independently (i.e., age in place). Then, the analysis applied a 2 percent factor representing the portion of the national 65+ population that currently resides in assisted living facilities, according to Pray et al. (2010). Doing so estimated the portion of the SCP national population that would have had to go to an assisted living facility if not for SCP. This metric is used because it cannot be assumed that 49 percent of the entire SCP participant population had the means to move to assisted living facilities. Residency costs and other systematic barriers may prevent many from doing so. Thus, this metric helps in calculating a conservative estimate of savings to SCP participants.

The product of the first three columns of Figure 4 yielded an estimate of 289 SCP participants who avoided assisted living facilities during the program year.

Estimating cost savings from aging in place longer. To monetize the savings of aging in place, this analysis calculated the difference between the median monthly cost of an assisted living facility and the mean monthly housing expenditures for an individual in the U.S., of which the latter metric considers the age distribution of SCP participants. The median monthly cost of an assisted living facility in the U.S. is \$4,051 (Genworth, 2020). Based on 2019 data from the Consumer Expenditure Survey (BLS, 2020), the mean monthly housing expenditure in the U.S. per person—weighted based on the age distribution of SCP participants in FY18—was \$1,505. This analysis took the difference between these metrics, annualized it, and applied it to the aforementioned 289 individuals to calculate total savings.

¹⁵ While aging in place likely generates quality of life benefits for SCP participants in addition to cost savings, data to measure and monetize those benefits are not currently available.

Median Percent Number of Annual **Participants** Who Percent of Cost of Median **Population** Who Annual Number Strongly an of SCP in Assisted **Agreed** Avoided Assisted Housing Total **Participants** They Could Living Assisted Living Cost for a **Benefit** Live at **Facilities** Mortgage Realized Served Living **Facility** in FY18 Home (%) (%) **Facility Costs** (2019\$)(2019\$)(2019\$)Program 49% SCP 29,530 2% 289 \$48,612 \$18,065 \$8,840,025

Figure 4. Cost Savings to Assisted Living Facilities due to SCP

Sources: Georges et al. (2014), AmeriCorps, Pray et al. (2010), Consumer Expenditure Survey (BLS, 2020)

Note: Numbers may not sum due to rounding.

As shown in Figure 4, this analysis estimates the total reduced spending on assisted living facilities to be \$8,840,025. This was included in the ROI analysis as a one-time benefit for SCP participants based on the assumption that SCP participants are better able to age in place while SCP services are provided, but not afterward in the event that those services are discontinued.

Reduced OOP Medical Costs from Decreased Hospital Visits and Improved Health

This analysis estimated reduced OOP medical costs to SCP participants—resulting from fewer visits to hospitals (both inpatient stays¹⁶ and emergency department visits) and improved health—due to participating in SCP.

Estimating the reduction in hospital visits. The monetization process for this one-time benefit leveraged the results of an outcomes analysis completed by the Lutheran Senior Services (LSS)¹⁷, the statewide SCP for Minnesota. ¹⁸ Its findings indicated that compared to 12 months before SCP participation, a sample of SCP participants experienced a 21 percent decrease in inpatient hospital stays and a 54 percent decrease in emergency department visits 12 months after beginning SCP participation. ¹⁹ To monetize these benefits and apply them to the national SCP participant population, this analysis first used data from the Healthcare Cost and

¹⁶ Inpatient stays are when someone was admitted to a hospital and had to stay at that hospital overnight for at least one night to receive care or be monitored.

¹⁷ Lutheran Senior Services, personal communication, April 22, 2020. All references to Lutheran Senior Services refer to data received through ICF's personal communication with that organization.

¹⁸ This benefit—as well as all medical cost savings benefits realized across stakeholder groups—is only realized for one year. In other words, improved health outcomes in this ROI analysis are not spread out or discounted for several years after program participation or service. This is because it is assumed that to sustain these benefits in improved health or decreased hospital visits, program participation and service would have to continue from year to year. For that to happen, costs for beyond just one program year would need to be included. Therefore, all these medical cost savings are one-time benefits that are experienced because of one year of programming.

¹⁹ For all stakeholder groups that experience medical cost savings due to SCP participants' decreased hospital visits, the impact on hospital or healthcare providers is not captured in this ROI analysis. It is assumed that these hospitals and healthcare providers are operating at 100 percent capacity. Thus, when they lose visits due to the favorable impacts of SCP, it is assumed visits will come from another individual needing care and the hospital is not losing revenue.

Utilization Project (HCUP; AHRQ, 2016)—which is managed by the Agency for Healthcare Research and Quality under the Department of Health and Human Services—to estimate the mean inpatient stay and emergency department visit discharge rates for the population served by SCP (Figure 5). The analysis weighted these discharge rates—shown in Figure 5—based on the age segmentation of SCP participants for FY18. This analysis then applied these weighted discharge rates to the number of SCP participants served nationwide in FY18 (i.e., 29,530, per AmeriCorps data) to estimate the number of SCP participants who—without the program—would have experienced an inpatient hospital stay or emergency department visit in a year. The discharge rates in Figure 5 indicate that only 9,150 and 6,813 SCP participants out of the entire SCP population served nationwide would have had an inpatient hospital stay or emergency department visit, respectively, during the program year. This is a conservative approach, given that individuals may experience multiple inpatient hospital stays or emergency department visits in one year.

The analysis then applied the LSS findings regarding reduced inpatient hospital stays and emergency department visits that resulted from SCP to this reduced SCP participant population. Based on this process, the analysis estimates that SCP resulted in 1,961 fewer inpatient stays and 3,650 fewer emergency department visits nationwide for the program year.

Monetizing the reduced hospital visits by SCP participants. To monetize the reduced medical costs associated with these reduced hospital visits, the analysis used data on the mean inpatient stay and emergency department visit hospital charge for the U.S.²⁰ It weighted these metrics based on the age distribution of SCP participants in FY18 and then applied them to the number of reduced inpatient stays and emergency hospital visits as a result of SCP. The result estimates the total medical cost savings experienced due to decreased hospital visits by SCP participants across all payers.

To calculate the cost savings specifically to SCP participants, the analysis used HCUP data (AHRQ, 2016) on the distribution of hospital charges across payers, weighted based on SCP participants' ages for FY18. As shown in Figure 5, HCUP data indicates that 1.1 percent of inpatient stay and emergency department visit expenditures are paid OOP. Thus, approximately 1.1 percent of the total cost savings realized would benefit SCP participants directly.

²⁰ The mean hospital *charge* was used as the cost component in monetizing cost savings to OOP payers, private insurance companies, and other healthcare payers as a result of the decrease in inpatient stays and emergency department visits since, according to the HCUP data source (AHRQ, 2016), the hospital charge represents what the hospital billed for the stay or visit. The mean hospital *cost* was used as the cost component to monetize savings to the federal government (which manages Medicare and Medicaid), since it represents the actual costs of production.

Figure 5. Cost Savings for SCP Participants by Hospital Visit Type

Hospital Visit Type	Number of SCP Participants Served in FY18	Discharge Rate (%)	Reduction in Hospital Visits (%)	Mean Hospital Charge per Visit (2019\$)	Portion Paid OOP (%)	Total Benefit Realized (2019\$)
Inpatient Stays	29,530	31%	21%	\$59,783	1.1%	\$1,315,264
Emergency Department Visits	29,530	23%	54%	\$56,795	1.1%	\$2,325,991
Total						\$3,641,255

Sources: AmeriCorps, HCUP (AHRQ, 2016), LSS Note: Numbers may not sum due to rounding.

As a result, SCP participants experience a one-time benefit of over \$3.6 million based on the reduction in inpatient stays and emergency department visits. Benefits to other payers are discussed in subsequent sections.

Benefits to FGP & SCP Volunteers

This ROI analysis captured two types of FGP & SCP volunteer benefits: stipends and reduced medical costs due to improved health outcomes.

Stipends

Data on stipend amounts were provided directly by AmeriCorps for FY18 and represent the total stipends—paid for by AmeriCorps federal funding and budgeted match funding from non-federal government entities—awarded to FGP & SCP volunteers for their service. This amount in 2019 dollars is \$89,729,541 and represents a direct benefit to FGP & SCP volunteers because it is a form of income they previously did not have. For FY18, the hourly stipend amount for FGP & SCP volunteers was \$2.65/hour; as of April 1, 2020, this amount was increased to \$3/hour (AmeriCorps, 2020).

Reduced OOP Medical Costs from Improved Health

FGP & SCP volunteers themselves experience OOP medical cost savings from improved health. This analysis used the findings from Georges et al. (2018) to monetize this program impact. Based on FGP & SCP volunteers' survey responses, that study found 16.6 percent of FGP & SCP volunteers reported fair/poor health at baseline (i.e., prior to serving in AmeriCorps Seniors). When compared to a group of similar individuals who were not volunteers, FGP & SCP volunteers who initially reported fair/poor health at baseline had a 55 percent better chance of improved health after serving.

To incorporate these findings into the ROI analysis, this analysis first calculated the number of full-time equivalents (FTEs) for FGP & SCP volunteers for FY18. The improved health experienced by FGP & SCP volunteers in Georges et al. (2018) was based on the number of people who served in these programs, and given that AmeriCorps provided

total hours served per program, it was necessary to calculate the number of FTEs that the hours represented. Figure 6 shows this calculation, in which the total number of hours served in FY18 for each AmeriCorps Seniors program was divided by AmeriCorps's Volunteer Service Year (VSY) proxy of 1,044 hours per program year (AmeriCorps, 2018). The calculations yield a total of 27,759 FTEs.

Figure 6. Full-Time Equivalents by AmeriCorps Seniors Program

AmeriCorps Seniors Program	Hours Served in FY18	Average Hours Served in Volunteer Service Year (VSY)	Full-Time Equivalents (FTEs)
FGP	19,648,631	1,044	18,821
SCP	9,332,031	1,044	8,939
Total	28,980,662		27,759

Source: AmeriCorps

Note: Numbers may not sum due to rounding. FTEs are rounded to the nearest whole person.

This analysis applied the 16.6 percent to the number of FTEs for both AmeriCorps Seniors programs to estimate the number with fair/poor health prior to volunteering. The analysis then applied a factor of 55 percent to estimate the number of FTEs who experienced improved health (i.e., moved from a self-perceived health status of fair/poor to good/very good/excellent) as a result of serving in FGP or SCP. Based on these calculations, roughly 2,540 volunteers experienced improved health outcomes.

To monetize this benefit, this analysis used medical cost data provided by the Medical Expenditure Panel Survey (MEPS; AHRQ, 2020), managed by the Agency for Healthcare Research and Quality under the Department of Health and Human Services. The MEPS medical cost data was provided by age group and by self-reported health status. The MEPS Likert scale matched that used in the Georges et al. (2018) study. The analysis calculated the mean annual medical expenditure for someone with a perceived health status of fair/poor versus good/very good/excellent, weighted by the age distribution of FGP & SCP volunteers who served in FY18. Results are shown in Figure 7 in 2019 dollars.

Figure 7. Cost Savings for FGP & SCP Volunteers due to Improved Health

	Metric	Outputs (Inputs)
	Number of FTEs in FY18	27,759
	Number of FTEs with Fair/Poor Health at Baseline	4,618 (16.6%)
	Number of FTEs with Improved Health	2,540 (55%)
al Ss	Fair/Poor Health	\$25,569
nnu cal iture rson	Good/Very Good/Excellent Health	\$7,805
Mean Annual Medical Expenditures per Person (2019\$)	Reduction in Mean Annual Medical Expenditures due to Improved Health	\$17,763
_ ∑ — —	Portion Paid OOP	\$2,115 (11.9%)
	Total Benefit Realized	\$5,372,497

Sources: AmeriCorps, Georges et al. (2018), MEPS (AHRQ, 2020)

Note: Numbers may not sum due to rounding.

The difference in the mean annual medical expenditures per person (nearly \$18,000) represents the total cost savings that result from improved health outcomes. However, FGP & SCP volunteers only realize the portion of medical cost savings that would be paid OOP. Using MEPS data (AHRQ, 2020), weighted by the age segmentation of FGP & SCP volunteers for FY18, this analysis determined that 11.9 percent of total medical expenditures for this population is paid OOP. FGP & SCP volunteers themselves experience a one-time cost savings of over \$5 million over 12 months due to improved health from serving in AmeriCorps Seniors.

Benefits to Caregivers for SCP Participants

Caregivers of individuals who receive SCP services benefit indirectly by receiving a respite from their caregiving activities. Because of this, caregivers' own health improves, according to findings from Georges et al. (2017). That study indicates that 47 percent of surveyed caregivers who reported their health status as fair/poor at baseline reported their health status as good/very good/excellent at follow-up.

To incorporate this improvement in health, this analysis started with the 5,442 caregivers served by SCP in FY18. Then, the analysis applied 47 percent to estimate the number of caregivers who experienced increased health outcomes attributable to SCP. This resulted in more than 2,500 caregivers nationwide whose health improved from fair/poor to good/very good/excellent as a result of SCP.

To monetize this improvement, this analysis used medical cost data from MEPS (AHRQ, 2020) to calculate the mean annual medical expenditure for someone with a perceived health status of fair/poor versus good/very good/excellent, both weighted

to reflect the age distribution of caregivers.²¹ These metrics are shown in <u>Figure 8</u> in 2019 dollars.

Figure 8. Cost Savings for Caregivers due to Improved Health

	Metric	Outputs (Inputs)
	Number of Caregivers in FY18	5,442
	2,558 (47%)	
ean Annual Medical (penditures oer Person (2019\$)	Fair/Poor Health	\$23,869
	Good/Very Good/Excellent Health	\$7,016
Mean Annua Medical Expenditure per Person (2019\$)	Reduction in Mean Annual Medical Expenditures due to Improved Health	\$16,853
<u>≥</u> <u>ú</u> –	Portion Paid OOP	\$2,042 (12.1%)
	Total Benefit Realized	\$5,223,761

Sources: AmeriCorps, Georges et al. (2017), MEPS (AHRQ, 2020)

Note: Numbers may not sum due to rounding.

The difference in the mean annual medical expenditures per person (nearly \$17,000) represents the total cost savings that result from caregivers' improved health outcomes. However, caregivers only realize the portion of medical cost savings that would be paid OOP. Using MEPS data (AHRQ, 2020), weighted by the age segmentation of caregivers, this analysis determined that 12.1 percent of total medical expenditures for this population is paid OOP. Caregivers themselves experience a one-time cost savings of over \$5 million annually due to improved health resulting from SCP.

Benefits to Private Insurance Companies

Medical cost savings to private insurance companies stem from decreased hospital visits for SCP participants, as well as improved health for FGP & SCP volunteers and caregivers. This analysis used the methodologies described above to calculate *total* medical cost savings related to the outcomes experienced by SCP participants, FGP & SCP volunteers, and caregivers. To calculate the cost savings specifically to private insurance companies from SCP participants' decrease in hospital visits, the analysis used HCUP data (AHRQ, 2016) on the distribution of healthcare costs across payers.

²¹ The same five-point scale categorizations used in the Georges et al. (2017) and Georges et al. (2018) studies (e.g., poor, fair, good, very good, and excellent) are used by MEPS (AHRQ, 2020).

<u>Figure 9</u> estimates cost savings to private insurance companies from SCP participants' decrease in hospital visits.²² HCUP data on the distribution of healthcare costs across payers were weighted based on the age distribution of SCP participants and used to estimate that 12.1 percent of hospital visit costs are paid by private insurance companies. Private insurance companies realize nearly \$40 million in savings from the reduction in hospital visits by SCP participants.

Figure 9. Cost Savings for Private Insurance Companies by Hospital Visit Type due to Decreased Hospital Visits for SCP Participants

Hospital Visit Type	Number of SCP Participants Served in FY18	Discharge Rate (%)	Reduction in Hospital Visits (%)	Mean Hospital Charge per Visit (2019\$)	Portion Paid by Private Insurance (%)	Total Benefit Realized (2019\$)
Inpatient Stays	29,530	31%	21%	\$59,783	12.1%	\$14,170,021
Emergency Department Visits	29,530	23%	54%	\$56,795	12.1%	\$25,059,117
Total						\$39,229,138

Sources: AmeriCorps, HCUP (AHRQ, 2016), LSS Note: Numbers may not sum due to rounding.

<u>Figure 10</u> shows cost savings to private insurance companies that stem from the improved health outcomes of FGP & SCP volunteers, as well as caregivers.²³ This analysis used MEPS (AHRQ, 2020) data, weighted based on the age distribution of each stakeholder group, to determine the share of healthcare costs paid by private insurance companies.²⁴ This benefit was estimated at nearly \$25 million.

²² For specifics on how each of the metrics in columns 1 – 4 of Figure 9 was estimated, please reference the Benefits to FGP & SCP Participants section (specifically the "Reduced OOP Medical Costs from Decreased Hospital Visits and Improved Health" subsection) earlier in this report.

²³ For specifics on how each of the metrics in columns 1 – 3 of Figure 10 was estimated, please reference the *Benefits to FGP & SCP Volunteers* section (specifically the "Reduced OOP Medical Costs from Improved Health" subsection) as well as the *Benefits to Caregivers for SCP Participants* section earlier in this report.

²⁴ Based on the data received, caregivers tended to be younger than FGP & SCP volunteers. Thus, caregivers had a higher portion of medical cost savings allocated to private insurance companies.

Figure 10. Cost Savings due to Improved Health for Private Insurance Companies by Stakeholder Group

Stakeholder Group	Number of Individuals Who Experienced Improved Health	Mean Annual Medical Expenditure Fair/Poor Good/Very Health Good/Excellent (2019\$) Health (2019\$)		Portion Paid by Private Insurance (%)	Total Benefit Realized (2019\$)
FGP & SCP Volunteers	2,540	\$25,569	\$7,805	24.5%	\$11,034,329
Caregivers for SCP Participants	2,558	\$23,869	\$7,016	32.2%	\$13,865,855
Total					\$24,900,184

Sources: AmeriCorps, MEPS (AHRQ, 2020), Georges et al. (2018), Georges et al. (2017)

Note: Numbers may not sum due to rounding.

Benefits to Other Healthcare Payers

Medical cost savings to other healthcare payers stem from the decreased hospital visits of SCP participants as well as the improved health of FGP & SCP volunteers and caregivers.

For the former, as mentioned earlier, HCUP data (AHRQ, 2016) is used to monetize these benefits, and its definition of "other" healthcare payers includes those such as worker's compensation, TRICARE (healthcare for military families), Veterans Affairs (VA) healthcare, the Children's Health Insurance Program (CHIP), Indian Health Services, the Title V Program, state or county indigent programs, and others (Barrett et al., 2014). Generally speaking, these "other healthcare payers" are insurance plans or payers of last resort for individuals who don't have insurance.

To estimate cost savings to this "other healthcare payers" stakeholder group as a result of decreased hospital visits, this analysis used the methodologies described above to first calculate *total* medical cost savings related to SCP participants' decrease in both inpatient stays and emergency department visits. To calculate the cost savings specifically to these other healthcare payers, the analysis used HCUP data (AHRQ, 2016) on the distribution of healthcare costs across payers, using only the portion paid by other healthcare payers in the calculation of benefits.

Figure 11 estimates this stakeholder group's savings from SCP participants' decrease in hospital visits. ²⁵ HCUP data on the distribution of healthcare costs across payers were weighted based on the age distribution of SCP participants and used to estimate that 1.8 percent of hospital visit costs are paid by other healthcare payers. As a result, they realize nearly \$6 million in savings from the reduction in hospital visits by SCP participants.

Figure 11. Cost Savings due to Decreased Hospital Visits for Other Healthcare Payers by Hospital Visit Type

Hospital Visit Type	Number of SCP Participants Served in FY18	Discharge Rate (%)	Reduction in Hospital Visits (%)	Mean Hospital Charge per Visit (2019\$)	Portion Paid by Other Healthcare Payers (%)	Total Benefit Realized (2019\$)
Inpatient Stays	29,530	31%	21%	\$59,783	1.8%	\$2,128,107
Emergency Department Visits	29,530	23%	54%	\$56,795	1.8%	\$3,763,473
Total						\$5,891,580

Sources: AmeriCorps, HCUP (AHRQ, 2016), LSS Note: Numbers may not sum due to rounding.

Figure 12 shows benefits to other healthcare payers that stem from the improved health outcomes of FGP & SCP volunteers, as well as caregivers. ²⁶ For these improved health outcomes, MEPS data is used to determine cost savings to other healthcare payers and this data source's definition of "other" healthcare payers includes those such as the Department of Veterans Affairs (excluding TRICARE), Indian Health Services, community and neighborhood clinics, worker's compensation, homeowner's or liability insurance, and others (AHRQ, n.d.). This analysis used MEPS data (AHRQ, 2020), weighted based on the age distribution of each stakeholder group, to determine the share of healthcare costs paid by other healthcare payers. This benefit was also estimated at nearly \$6 million.

²⁵ For specifics on how each of the metrics in columns 1 – 4 of Figure 11 was estimated, please reference the *Benefits to FGP & SCP Participants* section (specifically the "Reduced OOP Medical Costs from Decreased Hospital Visits and Improved Health" subsection) earlier in this report.

²⁶ For specifics on how each of the metrics in columns 1 – 3 of Figure 12 was estimated, please reference the Benefits to FGP & SCP Volunteers section (specifically the "Reduced OOP Medical Costs from Improved Health" subsection) as well as the Benefits to Caregivers for SCP Participants section earlier in this report.

Figure 12. Cost Savings due to Improved Health for Other Healthcare Payers by Stakeholder Group

Stakeholder Group	Number of Individuals Who Experienced Improved Health	Mean Annual Medical Expenditure Fair/Poor Good/Very Health Good/Excellent (2019\$) Health (2019\$)		Portion Paid by Other Healthcare Payers (%)	Total Benefit Realized (2019\$)
FGP & SCP Volunteers	2,540	\$25,569	\$7,805	6.5%	\$2,942,436
Caregivers for SCP Participants	2,558	\$23,869	\$7,016	6.7%	\$2,868,720
Total					\$5,811,156

Sources: AmeriCorps, MEPS (AHRQ, 2020), Georges et al. (2018), Georges et al. (2017)

Note: Numbers may not sum due to rounding.

Benefits to the Federal Government

The federal Medicare and Medicaid programs also benefit from medical cost savings that stem from SCP participants' decreased hospital visits as well as FGP & SCP volunteers' and caregivers' improved health. Figure 13 estimates federal government savings from SCP participants' decrease in hospital visits. ²⁷ HCUP data (AHRQ, 2016) on the distribution of healthcare costs across payers were weighted based on the age distribution of SCP participants and used to estimate that 80.6 percent of hospital visit costs are paid by Medicare and 4.3 percent are paid by Medicaid. The federal government realizes nearly \$59 million in savings from the reduction in hospital visits by SCP participants.

²⁷ For specifics on how each of the metrics in columns 1 – 4 of Figure 13 was estimated, please reference the Benefits to FGP & SCP Participants section (specifically the "Reduced OOP Medical Costs from Decreased Hospital Visits and Improved Health" subsection) earlier in this report.

Figure 13. Cost Savings due to Decreased Hospital Visits for the Federal Government by Hospital Visit Type

Hospital Visit Type	Number of SCP Participants Served in FY18	Discharge Rate (%)	Reduction in Hospital Visits (%)	Mean Hospital Cost per Visit (2019\$)*	Portion Paid by Medicare & Medicaid (%)	Total Benefit Realized (2019\$)
Inpatient Sta	Inpatient Stays					
Medicare	29,530	31%	21%	\$12,811	80.6%	\$20,250,937
Medicaid	29,530	31%	21%	\$13,106	4.3%	\$1,095,896
Emergency Department Visits						
Medicare	29,530	23%	54%	\$12,171	80.6%	\$35,812,975
Medicaid	29,530	23%	54%	\$12,451	4.3%	\$1,938,049
Total						\$59,097,858

Sources: AmeriCorps, HCUP (AHRQ, 2016), LSS, American Hospital Association (2020)

Note: Numbers may not sum due to rounding.

*Note: The mean hospital *charge* was used as the cost component in monetizing cost savings to OOP payers, private insurance companies, and other healthcare payers. The hospital charge represents what the hospital billed for the stay or visit. The mean hospital *cost* represents the negotiated prices between the federal government and healthcare entities. This portion of the analysis uses mean hospital cost to monetize savings to the federal government because hospitals are more likely to receive payments of the negotiated cost from the federal government for a given service, rather than what they would have charged for the entire stay or visit. Further, the prevalence of underpayments is reflected in Figure 13 to calculate a more conservative estimate of savings to the federal government. Specifically, according to the American Hospital Association (2020), hospitals only received \$0.87 and \$0.89 for every dollar spent caring for Medicare and Medicaid patients, respectively. Because of this, only 87 and 89 percent of the average hospital cost per visit paid by Medicare and Medicaid, respectively, is included in Figure 13 above.

<u>Figure 14</u> shows benefits to the federal government that stem from the improved health outcomes of FGP & SCP volunteers, as well as caregivers.²⁸ This analysis used MEPS data (AHRQ, 2020), weighted based on the age distribution of each stakeholder group, to determine the share of healthcare costs paid by the federal government. This benefit was estimated at nearly \$47 million.

Figure 14. Cost Savings due to Improved Health for the Federal Government by Stakeholder Group

Number of			n Annual Expenditure	Portion Paid by	Total	
Stakeholder Group	Individuals Who Experienced Improved Health	Fair/Poor Health (2019\$)	Good/Very Good/Excellent Health (2019\$)	Medicare & Medicaid (%)	Benefit Realized (2019\$)	
FGP & SCP Volunteers						
Medicare	2,540	\$25,569	\$7,805	50.2%	\$22,645,594	
Medicaid	2,540	\$25,569	\$7,805	6.5%	\$3,125,217	
Caregivers for SCP Participants						
Medicare	2,558	\$23,869	\$7,016	40.3%	\$17,353,923	
Medicaid	2,558	\$23,869	\$7,016	8.8%	\$3,794,015	
Total					\$46,918,749	

Sources: AmeriCorps, MEPS (AHRQ, 2020), Georges et al. (2018), Georges et al. (2017)

Note: Numbers may not sum due to rounding.

Summary of Distribution of Healthcare Cost Savings Across Payers

<u>Figure 15</u> summarizes the division of cost savings for the improved outcomes experienced by participants, volunteers, and caregivers by payer type to demonstrate that all cost savings are included in this ROI analysis but divided across multiple stakeholder groups. Again, these percentages are calculated using data from either MEPS or HCUP—depending on the stakeholder group whose outcomes improved—and weighted based on the respective age distribution of participants, volunteers, and caregivers when applicable.

²⁸ For specifics on how each of the metrics in columns 1 – 3 of Figure 14 was estimated, please reference the Benefits to FGP & SCP Volunteers section (specifically the "Reduced OOP Medical Costs from Improved Health" subsection) as well as the Benefits to Caregivers for SCP Participants section earlier in this report.

Figure 15. Percent of Cost Savings Realized by Payer Type and Outcome

Payer Type	SCP Participants' Decreased Hospital Visits (%)	FGP & SCP Volunteers' Improved Health (%)	Caregivers' Improved Health (SCP) (%)
Medicare	80.6%	50.2%	40.3%
Medicaid	4.3%	6.9%	8.8%
Private Insurance	12.1%	24.5%	32.2%
OOP	1.1%	11.9%	12.1%
Other	1.8%	6.5%	6.7%
Total	100.0%	100.0%	100.0%

Sources: AmeriCorps, MEPS (AHRQ, 2020), HCUP (AHRQ, 2016)

Note: Numbers may not sum due to rounding.

Costs

Federal funding and non-federal match funding support the operations of FGP & SCP. The former is provided by AmeriCorps and the latter is raised by grantees and includes funding from state and local governments, community-based organizations, and other non-federal entities.²⁹

Funding-level data provided by AmeriCorps reflect amounts that were fully utilized to cover program costs. These program costs were provided directly by AmeriCorps for FY18. They are expressed in 2019 dollars in the analysis to be consistent with the monetization process of program benefits. Figure 16 shows the segmentation of these costs by funder type and AmeriCorps Seniors program. Based on data provided by AmeriCorps, federal and budgeted match funds are used by programs for items such as background checks, equipment purchases, local or long-distance travel, meals, supplies, volunteers' stipends, and other indirect costs.

While AmeriCorps is the primary funder for both FGP & SCP (sponsoring more than three-fourths of these programs' combined costs), the programs' combined budgeted match spending was 31 percent of federal funds. This match enables AmeriCorps Seniors programs to serve more individuals and provide more services than would be possible otherwise, thereby increasing benefits across stakeholder groups. When analyzing FGP & SCP separately, budgeted match spending was 25 percent and 43 percent of federal funds, respectively.

²⁹ AmeriCorps provided data on budgeted match spending in April 2020. On their grant applications, programs must denote the non-federal match they expect to receive for the upcoming fiscal year. Given this, it is possible that the actual match was higher than the budgeted match initially reported for FY18.

Figure 16. FGP & SCP Costs by Funder Type and AmeriCorps Seniors Program

Funder	Costs for Program Year (2019\$)	Percent of Total (%)	Match Funding as a Percentage of AmeriCorps Funds (%)			
FGP						
AmeriCorps	\$108,043,041	80%				
Non-federal	\$27,336,587	20%	25%			
Total	\$135,379,628	100%				
SCP						
AmeriCorps	\$44,832,529	70%				
Non-federal	\$19,473,545	30%	43%			
Total	\$64,306,074					
Total FGP & SCP Combined						
AmeriCorps	\$152,875,570	77%				
Non-federal	\$46,810,132	23%	31%			
Total	\$199,685,702					

ROI Study Limitations

The most important limitation of this ROI study is the lack of data on the long-term benefits to FGP participants. The participants' benefits for FGP captured in this study primarily consist of the value of services provided by FGP volunteers, as measured by multiplying the number of hours of services provided by a market rate for those services. The long-term benefits to the children and youth who are served by FGP programs are not captured because those outcome data are not available. Those benefits are likely considerable, and would most likely lead to a much higher ROI for FGP. For example, one-on-one tutoring provided by FGP likely leads to improved educational outcomes and higher educational attainment and, in turn, leads to increased earnings and tax revenue through employment and reduced government spending on public assistance. All of these can drive a strong, long-term ROI. One example of evidence that early childhood education interventions result in positive, long-term impacts for participating youth is provided by Reynolds et al. (2018). That study evaluated whether the Child-Parent Center (CPC) program in Chicago—a preschool to third grade intervention that provides educational programming to economically disadvantaged children and comprehensive services to their families—was linked to higher educational attainment in later years. The study followed children until they were 35 years old. The study concluded that, compared to a matched comparison group, those in the CPC program for four to six years had a 48 percent higher rate of degree completion. Although these outcomes are robust and substantial, they could not be used to reasonably monetize the benefits of students who participate in FGP given the differences in the service models between the CPC program and FGP. Even with this

limitation, however, the ROI estimates for FGP still demonstrate strong total benefits per federal dollar and total benefits per funder dollar.

It is also important to note that this ROI study relies in part on self-reported data. Specifically, the Georges et al. (2014), Georges et al. (2018), and Georges et al. (2017) studies—which describe program impacts for SCP participants, FGP & SCP volunteers, and caregivers for SCP participants, respectively—include self-reported survey data. Data on FGP & SCP volunteers' and caregivers' improved health was based on respondents rating their own health status using a Likert scale (i.e., poor, fair, good, very good, excellent) at baseline and at follow-up. Medical tests, hospital records, or other documentation by third-party sources were not available to corroborate the health status of these individuals. Similarly, Georges et al. (2014) asked SCP participants for their level of agreement on whether they were able to remain living at home independently as a result of SCP. Objective sources were not used to evaluate whether participants could live on their own successfully due to program participation. AmeriCorps Seniors does validate data on performance measures submitted by program grantees, and these often include participant outcomes. However, data collected and analyzed by third-party evaluators—such as the aforementioned studies—are not validated by AmeriCorps.30

Lastly, the sample sizes used in some of these outcome analyses are small relative to the national FGP & SCP populations that are served annually. Specifically, the sample sizes for the LSS analysis, as well as the Georges et al. (2018) and Georges et al. (2017) studies, were not statistically representative of the nationwide populations for these groups in FY18. Conducting studies with larger sample sizes would help increase the confidence level of future ROI analyses.

Benefits, Costs, and ROI Results

The ROI analysis for FGP & SCP measures the benefits of the programs compared to their costs to estimate the financial return to the various stakeholders from the investment.

Benefits

<u>Figure 17</u> summarizes estimated benefits (in 2019 dollars) for FGP & SCP by stakeholder group. Benefits total roughly \$700 million for FGP & SCP combined, and about 53 percent of that is attributed to FGP while 47 percent is attributed to SCP. The benefits of SCP are largely healthcare related, such as improved health outcomes for volunteers and the seniors they serve. This produces savings in healthcare expenditures, which in

³⁰ AmeriCorps Seniors requires grantees to submit work plans, which contain national performance measures. These performance measures are intended to measure the impact of activities that meet needs within the community. For each one, there are specific instructions on how to measure and collect data. Data collection and tracking mechanisms are reviewed by AmeriCorps staff through both desk reviews and on-site staff visits. Grantees report on data twice a year through Project Progress Reports. These reports are reviewed by staff for accuracy. Submitted data are also verified by staff. However, outcomes related to individuals' improved health as used in this analysis were not provided by program performance measures, but rather by third-party studies.

turn benefits the payers of healthcare, such as the federal government (e.g., Medicaid, Medicare) and private health insurance companies. While FGP also produces savings in healthcare for volunteers, a greater proportion of the program's benefits stems from the value of services provided.

Figure 17. Benefits by Stakeholder Group (2019\$)

	Benefits by Program				
Stakeholder Group	FGP & SCP Combined (2019\$)	FGP (2019\$)	SCP (2019\$)		
FGP & SCP Participants	\$417,031,473	\$280,573,836	\$136,457,637		
FGP & SCP Volunteers	\$95,102,038	\$64,952,442	\$30,149,596		
Caregivers (SCP)	\$5,223,761	-	\$5,223,761		
Private Insurance Companies	\$64,129,322	\$7,481,177	\$56,648,146		
Other Healthcare Payers (not including Medicare/Medicaid)	\$11,702,736	\$1,994,945	\$9,707,791		
Federal Government	\$106,016,607	\$17,472,380	\$88,544,226		
Total	\$699,205,936	\$372,474,780	\$326,731,156		
Benefit per FTE	\$25,188	\$19,791	\$36,552		

Note: Numbers may not sum due to rounding.

Costs

Figure 18 summarizes the costs of FGP & SCP by funding source, as provided by AmeriCorps. The total cost of FGP & SCP for the September 2017 through August 2018 program year (FY18), in 2019 dollars, is roughly \$199.7 million. A total of 68 percent of the funding for the two programs combined was allocated to FGP, while 32 percent was allocated to SCP. AmeriCorps provided roughly 77 percent of the funding for these two AmeriCorps Seniors programs, while other funders provided 23 percent of the funding in terms of a budgeted match. Budgeted match funding can be provided to these programs by state or local governments, non-profits, community-based organizations, and other entities. Funding from these other sources represents the budgeted match used to provide services and implement the program.

Figure 18. Cost by Funding Source for FGP & SCP (2019\$)

Funding Source	FGP & SCP Combined (2019\$)	FGP (2019\$)	SCP (2019\$)
AmeriCorps (Federal Government)	\$152,875,570	\$108,043,041	\$44,832,529
Other Funders*	\$46,810,132	\$27,336,587	\$19,473,545
Total	\$199,685,702	\$135,379,628	\$64,306,074

Source: AmeriCorps

*Note: Includes the budgeted match provided by non-federal entities.

ROI Results

<u>Figure 19</u> shows the benefits and costs that are included in each of the three ROI calculations.

Figure 19. Benefits and Costs Included in the ROI Calculations

ROI Calculation*	Benefits (Numerator)	Costs (Denominator)
Total Benefits per Federal Dollar	All participant, volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits derived from FGP & SCP	 Federal AmeriCorps funding
Total Benefits per Funder Dollar	All participant, volunteer, caregiver, private insurance company, other healthcare payer, and federal government benefits derived from FGP & SCP	 Federal AmeriCorps funding Budgeted match funding
Federal Government Benefits per Federal Dollar	Reduced healthcare spending attributable to FGP & SCP	Federal AmeriCorps funding

*Note: AmeriCorps is the only source of federal support for FGP & SCP, so the cost of AmeriCorps's support to these programs is the sole component of the denominator for two ROI calculations: 1) total benefits per federal dollar, and 2) federal government benefits per federal dollar. Additionally, "funder dollar" includes all support to these programs, including AmeriCorps support and budgeted match funding from non-federal entities.

<u>Figure 20</u> summarizes the ROI results for FGP & SCP. The results are expressed as cost-benefit ratios and are interpreted as the amount returned for every dollar of investment (or cost).³¹

Figure 20. ROI Results for FGP & SCP

	AmeriCorps Seniors Program				
ROI Calculation	FGP & SCP Combined	FGP	SCP		
Total Benefits per Federal Dollar	\$4.57	\$3.45	\$7.29		
Total Benefits per Funder Dollar	\$3.50	\$2.75	\$5.08		
Federal Government Benefits per Federal Dollar	\$0.69	\$0.16	\$1.97		

Combined, FGP & SCP generate strong positive ROIs for two of the three ROI calculations: total benefits per federal dollar and total benefits per funder dollar. Results show a return of \$4.57 and \$3.50 for every dollar invested, respectively. When only federal government benefits are considered, the return for FGP & SCP combined is \$0.69 for every dollar invested.

For FGP alone, this analysis estimates a return of \$3.45 in total benefits per federal dollar and \$2.75 per funder dollar. The results for FGP are lower than those for SCP, particularly FGP's return of the federal government benefits per federal dollar of \$0.16. However, the lower ROIs for FGP are primarily due to a major limitation in this study: the lack of data availability to measure the long-term benefits to a large proportion of FGP participants. The participants' benefits for FGP captured in this study primarily consist of the value of services provided by FGP volunteers, as measured by multiplying the number of hours of services provided by a market rate for those services. The long-term benefits to the children and youth who are served by FGP programs are not captured because those outcome data are not available. Those benefits are likely considerable. For example, the one-on-one tutoring that is provided by FGP may lead to improved educational outcomes and higher educational attainment, which may, in turn, lead to increased earnings and tax revenue through employment, as well as reduced government spending on public assistance. All of these can drive a strong, long-term ROI. Even with this limitation, however, these ROI results for FGP still demonstrate strong total benefits per federal dollar and total benefits per funder dollar.

³¹ ROIs are often expressed as percentages when measuring the financial return to a single entity from that entity's investment. Although this is consistent with one of the three ROI metrics reported (e.g., federal government benefits per federal dollar), since the other ROIs lend themselves to a cost-benefit ratio, that ratio is consistently used for all three metrics. Although not shown as a ratio, the results should be interpreted as the return for every dollar of investment.

SCP generates a strong positive return for all three ROI calculations. Total benefits per federal dollar are \$7.29 for every federal government dollar invested, while total benefits per all funder dollars equals \$5.08 for every dollar invested. The federal government alone realizes a return of \$1.97 for every tax dollar invested, a nearly 200 percent return.

Additional Detail on ROI Calculations

The formulas used to calculate each of the three ROI estimates are listed below:

ompanies + ral Government
CP Volunteers + Companies + eral Government
Funding

<u>Figure 21</u>, <u>Figure 22</u>, and <u>Figure 23</u> show the total benefits, costs, and ROI results for these AmeriCorps Seniors programs combined and individually.

Figure 21. ROI Calculations for FGP & SCP Combined (2019\$)

Benefits / Costs	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Total Benefits	\$699,205,936	\$699,205,936	\$106,016,607
Total Costs	\$152,875,570	\$199,685,702	\$152,875,570
Result	\$4.57	\$3.50	\$0.69

Figure 22. ROI Calculations for FGP (2019\$)

Benefits / Costs	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Total Benefits	\$372,474,780	\$372,474,780	\$17,472,380
Total Costs	\$108,043,041	\$135,379,628	\$108,043,041
Result	\$3.45	\$2.75	\$0.16

Figure 23. ROI Calculations for SCP (2019\$)

Benefits / Costs	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Total Benefits	\$326,731,156	\$326,731,156	\$88,544,226
Total Costs	\$44,832,529	\$64,306,074	\$44,832,529
Result	\$7.29	\$5.08	\$1.97

Drivers of ROI

The magnitude of the positive ROI calculations is driven by several factors, including:

- Healthcare expenditure savings. Volunteers, caregivers, program participants, private insurance, other healthcare payers, and the federal government realize significant savings in healthcare expenditures from the improvement in health outcomes of participants, volunteers, and caregivers because of FGP & SCP. Healthcare savings stem from reduced emergency department visits, reduced inpatient hospital stays, and overall improved health and wellness.
- Assisted living expenditure savings. Many of the individuals who receive services
 from SCP volunteers report that they can stay in their homes while receiving the
 services rather than having to move into an assisted living facility. This generates
 significant cost savings for these program participants.
- Value of in-kind services. FGP & SCP program participants (and their households)
 receive in-kind services of considerable value. These services have monetary value
 and do not displace labor, but instead add the capacity needed to address unmet
 needs in communities nationwide.

Recommendations for Further Research

Future ROI studies for national and community service programs, and FGP & SCP in particular, can be strengthened in several ways.

Recommendation 1: Study FGP participants' long-term outcomes. The most prominent limitation of this ROI study is the lack of available data on the long-term benefits to children and youth served by FGP. FGP volunteers serve in high-need schools and help children learn how to read, mentor troubled teenagers, and teach kids social skills, while also providing emotional support. While a body of research has emerged on the positive effects of early childhood education and other education interventions, the programs and services researched do not adequately match the FGP service model.

Future research should measure and monetize the long-term benefits of FGP. For instance, the one-on-one tutoring provided by FGP volunteers may boost high school graduation rates, college enrollment, and postsecondary degree completion. Research may be able to quantify that relationship by comparing the improvement in reading scores for children and youth who receive tutoring to those who do not. Existing literature may establish a connection between those reading scores and, for example, high school graduation rates. The estimated impact on high school graduation rates

could then be monetized based on the increased employment and earnings that are associated with a high school degree.

The FGP ROI estimates reported in this analysis would likely be substantially higher if long-term benefits to participants were included. Thus, collecting and analyzing data on outcomes for FGP participants is an important area for potential future research.

Recommendation 2: Document outcomes using third-party data. Using third-party data, along with or in place of self-reported data, can improve the accuracy of program outcome measurements. While self-reported data is easier to obtain—especially via survey instruments—it has several disadvantages. Some answers may be exaggerated, respondents may not answer honestly, and response biases could affect results. AmeriCorps programs should—where possible—leverage data from third-party sources either to provide data for their program evaluation or to corroborate findings from self-reported data. In the case of AmeriCorps Seniors programs, third-party data may be used to corroborate self-reported health outcomes for volunteers and—in the case of SCP—caregivers. Third-party data may also be used to corroborate SCP participant statements about the extent to which the program enabled them to age in place.

Recommendation 3: Ensure sample sizes for program evaluations are adequate and random. AmeriCorps grantees are required to conduct evaluations for their programs. To ensure findings are statistically representative of the population served, grantees should identify what the appropriate sample size should be for their outcome studies, which would differ by program based on the number served. Appropriate sample sizes—as well as those samples being random—will make the findings more reliable and provide greater confidence that the outcomes can be attributed to the intervention itself versus other confounding factors. Overall, larger sample sizes in these studies can provide a smaller margin of error, identify outliers in the data, and otherwise measure program impacts more accurately.

Recommendation 4: Develop a strategy to evaluate the outcomes of RSVP. While this ROI analysis includes the impacts of AmeriCorps Seniors' FGP & SCP, it excludes those that result from the Retired Senior Volunteer Program (RSVP). RSVP is one of the nation's largest volunteer networks for older adults that supports volunteering across a variety of projects, including community-based work across AmeriCorps's six focus areas. RSVP volunteers may engage in community development initiatives, independent living assistance, the tutoring or mentoring of children, or natural disaster relief. Because this AmeriCorps Seniors program supports a myriad of interventions, it would be beneficial to develop a strategy to collectively evaluate the outcomes of the array of services this program provides nationally, and to monetize its benefits to its volunteers and other applicable stakeholder groups. By carrying out this work and incorporating it into the results of this analysis, an ROI could be calculated that is more representative of the impacts and benefits across all three AmeriCorps Seniors programs collectively.

Conclusion

Based upon these findings, investment in FGP & SCP results in favorable impacts across a variety of stakeholder groups, including participants who receive program services, caregivers, volunteers, the federal government, and other healthcare payers. In addition to their market value, these services can provide longer-term benefits. SCP participants, primarily seniors, and their caregivers benefit from improved health outcomes and the ability for participants to remain living in their homes longer. FGP & SCP volunteers also benefit from staying active and engaged in their community, which leads to improved health outcomes. Many of the benefits—particularly the health-related benefits—realized by participants, caregivers, and volunteers have positive impacts on the federal government through savings in healthcare expenditures, such as those incurred by Medicare and Medicaid. These benefits are also realized by other payers of healthcare costs, including state and local governments and private insurers. Note that long-term benefits to FGP participants—children and youth—are not currently measured and, for that reason, are not captured in this ROI analysis.

The results of the ROI indicate that the benefits realized by all stakeholders from FGP & SCP combined outweigh the investment made by funders. The combined return to participants, volunteers, government, and other beneficiaries is \$4.57 for every dollar in federal government cost, a 457 percent return on investment. When all funding (from the federal government and other funders) is considered, the total return across all stakeholder groups is \$3.50 for every dollar in cost, a 350 percent return on investment. Lastly, when considering the ROI to the federal government alone, for FGP & SCP combined, the federal government receives \$0.69 back in cost savings for each dollar in cost.

Appendix: Benefits and Costs Included in Return on Investment Calculations

Benefits

In <u>Figure 24</u>, the rightmost three columns indicate whether a benefit is included in the numerator of a return on investment (ROI) calculation.

Figure 24. Benefits Included in ROI Calculations

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
In-kind services provided to	FGP participant	AmeriCorps ³²	X	X	
children and youth by the Foster Grandparent Program (FGP)		 National Wage Estimates (U.S. Bureau of Labor Statistics, 2019) Consumer Price 			
		Index (CPI; BLS, n.d.)			
		 Schonfeld & Associates, Inc. (n.d.) 			

³² AmeriCorps, personal communication, 2020.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
In-kind independent living assistance services provided to older and/or disabled adults by the Senior Companion Program (SCP)	SCP participant	 AmeriCorps³³ National Wage Estimates (BLS, 2019) CPI (BLS, n.d.) Schonfeld & Associates, Inc. (n.d.) 	X	X	
Cost savings from not having to go to assisted living facilities	SCP participant	 AmeriCorps³³ Georges et al. (2014) Pray et al. (2010) Genworth (2020) Consumer Expenditure Survey (BLS, 2020) CPI (BLS, n.d.) 	X	X	

³³ AmeriCorps, personal communication, 2020.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Decreased out-of-	SCP participant	• AmeriCorps ³⁴	X	Х	
pocket (OOP) hospital visit costs due to improved		• Lutheran Senior Services (LSS) ³⁵			
SCP participant health		Healthcare Cost and Utilization Project (HCUP; Agency for Healthcare Research and Quality, 2016)			
		• CPI (BLS, n.d.)			
Decreased private	Private insurance	• AmeriCorps 34	X	X	
insurance hospital visit costs due to	companies	• LSS ³⁵			
improved SCP participant health		• HCUP (AHRQ, 2016)			
		• CPI (BLS, n.d.)			

AmeriCorps, personal communication, 2020.
 Lutheran Senior Services, personal communication, April 22, 2020. All references to Lutheran Senior Services refer to data received through ICF's personal communication with that organization.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Decreased Medicare and Medicaid hospital visit costs due to improved SCP participant health	Federal government	 AmeriCorps³⁶ LSS³⁷ HCUP (AHRQ, 2016) CPI (BLS, n.d.) American Hospital Association (2020) 	X	X	X
Decreased hospital visit costs to other healthcare payers due to improved SCP participant health	Other healthcare payers	 AmeriCorps³⁶ LSS³⁷ HCUP (AHRQ, 2016) CPI (BLS, n.d.) 	X	X	

AmeriCorps, personal communication, 2020.
 Lutheran Senior Services, personal communication, April 22, 2020. All references to Lutheran Senior Services refer to data received through ICF's personal communication with that organization.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
OOP cost savings due to FGP & SCP volunteers' improved health	FGP & SCP volunteers	AmeriCorps ³⁸	Х	X	
		• Georges et al. (2018)			
		 Medical Expenditure Panel Survey (MEPS; AHRQ, 2020) 			
		• CPI (BLS, n.d.)			
Private insurance	Private insurance companies	• AmeriCorps ³⁸	Х	X	
cost savings due to FGP & SCP volunteers' improved health		• Georges et al. (2018)			
		• MEPS (AHRQ, 2020)			
		• CPI (BLS, n.d.)			
Medicare and Medicaid cost savings due to FGP & SCP volunteers' improved health	government	• AmeriCorps ³⁸	Х	X	X
		• Georges et al. (2018)			
		• MEPS (AHRQ, 2020)			
		• CPI (BLS, n.d.)			

³⁸ AmeriCorps, personal communication, 2020.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Cost savings to other healthcare payers due to FGP & SCP volunteers' improved health	Other healthcare payers	 AmeriCorps³⁹ Georges et al. (2018) MEPS (AHRQ, 2020) CPI (BLS, n.d.) 	X	X	
OOP cost savings due to caregivers' improved health	Caregivers (SCP)	 AmeriCorps³⁹ Georges et al. (2017) MEPS (AHRQ, 2020) CPI (BLS, n.d.) 	X	X	
Private insurance cost savings due to caregivers' improved health	Private insurance companies	 AmeriCorps³⁹ Georges et al. (2017) MEPS (AHRQ, 2020) CPI (BLS, n.d.) 	X	X	

³⁹ AmeriCorps, personal communication, 2020.

Benefit	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
Medicare and Medicaid cost savings due to caregivers' improved health	Federal government	• AmeriCorps ⁴⁰	X	X	X
		• Georges et al. (2017)			
		• MEPS (AHRQ, 2020)			
		• CPI (BLS, n.d.)			
Cost savings to other healthcare payers due to caregivers' improved health	Other healthcare payers	AmeriCorps ⁴⁰	X	X	
		• Georges et al. (2017)			
		• MEPS (AHRQ, 2020)			
		• CPI (BLS, n.d.)			
Stipends	FGP & SCP volunteers	AmeriCorps ⁴⁰	X	X	

⁴⁰ AmeriCorps, personal communication, 2020.

Costs

In <u>Figure 25</u>, the rightmost three columns indicate whether a cost is included in the denominator of a return on investment (ROI) calculation.

Figure 25. Costs Included in ROI Calculations

Cost	Stakeholder Group	Data Sources	Total Benefits per Federal Dollar	Total Benefits per Funder Dollar	Federal Government Benefits per Federal Dollar
AmeriCorps costs for stipends and other FGP & SCP grant funding	Federal government (AmeriCorps)	AmeriCorps ⁴¹	X	X	X
Budgeted match funding	Non-federal government funders	AmeriCorps ⁴¹		X	

⁴¹ AmeriCorps, personal communication, 2020.

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