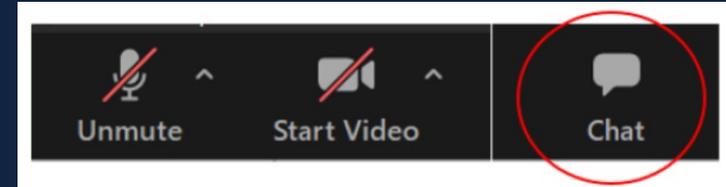


# Virtual Meeting Tips & Best Practices

## Rules of Engagement



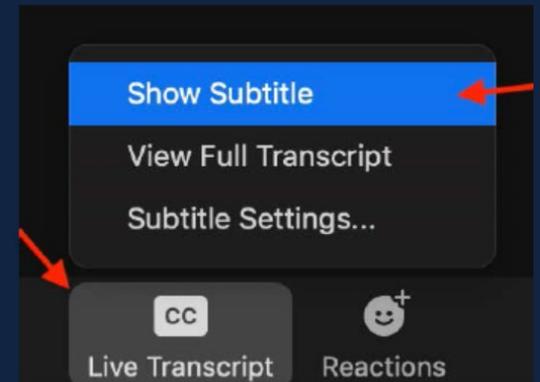
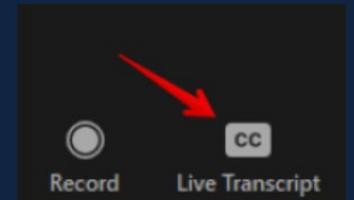
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Use the “**Raise Hand**” feature located under “reactions” to be recognized to come off mute and ask a question during the Q&A portion of the Webinar.

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# National Service: Novel Strategies to Measure the Return on Forestry Risk Mitigation

January 18, 2023

# Welcome

Mary M. Hyde, PhD

Director, Office of Research and Evaluation



# About AmeriCorps



- A U.S. federal agency that is the nation's largest grant maker for national service and volunteering
- Through national service programs such as AmeriCorps State & National, VISTA, AmeriCorps Seniors, and NCCC it provides opportunities to thousands of Americans to effect change in their communities
- AmeriCorps grantees support initiatives in education, economic opportunity, healthy futures, disaster services, environmental stewardship and support for veterans and military families. They work in diverse, urban, rural, and frontier communities
- Following the passage of the Serve America Act (2009), AmeriCorps began to organize and develop an evidence base for its programs. Investments by AmeriCorps and its grantees since then have resulted in the development of a base of evidence for agency-supported programs.



# The Evidence Act and AmeriCorps Learning Agenda

- The Foundations for Evidence-Based Policymaking Act of 2018 (“Evidence Act”) established processes for the federal government to modernize its data management practices and evidence-building functions to inform policy decisions to measure and improve the impact of federal programs.
  - Memoranda issued by the Executive Office of the President to all heads of departments and agencies:
    - OMB Memorandum, M-19-23 ... (Establish agency accountability for use of evidence and the development of a learning agenda)
    - OMB Memorandum, M-20-12 ... (Build and support evidence and evaluation capacity)
    - OMB Memorandum, M-21-27 ... (Restoring trust and integrity through transparent use and access to evidence)
- AmeriCorps Learning Agenda  
<https://americorps.gov/sites/default/files/document/AmeriCorps-Learning-Agenda-2022-2026.pdf>
- Webinar Series <https://americorps.gov/about/our-impact/webinars>

# AmeriCorps' Vision for Return on Investment (ROI) Studies

Lily Zandniapour, PhD

Research and Evaluation Manager, Office of Research and Evaluation



# AmeriCorps Learning Agenda - Evaluation Question



**Strategic Learning and Evidence  
Building Plan: Fiscal Years 2022-2026**  
Office of Research and Evaluation  
March 2022 (Version 1.0)

## Evergreen Learning and Evidence Building Activities

- How can AmeriCorps empirically document the social and economic returns on investment in national service strategies and interventions?
- Conduct targeted return on investment analyses

250 E Street SW  
Washington, D.C. 20525  
202-606-5000 / 800-942-2677

➤ Source: AmeriCorps Learning <https://americorps.gov/sites/default/files/document/AmeriCorps-Learning-Agenda-2022-2026.pdf>



# About Return on Investment



$$\frac{\text{Total Benefits}}{\text{Total Costs}} = \text{ROI}$$



# About the ROI Studies Project



ICF supporting a multi-year effort to:

- Review AmeriCorps's national service portfolio for ROI-ready programs
- Select programs for a deeper look at ROI feasibility
- Develop four ROI studies per year
- <https://americorps.gov/evidence-exchange/return-investment-roi-studies>

# Programs Studied



## NATIONAL SERVICE PROGRAMS PROVIDE A POWERFUL RETURN ON INVESTMENT

### Improving Lives, Strengthening Communities, and Fostering Civic Engagement Through Service

AmeriCorps offers transformative resources including funding and personnel to address pressing social challenges, strengthen communities, and generate potential benefits beyond the invested dollars. Select ROI studies below, organized by AmeriCorps's key focus areas, demonstrate the value of national service investments.

#### RETURN ON INVESTMENT (ROI)

ROI analyses compare a program's benefits to its costs to help assess program performance, demonstrate value to stakeholders, and build the evidence base to support decision making.

#### ROI analyses conducted consist of three calculations:

1. Total benefits per federal dollar
2. Total benefits per funder dollar
3. Federal government benefits per federal dollar

#### ROI Among AmeriCorps Programs

#### PROGRAM | ASSESSED ROI PER FUNDER DOLLAR | INSIGHTS AND TAKEAWAYS

##### Disaster Services

#### SBP AmeriCorps

-\$1.27-\$4.14

- AmeriCorps members benefit from living allowances during service and experience increased wages, reduced unemployment, and increased educational attainment after service.
- Government experiences reductions in housing construction time, which decreases costs associated with housing displaced families, and benefits from lower construction costs when rebuilding homes.
- Government realizes increased tax revenue from the improved employment and earnings of AmeriCorps members and program participants, savings on other expenditures for corrections, public assistance, and social insurance.

##### Economic Opportunity

#### Community Empowerment Technology Project (CTEP)

\$2.95-\$34.26

- Employment and earnings increased for 10.3% of previously unemployed participants who credit the program with their employment success.
- AmeriCorps members enjoy increased wages, reduced unemployment, and increased educational attainment after serving.
- Government realizes increased tax revenue from the improved employment and earnings of AmeriCorps members and program participants, savings on other expenditures for corrections, public assistance, and social insurance.

AmeriCorps Return on Investment Studies (2020-2021), ICF International, AmeriCorps Evidence Exchange, 2022. <https://americorps.gov/evidence-exchange/return-investment-roi-studies>

[Improving Lives, Strengthening Communities, and Fostering Civic Engagement Through Service \(americorps.gov\)](https://americorps.gov/evidence-exchange/return-investment-roi-studies)

# Featured Today



## RESEARCH BRIEF – ROI PROJECT Nevada Conservation Corps

AmeriCorps.gov

### Program Description

Nevada Conservation Corps (NCC) is an environmental service program of the Great Basin Institute dedicated to promoting field research and direct conservation service. NCC has utilized AmeriCorps support for its conservation work since 1999. NCC supports Nevada's communities and public lands by deploying forestry teams to mitigate fire threats, reduce the spread of invasive species, and restore and re-designate trails. In addition, monitoring and assessment teams capture critical data on the condition of forest and rangeland health.

### Return on Investment Analysis

To better understand the impact of the program in relation to costs, AmeriCorps commissioned a return on investment (ROI) analysis by ICF, an independent research firm. ROI analyses of national service programs estimate the monetary value of benefits that a program generates per dollar invested.

**AmeriCorps, the federal agency for volunteerism and national service, provides opportunities for Americans to serve their country domestically, address the nation's most pressing challenges, improve lives and communities, and strengthen civic engagement. Each year, the agency invests more than \$800 million in grants for local nonprofit, community, tribal, and state organizations; places more than 250,000 AmeriCorps members and AmeriCorps Seniors volunteers in intensive service roles; and empowers millions more to serve as long-term, short-term, or one-time volunteers. Learn more at AmeriCorps.gov.**



## Return on Investment Study: Nevada Conservation Corps

**Submitted to:**  
AmeriCorps  
250 E St., SW  
Washington, DC 20024

**Submitted by:**  
ICF Incorporated, LLC  
9300 Lee Highway  
Fairfax, VA 22031  
<https://www.icf.com>

September 21, 2022

This report was commissioned by AmeriCorps' Office of Research and Evaluation under Contract # 03002140ADU209 and Order # 5332A20R0013. Information in this report is in the public domain. Please, direct communications related to this report to Lily Zandniapour at [lily.zandniapour@ncc.gov](mailto:lily.zandniapour@ncc.gov) and Sarah Yue at [syue@ncc.gov](mailto:syue@ncc.gov). Cite this report as follows: Voigt, G., Borgida, J., Clark, D., Kulka, L., Miller, B., Modicamore, D., Pershing, J., Thompson, P., & Sarwana, M. (2022). *Return on Investment Study: Nevada Conservation Corps*. ICF.



Featured Program:

# Nevada Conservation Corps

Scott Scherbinski

Program Director for Nevada  
Conservation Corps, Great Basin Institute



# About Nevada Conservation Corps (NCC)



- NCC is a program of the Great Basin Institute dedicated to promoting field research and direct conservation service under AmeriCorps since 1999.
- NCC supports Nevada's and California's communities and public lands by deploying forestry teams to mitigate fire threats, reduce the spread of invasive species, and restore and re-designate trails.

# AmeriCorps' Role in NCC



AmeriCorps members:

- Provide crew-based services that reduce wildland fire threat through fuels reduction
- Engage in the treatment and abatement of noxious weeds
- Work through post-fire re-seeding and native plant re-introduction processes
- Oversee trail management and creation
- Participate in health and assessment teams, which capture critical data on the condition of forest and rangeland health

# NCC Evaluation Results



- 2020 evaluation of the efficacy of NCC fuel reduction treatments at 210 sites from 2019 to 2020.
- Measured fire regime condition class (FRCC), which relates to risk to ecosystem sustainability and risk of uncharacteristic wildland fire behavior and effects.
- Treatment sites matched to a comparison group with FRCC values measured before and after the treatment.
- FRCC ratings on treated plots decreased (2.10) compared to un-treated sites (2.39)

Source: Center for Program Evaluation. (2020). Great Basin Institute – Nevada Conservation Corps – Evaluation Report 2019 – 2020. Reno, NV. Retrieved from [https://americorps.gov/sites/default/files/document/GreatBasinInstitute.21ES231073.Evidencedoc3\\_EDITED\\_508.pdf](https://americorps.gov/sites/default/files/document/GreatBasinInstitute.21ES231073.Evidencedoc3_EDITED_508.pdf)

ROI Innovation:

# Estimating the Return on NCC Activities

*Ben Miller*, Project Manager for the ROI Studies Project, ICF

*Dominic Modicamore*, Technical Lead for the ROI Studies Project, ICF

*George Voigt*, Economics Analyst for the ROI Studies Project, ICF

# General Approach to Stakeholder Mapping



## Benefits

- Program participants
- Family members
- Wider community
- AmeriCorps members
- Government
  - Federal
  - State
  - Local

## Costs

- AmeriCorps members (opportunity cost)
- Funders (opportunity Cost)
- Private funders
- Government funders

# NCC Program Benefits



## AmeriCorps Members

- Additional earnings from reduced unemployment and increased educational attainment
- Post-tax living allowances

## Government

- Tax revenue from increased earnings by NCC AmeriCorps members post-program and related economic activity
- Reduced lifetime spending on corrections, public assistance, and social insurance from increased educational attainment by NCC AmeriCorps members

## Society

- Wildfire reduction benefits
- Habitat improvement benefits
- Trail maintenance and creation benefits

# NCC Program ROI Results



ROI Calculation	ROI Scenario		
	Short-Term	Medium-Term	Long-Term
Total Benefits per Federal Dollar*			
With low ecosystem benefits	\$1.17	\$8.35	\$11.48
With average ecosystem benefits	\$2.58	\$24.02	\$32.02
With high ecosystem benefits	\$6.57	\$68.46	\$90.28
Total Benefits per Funder Dollar*			
With low ecosystem benefits	\$0.98	\$7.08	\$9.75
With average ecosystem benefits	\$2.20	\$20.66	\$27.55
With high ecosystem benefits	\$5.66	\$59.17	\$78.04
Federal Government Benefits per Federal Dollar	\$0.04	\$0.17	\$0.23

\* These ROI estimates are provided based on low, average, and high estimates of ecosystem benefits to society.

# Benefit Valuation



- Combining market and non-market benefits produces a more comprehensive measure of program impacts.
  - A. Market Benefits: Those services that have active markets generating a value (e.g. reduced government spending on corrections, public assistance, and social insurance from AmeriCorps members increased educational attainment and reduced unemployment)
  - B. Non-Market Benefits: Those services that do not have active markets generating a value (e.g. the ecosystem service values preserved due to fuel reduction treatments reducing the chance of treated sites burning)
- AmeriCorps members generate market benefits for themselves and the federal government.
- NCC's activities generate benefits to society through non-market values of ecosystem services, benefits to human health, reduced greenhouse gas emissions, and increased health and recreation from trails.

# Wildfire Reduction Benefits – Three-Part Methodology



- Estimated 203.39 acres prevented from burning due to NCC, based on the number of treated acres (2,825) and the estimate of burn reduction (7.2%) from treatment
- Three distinct benefits based on protected acres:
  1. Ecosystem services preserved
    - A range of ecosystem service values (\$393 - \$2,890 per acre) estimate the benefits from areas not burned
  2. Human health benefits from reduced air particulates from smoke
    - \$467 per acre
  3. Reduced carbon dioxide emissions
    - Monetized based on social cost of carbon of \$47.76 per ton
    - A range of values (\$1 - \$93 per acre) vary based how much carbon is released

# Habitat Improvement Benefits – Additional information



- ROI study estimated ecosystem service values based on the 1,866 acres treated for habitat restoration and a range of ecosystem services based on habitat type:
  - \$7,697 - \$35,151 per acre for forested mountains (83 acres treated during study period)
  - \$6,687 - \$78,571 per acre for other ecosystem designations (1,866 acres treated during study period)



# Benefit Discounting Through Regrowth

- NCC's activities accrue benefits over time, but those benefits decrease as time passes
- Values for wildfire reduction and habitat regrowth are discounted over time to account for the regrowth of flammable material, the return of invasive species, and the reduction of native ecosystem services:
  - 10% loss of benefits over the first 10 years
  - 84% loss of benefits over 30 years.

# Trail Maintenance and Creation Benefits – Additional information



- 552.91 miles of trails maintained/created by NCC
- Benefits to society of \$3.27 per mile of trail based on:
  - Health benefits \$2.94 per mile
  - Recreation benefits \$0.33 per mile
- These benefits accrue over time, but in order to account for degradation of trails over time the stream of annual benefits is adjusted to reflect an average cost of ongoing maintenance to trails (~50% of annual benefits)

# Program Perspective on the ROI Study

Scott Scherbinski, Program Director for Nevada  
Conservation Corps, Great Basin Institute

# Reflection

Ben Olsen

Deputy Regional Administrator for the Western Region



# Q&A Panel Facilitator

Emily McDonald, PhD

Research Analyst, Office of Research and Evaluation



## Q & A Panel Discussion:

- **Ben Miller**, Project Manager for the ROI Studies Project, ICF
- **Dominic Modicamore**, Technical Lead for the ROI Studies Project, ICF
- **Benjamin Olsen**, Deputy Regional Administrator, West Region, AmeriCorps
- **Scott Scherbinski**, Program Director for Nevada Conservation Corps, Great Basin Institute
- **George Voigt**, Economics Analyst for the ROI Studies Project, ICF
- **Lily Zandniapour**, PhD, AmeriCorps Office of Research and Evaluation

# Thank you for attending today's webinar.

The recording and support materials will be provided in the next two weeks. Those items will be located on the AmeriCorps Impact Webinar page at:

<https://americorps.gov/webinar/national-service-novel-strategies-measure-return-forestry-risk-mitigation>

To inquire about the work presented in this webinar, please reach out to [Evaluation@cns.gov](mailto:Evaluation@cns.gov)