



An Evaluation of the Corporation for the Promotion of Rifle Practice and Firearms Safety

Paul W. Mayberry, Vikram Kilambi, Brian Briscoombe,
Heather Krull, Michelle D. Ziegler, Michael L. Hansen,
Jaime L. Hastings, Karen Lee

For more information on this publication, visit www.rand.org/t/RR2568

Library of Congress Cataloging-in-Publication Data is available for this publication.

ISBN: 978-1-9774-0198-4

Published by the RAND Corporation, Santa Monica, Calif.

© Copyright 2019 RAND Corporation

RAND® is a registered trademark.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of its research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.

The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

Support RAND

Make a tax-deductible charitable contribution at
www.rand.org/giving/contribute

www.rand.org

Preface

This report documents research and analysis conducted as part of a project entitled *Evaluation of the Corporation for the Promotion of Rifle Practice and Firearms Safety (CPRPFS)*, sponsored by the Administrative Assistant to the Secretary of the Army. The purpose of the project was to provide Army leadership with an evaluation of the CPRPFS that includes an assessment of the costs and benefits of the Civilian Marksmanship Program to the Army, along with the costs and profits associated with the transfer of excess pistols to the CPRPFS.

The Project Unique Identification Code (PUIC) for the project that produced this document is RAN187788.

This research was conducted within RAND Arroyo Center's Personnel, Training, and Health Program. RAND Arroyo Center, part of the RAND Corporation, is a federally funded research and development center (FFRDC) sponsored by the United States Army.

RAND operates under a "Federal-Wide Assurance" (FWA00003425) and complies with the *Code of Federal Regulations for the Protection of Human Subjects Under United States Law* (45 CFR 46), also known as "the Common Rule," as well as with the implementation guidance set forth in DoD Instruction 3216.02. As applicable, this compliance includes reviews and approvals by RAND's Institutional Review Board (the Human Subjects Protection Committee) and by the U.S. Army. The views of sources utilized in this study are solely their own and do not represent the official policy or position of DoD or the U.S. Government.

Contents

Preface	iii
Figures	vii
Tables	ix
Summary	xiii
Acknowledgments	xxiii
Abbreviations	xxv
 CHAPTER ONE	
Introduction	1
Background	1
Objective and Approach	4
Timing Issues	5
Organization of This Report	5
 CHAPTER TWO	
Assessing the Effectiveness of the Civilian Marksmanship Program	7
Statutory Specification of Civilian Marksmanship Program Functions	8
Analytical Specification of Civilian Marksmanship Program Functions Through Logic Models	10
Data Collection	13
Civilian Marksmanship Program Activities and Measurement Results Across Functions ...	14
Observations	38
 CHAPTER THREE	
Comparing the Civilian Marksmanship Program with Similar Organizations	39
Shooting Sports in the United States	39
Selection Criteria and Identification of Comparable Organizations	42
Data Collection	43
Results	46
Observations	64

CHAPTER FOUR

Evaluating the Benefits and Costs of the Civilian Marksmanship Program to the

U.S. Army	67
General Methodological Approach	68
Benefits and Costs Analysis Results	70
Observations	101

CHAPTER FIVE

Assessing Civilian Marksmanship Program Funding Models: Current and

Prospective	105
Findings from Activity 1: Analysis of the Civilian Marksmanship Program's Financial Data	106
Findings from Activity 2: Identifying Nonprofit Funding Models	111
Findings from Activity 3: Other Options for Generating Revenue	117
Observations	122

CHAPTER SIX

Assessing Financial Aspects of Transferring M1911/M1911A1 Pistols

Underlying Factors Driving the Costs and Profits of M1911/M1911A1 Pistol Sales	123
Analysis of M1911/M1911A1 Program Costs and Profits	130
Observations	138

CHAPTER SEVEN

Conclusion

Task 1: Assess the Effectiveness of the Civilian Marksmanship Program	141
Task 2: Compare the Civilian Marksmanship Program with Similar Organizations	143
Task 3: Evaluate the Benefits That the Army Receives from the Civilian Marksmanship Program Relative to Resources That the Army Provides	144
Task 4: Assess the Civilian Marksmanship Program's Current Funding Model and Prospective Funding Models That Would Support the Program's Transition to Self-Sustainment	145
Task 5: Assess Costs and Profits Associated with the Transfer of Excess Firearms from the Army to the Civilian Marksmanship Program with Respect to Surplus Caliber .45 M1911/M1911A1 Pistols	146

APPENDIX

Detailed Information Supporting Prior Referenced Information

References	173
-------------------------	-----

Figures

2.1.	Specifications of CMP Functions.....	10
2.2.	Locations of CMP Affiliates.....	20
2.3.	Location of CMP Youth Affiliates	21
3.1.	Total Assets of Comparable Organizations by Year	51
5.1.	CMP Revenues, Expenses, and Profits/Losses, FYs 2013–2017	106
5.2.	CMP Revenues (Including Interest and Gains on Investments), Expenses, and Profits/Losses, FYs 2013–2017.....	107
5.3.	Categories of Revenues and Expenses, FY 2017	108
5.4.	Categories of Revenues and Expenses, Including Surplus and Non-Surplus Sales, FY 2017.....	109
5.5.	CMP Revenues, Expenses, and Profits and Losses, Including Interest and Gains on Investments, Excluding Surplus Sales, FYs 2013–2017.....	110
5.6.	CMP Revenues, Expenses, and Profits and Losses, Excluding Interest, Gains on Investments, and Surplus Sales, FYs 2013–2017	111
5.7.	Value of CMP’s Core Endowment Fund, FYs 2013–2017.....	116
6.1.	Work Breakdown Structure of Refurbished M1911/M1911A1s.....	132
6.2.	Estimated M1911/M1911A1 Profits	137

Tables

1.1.	Summary of Approaches and Data Collection for the Five Tasks	6
2.1.	CMP Logic Model, Core Functions.....	12
2.2.	CMP Logic Model, Administrative Functions.....	13
2.3.	Marksmanship and Safety Training Attendance in CMP Programs, 2013–2017	18
2.4.	Marksmanship and Safety Instructors Trained or Certified, 2013–2017.....	21
2.5.	Regression Coefficients for JROTC National Championship Scores, 2006–2018.....	23
2.6.	Abridged Description of Safety Content in Selected CMP Materials.....	24
2.7.	Number of Unintentional Firearm Incidents, 2013–2017.....	25
2.8.	Number of Participants in Marksmanship Competitions Hosted and Sanctioned per Year, 2013–2017.....	27
2.9.	Total Number of CMP Publications, by Topic	30
2.10.	Dollar Value of Prizes Awarded per Year by CMP in Recognition of Marksmanship Achievements, 2013–2017	31
2.11.	Dollar Value of Grants Awarded per Year by CMP, 2013–2017.....	31
2.12.	Dollar Value of Scholarships Awarded per Year by CMP, 2013–2017	32
2.13.	CMP Insurance Coverage	35
2.14.	Annual CMP Revenue and Expenses from Sales and Programs, 2013–2017	37
3.1.	Summary of Firearm Ranges and Facilities in the United States and Services Provided	41
3.2.	Cost to Affiliate with Each National Organization	53
3.3.	Cost to Participate in Marksmanship and Firearm Safety Trainings, Camps, and Clinics Hosted by Each National Organization	54
3.4.	Listing of Safety Training Reviewed from Selected Organizations.....	55
3.5.	Abridged Safety Content Checklist of Safety Training Reviewed from Selected Organizations	57
3.6.	Marksmanship and Safety Training Attendance, 2013–2017.....	58
3.7.	Number of Marksmanship and Firearm Safety Instructors and Officials Trained per Year, 2013–2017.....	59
3.8.	Number of Unintentional Firearm Incidents at Trainings Conducted and Competitions Hosted by Each Organization per Year, 2013–2018.....	60

3.9.	Number of Participants in Marksmanship Competitions Hosted and Sanctioned per Year, 2013–2017	62
3.10.	Total Value of Scholarships, Awards, and Grants Disbursed by Year, 2013–2017	63
4.1.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from the Philippines to CMP	74
4.2.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from Turkey to CMP	75
4.3.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from Austria and Japan to CMP	76
4.4.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from Foreign Countries to CMP	77
4.5.	Surplus Army Rifles Transferred from U.S. Locations, Excluding DDAA, to CMP	77
4.6.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP	78
4.7.	Surplus Rifles Transferred from DDAA to CMP	79
4.8.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Rifles from DDAA to CMP	80
4.9.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Rifles from U.S. Locations to CMP	81
4.10.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Ammunition to CMP	82
4.11.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP	82
4.12.	If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP	84
4.13.	If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP	84
4.14.	If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Rifles to CMP	85
4.15.	If Allowed to Destroy Surplus Materiel, Army Would Incur More Costs Than It Would Avoid by Storing M1911/M1911A1s for CMP	86
4.16.	If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Ammunition to CMP	87
4.17.	If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP	87
4.18.	If Not Repatriating Excess Firearms, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP	88

4.19.	The Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP for Each Scenario	89
4.20.	The Army Incurs More Costs Than It Avoids by Providing Labor for CMP-Related Activities	92
4.21.	The Army Avoids Costs by Providing Facilities for CMP-Related Activities.....	93
4.22.	The Army Incurs More Costs Than It Avoids by Providing Labor and Facilities for CMP-Related Activities.....	93
4.23.	The Army Avoids Costs Because of CMP Participation in the Ceremonial Rifle Program	95
4.24.	The Army Avoids Costs Because of CMP Support to Army ROTC and JROTC.....	97
4.25.	The Army Avoids Costs Because of CMP Support to the National Matches and SAFS	97
4.26.	The Army Avoids Costs Because of CMP Support to Programs and Activities	98
4.27.	If the Army Were Not Allowed to Destroy Surplus Materiel, It Would Avoid More Costs Than It Would Incur Because of CMP.....	101
4.28.	If the Army Were Required to Destroy Surplus Materiel, It Would Avoid More Costs Than It Would Incur Because of CMP	102
4.29.	If the Army Would Not Repatriate Excess Firearms, It Would Avoid More Costs Than It Would Incur Because of CMP.....	102
5.1.	Nonprofit Funding Models.....	112
5.2.	Distribution of Donations Made to CMP, FY 2014, FYs 2016–2017	115
5.3.	Notional Matrix for Evaluating Options for Generating Additional Revenue	121
6.1.	M1911/M1911A1 Inventory	127
6.2.	Fixed Costs, Capital Investments, Acquisitions, and Other Committed Resources	131
6.3.	M1911/M1911A1 Cost Statement	133
6.4.	Estimated M1911/M1911A1 Margins by Grade	136
6.5.	Estimated M1911/M1911A1 Profits and ROI.....	137
6.6.	Estimated M1911/M1911A1 Profits and ROI for Different Authorizations in FY 2019	138
A.1.	Description of Safety Content in Selected CMP Materials.....	154
A.2.	Dollar Value of Prizes Awarded in Recognition of Marksmanship Achievements by CMP, 2013–2017	158
A.3.	Dollar Value of Grants Awarded per Year by CMP, 2013–2017.....	159
A.4.	Dollar Value of Scholarships Awarded per Year by CMP, 2013–2017	159
A.5.	Summary of Firearm Ranges and Facilities by State and Services Provided....	160
A.6.	Questionnaire Submitted to Organizations	162
A.7.	Selected Financials for Organizations (dollars in thousands).....	163
A.8.	Cost to Participate in Marksmanship and Firearm Safety Trainings, Camps, and Clinics Hosted by Each National Organization	165

A.9.	Fees to Participate in Marksmanship Competitions Hosted by Each National Organization	167
A.10.	Composition of Revenues and Expenses, FYs 2013–2017	169
A.11.	Proportion of Sales Revenues and Expenses Attributed to Surplus and Non- Surplus	170
A.12.	Donation Information	171

Summary

The Civilian Marksmanship Program (CMP) began in 1903 with the goal of encouraging individuals to develop marksmanship skills in case they were called on to serve during wartime. Congress expanded the program's focus over the ensuing decades and created the Corporation for the Promotion of Rifle Practice and Firearms Safety, a 501(c)(3) nonprofit organization, to govern and promote CMP in 1996. Under its statutory authorities, CMP performs three key functions that other organizations also perform: marksmanship instruction, competitions, and promotion of the sport. The organization also has additional statutory functions that center on the securing and selling of surplus firearms as well as procuring necessary supplies and services to carry out the program. The sale of firearms provides the primary revenue source for CMP and its programs.

The National Defense Authorization Act for Fiscal Year (FY) 2018 tasked the Army to “enter into an agreement with a Federally funded research and development center with relevant expertise to conduct an evaluation of the Corporation for the Promotion of Rifle Practice and Firearms Safety [sic] for the purpose of assessing future transfers of excess firearms to the Corporation.”¹ At the request of the Administrative Assistant to the Secretary of the Army, RAND Arroyo Center conducted this evaluation. The legislative language called for five discrete tasks:

1. Assess the effectiveness of CMP.
2. Compare CMP with similar organizations.
3. Evaluate the benefits the Army receives from CMP relative to the resources the Army provides CMP.
4. Assess CMP's current funding model and prospective funding models that would support CMP's transition to self-sustainment.
5. Assess the costs and profits associated with the transfer of excess firearms from the Army to CMP with respect to surplus caliber .45 M1911/M1911A1 pistols.

¹ Public Law 115-91, National Defense Authorization Act for Fiscal Year 2018, December 12, 2017.

To focus on the most recent data, we chose the period for assessing CMP to span from 2013 to 2017; the study was conducted from February 2018 to September 2018. Next, we explain what we did and what we found for each of the tasks.

Task 1: Assess the Effectiveness of the Civilian Marksmanship Program

Approach

In assessing the effectiveness of CMP against its statutory functions, we relied on logic modeling—an established, systematic qualitative research method for program measurement and evaluation. We developed logic models for CMP’s key functions. The logic models described program objectives, accomplishments, and activities. Army and CMP leadership participated in this development and approved the resulting quantitative and qualitative evaluation measures. This approach is constrained by the fact that CMP lacks an overarching and guiding strategy and thereby is deficient in corresponding measures for program evaluation. We inferred CMP’s intended purposes using a logic model abstraction, but this technique also does not address absolute questions of “how much is enough” in terms of accomplishing outcomes for any of CMP’s functions.

To inform the evaluation, we collected wide-ranging qualitative and quantitative data consistent with the agreed-upon logic models. Although CMP was the source for most of this information, we employed multimethod verification to gain alternative perspectives and to validate evidence—engaging various groups of subject-matter experts, attending a CMP board meeting, touring facilities, observing competitions, interviewing civilian and military leaders, and maintaining close communications with CMP staff to verify and further explain data that we received.

Findings

As noted, we were constrained because CMP lacks strategy-driven, performance-outcome measures. We received many output metrics—e.g., numbers of individuals completing instruction—but no information about the quality or effect of that instruction. This restricted and limited our ability to determine direct benefits to either individual citizens or the Army. Despite these limitations, the findings demonstrate that **CMP is effective in its functions to instruct, conduct, and promote.**

CMP offers a broad range of instruction to multiple audiences. The focus is primarily on rifle and pistol clinics at all levels, from beginners to experts. Participants are predominantly adults, but youth instructional programs are growing quickly, and CMP has engaged more-diverse populations, such as women and disabled persons. CMP also concentrates on delivering force-multiplying instructional programs that develop and deploy capable instructors who can teach the fundamentals and essentials of marksmanship to others in their local areas. One of CMP’s focus areas is safety

instruction, which includes certification of range safety officers who are qualified to conduct and oversee competitions. CMP is the sole organization responsible for developing and certifying Junior Reserve Officer Training Corps instructors. CMP relies heavily on its affiliates to execute instruction and uphold good safety practices.

CMP conducts and sanctions many of the most-valued competitions in shooting sports, such as the National Matches and Junior Reserve Officer Training Corps Championships. It averaged 307,000 participants in its sanctioned competitions, with about 20-percent growth over the study period. Here, too, CMP relies heavily on its affiliates. The national organization has introduced considerable innovation in the sport through its use of electronic targets, a web-based results repository, and a highly visible CMP-designed safety device employed at all competitions.

CMP invests considerably in promoting the sport by publishing a robust range of supporting materials and maintaining a growing social media and electronic presence. It is notable that CMP distributed more than \$900,000 in 2017 to recognize marksmanship achievements through team endowments, individual awards and medals, and general program support. Similarly, in 2017, CMP recognized high school seniors who demonstrated marksmanship excellence by awarding almost \$172,000 in scholarships to support postsecondary and vocational education.

CMP depends primarily on revenues generated from sales of transferred items to execute its mission. To carry out its administrative functions, CMP uses an auditable system to secure and track firearms, control its inventory, and adhere to laws governing sales of firearms. CMP employs an independent accounting firm to provide annual financial audits and biannual operational compliance assessments. These auditor determinations identified no financial deficiencies in 2017. The accounting firm has yet to issue a final operational determination, but preliminary findings indicated only a single inconsistency that was promptly addressed by CMP management. In the operational realm, there is potential ambiguity in the Army memorandum of understanding and the statute about the title, timing, and transfer of firearms, which could raise concerns about liability and should be examined further.

Task 2: Compare the Civilian Marksmanship Program with Similar Organizations

Approach

Comparison organizations needed to be national organizations with considerable focus on target shooting and a stated mission directed toward at least one of CMP's functions to instruct, conduct, or promote. We excluded organizations primarily associated with law enforcement, security, and solely hunting. Local gun clubs, individual businesses, and regional or state organizations did not qualify under this conceptualization.

We generated candidate organizations by (1) sending a preliminary questionnaire to CMP asking for identification of similar organizations, (2) conducting multiple internet searches, and (3) engaging the CMP Board of Directors, which had considerable knowledge and contacts in the shooting sports realms. All told, we identified 146 possible organizations, from which we derived the following ten for comparison:

- National Rifle Association (NRA) and the NRA Foundation (the NRA conducts competitions and carries out instruction; the NRA Foundation is its associated nonprofit organization)
- USA Shooting
- National Shooting Sports Foundation
- National Skeet Shooting Association/National Sporting Clays Association
- Scholastic Shooting Sports Foundation (Scholastic Clay Target Program/Scholastic Action Shooting Program)
- American Legion (Junior Shooting Sports Program)
- National Collegiate Athletic Association
- MidwayUSA Foundation
- USA Youth Education in Shooting Sports
- Youth Shooting Sports Alliance.

Findings

Although each organization has a national presence in at least one of CMP's functions to instruct, conduct, or promote, **none of the organizations that provided data matches CMP in scale and comprehensiveness of function.** With respect to scale, the only other organizations with the financial resources and extensive networks of affiliates required for widespread marksmanship instruction and sport proliferation is possibly the NRA/NRA Foundation or the National Shooting Sports Foundation. However, both organizations' scopes are quite broad, and their interests and activities extend beyond these areas to political advocacy.

With respect to the instruct function, CMP and its affiliates annually train 80,000 individuals—about half of them youth—in marksmanship, relying heavily on independent affiliates to carry out this instruction. Other organizations do not train as many adults or youth; delegate training to independent or affiliated instructors, clubs, or affiliates; or both. The NRA and its affiliates presumably train significantly more individuals than CMP, but we were unable to substantiate this claim; neither NRA organization responded to data requests.

A definitive leader in the conduct function, CMP and its affiliates draw more participants in competitions than all the other organizations for which we have data. Moreover, CMP has contributed to sports governance, published authoritative rules for the conduct of competitions, and innovated by incorporating technology into competitions. We note that smaller, less-established organizations have grown more during the

study period. Such organizations have a youth focus and offer categories of competition that CMP traditionally does not emphasize. Although the NRA did not provide data, participation in NRA competitive events might be at a level similar to that for CMP.

When comparing the total amounts of financial assistance provided by organizations in executing the promote function, CMP ranks only fourth among the organizations studied. It does undertake some notable activities with promotional appeal, such as its relationship with the Army and its use of brand ambassadors, state associations, and media. CMP also holds significantly more financial assets than most other organizations in the form of its core endowment fund. However, the other organizations are all foundations that have much greater annual revenues.

This comparison of organizations establishes that CMP has a significant national presence in marksmanship instruction, competition, and promotion. However, CMP and all these organizations operate in the wider context of target shooting, which involves approximately 50 million individuals across the United States and is where many citizens are first exposed to shooting or are trained by a friend or family member. In this regard, none of the organizations examined have shown that they have the resources or scale to interact with such a large population with respect to marksmanship proliferation, but there certainly is potential to make greater inroads.

The foregoing comparisons have limitations. Foremost, three organizations did not provide data or corroborate participation figures. These omissions weaken the quantitative comparisons, particularly those between the NRA/NRA Foundation and CMP, which are thought to be of similar scale. Second, based on the selection criteria and identification procedures, we did not consider for-profit entities. Such organizations can and do provide such functional services, but we did not have consistent means for capturing and characterizing their offerings. Third, these comparisons relied on the strength of a logic model that was strictly based on CMP's functions to instruct, conduct, and promote—there could have been other notable and significant activities undertaken by organizations that we did not fully consider or value. Despite these limitations, we believe that our analysis is credible for the purposes of this report.

Task 3: Evaluate the Benefits That the Army Receives from the Civilian Marksmanship Program Relative to Resources That the Army Provides

Approach

To evaluate benefits and costs, we examined CMP's functions and reviewed the CMP-Army memorandum of understanding to assemble an initial list of potential Army costs and benefits. This list was reviewed by Army and CMP subject-matter experts to create and validate a comprehensive list. For this agreed-upon final list, we attempted

to collect data; however, it became clear that the ability to quantitatively measure each element varied. At one extreme, the Army and CMP have very detailed information; at the other extreme, data are completely unavailable. We therefore organized our analysis around four conceptual categories. The first category concerns the process for dealing with surplus firearms and related materiel, consisting of transportation, handling, storage, destruction, or transfer to CMP. This is the category for which we have the most-precise data. The second category consists of Army labor and facilities associated with CMP; these are somewhat less precisely measured but still reasonably estimated. The third category covered CMP support to programs and activities that, in principle, help the Army. Finally, we examined costs and benefits to the Army that we cannot measure precisely and for which data are unavailable.

Two considerations underpinned the benefit-cost analysis: (1) identifying counterfactuals and (2) choosing a time horizon. The counterfactual centers on estimating what benefits would have accrued to the Army—and the costs it would have incurred—if the program did not exist. For each of the four conceptual categories, we explicitly list the likely counterfactuals that informed our analysis. Many of the counterfactuals center on the “moratorium” language in annual appropriations bills that prevents the Army from using funds to demilitarize or dispose of surplus firearms, language that predates the creation of the Corporation for the Promotion of Rifle Practice and Firearms Safety.²

For the time horizon, our baseline benefit and cost analysis focused on calendar years 2013–2017, the five most recent years for which we were able to collect reliable data. This time horizon allows us to compare an “average full year of Army costs” with an “average full year of Army benefits.” Nevertheless, to the extent that idiosyncratic costs and benefits occur in this period, our estimates will not necessarily be representative of what the Army should expect in the future. We conducted a variety of analytical excursions to further examine such exceptional circumstances. All financial data are presented in 2017 dollars, calculated using the Consumer Price Index of the Bureau of Labor Statistics.

Findings

CMP benefits to the Army likely outweigh Army costs. We explored several alternative assumptions in our analyses, but, in all cases, we estimate that the costs incurred by the Army as a result of CMP are less than the avoided costs to the Army. Much of the incurred cost is the time spent by Army personnel on CMP-related activities; the remainder reflects costs associated with storing and releasing some materiel to CMP. Much of the avoided costs are a result of CMP providing support to programs and activities that the Army would have provided otherwise; the remainder of the avoided costs are a result of the transfer of surplus firearms and ammunition to CMP.

² See, for example, Public Law 115-141, Consolidated Appropriations Act, 2018, Sec. 8018, March 23, 2018. Also see Public Law 101-165, Department of Defense Appropriations Act, 1990, Sec. 9080, November 21, 1989.

The benefit-cost ratio is sensitive to assumptions about what the Army would do if CMP did not exist. Although the benefits to the Army outweigh the costs in all cases, the extent to which this is true depends heavily on the specific assumptions we make about what the Army would do if CMP did not exist. Specifically, we estimate benefit-cost ratios ranging from 6:1 to 35:1. The different assumptions we examine are all arguably plausible and are ones that we can neither prove nor disprove. We have presented our analyses in a way that allows readers to evaluate each assumption and select the ones they believe to be most likely.

All CMP-related benefits to the Army are avoided costs. It is important to emphasize that all Army benefits are the result of cost-avoidance. The Army does not receive any financial payments from CMP, other than reimbursement for some expenditures that the Army makes on CMP's behalf. The benefits, therefore, are not resources that the Army could reprogram for other purposes.

Future adverse events could lead to higher costs for the Army. There are some potential costs and benefits for which data are unavailable and that we cannot measure precisely. Although there were no adverse events associated with CMP during the years we analyzed, we cannot rule out the possibility that such events (for example, a surplus firearm being sold by CMP to the public and subsequently being used in a crime or being associated with an accident leading to injury) might occur in the future. If they do, and if the Army were to be adversely affected, the Army would incur higher costs as a result of CMP than the ones we are able to estimate.

Task 4: Assess the Civilian Marksmanship Program's Current Funding Model and Prospective Funding Models That Would Support the Program's Transition to Self-Sustainment

Approach

CMP provided us with detailed financial information from FY 2013 to FY 2017 so that we could isolate revenues and expenses attributable to resources that the Army provides to CMP each year in the form of excess firearms. With those factors removed, the remaining revenues and expenses represent CMP's financial situation if the Army were to stop providing support to CMP. In addition to analyzing CMP's financial data, we also identified funding models typically used by nonprofit organizations, with the goal of identifying the model or models that CMP currently uses and what alternative models might be feasible for future consideration. Finally, we explored alternative opportunities that CMP could consider to generate additional revenues that would replace those currently created by the receipt of excess Army firearms. In other words, if the Army were to discontinue the transfer of excess firearms, what other activities might CMP engage in to generate revenue in new or expanded ways?

Findings

Excluding the receipt of excess firearms from the Army, CMP still has a viable business model that has shown a profit in all but one of the past five years while delivering a robust range of programs and services. Central to this is the existence of CMP's core endowment fund of more than \$240 million in FY 2017. Revenues derived from the earnings and interest on this fund allow CMP to have a buffer that can be used to supplement its annual operating budget as needed. Accordingly and within reason, CMP can deal with unanticipated negative annual variances or can surge to cover emergent high-priority funding requirements. Theoretically, CMP would have had to tap into its returns on the core endowment fund for each of the past five years if it had not received excess firearms.

If returns on investments (ROIs) are included in the profit calculation, CMP would have earned positive profits, ranging from \$4 million to \$6.5 million per year, from FY 2013 to FY 2017 (except for FY 2015, when the stock market was down) even without receiving Army resources. Conversely, if ROIs are not included in the profit calculation, CMP would have experienced a loss each year, ranging from \$2 million to \$7 million, in the absence of excess firearms and other resources from the Army.

To make up for any loss in revenue that would arise from the lost sale of excess firearms, we presented several options for generating new or additional revenue. These options can be characterized as (1) an alternative funding model under which CMP could establish a membership program or rely more heavily on donations or sponsors, (2) an expansion of existing services or programs, or (3) the development of a new type of revenue stream. Each of these options would require some level of effort by CMP, and each would generate some effect as measured by revenue generated. To decide which might be a feasible source of revenue, CMP would need to assess and prioritize these options according to effort, impact, and other important dimensions.

These analyses again highlight the need for CMP to have an overarching and guiding strategy. Such options for generating additional revenue could also be used as the basis for a strategic program expansion to further CMP's overall mission and objectives, regardless of whether CMP receives future excess firearms.

Task 5: Assess Costs and Profits Associated with the Transfer of Excess Firearms from the Army to the Civilian Marksmanship Program with Respect to Surplus Caliber .45 M1911/M1911A1 Pistols

Approach

Our analysis consisted of two components: a detailed treatment of costs of CMP's establishing and executing the M1911/M1911A1 program and a forecasting of profits

for 2018, 2019, and over the projected sale period of the full inventory. We submitted a detailed questionnaire to CMP that asked about inventory assessments, business strategy, sales management, costs, and pricing. CMP senior management completed the questionnaire and hosted a site visit. During this visit, we were able to tour the dedicated pistol facilities and thereby better appreciate the operations for accepting, refurbishing, storing, processing, selling, and shipping the pistols. Because pistol sales did not occur during the study period, we forecasted profits and estimated costs using established methods and a range of feasible assumptions.

Findings

Based on the analysis, we find that CMP invested \$940,000 in startup costs in 2017–2018 and has the **potential to earn \$3.4 million in profits in 2018 and \$2.0 million in 2019**. Uncertainty associated with program specifics increases considerably in 2019 and beyond. Projected 2019 profits assume that past sale prices are retained and that the Army transfers the fully allowed complement of 10,000 pistols. The Army has yet to make this decision. Transferring 8,000 pistols would result in a revised 2019 profit of \$1.9 million. Profits in later years will decline as costs and washout rates (items not fit for sale) increase because of the lower quality of future transferred inventories. Demand for lower-grade pistols at current fair market prices might not be realistic in the future. This means that in order to break even, CMP could be forced to find operational efficiencies to reduce costs or to raise prices after 2023 under our current estimation assumptions—or they would have to sell pistols at a loss. All of these considerations illustrate limitations in our findings.

CMP has invested considerably in its capacity to store the Army's entire M1911/M1911A1 inventory securely; however, CMP currently stores only its initial annual increment of pistols. This represents a CMP-stored inventory of 8,000 pistols, not the full pistol inventory of more than 98,000. The Army retains the yet-to-be transferred inventory of 90,000 pistols at the Anniston Army Depot and pays for storage. Re-examining this policy could lead to Army savings in real and avoided storage costs.

Per its memorandum of agreement with the Army,³ CMP agrees to report to the Army any information on crimes committed with purchased pistols. The National Defense Authorization Act for FY 2018 requires the Secretary of the Army to provide information, to the extent feasible, on any crimes committed using any pistols transferred to or sold by CMP. CMP does have an auditable system to track, record, and monitor all firearms, sales, and sales inquiries until the final purchaser physically possesses the item. But after the final sale, the ability to report such incidents could be beyond the feasible capabilities of CMP and the Army.

³ U.S. Army and Corporation for the Promotion of Rifle Practice and Firearms Safety, "Transfer of Surplus Caliber .45 M1911/M1911A1 Pistols from the U.S. Army to the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc., During Fiscal Years (FY) 2018 and 2019," Memorandum of Agreement, January 17, 2018.

Acknowledgments

We are grateful to the many people who were involved in this research. In particular, we would like to thank our Army sponsors, Gerald O’Keefe and Mark Averill of the Office of the Administrative Assistant to the Secretary of the Army. We appreciated their help and guidance throughout this study. Steve Wallace, who serves as the Army Civilian Marksmanship Program (CMP) Liaison, was very gracious with his time and information. Both Daryl Meyer and Audrey Clarke of the Army’s Tank-Automotive and Armaments Command were supportive in providing detailed information associated with surplus firearms inventories, storage, disposition, and donation. LTC James Barrows and Kyle Ward of the Army Marksmanship Unit were helpful in expanding our understanding of the current and historical relationship between the Army and CMP.

We are also grateful to the executive leadership and staff of CMP. These individuals were open and transparent throughout the project, providing access to their comprehensive data sources and helping us understand their operations.

Several organizations provided valuable data for this study. We are indebted to the National Shooting Sports Foundation, USA Shooting, the Scholastic Shooting Sports Foundation, the National Collegiate Athletic Association, MidwayUSA Foundation, USA Youth Education in Shooting Sports, and the Youth Shooting Sports Alliance.

This research benefited from helpful insights and comments provided by several RAND colleagues, including Tim Bonds, Mike Linick, and Jennifer Kavanagh. Given the volumes of data involved, we are indebted to our analytic staff of Sarah Heintz and Norah Griffin. We also thank Paul Steinberg for his contributions to making this study concise and consistent in its messaging. Finally, our reviewers—Craig Bond, Ryan Consaul, and Andrew Morral—provided thoughtful comments that greatly improved this report.

Abbreviations

3PAR	three-position air rifle
AMU	Army Marksmanship Unit
ARNG	Army National Guard
CMP	Civilian Marksmanship Program
CPRPFS	Corporation for the Promotion of Rifle Practice and Firearms Safety
DDAA	Distribution Depot, Anniston Alabama
DLA	Defense Logistics Agency
DoD	Department of Defense
DoDAAC	Department of Defense Activity Address Code
ECI	empty chamber indicator
EIC	Excellence in Competition
FFL	federal firearms license
FY	fiscal year
GAO	Government Accountability Office
GSM	Garand-Springfield-Military
HQDA	Headquarters, Department of the Army
IRS	Internal Revenue Service
ISSF	International Shooting Sports Federation
JMIC	JROTC Marksmanship Instructor Course
JROTC	Junior Reserve Officer Training Corps
MOA	memorandum of agreement
MOU	memorandum of understanding
N/A	not applicable
NCAA	National Collegiate Athletic Association
NDAA	National Defense Authorization Act

NICS	National Instant Criminal Background Check System
NRA	National Rifle Association
NSCA	National Sporting Clays Association
NSSA	National Skeet Shooting Association
NSSF	National Shooting Sports Foundation
RFID	radio-frequency identification
ROI	return on investment
ROTC	Reserve Officer Training Corps
SAFS	Small Arms Firing Schools
SASP	Scholastic Action Shooting Program
SCTP	Scholastic Clay Target Program
SDM	Squad Designated Marksmanship
SES	Senior Executive Service
SME	subject-matter expert
SSSF	Scholastic Shooting Sports Foundation
TACOM	Tank-Automotive and Armaments Command
UIT	unique item tracking
USAR	U.S. Army Reserve
USAYESS	USA Youth Education in Shooting Sports
USMC	U.S. Marine Corps
YSSA	Youth Shooting Sports Alliance

Introduction

In this chapter, we discuss the history of the Civilian Marksmanship Program (CMP), the history of the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc. (CPRPFS), and the need for a congressionally mandated report that drove the analyses on which this report is based.

Background

History of CMP

The origins of CMP date to 1903, with the establishment of the National Board for the Promotion of Rifle Practice and the creation of the Office of the Director of Civilian Marksmanship through the 1903 War Department Appropriations Act.¹ The board advised the Secretary of War, and its purpose was to encourage individuals to develop marksmanship skills in case they were called on to serve during wartime. The United States had previously faced problems with mobilization, training, and the adequacy of combat operations during the Spanish-American War.² The board was formed to address this perceived gap in civilian marksmanship training.³

Over the ensuing decades, Congress expanded the Office of the Director of Civilian Marksmanship (which would eventually become CMP) and placed it under the Army's purview.⁴ Through a variety of legislative actions, the Army program was authorized to hire a director, create an affiliated club system, conduct firearms competitions and national matches, and sell surplus firearms to affiliated clubs. The President

¹ U.S. Government Accountability Office, "Civilian Marksmanship Program: Corporation Needs to Fully Comply with the Law on Sales of Firearms," Washington, D.C.: GAO/NSIAD-99-41, 1999, p. 3.

² U.S. Government Accountability Office, "Military Preparedness: Army's Civilian Marksmanship Program is of Limited Value," Washington, D.C.: GAO/NSIAD-90-171, 1990, p. 2.

³ U.S. Government Accountability Office, 1990, p. 1.

⁴ U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part III, Training, Chapter 401, Training Generally, Section 4308, Promotion of Civilian Marksmanship: Authority of the Secretary of the Army, August 10, 1956 (since repealed).

also had the authority to detail regular, reserve, and noncommissioned Army personnel to act as instructors at rifle ranges to “train . . . civilians in the use of military arms.”⁵

In the 1990s, legislative changes amended the statutes to something closer to how the program is operated today. Although many of the Army’s obligations remained, the program’s intent was expanded to add a targeted youth focus.⁶ “Arms (including surplus M-1 Garand rifles), ammunition, targets, and other supplies and appliances necessary for target practice” could be sold at fair market value to members of gun clubs under the direction of the National Board for the Promotion of Rifle Practice.⁷ Those sales required only that a purchaser be of legal age and be a member of an authorized gun club. However, the loan of caliber .30 rifles, caliber .22 rifles, air rifles, and their associated ammunition was limited to authorized gun clubs that provided training in rifle use.⁸

Creation of the CPRPFS

In the National Defense Authorization Act (NDAA) for fiscal year (FY) 1996,⁹ Congress created the CPRPFS to govern and promote CMP and alleviate this administrative burden for the U.S. Army. The CPRPFS is a congressionally chartered nonprofit organization, colloquially called a “Title 36” organization after the part of the U.S. Code that sanctions such organizations.¹⁰ Such charters are used for private organizations with a patriotic, charitable, historical, or educational purpose.¹¹ A congressional charter is largely honorific and typically does not equate to congressional oversight or a direct relationship with the federal government.

Unlike other Title 36 organizations, CPRPFS originated as a Department of Defense (DoD) program before becoming a Title 36 organization in 1996. The

⁵ U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part III, Training, Chapter 401, Training Generally, Section 4310, Rifle Instruction, Detail of Members of Army, August 10, 1956 (since repealed).

⁶ For example, see 10 U.S.C. § 4308(a)(3), amended 1992 (since repealed): “The Secretary of the Army . . . shall provide for . . . the promotion of the practice in the use of rifled arms, the maintenance and management of matches or competitions in the use of those arms, and the issue, without cost, of the arms, ammunition . . . targets, and other supplies and appliances necessary for these purposes, to gun clubs . . . that provide training in the use of rifled arms to youth, the Boy Scouts of America, 4-H clubs, Future Farmers of America, and other youth-oriented organizations for training and competition.”

⁷ 10 U.S.C. § 4308(a)(6), amended 1992 (repealed).

⁸ 10 U.S.C. § 4308(a)(5), amended 1992 (repealed).

⁹ Public Law 104-106, National Defense Authorization Act for Fiscal Year 1996, February 10, 1996.

¹⁰ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations. As of August 27, 2018, there are 98 “Title 36” organizations. Examples of other “Title 36” organizations include the American Legion, American Red Cross, Boy Scouts of America, Little League Baseball, the National Academy of Sciences, and Veterans of the Foreign Wars of the United States.

¹¹ Ronald C. Moe and Kevin R. Kosar, *The Quasi-Government: Hybrid Organizations with Both Government and Private Sector Legal Characteristics*, Washington, D.C.: Congressional Research Service, RL30533, 2005, p. 28.

CPRPFS has governmental attributes (e.g., if the CPRPFS were to be dissolved, some assets it held would be returned to the Army and possibly the U.S. Treasury) and maintains ties to the federal government by way of its relationship with the U.S. Army.

CPRPFS also has private organization attributes as a 501(c)(3) nonprofit—a tax-exempt organization that operates for charitable, religious, scientific, recreational, public safety, or humanitarian purposes.¹² Such organizations are prohibited from supporting or opposing political candidates.¹³ A 501(c)(3) organization can engage in some lobbying, but too much lobbying activity risks the loss of tax-exempt status. Organizations lose their tax-exempt status if a substantial part of their activities involves attempting to influence legislation or if their expenditures on lobbying exceed a given threshold.¹⁴ CPRPFS’s focus is the promotion of CMP—and, more broadly, the promotion of the sport of marksmanship—and does not include lobbying or politically motivated activities.

CMP is governed by the 11-member CPRPFS board of directors,¹⁵ with the chairman of the board also serving as the chief executive officer. CMP executive leadership and operating staff are divided between two headquarters locations: CMP North in Camp Perry, Ohio, and CMP South in Anniston, Alabama. CMP North oversees the daily operation of the training and competition programs; CMP South oversees sales programs and the management of transfers of surplus equipment with Anniston Army Depot.¹⁶

The Need for a Congressionally Mandated Report

Section 1091(e) of the 2018 NDAA requires the creation of a report that contains an “assessment of the effectiveness of the Civilian Marksmanship Program, including an examination of the functions and activities of the Program, as described in section 40722 of Title 36 U.S. Code, that support the mission of the Program.”¹⁷

¹² Internal Revenue Service (IRS), “Exemption Requirements—501(c)(3) Organizations” webpage, December 28, 2017.

¹³ IRS, “The Restriction of Political Campaign Intervention by Section 501(c)(3) Tax-Exempt Organizations,” webpage, September 4, 2018b.

¹⁴ IRS, “Lobbying,” webpage, January 3, 2018a.

¹⁵ The CPRPFS is required statutorily to have a minimum of nine board members and a Director of Civilian Marksmanship. Additional bylaws, policies, and procedures can be adopted at the discretion of the board. See U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter I, Corporation, Section 40702, Governing Body, August 12, 1998.

¹⁶ Civilian Marksmanship Program, “About the CMP,” webpage, undated-a.

¹⁷ Public Law 115-91, National Defense Authorization Act for Fiscal Year 2018, December 12, 2017.

Objective and Approach

At the request of the Administrative Assistant to the Secretary of the Army and to help meet the need for a congressionally mandated report, we provided an evaluation of the CPRPFS that includes an assessment of the costs and benefits of CMP to the Army, along with the costs and profits associated with the transfer of excess pistols to the CPRPFS.

To accomplish this objective, the project focused on completing five essentially independent tasks, described in the following sections.

Task 1: Assess the Effectiveness of CMP

In concert with the Office of the Administrative Assistant to the Secretary of the Army, we created a logic model to align congressionally mandated goals with activities and resources and then identified measures of effectiveness for each. Based on these measures, we identified appropriate data sources that provided empirical information on the activities described in 36 U.S.C. § 40722.¹⁸ We assessed the functions and activities of CMP related to the selected measures.

Task 2: Compare CMP with Similar Organizations

In this task, we used literature reviews, interviews, and open-source searches to develop a sample of other organizations that offer instruction in marksmanship, firearms practice and safety, and opportunities for marksmanship competitions. We worked with these organizations to obtain data comparable with those collected in Task 1. We compared the structure, financing, effectiveness, and focus on youth participation of these organizations with the equivalent aspects of CMP.

Task 3: Evaluate the Benefits That the Army Receives from CMP Relative to Resources That the Army Provides CMP

We estimated the financial and staffing resources currently provided by the Army to CMP. Using quantitative and qualitative measures from CMP financial statements, Tank-Automotive and Armaments Command (TACOM), and site visits, we developed criteria for evaluating the various benefits of CMP to the Army, evaluated CMP against those criteria, and performed a cost-benefit analysis.

Task 4: Assess CMP's Current Funding Model and Prospective Funding Models That Would Support CMP's Transition to Self-Sustainment

Using interviews with key stakeholders and subject-matter experts (SMEs) and a review of financial data, we isolated revenues and expenses attributable to CMP's current

¹⁸ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40722, Functions, August 12, 1998.

funding model—receiving resources by selling excess Army firearms. We analyzed various funding alternatives that might allow CMP to be self-sustaining without relying on Army excess firearms.

Task 5: Assess the Costs and Profits Associated with the Transfer of Excess Firearms from the Army to CMP with Respect to Surplus Caliber .45 M1911/M1911A1 Pistols

We gathered data on expenses and revenues from the sales of surplus pistols and calculated the net. Although the Army has transferred 8,000 M1911/M1911A1 pistols to CMP, the sales of those pistols did not occur during the time frame of this study. Therefore, we conducted economic analysis and forecasted profits and costs using established methods and a range of feasible assumptions.

Table 1.1 summarizes the approaches and data collection used to accomplish the five tasks we have detailed. More information is contained in the individual chapters on the five tasks.

Timing Issues

The period for conducting this study was from February to September of 2018. Timing for data collection was from March to August of 2018. This data collection overlapped with several organizations that were conducting their major firearm competitions during the summer months. Also, CMP's window to apply for purchase of an M1911/M1911A1 pistol was from September 4 to October 4, 2018. Only mail applications postmarked during this period were accepted. Therefore, no M1911/M1911A1 sales were made during the period that we selected for study—2013–2017.

Organization of This Report

The next five chapters correspond to discussions of the approaches we took to the five tasks and the findings from each. Each task is essentially an independent and stand-alone topic; therefore, we have incorporated findings and observations into each of those chapters without repeating them in the concluding chapter. An appendix presents more-detailed data for information that was summarized in Chapters Two through Six.

Table 1.1
Summary of Approaches and Data Collection for the Five Tasks

Task	Approach	Data Collection
1. Assess the effectiveness of CMP	- Developed logic model to describe program objectives, accomplishments, and activities - Developed quantitative and qualitative evaluation measures based on the logic model	- CMP reports and financial statements; Camp Perry interviews - Data analysis and resolving gaps in CMP reports - Site visit to CMP in Anniston, Alabama
2. Compare CMP with similar organizations	- Identified national-level organizations - Compared national-level organizations on Task 1 measurements (or sufficient proxies) - Determined additional comparison categories (structure, scope, funding)	- Substantial outreach to comparable organizations - Recontact of organizations to address gaps
3. Evaluate the benefits that the Army receives from CMP relative to the resources that the Army provides CMP	- Considered four major categories of costs and benefits - Used rules-based analytic treatment of each cost and benefit - Carefully scrutinized methodological choices - Conducted sensitivity testing, where warranted	- CMP financial statements, tax returns, Camp Perry interviews with Board of Directors Finance Committee - Ongoing data collection from CMP and TACOM - Analyzing and resolving gaps in CMP information - Site visit to CMP in Anniston, Alabama
4. Assess CMP's current funding model and prospective funding models that would support CMP's transition to self-sustainment	- Evaluated financials under scenario in which select expenses/revenues are removed - Explored feasibility for expanding donations, fees, memberships, and other revenue sources	Breakdowns of financial statements into (1) programs, (2) nonprograms or firearms, and (3) nonprogram or other
5. Assess the costs and profits associated with the transfer of excess firearms from the Army to CMP with respect to surplus caliber .45 M1911/M1911A1 pistols	Revenue: Made appropriate assumptions about varying levels of sales volumes using current pricing structure based on CMP and industry market research Cost: Obtained data and applied standard cost accounting practices for pistol acquisition, preparations for sale, ownership qualification, pistol transfer, and overhead Scenarios: Estimated profits for 2018, 2019, and for remaining M1911/M1911A1 inventory	- Sales process description and cost data from CMP - Conditions or statuses of nontransferred weapons from TACOM

Assessing the Effectiveness of the Civilian Marksmanship Program

This chapter, which captures the results of Task 1, assesses the effectiveness of CMP against its statutory functions in 36 U.S.C. § 40722. We describe how broad these functions are and how greater specificity is needed to determine program objectives and the necessary measurement to evaluate them. To do this, we rely on logic modeling—an established, systematic qualitative research method for program measurement and evaluation.

CMP's activities stem directly from its statutory authorities and can be classified into two categories: core functions and administrative functions.¹ It is important to note that this aggregation into “core” and “administrative” functions is made strictly for analytic purposes; the functions are not differentiated in the statute, nor should some of these functions be considered subordinate to others. Core functions encompass marksmanship instruction, competitions, and the promotion of marksmanship sports as mentioned by statute directly or indirectly. Administrative functions focus on the organizational supporting functions and mainly are involved with retail operations as authorized by statute.² The most critical administrative function is the sale of firearms and related equipment transferred from the Army. In this chapter, we also discuss the potential statutory ambiguity in liability and ownership arising from such transfers.

Our approach to assessing CMP's effectiveness is constrained by the fact that CMP lacks an overarching and guiding strategy and thereby is also deficient in corresponding measures for program evaluation. We inferred CMP's intended purposes using a logic model abstraction, but this technique does not address absolute questions of “how much is enough” in terms of accomplishing outcomes for any of CMP's functions. Also, the logic model suggests measurements that evaluate the accomplishments of CMP's activities for each of its functions. We describe how wide-ranging data col-

¹ CMP management internally refers to core and administrative functions or activities as programmatic and non-programmatic activities, respectively.

² The CMP statute, 36 U.S.C. § 40722, states that there are six CMP functions. The sixth is “to procure necessary supplies and services to carry out the Program.” We focused on only the first five functions to form the basis of our evaluation.

lected from CMP inform the evaluation. The limitations of these data are that they are primarily self-reported by CMP, but we sought multimethod verification when possible. An additional evaluative method is detailed in Chapter Three, in which we compare and contrast CMP with similar organizations across these functional areas.

Notwithstanding these limitations, our principal observation is that CMP offers a broad range of firearms instruction, marksmanship, safety, instructor development, and firearms maintenance to multiple audiences, primarily to adults, but increasingly also to youth. There is some evidence that training improves actual marksmanship proficiency, although such outcomes would need to be tracked better. The organization also conducts or sanctions major marksmanship competitions, including many of the National Matches, and promotes shooting sports by publishing a wide range of supporting materials, maintaining a social media presence, granting prizes and awards, and giving scholarships. These activities are made possible primarily by the sales of firearms and equipment transferred to CMP by the Army. This relationship and all its aspects are discussed further in Chapters Four, Five, and Six. This chapter focuses almost exclusively on the accomplishments of CMP. Chapter Three supplements these results by comparing our observations of CMP with our observations of other organizations.

Statutory Specification of Civilian Marksmanship Program Functions

Statutory Functions of CMP

As discussed in Chapter One, CMP originated in 1903 to bolster military readiness by encouraging U.S. citizens to develop marksmanship skills. Since then, CMP has been under the control of different entities, and its mission has changed from supporting readiness to primarily providing marksmanship instruction and conducting marksmanship competitions for the general population and especially for youth. In 1996, when CMP control was transferred to the CPRPFS,³ legislation specified the following six statutory functions:⁴

1. Instruct citizens of the United States in marksmanship.
2. Promote practice and safety in the use of firearms.
3. Conduct competitions in the use of firearms and to award trophies, prizes, badges, and other insignia to competitors.
4. Secure and account for firearms, ammunition, and other equipment for which the corporation is responsible.

³ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40721, Responsibility of Corporation, August 12, 1998.

⁴ 36 U.S.C. § 40722.

5. Issue, loan, or sell firearms, ammunition, repair parts, and other supplies under 36 U.S.C. §§ 40731 and 40732.⁵
6. Procure necessary supplies and services to carry out CMP.

In performing its functions, CMP is required to give priority to safety, training, and competitions with a youth focus “that reaches as many youth participants as possible.”⁶

Ambiguity of Statutory Functions

As described in the following sections, CMP conducts numerous activities to execute these six statutory functions. The enacting statute for CPRPFS does not specify the intended scope of CMP activities nor the expected accomplishments that would indicate that the statutory functions have been satisfactorily performed. For example, the statutory function to “instruct citizens of the United States in marksmanship” does not have accompanying language or guidance that resolve such issues as how many citizens need to receive training for CMP to have fulfilled its mission, what kind of training in which categories of firearms should be offered, the intended outcome of the training, or how many youth participants would be considered a success.

The ambiguity in the statutory functions has made it difficult for CMP to precisely articulate its mission and define corresponding assessment measures. In response to this statutory requirement, CMP has developed and conducted numerous activities. Although these activities are consistent with the broad CMP mission statement and vision, CMP lacks a sufficiently detailed strategy that clarifies how it seeks to fulfill the statutory functions. At a minimum, such a strategy would articulate CMP’s precise goals, set the scope of its activities, and identify measurements to judge whether the statutory functions are being adequately addressed. Similarly, this strategy would guide CMP’s programmatic decisions, trade-offs, and prioritizations.

Moreover, the statutory functions overlap considerably. For instance, CMP has promoted the use of empty-chamber indicators (ECI, described later in this chapter) that make conducting competitions safer. This activity can be considered an element of two statutory missions: to conduct competitions and to promote firearms practice and safety. We sought to refine and more uniquely define these overlapping statutory functions using logic models.

⁵ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40731, Issuance or Loan of Firearms and Supplies, and Section 40732, Sale of Firearms and Supplies, August 12, 1998.

⁶ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40724, Priority of Youth Participation, August 12, 1998.

Analytical Specification of Civilian Marksmanship Program Functions Through Logic Models

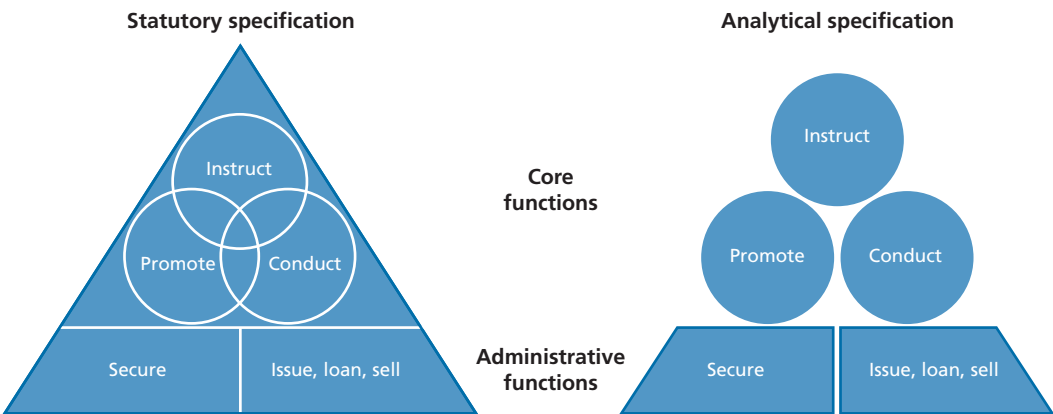
Because of the ambiguity in both the statutory functions and CMP’s ultimate objectives, we used an evaluative framework that relies on our interpretation of the statute rather than on its exact language. Although this evaluative framework is still based on the six statutory functions discussed, the framework distinguishes the statutory functions in a way that attempts to avoid overlap and ambiguity. We refer to this new framework as the analytical specification in contrast the original statutory specification. Figure 2.1 depicts a representative diagram of the statutory and analytical specifications. We use logic modeling—a qualitative research technique for program evaluation—to identify evaluative measurements and data requirements.

Core and Administrative Functions

To distinguish CMP’s different functions in the analytic specification, we formulated more-precise definitions of each of its three core functions:

- **Instruct**—refers to instructing U.S. citizens in marksmanship. This consists of the characteristics and outcomes of training programs that give individuals an opportunity to learn about proper and safe use of firearms and improve their shooting proficiency.
- **Conduct**—refers to conducting competitions in the use of firearms. This consists of characteristics and outcomes of competitive events (hosted or sanctioned) that give individuals an opportunity to demonstrate their firearm proficiency in a competitive setting.

Figure 2.1
Specifications of CMP Functions



NOTE: The sixth function, to “procure necessary supplies and services to carry out CMP,” is subsumed by the other five.

- **Promote**—refers to promoting practice and safety in the use of firearms. We interpret this as the outcomes of activities that are undertaken to popularize marksmanship sports, such as publications, award of scholarships, and governance/leadership of marksmanship sports in the United States.

The administrative functions support progress in the core functions:

- **Secure**—This means maintaining accountability for any transferred equipment from the Army, such as financial transparency, liability, and compliance with all applicable laws.
- **Issue, Loan, or Sell**—This refers to generating revenue from the sales of firearms and equipment.

Logic Models

Developing evaluative criteria for the functions requires a systematic approach. We selected an approach centered on logic models.⁷ A logic model describes the relationship between a program's resources and its ultimate goals, thus aiding in measuring a program's effectiveness and aiding in policy decisions.⁸

We developed the logic model before data collection and over several iterations from January through April 2018. We constructed the first iteration after reviewing relevant statutes,⁹ CMP's internal *Program Reviews*,¹⁰ CMP annual reports,¹¹ information from CMP's website, and program evaluation literature. The initial model was further refined by soliciting input from the Office of the Administrative Assistant to the Secretary of the Army during briefings and through discussions with CMP staff and management. We also attended the March 2018 CMP Board of Directors meeting at Camp Perry, Ohio, visited CMP operations in Anniston, Alabama, and conducted a site visit to the Defense Logistics Agency (DLA) Anniston facilities. The model was finalized and reviewed by CMP management during the Anniston visit. We considered at length how CMP's activities were linked to overall goals and made efforts to

⁷ Eric Landree and Richard Silberglitt, *Application of Logic Models to Facilitate DoD Laboratory Technology Transfer*, Santa Monica, Calif.: RAND Corporation, RR-2122-OSD, 2018; John A. McLaughlin and Gretchen B. Jordan, "Logic Models: A Tool for Telling Your Program's Performance Story," *Evaluation and Program Planning*, Vol. 22, No. 1, 1999.

⁸ Scott Savitz, Miriam Matthews, and Sarah Weiland, *Assessing Impact to Inform Decisions: A Toolkit on Measures for Policymakers*, Santa Monica, Calif.: RAND Corporation, TL-263-OSD, 2017.

⁹ 36 U.S. Code § 40722.

¹⁰ CMP, *Program Reviews*, internal documents, 2017b, 2018a. Not available to the general public.

¹¹ CMP, "Club Annual Reports," webpage, undated-e.

ensure that elements of a compelling logic model were specific, measurable, achievable, relevant, and time-bound.¹²

Tables 2.1 and 2.2 present the logic model used in the study. The *functions* in the analytical specification are the basis of the logic model, from which various supporting

Table 2.1
CMP Logic Model, Core Functions

Core Function	Objective	Accomplishment	Measurement (2013–2017)
Instruct	Increase training breadth and effectiveness	Current and relevant curriculum maintained that incorporates live-fire or demonstration of skills	Qualitative evidence on course offerings and experiences with the Army Marksmanship Unit
		Citizens receiving marksmanship or safety training	Number of training participants (youth or adult) at CMP or CMP affiliates
		Citizens from underrepresented populations received marksmanship or safety training	Engagements or outreach to populations that do not historically participate in marksmanship or safety training
	Increase access to training	More locations for U.S. citizens to receive training	Geographic distribution of CMP affiliates (youth or adult)
		More instructors available to provide training	Number of instructors trained or certified
	Improve proficiency	Higher marksmanship scores attained after training and competition events	Fixed-effect regression analyses of selected competition scores
Development of standards on marksmanship practice and safety		Comparison of training program to guidelines in literature	
Firearm incidents reduced (e.g., unintentional discharges, injuries, improper handling)		Number of firearm incidents or incident rate at CMP or CMP-affiliated events	
Conduct	Host or sanction competitions	Individuals participated in competitive events	Number of participants (youth or adult) at competitive events hosted or sanctioned by CMP
	Innovate conduct of competitions	Technology implemented to make the conduct of competitions more efficient and safer	Qualitative evidence
Promote	Increase awareness of marksmanship, safety, and related sports	Promotional materials released in different formats	Number and types of publications, seminars, etc.
		Support achievement in marksmanship, safety, and related sports	Total amount of awards given
		Financial assistance provided directly to youth or to youth organizations engaged in marksmanship activities	Total amount of grants and scholarships given

¹² Savitz, Matthews, and Weilant, 2017.

Table 2.2
CMP Logic Model, Administrative Functions

Administrative Function	Objective	Accomplishment	Measurement (2013–2017)
Secure	Secure and account for firearms and equipment	Complied with Army policy, memorandum of understanding (MOU), and external recommendations	Irregular safety or security audit findings
			Irregular financial or Government Accountability Office (GAO) audit findings
			Audit frequency and processes
			Liability and insurance; liability associated with title transfer
Issue, Loan, or Sell	Encourage and grow youth marksmanship programs	Loaned or donated firearms, related equipment, and other resources to affiliated and other youth organizations	Number of firearms issued or loaned
	Support veterans' programs	Serviced firearms and related equipment for ceremonial rifle program	Number of firearms provided
	Enable firearm sales to qualified U.S. citizens	Earned revenue that supports current and potential future programs	Dollar amount of net earnings from nonprogram activities

objectives were identified. The *accomplishments* are how the organization furthers these objectives. The *measurements* column lists the data sources and corresponding methodology used to evaluate the organization's accomplishments.

Data Collection

Having developed the logic model, we collected measurement data from multiple sources. Data collection and assessment focused on the years 2013–2017, although we did note and consider significant contributions outside this period.

Qualitative Data Collection

We collected qualitative data through multiple channels of communication and collaboration. We engaged in SME discussions, attended board meetings, toured facilities, interviewed civilian and military leaders, and maintained correspondence by e-mail and phone. We also conducted interviews using semistructured interviews for senior leaders and SMEs to gather focused, qualitative textual data from a range of leaders and experts within CMP. Questions and discussions focused on evaluating the logic model or identifying a measure supporting elements of the logic model.

In March of 2018, we attended the CMP Board of Directors Meeting in Camp Perry, Ohio, where we listened to the board briefings on all aspects of CMP and were part of discussions with the board, representatives from TACOM, the Administrative Assistant to the Secretary of the Army, the investment firm for CMP, and the external company in charge of the yearly audit. We also met with Gary Anderson, an internationally renowned expert in shooting sports, to understand his significant contributions at CMP and other shooting organizations in the development and interconnectivity of the various groups, especially with regard to safety curricula development. Additionally, we observed the Junior Reserve Officer Training Corps (JROTC) National Championships and interviewed marksmanship coaches from JROTC programs of the Army, Air Force, the Marine Corps, and Navy.

In July 2018, we visited Anniston, Alabama, to continue discussions with CMP leadership and visit CMP Talladega Marksmanship Park. In addition to CMP meetings, we traveled to Anniston Army Depot to interview leadership and staff of DLA's distribution and disposition centers and to gain a more in-depth understanding about what is involved in storing and destroying or disposing of small arms for the Army.

We also engaged in meetings and interviews with the Army Marksmanship Unit, the Ohio Army National Guard, and multiple other divisions within TACOM and DLA.

Quantitative Data Collection

For quantitative data, we relied on CMP records about its affiliates, participation in its programs, and financials. We supplemented this with information from the CMP website. We also had access to the CMP *Program Reviews* (an internal CMP publication compiling data on its programs).¹³

Civilian Marksmanship Program Activities and Measurement Results Across Functions

CMP conducts numerous activities to execute its core and administrative functions. In the remainder of this section, we first discuss vital CMP activities that span multiple core functions. Then, we discuss the activities in each of the core and administrative functions shown in Tables 2.1 and 2.2. Finally, we present the measurement results that aligned with the objectives for each CMP function.

¹³ CMP, 2018a.

CMP Activities That Span Multiple Core Functions

Affiliated Clubs

The Affiliated Clubs program has been active since 1996.¹⁴ It is the most important core function because it is the main way that CMP and its operations interact with the public in the execution of CMP's instruct and conduct functions.

A club can affiliate with CMP if it has at least ten adult or junior members, provides contact information and qualifications of any instructors, files an annual report, and pays dues. Affiliated clubs are largely independent in their daily operations. Benefits of affiliates consist of discounts on ammunition and rifle purchases, the ability to sanction clinics or matches, and the ability to advertise through CMP. For individual affiliated members, this relationship is needed to directly purchase a surplus firearm. CMP has a special MOU with several youth organizations, such as JROTC, Boy Scouts, Royal Rangers, and 4-H clubs that allows junior clubs from these organizations to enjoy affiliate benefits without paying affiliation dues.

CMP Competition and Training Facilities

The CMP competition centers and marksmanship ranges provide facilities to further all of CMP's core functions. CMP Competition Center South, located in Anniston, Alabama, opened in 2008; CMP Competition Center North opened the same year in Camp Perry, Ohio. These two permanent CMP facilities serve as venues for competitions and training for proficient and less-experienced shooters.

CMP also has the Petrarca Range, which is located at Camp Perry, Ohio. It is a covered range with ten high-power rifle targets and five electronic pistol targets. The Petrarca Range was opened to the public on July 21, 2016, and first used for 2016 National Matches.¹⁵ It is open for public shooting and offers monthly shooting leagues during open range hours. The Talladega Marksmanship Park is a second CMP range that provides a state-of-the-art 500-acre outdoor facility in Talladega, Alabama.¹⁶ This complex offers higher-power rifle shooting with electronic targets, electronically scored pistol facilities, and paper- and metal-target pistol ranges.

Activities Furthering the Instruct Function

CMP and its affiliates offer a broad range of activities that primarily fall within its instruct function. The source of these summaries is CMP's *Program Reviews*.¹⁷ The appendix at the end of this report provides more-detailed descriptions.

¹⁴ CMP, 2018a.

¹⁵ CMP, "CMP Targets at Petrarca Range," webpage, undated-k.

¹⁶ CMP, 2018a.

¹⁷ CMP, 2018a.

Activities by CMP Affiliates

Affiliate clubs can independently arrange for the training of their members, including basic marksmanship training for juniors and rifle clinics sanctioned by CMP. They can also provide training for coaching and adult leader development.

Activities by CMP

CMP offers many training programs for both marksmanship instructors and less-experienced individuals. Individuals can participate in numerous rifle camps, clinics, and courses to improve their marksmanship skills—from beginners to experts. The JROTC Marksmanship Instructor Course (JMIC) trains and certifies JROTC instructors who will then teach gun safety and air rifle marksmanship to JROTC cadets. Certification lasts for two years, after which all instructors must be recertified to continue in their training roles. The Garand-Springfield-Military (GSM) Master Instructor Course is offered to instructors wishing to hold CMP-sanctioned training clinics for new shooters at their shooting clubs using standardized CMP material. CMP also provides range officer training at various levels to prepare individuals to conduct competitive events safely.

Measurement Results for the Instruct Function

We now summarize the measurement data for the instruct function and related accomplishments and discuss limitations of the methodology for each measurement. Recall from Table 2.1 that the three objectives in the instruct function are increasing training breadth and effectiveness, increasing access to training, and improving proficiency.

Increasing Training Breadth and Effectiveness**Current and Relevant Curriculum Maintained That Incorporates Live-Fire or Demonstration of Skills**

The CMP national organization offers multiple training programs and clinics to improve and evaluate participants' skills and to improve effectiveness and increase participation. CMP offers Basic Rifle and Basic Pistol courses and recently expanded to include Basic Shotgun at CMP's Talladega Marksmanship Park and the Small Arms Firing School at Camp Perry and the Eastern/Western games. These courses are geared toward introductory and experienced audiences, including both adults and youth. More-advanced students can participate in the advanced Small Arms Firing School, U.S. Marine Corps (USMC) Junior Highpower Clinic, CMP Advanced Service Rifle Clinic, Infantry Trophy Clinic, or As-Issued Military Rifle Clinic, all in Camp Perry, Ohio. These courses allow participants to demonstrate their skills through live-fire. Some CMP events, such as the U.S. Army Small Arms Championship and rifle interservice events, are internal to the Army but funded and supported by CMP. However, the majority of training and events that CMP hosts and runs are open to all—military included—but limited to specific locations, such as CMP corpo-

rate locations in Alabama and Ohio. Affiliates also offer basic marksmanship training and rifle clinics.

Recently, CMP expanded its training programs to accompany high-power and small-bore competitions when these events offered by the National Rifle Association (NRA) at Camp Perry were relocated to Camp Atterbury, Indiana. As a result, CMP developed its own range officer course to create a sufficient cadre of safety officers in 2016. Range officers are required to be present at every CMP-managed range and match. Comments from interviews with coaches indicated that these range officers were considered a significant improvement to the sport because they focus on safety and provide basic safety instruction.

Although outside the study period, from 2005 to 2010, the U.S. Army Marksmanship Unit (AMU) collaborated with CMP to enhance the capacity of training throughput for the Army. This was in response to the Global War on Terror and an Army Chief of Staff direction that a Squad Designated Marksmanship (SDM) training program be established at the brigade level within all infantry units. An AMU staff sergeant described the rationale for the program:

A few years ago, the AMU commander (at the time), LTC Dave Liwanag, came up with the idea to supplement AMU personnel with CMP-sponsored volunteers. LTC Liwanag's idea to use CMP people to augment AMU really saved our bacon. We were then able to reduce the number of Soldiers needed on each trip and use CMP assistant instructors on the range. Our op-tempo was made much more efficient.¹⁸

This capability provided by CMP at no cost to the Army allowed AMU to increase its training capacity and increase the lethality of the armed forces. The SDM training featured courses for precision shooting beyond the 300-yard range (the range at which an average rifleman is trained on) out to the 600-yard range (the range at which a sniper is trained on). SDM course attendees at Fort Benning, Georgia, consisted of active-duty, National Guard, and reserve personnel from the Army, Navy, Air Force, and Marine Corps. A student of the SDM favorably described the quality of training provided by CMP:

The guys in the blue coats, CMP guys—I cannot begin to describe the bank of knowledge these gray-haired guys bring to the table. My assigned coach watched every single shot. He was there to help me figure out my error, and then correct it.¹⁹

¹⁸ Tyson Andrew Johnson, "The USAMU Squad Designated Marksman's Course, A Student's Perspective," *Infantry*, Vol. 97, No. 4, August 2008. Quote is attributed to AMU Staff Sergeant Emil Praslick.

¹⁹ Johnson, 2008.

Citizens Receiving Marksmanship/Safety Training

To measure CMP training participation, we assessed the numbers of individuals who received marksmanship training or safety training from CMP and CMP affiliates. Although individual programs have fluctuated in attendance over the past five years, the number of participants in CMP marksmanship and safety programs in total has increased over the past five years, averaging 74,000 participants (46,000 youth) per year, as shown in Table 2.3. Participation has grown by approximately 30 percent (44 percent for youth) over the study period. CMP relies on its affiliates to achieve these participation volumes; approximately 5,000 adults and youths were trained

Table 2.3
Marksmanship and Safety Training Attendance in CMP Programs, 2013–2017

Program Name	2013	2014	2015	2016	2017
Basic Marksmanship for Juniors ^a	39,376	38,276	40,897	55,805	56,892
Camp Riflery Program	184	215	N/A	N/A	N/A
GSM Sanctioned Matches–Clinics	938	552	534	527	352
GSM Master Instructor Course	126	48	63	53	37
JROTC Marksmanship Instructor Course–Master Instructors ^b	N/A	66	42	72	394
JROTC Marksmanship Instructor Course—Service Instructors (Online) ^c	1,800	1,800	1,800	1,800	1,800
Mobile Range	N/A	2,343	2,692	1,767	978
National Matches—Small Arms Firing School (Pistol)	308	305	279	310	230
National Matches—Small Arms Firing School (Rifle)	724	464	398	427	433
National Matches—USMC Junior Highpower Rifle Clinic	159	147	0	0	0
Range Officer Program	0	0	0	335	48
Rifle Clinics ^a	21,480	24,296	21,875	20,986	23,388
Total participants	65,095	68,512	68,580	82,082	84,552
Total youth participants as part of total participants	39,535	38,423	40,897	55,805	56,892

SOURCE: CMP, *Program Reviews*, internal document, 2017b (unless otherwise noted). Not available to the general public.

NOTE: In this table, N/A indicates that the program was not active according to the program review.

^a Data were supplied directly to the authors by CMP in August 2018. Not available to the general public.

^b CMP, undated-e.

^c Data are an estimate.

annually by the national organization during the study period. The number of training participants across all CMP affiliates also has continued to increase over the past five years, as shown in Table 2.3. The participation data aggregate attendance in these programs and do not count unique individuals. For example, one individual participating in three distinct programs would count as three participants in the total; hence, the results ought to be interpreted as describing participation volume.

Citizens from Underrepresented Populations Received Marksmanship/Safety Training

As will be discussed in Chapter Three, shooters are traditionally more likely to be adult, white males who reside in rural areas and have grown up around firearms. CMP also has engaged citizens from underrepresented populations in shooting. This includes outreach to disabled shooters and para-athletes at its competition centers, the Ohio Day at the Range, and Outdoor Adventure Fair, as well as outreach to women by cohosting the Women on Target program at Camp Perry, Ohio, and competitive events for women.²⁰ The Ability Center of Ohio held its “Day at the Range” event, where youths and adults with mental or physical disabilities could participate in events, at Camp Perry for several years. CMP provided coaches at one of its competition centers and training so that the participants of this program could learn about marksmanship in a safe and welcoming environment.²¹ However, data on participation rates for CMP along these dimensions were not available and precluded quantification of access to training in such populations.

Increasing Access to Training

Geographic Distribution of CMP and Its Affiliates

CMP and its affiliates form an extensive national network of shooting programs. CMP operates 53 state associations across the 50 states (California, Michigan, and Virginia each have two), in addition to its competition centers and marksmanship parks at corporate locations in Anniston/Talladega, Alabama, and Camp Perry, Ohio.

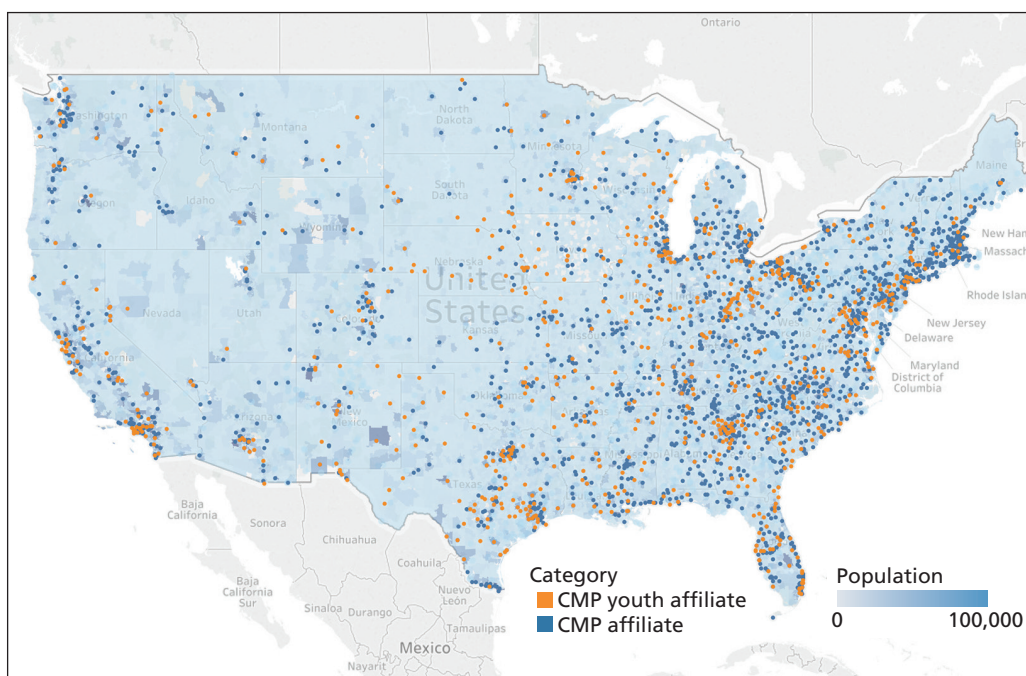
We extracted affiliate location data from an online directory on CMP’s website in June 2018.²² Figures 2.2 and 2.3 depict the locations of CMP affiliates and CMP youth affiliates overlaid with population by ZIP Code from the 2010 Census. In total, there were 3,973 affiliates—2,997 for all ages (75 percent) and 976 youth (25 percent)—across the 50 states, U.S. territories, and military bases. Youth affiliates were mainly located in populated areas, with the most common types of youth

²⁰ CMP, “CMP Welcomes Disabled During Second Annual Ohio Day at the Range,” webpage, September 16, 2015; CMP, “Sign Up Now for Upcoming Women on Target® Marksmanship Clinic at Camp Perry,” webpage, August 19, 2017d.

²¹ CMP, 2015.

²² CMP, “Find a CMP Affiliated Club,” webpage, undated-m.

Figure 2.2
Locations of CMP Affiliates



SOURCE: Data supplied directly to the authors by CMP in August 2018. Not available to the general public.

clubs being JROTC (350, or 36 percent), Boy Scouts (254, or 26 percent), and 372 others, including 4-H (38 percent).

Marksmanship and Safety Instructors

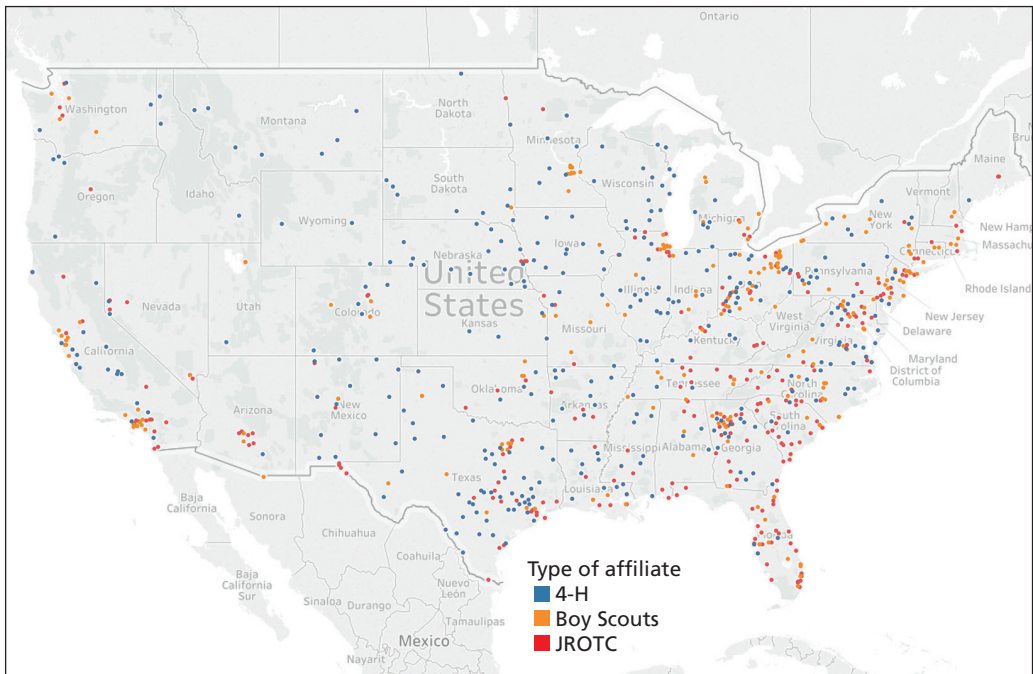
Another component of providing citizens access to training involves training and certifying instructors. Table 2.4 shows the range of instructional programs offered by CMP, which is the only organization that certifies JROTC instructors. It does this through its JMICS for Master Instructors and for Service Instructors (online), which reach about 1,900 individuals each year. These instructors can coach youth JROTC clubs after certification. When CMP management met with us in July 2018, it expressed a desire to expand training certification programs.

Improve Proficiency

Marksmanship Scores After Training and Competition Events

We were interested in the hypothesis that training provided by CMP improved individual shooting proficiency over time. CMP provided no data or analyses on the impact of its training programs on actual shooting proficiency. To obtain some measurement of this effect, we analyzed Postal Match scores (actual targets that are mailed in for

Figure 2.3
Location of CMP Youth Affiliates



SOURCE: Data supplied directly to the authors by CMP in August 2018. Not available to the general public.

Table 2.4
Marksmanship and Safety Instructors Trained or Certified, 2013–2017

Program Name	2013	2014	2015	2016	2017
Camp Riflery Program	184	215	N/A	N/A	N/A
GSM Master Instructor Course	126	48	63	53	37
JMIC—Master Instructors ^a	N/A	66	42	72	394
JMIC—Service Instructors (online) ^b	1,800	1,800	1,800	1,800	1,800
Range Officer Program	0	0	0	335	48
Total	2,110	2,129	1,905	2,260	2,279

SOURCE: CMP, 2017b (unless otherwise noted).

NOTE: N/A indicates program was not active according to the program review. The increase in JROTC Master Instructors in 2017 is because five-year recertifications are required and the 2017 cohort is larger than the others. JROTC Service Instructor course attendance is influenced by two-year recertification requirements.

^a CMP, undated-e.

^b Data are estimates.

scoring) from the National JROTC Championship. We downloaded individual-level scores from CMP's publicly available Club and Competition Tracker online.²³

We selected this particular competition because the National JROTC Championship has the greatest number of Postal participants of any youth tournament. The Championship has two variants—Sporter and Precision—which are held separately each year. We chose to use scores from the Postal stages rather than later stages because the Postal Match is open to all competitors and because using participants only from later stages would not be representative of the wider youth population. (Participants at later stages must qualify in earlier stages and are likely to be more skilled.) Moreover, JROTC instructors are solely certified by CMP.

Similar to the assessment of student test scores in education,²⁴ student competition scores also can be assessed with longitudinal data analysis to test the hypothesis that scores are significantly increasing with each additional year of training and competition. Using aggregate individual scores from the Individual Sporter and Individual Precision competitions for all JROTC military branches from 2006 to 2018, we obtained an unbalanced panel data set. To control for variation across individuals, we performed a fixed-effects regression analysis.²⁵

Table 2.5 presents the regression results for Precision and Sporter. Both variants exhibit a positive effect of competition scores for each additional year that the individual competes in the annual JROTC Championship. Based on the coefficients noted for “years competed” in the table, a one-year increase in competition experience yields about a 10-percent increase in competition scores in either variant.

The regression analysis has a significant limitation. It detected an increase in shooting proficiency for each additional year that a JROTC youth competes, but it is unclear to what extent this increase can be attributed to CMP beyond the observation that JROTC instructors are certified and trained exclusively by CMP in standardized courses. Instructors might obtain additional resources and training elsewhere, and we did not have the data to incorporate variability in instructor characteristics nor to compare these JROTC youth with another youth program at CMP or elsewhere. Having said that, this 10-percent increase for each additional year of competition is a sizable effect.

²³ CMP, *Civilian Marksmanship Program Club and Competition Tracker*, website dashboard, undated-c.

²⁴ Charles T. Clotfelter, Helen F. Ladd, and Jacob L. Vigdor, “Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effect,” *Journal of Human Resources*, Vol. 45, No. 3, 2010.

²⁵ The specification was $\ln(y_{it}) = \alpha_i + \mu t + \beta'x_{it} + \varepsilon_{it}$, where y_{it} was the competition score for individual i in competition-year t (i.e., first year individual competed, second year individual competed, etc.); ε_{it} is an error term; α_i is an individual fixed effect; and x_{it} is a vector of individual characteristics, such as the number of previous competitions that the individual participated in and the branch of service that his or her JROTC club belonged to (Navy, Army, Marine Corps, or Air Force). The scalar μ and vector β are coefficients of the regression model.

Table 2.5
Regression Coefficients for JROTC National Championship Scores, 2006–2018

Variable	Coefficient (Precision Format)	Coefficient (Sporter Format)
Intercept	5.577***	4.256***
Years competed	0.097***	0.097***
Number of previous competitions	−0.060***	−0.001
Navy JROTC	−0.023	Reference
Army JROTC	Reference	0.094**
Marine Corps JROTC	0.024	0.103*
Air Force JROTC	0.038	0.049
Number of cross sections	2,062	16,797
Mean squared error	0.0075	0.0377
R-squared	0.8250	0.8017

NOTE: Significance levels for coefficients are: * = 0.05, ** = 0.01, and *** = 0.001.

Development of Standards Regarding Marksmanship Practice and Safety

An important factor for instilling standards in marksmanship practice and safety is the content of training curricula addressing safety. There is no established standard for the safety topics that marksmanship courses or publications ought to cover, and our findings should not be construed as either recommending or disparaging an existing curriculum. However, research in public health and firearms training conducted by Hemenway et al. presented a structured list for ascertaining the content of firearms training that is grounded in observational data.²⁶ We used that list to create a descriptive checklist of what is taught in CMP training materials.

Table 2.6 provides an abridged description of which content in the Hemenway checklist is discussed in several CMP publications.²⁷ The full description of the comparison is available in Table A.1. CMP materials cover firearm operation, live-fire safety, and storage but have no coverage on relevant laws, theft of firearms, youth

²⁶ David Hemenway, Steven Rausher, Pina Violano, Toby A. Raybould, and Catherine W. Barber, “Firearms Training: What Is Actually Taught?” *Injury Prevention*, October 2017. We use this list as a descriptive tool to facilitate comparisons across organizations on training content related to safety; we do not suggest that it be used to evaluate the effectiveness of the content or the appropriateness of including the content in each situation.

²⁷ Armament Research, Development and Engineering Center, *M1 Garand Operation, Safety, and Maintenance Guide for Veteran and Civilian Service Organizations, Law Enforcement, and National Cemeteries*, Picatinny Arsenal, N.J.: Civilian Marksmanship Program, June 15, 2015; CMP, *Rifle Safety Manual*, undated-v; CMP, *A Junior Shooter’s Guide to Air Rifle Safety*, May 2017c; CMP, “JMJC—JROTC Marksmanship Instructor Course,” webpage, undated-r.

Table 2.6
Abridged Description of Safety Content in Selected CMP Materials

Checklist of Criteria from Hemenway et al.	CMP			JMIC
	<i>M1 Garand Operation, Safety, and Maintenance Guide</i>	<i>Rifle Safety Manual</i>	<i>Junior Shooter's Guide to Air Rifle Safety</i>	
Firearm anatomy	X	X	X	X
Firearm operation	X	X	X	
Live-fire ^a				
Firearm safety	X	X	X	X
Relevant laws				
Storage		X	X	
Theft				
Self-defense				
Children ^b				
Suicide				
Statistics				

SOURCES: Hemenway et al., 2017; Armament Research, Development and Engineering Center, 2015; CMP, undated-v; CMP, 2017c; CMP, undated-t.

NOTE: More-detailed information is available in Table A.1.

^a Depending on the context in which this CMP instruction is provided, live firing of the firearm also might be presented in all materials listed.

^b Some discussion of preventing unsupervised access by children is featured in the *Rifle Safety Manual*.

accidents, and suicide. We compare the content of these materials with those of other organizations in Chapter Three.

Additionally, CMP has engaged national experts in shooting sports to develop better training standards. Among them is Gary Anderson, a well-known figure in shooting sports who had a successful Olympic and international competition career.²⁸ He has served in senior leadership positions in several organizations involved in shooting sports, such as USA Shooting, the NRA, International Shooting Sports Federation (ISSF), and CMP. In each of these positions, he has been noted for his contributions to conducting competitions and his focus on developing youth programs and safety

²⁸ ISSF, “ISSF Vice President Gary Anderson Awarded ‘Olympic Order,’” November 16, 2012; USA Shooting, “Hall of Fame—Gary L. Anderson,” webpage, undated-d; JROTC instructors and CMP staff, interviews with authors, Port Clinton, Ohio, March 23–24, 2018.

protocols, including the use of ECIs, which we discuss later in this chapter. Several publications from these organizations refer to his work.²⁹

Reduce Firearm Incidents

Risk of injury is inherent in any sport. We are aware of no data on injury rates for target shooting and shooting sports. These incidents are presumed to be rare because public media readily publicize such incidents, because organizations and events that have such incidents can be forced to disband, and because safety rules and their enforcement are the focus of all CMP competitions and events at every level.³⁰ That said, safety incidents do occur occasionally.

We focus on unintentional firearm incidents at trainings or at competitions conducted or sanctioned by CMP. CMP provided data on such incidents at events held by the national organization and its affiliates.³¹ Data from affiliates were compiled from the annual reports filed by each affiliate, in which CMP requests affiliates to report “the number, if any, of shooting or gun related accidents or incidents that occurred in your organization’s marksmanship activities and that resulted in physical injury.”³² Table 2.7 shows the number of accidents or incidents at CMP’s affiliates. These data are self-reported, do not reflect severity, and do not contain the specifics of what was involved; this could be interpreted widely by affiliates and might include unrelated accidents at an event and issues involved with range conditions unrelated to any specific event. Because the absolute number of incidents does not adjust for the participation volume of CMP programs, we calculate annual incident rates (per 1,000) as the ratios of total incidents to total competition participants and marksmanship train-

Table 2.7
Number of Unintentional Firearm Incidents, 2013–2017

Organization	2013	2014	2015	2016	2017	Annual Incident Rate (per 1,000)
CMP (including affiliates)	10	25	19	35	28	0.012
CMP (excluding affiliates)	0	0	0	0	0	0

SOURCE: CMP, undated-e.

NOTE: Number of incidents is self-reported and defined as the number, if any, of shooting or gun-related accidents or incidents that occurred in an organization’s marksmanship activities and that resulted in physical injury.

²⁹ Leo R. Lujan, *Shooter’s Guide to Position Air Rifle*, Junior Shooting Sports Publication (distributed by American Legion), 1996. See Chapter Three for a comparison of CMP with other organizations for a listing of training documents.

³⁰ American Legion, *The American Legion Junior Shooting Sports Program Adult Leader Manual*, Junior Shooting Sports, undated-a; Lujan, 1996.

³¹ Data were supplied directly to the authors by CMP in August 2018. Not available to the general public.

³² CMP, undated-e.

ing attendees (averaged over five years). CMP had no incidents at its national events during the study period, and its affiliates averaged approximately 23 incidents a year (0.012 incidents per 1,000). None of these incidents were fatal.

Activities Furthering the Conduct Function

CMP and its affiliates offer a broad range of activities that primarily align to the conduct function. The source for these summaries is CMP's *Program Reviews* of 2018.³³ The appendix at the end of this report provides more-detailed descriptions.

Clarification on Marksmanship Competitions

Marksmanship competitions (for target shooting) provide opportunities for individuals to measurably demonstrate their marksmanship proficiency in a competitive setting. The fundamental element of any competitive event involves participants approaching the firing line and shooting at targets. The shots are subsequently scored based on the accuracy of the shot with respect to hitting the center of the target. Depending on the category, the participant also might be required to shoot from different body positions (e.g., standing, prone) or shift among them, to use different types of firearms or shift among them, or to finish a specific number of shots within a time limit. Range officers direct the event and ensure that safety procedures are followed. Individuals or teams can compete, depending on the format of the competition. Competitions also vary widely in structure and duration. Events can last a single day or encompass a progressive sequence of events that culminate in a regional or nationwide championship.

Activities by CMP Affiliates

Affiliate clubs can host competitions in formats and categories that are sanctioned by CMP in addition to other unsanctioned competitive events they might hold independently. Sanctioned competitions must follow rules and guidelines on participation, format, and safety, as established by CMP. Participation in CMP events allows for the accumulation of points for marksmanship designations, and individual results are maintained in the Competition Tracker, a web-based system for furthering the shooting sports.

Activities by CMP

CMP holds numerous competition events in different categories with varying structure and duration. These consist of the three-position air rifle (3PAR) championships, Eastern and Western Games, Excellence in Competition (EIC) events, GSM Matches, JROTC National Championships, Mobile Air Rifle events, National Junior Olympic 3PAR matches, National Match Air Gun events, the National Matches, State Games, Talladega 600, and other 3PAR events. In addition to JROTC events, the National Matches and EIC events also have historical ties with the public. The National Matches date to 1903, when Congress authorized them and the National Board for the Promo-

³³ CMP, 2018a.

tion of Rifle Practice (CPRPFS's predecessor organization). The EIC events can be traced to a War Department program that recognized excellence in marksmanship of Army servicemembers and that eventually became open to civilians in 1926.

Measurement Results for the Conduct Function

We now summarize the measurement data for the conduct function and related accomplishments and discuss any limitations of the methodology for each measurement. Recall from Table 2.1 that there are two objectives for this function: host or sanction competitions, and innovate the conduct of competitions.

Host or Sanction Competitions

CMP and its affiliates host many competitions. There are both youth competitions and non-age-restricted competitions. We assessed the total number of participants in marksmanship competitions from 2013 to 2017.

Including affiliates, CMP has averaged approximately 307,000 total participants per year (42,000 youth). About 43,000 adults and youth participate in programs held by the national organization alone (5,500 youth). Over the study period, participation has grown by 20 percent (29 percent for youth). Table 2.8 shows competition participants from 2013 to 2017, defining participants in CMP-hosted competitions by age group and by total participants in CMP and affiliate-hosted competitions. The proportion of military participants to civilian ones in CMP national competitions is roughly 11 percent military participants and 89 percent civilian participants over the

Table 2.8
Number of Participants in Marksmanship Competitions Hosted and Sanctioned per Year, 2013–2017

Organization	2013	2014	2015	2016	2017
CMP					
Total participants	35,720	38,164	47,968	49,006	43,964
Total youth participants	4,104	5,585	6,266	5,834	5,709
CMP affiliates					
Total participants	250,248	276,443	239,287	256,036	299,462
Total youth participants	30,465	42,810	27,897	40,291	38,971
Total for both programs					
Total participants	285,968	314,607	287,255	305,042	343,426
Total youth participants	34,569	48,395	34,163	46,125	44,680

SOURCE: CMP, 2017b; additional data supplied directly to the authors by CMP in August 2018. Not available to the general public.

NOTE: An individual might be counted more than once if he or she participated in more than one competition.

past 15 years.³⁴ For the participation data, we aggregate participation in these programs and do not count unique individuals. For example, one individual participating in three distinct programs would count as three participants in the total; hence, the results ought to be interpreted as describing participation volume.

Innovate the Conduct of Competitions

CMP has contributed technological innovations to make competitions more efficient and safer. Notably, CMP has popularized the use of ECIs, which are safety flags that are affixed to firearms and, if properly used, visibly indicate that a rifle chamber is empty. Proper use of an ECI assures everyone on the firing line that there is no ammunition to be fired from that firearm. CMP has adapted the most readily available designs to be visible from all angles and to be resistant to the pressure of an AR-15 bolt being closed on it accidentally. CMP is requiring the use of ECIs at national competitive events and distributing them for free. CMP also has tried to encourage use of ECIs in Army basic training.³⁵

CMP also has incorporated the use of electronic targets in some of its programs. The CMP Marksmanship Park in Talladega, Alabama, has an all-electronic range. Electronic targets offer immediate response to the shooter and enable directional coaching. Moreover, electronic targets increase safety by removing the need for an actual person to go down range and service a target between rounds. Electronic targets are relatively expensive, but they reduce the total time needed to complete a shooting events competition and allow for instant scoring and increased accuracy. Because matches can be completed in a fraction of the time required for matches that use paper targets, more shooters can compete in each match. These targets provide a spectator aspect to marksmanship and instant feedback to the competitor. Electronic targets are not new; they have been used for years in Europe in ISSF-style shooting for small-bore rifle, pistol, and air rifle.³⁶

CMP's Club and Competition Tracker tracks the scores and shooters across all CMP and CMP-sanctioned events. Other shooting organizations have made agreements with CMP to use this convenient score tracking technology that quickly disseminates competition results and serves as a repository of an individual's historical shooting results.³⁷ The web-based tracker can be used to search for clubs, upcoming competitions and events, event registration information, competition results, and standings of the top shooters. CMP hosts this system, and it benefits the other shooting sports organizations that use it, such as the American Legion and National Collegiate Athletic Association (NCAA).

³⁴ Data were supplied directly to the authors by CMP in August 2018. Not available to the general public.

³⁵ CMP management and staff, interviews with authors, Anniston, Ala., July 2018.

³⁶ CMP management and staff, interviews with authors, Anniston, Ala., July 2018.

³⁷ CMP, undated-c.

Activities Furthering the Promote Function

CMP and its affiliates offer a broad range of activities that primarily align to its promote function. The source for these summaries is CMP's *Program Reviews* of 2018.³⁸ The appendix at the end of this report provides more-detailed descriptions.

Activities by CMP Affiliates

Affiliates can independently pursue promotion activities but these responsibilities generally are conducted by CMP.

Activities by CMP

CMP engages in several promotion activities. It disburses financial awards, trophies, prizes, and badges/insignia for success in marksmanship competitions, and it operates a scholarship program. CMP also provides some financial grants to youth organizations for encouraging youth participation in marksmanship competitions. Regular marketing activities feature posts on social media (Facebook, Twitter, and Google); a brand ambassador program; and state directors/state associations that provide leadership, publicity, and coordination to strengthen junior shooting programs across states.

CMP publishes electronic and print newsletters and magazines with content on several topics, such as marksmanship news, instruction, coaching, and competitions. CMP also publishes marksmanship instruction, forms and technical manuals, safety information, and rules guides.³⁹ Publications are divided between those offered for free and those available for purchase, but most are available for free through the CMP website, including those available for purchase.

Measurement Results for the Promote Function

We now summarize the measurement data for the promote function and related accomplishments and discuss any limitations of the methodology for each measurement. Recall from Table 2.1 that the objectives in this function are to increase awareness of marksmanship, safety, and related sports and to support achievement in marksmanship, safety, and related sports.

Increase Awareness of Marksmanship, Safety, and Related Sports

CMP distributes several print and electronic publications to help promote marksmanship among all ages; many publications specifically target youth audiences or youth instructors. These books, pamphlets, posters, DVDs, and newsletters range in price from free to \$37. CMP also distributes print publications produced by other organizations, such as the U.S. Army. Table 2.9 shows the total number of publications by topic, including publications produced by other organizations.

³⁸ CMP, 2018a.

³⁹ CMP, "CMP Publications and Training Manuals," webpage, undated-i.

Table 2.9
Total Number of CMP Publications, by Topic

Topic	Total Publications	Youth Publications
Newsletters and catalogs	3	1
Marksmanship instruction (produced by CMP)	12	5
Marksmanship instruction (produced by another outfit)	5	0
Forms and manuals	6	0
Safety and rules	9	1
Total	35	7

SOURCE: CMP, undated-i.

CMP also maintains a strong social media presence. CMP's website had approximately 6.9 million page views over the period of October 2017 to February 2018. Its most popular pages are related to its sales program (almost 1.2 million page views) and its information page for the relatively new M1911/M1911A1 program (0.8 million page views).⁴⁰ CMP also maintains a presence on Facebook, Twitter, and Google+.

In 2018, CMP had approximately 300,000 e-mail subscribers for sales communications, almost double what it had in 2015.⁴¹ Its Shooters News e-mails were distributed to approximately 105,000 subscribers in 2018, a significant increase from 75,000 in 2017 and 45,000 in 2015.⁴² The *On the Mark* newsletter was distributed to 6,000 subscribers, a decline from approximately 8,500 in both 2015 and 2016.⁴³ The *First Shot* printed newsletter publishes about 90 articles annually.⁴⁴

Support Achievement in Marksmanship and Related Sports

CMP supports achievement in marksmanship and related sports through spending on awards and medals, endowment awards, and competitor recognition. Table 2.10 shows aggregated dollar values by category. Table A.2 in the appendix provides complete information by category and individual CMP activity. Endowment awards refer to contributions made to financial endowments of successful marksmanship teams. As seen in Table 2.10, the amount that CMP has spent on awards has averaged \$400,000 a year and has continued to increase over the past five years, with significant increases

⁴⁰ CPRPFS, Board of Directors Meeting, schedule and briefing, Camp Perry, Ohio, March 23–24, 2018b, p. 50. Not available to the general public. Page views at the CMP homepage (undated-o) were 6.9 million from October 2017 through February 2018.

⁴¹ CPRPFS, 2018b, p. 53.

⁴² CPRPFS, 2018b, p. 51.

⁴³ CPRPFS, 2018b, p. 52.

⁴⁴ CPRPFS, 2018b, p. 52.

Table 2.10
Dollar Value of Prizes Awarded per Year by CMP in Recognition of Marksmanship Achievements, 2013–2017

Category	2013	2014	2015	2016	2017
Awards and medals	110,951	185,662	203,365	200,165	190,177
Competitor recognition	18,619	13,082	13,082	6,380	0
Program support	5,105	90	794	746	960
Endowment awards	0	0	0	309,600	740,400
Total	134,675	198,834	217,239	516,891	931,537

SOURCE: CMP, annual profit-loss spreadsheets, Excel files, 2013–2017, provided to authors June 6, 2018. Not available to the general public.

NOTE: All figures are in nominal dollars.

in 2016 and 2017. These increases were the result of endowment awards made to successful teams, which were made possible by contributions from organizations partnering with CMP.

CMP also provides financial support to youth who participate in CMP programs. Tables 2.11 and 2.12 show aggregated dollar values by category. Tables A.3 and A.4 in the appendix feature complete tables by category and individual CMP activity. As seen in Tables 2.11 and 2.12, the amount of grants that CMP provides to other organizations has been declining over the past five years, but CMP has continued to increase the amount of financial assistance it provides in scholarships to youth—particularly to youth in JROTC or ROTC programs (although any high school senior involved in shooting sports can apply). CMP provides approximately 150 scholarships in \$1,000 increments to high school seniors who demonstrate marksmanship experience to support postsecondary and vocational education.⁴⁵

Table 2.11
Dollar Value of Grants Awarded per Year by CMP, 2013–2017

Category	2013	2014	2015	2016	2017
Grants	17,069	25,004	25,818	18,832	2,204
Sponsorship	6,400	8,000	6,400	5,400	4,000
Team support	15,000	15,000	0	0	0
Total	38,469	48,004	32,218	24,232	6,204

SOURCE: CMP, 2013–2017.

NOTE: All figures are in nominal dollars.

⁴⁵ CMP, “Scholarship Program,” webpage, undated-w.

Table 2.12
Dollar Value of Scholarships Awarded per Year by CMP,
2013–2017

Category	2013	2014	2015	2016	2017
Scholarships	155,500	163,810	172,500	166,000	171,835

SOURCE: CMP, 2013–2017.

NOTE: All figures are in nominal dollars.

Activities Furthering the Secure and Issue, Loan, or Sell Functions

The secure function and the issue, loan, or sell function are CMP’s two administrative functions. Unlike the core functions and activities supporting them, the administrative functions are executed mainly by CMP with little to no involvement of the affiliates. CMP engages in several activities to sustain its core functions and maintain its relationship with the Army, the most critical of which is the sale of surplus firearms and equipment that are transferred to CMP from the Army. These activities do not vary by function, so we summarize them together before examining the measurement results for each function separately.

Sales of Surplus Firearms and Equipment

CMP’s enabling legislation allows it to sell surplus Army firearms directly to qualified individual members of a CMP affiliate.⁴⁶ It can also sell other related equipment either directly to individual members of a CMP affiliate or to the affiliate club. These firearms consist of caliber .22 rimfire and caliber .30 surplus rifles (notably the M-1 Garand), air rifles, caliber .22 and .30 ammunition, repair parts, and other supplies. These transfers are further governed by an MOU between the Army and CPRPFS.⁴⁷ Sales are limited by applicable local and state laws and to U.S. citizens age 18 (21 for handguns) or older who are members of a CMP affiliate and have not been convicted of a felony. CMP also will initiate a National Instant Criminal Background Check System (NICS) review. (The 2018 NDAA authorized sales and transfers of M1911/M1911A1 pistols, which is considered separately in Chapter Six.⁴⁸) The MOU imposes additional requirements for sales, such as limitations on the numbers of firearms ordered by customers and total amounts transferred for specific equipment. Moreover, the Army cannot transfer Browning Automatic Rifle, caliber .30, M14, M3, or M2 firearms to CMP. As discussed throughout this report, such sales are CMP’s principal source of revenue.

⁴⁶ The legislation also exempts CMP from some federal firearms license (FFL) requirements.

⁴⁷ U.S. Army and CPRPFS, “Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc., dba the Civilian Marksmanship Program,” Memorandum of Understanding, September 12, 2016.

⁴⁸ Public Law 115-91, 2017.

Retail and Custom Gunsmithing

CMP operates two retail stores at its corporate locations in Port Clinton, Ohio, and Anniston, Alabama. The stores sell firearms, ammunition, and related equipment to qualified buyers. CMP also engages in mail-order, phone, and fax sales of some firearms (e.g., the M1911/M1911A1s are sold by mail and by auction) and operates an online store that sells ammunition, parts, memorabilia, equipment, accessories, publications, and instructional materials. It also conducts electronic auctions of rare and unique firearms. At its Anniston location, it operates a gunsmithing shop where customers can send their rifles for service, repair, or upgrades. The shop specializes in M1 Garand, M1 Carbine, 1903 and 1903A3 Springfield, the 1917 Enfield and the Krag, but it also provides services for other rifles, such as the Remington 40X, Mossberg 44, and H&R Model 12.⁴⁹

Ceremonial Rifle Program

One noteworthy activity is CMP's support to the Ceremonial Rifle Program. By law, the Secretary of the Army can loan or donate excess M-1 rifles, slings, and cartridge belts to eligible organizations for use in funerals and other ceremonial activities.⁵⁰ CMP is not required by law to do this, nor is it one of CMP's statutory functions. Instead, it is a long-standing service that CMP provides for the Army. This activity is discussed further in Chapter Four.

Measurement Results for the Secure Function

We now summarize the measurement data for the secure function and related accomplishments and discuss any limitations of the methodology for each measurement. Recall from Table 2.2 that the objective in this function is to secure and account for firearms and equipment.

Secure and Account for Firearms and Equipment

CMP employs an external financial auditor to independently review its financial documentation and inventory each year. For the study period, 2013–2017, no financial irregularities were found.⁵¹

The 2016 MOU limits CMP's activities related to sales and transfers of firearms and equipment and requires CMP to conduct biennial auditing and reporting of its

⁴⁹ CMP, "Custom Gunsmithing," webpage, undated-l.

⁵⁰ U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part IV, Service, Supply, and Procurement, Chapter 443, Disposal of Obsolete or Surplus Material, Section 683, Excess Non-Automatic Service Rifles: Loan or Donation for Funeral and Other Ceremonial Purposes, August 10, 1956. The section defines eligible organizations as "(1) a unit or other organization of honor guards recognized by the Secretary of the Army as honor guards for a national cemetery; (2) a law enforcement agency; or (3) a local unit of any organization that . . . is a nationally recognized veterans' organization."

⁵¹ CPRPFS, *Financial Statements and Supplementary Information*, independent auditors' report for September 30, 2017 and 2016 prepared by Warren Averett, January 30, 2018a. Not available to the general public.

activities.⁵² The MOU requires recording ammunition sales in an auditable manner and limiting such sales to 2,000 rounds per caliber per customer per year (200 for affiliates); recording rifle sales in an auditable manner and limiting such sales to eight rifles per customer per year; recording M1911/M1911A1 pistol sales in an auditable manner and limiting such sales to one per customer (discussed in Chapter Six); following prescribed protocols for the Ceremonial Rifle Program in an auditable manner; and following the prescribed protocols to ensure that CMP has adhered to proper storage, maintenance, and issuance for oversight of all property transferred to CMP from the Army.

According to the MOU, CMP agrees to submit a biennial audit report from an external independent company to the Secretary of the Army that reports on the aforementioned activities and certifies that CMP complies with statute.⁵³ There was some ambiguity in the MOU about when CMP was to submit the first operational audit report; this has now been resolved and CMP will make its submission in the first quarter of calendar year 2019.

To achieve this deadline, CMP engaged an external auditor to conduct the review. At the time of our report, CMP was still reviewing and responding to the auditor's draft report, but we received permission from CMP's Chief Operating Officer to summarize its findings, as follows:⁵⁴

- **Sale of surplus ammunition to authorized individual customers and affiliated organizations:** The auditor verified that surplus ammunition sales were limited to 2,000 rounds per caliber per authorized individual customer per calendar year and limited to 200 rounds per caliber per affiliated organization member per calendar year. Surplus ammunition is no longer available for sale by CMP as of January 1, 2018.
- **Sales of surplus M1911/M1911A1 pistol to authorized individual customers:** Although no sales have occurred, the auditor reviewed all accounting records and observed the inventory, verifying that all pistols are still on the premises.
- **Ceremonial Rifle Program:** The auditor found that procedures for the security, oversight, and accountability of ceremonial rifles in CMP's possession are consistent with federal, state, and local laws.
- **Accountability of transferred material:** The auditor found that CMP had appropriate and effective oversight of all transferred property by prescribing and adhering to storage, maintenance, and issuance procedures.

⁵² This is referred to as an operational audit, which differs from a separate, financial audit.

⁵³ 36 U.S.C. Ch. 407.

⁵⁴ *Independent Accountants' Report on Applying Agreed-Upon Procedures for the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc. under Memorandum of Understanding with the United States Army, September 12, 2016*, draft report, September 2018. Not available to the general public.

- **Sales of surplus rifles to authorized individual customers:** The auditor examined a sample of sales records for 8,115 surplus rifles sold in 2017. They certified that all sampled cases qualified as “authorized individual customers.” They also tested the sales limit of eight rifles to any single customer in a calendar year. They noted an irregularity associated with backorders that crossed calendar years. This condition was not captured by CMP’s inventory control system and resulted in 40 customers exceeding the annual limit. In response, CMP implemented safeguards against future overpurchases through additional staff procedures and a more comprehensive data retrieval system.

Historically, GAO has periodically examined CMP and its operations. As occurred with our project, GAO is conducting a simultaneous study of CMP with many similar and overlapping objectives. During our study period, 2013–2017, GAO conducted no assessments. GAO’s previous engagement in 1999 found that CMP did not comply with its enabling legislation about firearms sales and concluded that it was necessary to establish guidance regarding what support the Army could provide CMP.⁵⁵ This recommendation resulted in the revision of the CMP–Army MOU in 1999, which was superseded by another MOU in 2012 and the current MOU in 2016.

One aspect of CMP’s secure function involves insuring against risks that might impair its operations. This includes assessments of liability and measurements of liability protection. CMP carries many forms of insurance (see Table 2.13 for type and

Table 2.13
CMP Insurance Coverage

Insurance Coverage Type	Coverage Limit
Excess liability	\$25,000,000
Directors and officers liability/employment practices liability	\$10,000,000
Umbrella coverage	\$10,000,000
World risk (directors’ and officers’ kidnapping)	\$2,000,000
Package—property	\$20,405,000
Package—general liability	\$2,000,000
Automobile	\$1,000,000
Worker’s compensation	\$1,000,000
Crime/fiduciary liability	\$3,000,000/\$1,000,000
Cyber	\$5,000,000

SOURCE: CMP official, e-mail with authors, July 27, 2018.

⁵⁵ GAO, 1999.

coverage limit). CMP does not carry inventory insurance and self-insures some of its buildings, and CMP management has stated that its liability, umbrella, and excess liability coverage will cover incidents occurring at a match. We are unsure whether this coverage extends to liability for stolen firearms; moreover, this insurance is applicable only to CMP and not the Army.

Regarding the transfer of ownership of firearms and equipment, there is a conflict between CMP's governing statutes and its MOU with the Army. Under 36 U.S.C. § 40728, title to an item transferred to CMP is vested either "(1) on the issuance of the item to an eligible recipient under section 40731 of this title; or (2) immediately before the corporation delivers the item to a purchaser in accordance with a contract for sale of the item that is authorized under section 40732 of this title."⁵⁶ The first condition refers to the issuance or loaning of firearms and supplies to certain organizations for activities such as training and competitions.⁵⁷ The second refers to CMP's sale of firearms and related supplies to affiliated organizations and gun club members.

The statute transfers ownership from the Army to CMP when items are about to be sent to eligible individuals, organizations, and consumers. However, the 2016 MOU with the Army transfers ownership to CMP at an earlier point in the process and states that "both parties agree that the transfer of surplus firearms, parts, supplies, or ammunition may be completed either by the Army's processing of a materiel release order or by the Army's shipment of returning materiel directly to the Corporation on a Government or commercial bill of lading."⁵⁸ Also per the 2016 MOU, the Army's processing requires "a materiel release to the Corporation at Department of Defense Activity Address Code (DoDAAC) ALEABM and/or W09PZs (the [TACOM] Life Cycle Management Command warehouse) and update[ing] the Unique Item Tracking (UIT) small items/light weapons serialization program."⁵⁹

The conflict between the statute and MOU affects not only the vesting of title in the firearms and related equipment but also could affect which organization bears the liability against theft and loss. On the face of things, the governing statutes consider the Army to have ownership of these firearms and supplies until they are shipped to an affiliated organization or consumer. The statutory language does not specify whether ownership changes hands with only physical transfer or whether electronic transfer (i.e., updating the UIT program) is sufficient. Although the Army and CMP agreed

⁵⁶ U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40728, Transfer of Firearms, Ammunition, and Parts, November 25, 2015.

⁵⁷ 36 U.S.C. § 40731(a) limits the issuance or loan of firearms and related supplies to "(1) organizations affiliated with the corporation that provide firearms training to youth"; (2) the Boy Scouts of America; (3) 4-H Clubs; (4) the Future Farmers of America; and (5) other youth oriented organizations."

⁵⁸ U.S. Army and CPRPFS, 2016, paragraph 6.

⁵⁹ U.S. Army and CPRPFS, 2016, paragraph 7.

to transfer ownership at an earlier stage in the process, the MOU does not override the statutory language. Otherwise, the Army and CPRPFS need to amend their MOU to align it with statutory requirements and intent.

Measurement Results for the Issue, Loan, or Sell Function

We now summarize the measurement data for the issue, loan, or sell function and related accomplishments and discuss any limitations of the methodology for each measurement. Recall from Table 2.2 that the objectives in this function are to encourage and grow youth marksmanship programs, support veterans' programs, and enable firearm sales to qualified US citizens.

Encourage and Grow Youth Marksmanship Programs

Although its enabling legislation permits CMP to issue and loan firearms to support marksmanship programs, it does not, for liability reasons. At a CMP range or at competition centers, it will allow shooters who do not have their own air rifles to "rent" an air rifle for use on the range under supervision. Additionally, during select training schools, CMP will issue small arms to shooters in training for the Small Arms Firing Schools (SAFS). These supervised firearms never leave the CMP facility.

Support Veterans' Programs

As will be discussed in greater detail in Chapter Four, CMP's services to veterans through the Ceremonial Rifle Program and its overall financial performance depends on its relationship with the Army. CMP services approximately 2,500 rifles for the Ceremonial Rifle Program each year at no cost to the Army.

Enable Firearm Sales to Qualified U.S. Citizens

Most of CMP's revenues come from sales rather than its programs, as shown in Table 2.14. CMP sales revenue and sales expenses have been steadily decreasing over the past five years. Total non-sales revenue has remained steady at roughly \$1 million

Table 2.14
Annual CMP Revenue and Expenses from Sales and Programs, 2013–2017

Revenue and Expenses	2013	2014	2015	2016	2017
Total sales revenue	38,564,223	26,315,535	21,295,570	18,484,675	16,769,793
Total non-sales revenue (not including other revenue or investment income)	1,327,266	1,225,925	1,577,592	1,474,094	2,012,297
Total sales expenses	15,642,991	13,492,758	10,728,002	11,393,970	9,634,108
Total program expenses	5,401,747	5,316,277	6,118,915	6,579,368	7,441,433

SOURCE: CMP, 2013–2017.

NOTE: All figures are in nominal dollars.

per year with an increase in 2017 (to a little over \$2 million), but program expenses have continued to increase each year.

Observations

CMP undertakes numerous activities to execute its core and administrative functions. The findings demonstrate that CMP offers a broad range of instruction to multiple audiences. The focus of instruction by the national organization is primarily on rifle and pistol clinics and the development of JROTC instructors. Participants are predominantly adults, but youth instruction programs are growing quickly and CMP has engaged more-diverse populations, including women and disabled individuals. Improvements in shooting proficiency could be tracked better to analyze the efficacy of its training programs. CMP relies heavily on its affiliates to execute instruction and uphold good safety practices.

The organization conducts and sanctions many of the most-valued competitions in shooting sports, such as the National Matches and the JROTC Championships. CMP averaged 307,000 participants (42,000 youth) with about 20-percent growth over the study period. Again, CMP relies heavily on its affiliates to hold competitions. The national organization has shown innovation in the conduct of competitions through its promotion of ECIs, electronic targets, and its Competition Tracker. CMP also promotes the sport by publishing a robust range of supporting materials, maintaining a social media presence, granting prizes and awards, and awarding scholarships.

A limitation of the assessment in this chapter, as evidenced by the need for the logic model abstraction, is that it is based on our inferences of CMP program goals and legislative direction. CMP has no formal guidance that either resolves the potential ambiguity or articulates comprehensive strategy with measurable objectives. Such a strategy would necessarily answer the intended policy outcome for each function. For instance, in articulating the instruct function, CMP would need to decide whether its goals would be to train some number of U.S. citizens or youth or to obtain a certain level of geographic coverage with its activities. Although we have reported various measures, neither the Army nor CMP has established performance standards for CMP, so we cannot state exactly whether CMP's performance exceeds or falls short of expectations.

As will be discussed throughout the report, CMP depends on revenue generated from sales of transferred items to execute its mission. To carry out its administrative functions, it uses an auditable system to secure and track firearms, control its inventory, and adhere to laws governing sales of firearms. However, there is potential ambiguity in the Army MOU and statute about the title and ownership of the firearms, which could raise concerns for liability and ought to be examined further.

To complete the assessment of our findings in this chapter, we compare CMP with similar organizations in Chapter Three.

Comparing the Civilian Marksmanship Program with Similar Organizations

Chapter Two describes CMP's activities and measurement results for each of its core functions (instruct, conduct, promote) and its administrative ones (secure; issue, loan, or sell). Additional context and comparison with similar organizations can provide an important and supplementary evaluation perspective to these results. Because CMP operates in the broader space of shooting sports, such a comparison could reveal other organizations that have made contributions to shooting sports similar to those of CMP and that also perhaps possess the scale to instruct citizens in marksmanship, conduct marksmanship competitions, or promote marksmanship nationally. This chapter presents the results of Task 2 by providing that comparison: It summarizes shooting sports in the United States, selection criteria for identifying comparable organizations, data collection, and comparative results of CMP with ten other organizations.

Based on the data that we received, our principal observation is that few, if any, organizations perform all the core functions that CMP does. However, each organization we examined does have a national presence in at least one of those functions. As we will discuss later, some of the featured organizations did not provide data for a complete analysis. The most notable such organization is the NRA/NRA Foundation, which we consider closest to CMP with respect to scale and execution of marksmanship training, competitions, and promotion. Not having these data is an important limitation, but in terms of effect on national policymaking, this lack is somewhat mitigated by our observation that the potential national demand for marksmanship training and related services far outstrips the capacity of any organization featured herein.

Shooting Sports in the United States

Shooting sports encompass several different activities, both competitive and non-competitive, that demonstrate proficiency in the use of ranged weapons (e.g., firearms, air guns, bows/crossbows) against targets under different conditions (e.g., time limits, firing distances, body positions). We restrict our analysis to target shooting with contemporary firearms and air guns because this is primarily CMP's domain. This

restricted focus excludes archery, hunting, use of antiquated firearms (reenactments, skirmishes, and competitive muzzle-loading), and practical, precision, and defensive shooting. The exclusion of practical shooting and similar categories is arguable because although such shooting does involve target shooting with contemporary firearms, it is more focused on demonstration of defensive skills, speed, or accuracy in predesigned courses where targets are not set or arranged in any standard way.

We found limited sources that systematically analyze and characterize the status of shooting sports. The one exception was work published by the National Shooting Sports Foundation (NSSF), a nonprofit trade association for the firearms industry. NSSF regularly sponsors research on shooting sports participation, safety, and economic impacts. Not all of NSSF's work is publicly available without membership or a fee, but they shared several of their reports, which we summarize in the following sections.

Participation in Shooting Sports

NSSF reports say that surveys indicate that the number of participants in target shooting (with a handgun or a rifle) increased from 34.4 million in 2009 to 51.2 million in 2014, with a decrease to 49.4 million in 2016.¹ The two most popular variants of target shooting in 2016 were target shooting with a handgun and target shooting with a rifle: 27.9 million participated with a rifle, and 33.3 million participated with a handgun (individuals can participate in multiple variants).

Half of all participants spent less than four or five separate days or occasions engaged in target shooting (median) each year. This distribution was rightly skewed, indicating that a sizable fraction of this population spends significantly more time in these activities (mean: 15–16 days or occasions).

Participation in target shooting is likelier among males, individuals ages 18–54, those involved with hunting, and those who reside in a rural area or the South, West, and Midwest regions. Nearly half of target shooters began with a traditional rifle, and most reported that they were taught by a family member or friend.

An estimated 17.8 percent of all target shooters started shooting within the past five years. These shooters are more likely than experienced shooters to be younger, female, and nonwhite, to reside in urban or suburban areas, and to not have grown up around firearms. A survey of individuals who did not go target shooting ($n = 2,463$) indicated that they did not do so because they had no interest (59 percent) or they did not or could not own a firearm (13 percent).

A separate study commissioned by NSSF asked a nationwide sample ($n = 930$) to assess Americans' attitudes toward target shooting.² Sixty-six percent of the sample

¹ NSSF, *NSSF Report: Sport Shooting Participation in the United States in 2016*, Newtown, Conn., 2016b; NSSF, *Changing Faces of the Shooting Sports: Meeting the Needs of an Increasingly Diverse Customer Base*, Newtown, Conn., 2015.

² NSSF, *Americans' Attitudes Toward Hunting, Fishing, and Target Shooting*, Newtown, Conn., 2011.

indicated that shooting sports was an acceptable recreational activity and 32 percent indicated that shooting sports were somewhat or completely inappropriate.

Economic Impact of Shooting Sports

Another NSSF report estimated that each target shooter spent \$87 (2011 dollars) per year on fuel, food, and lodging when engaging in a target shooting activity and \$406 per year on equipment, such as firearms, ammunition, range fees, and instruction (resulting in an economic impact of approximately \$10–25 billion, assuming 20–50 million target shooter participants).³

Access to Shooting Sports

A critical component of shooting sports is having the necessary facilities and ranges for using firearms. Most shooters rely on gun ranges to practice and might travel 30–45 minutes on average to a location. In a study that sampled range owners (n = 156) across the United States, more than 80 percent reported that they offered some form of firearms instruction.⁴

Table 3.1 summarizes access to ranges in the United States from wheretoshoot.org, which serves as a repository of ranges that have been identified by or registered with the website. Table A.5 in the appendix also presents a summary by U.S. state. At least 6,500 firearm ranges were in operation in the United States, 60 percent of them public and 45 percent handicapped-accessible. Firearms instruction was provided by 44 percent of the ranges; 21 percent provided equipment rentals. Also, 23 percent had special programs for women and 27 percent for youth (with 9 percent of the total having junior rifle programs).⁵

Table 3.1
Summary of Firearm Ranges and Facilities in the United States and Services Provided

Total Number of Facilities	Public	Handicapped- Accessible	Instruction	Junior Rifle Programs	Women's Programs	Youth Programs	Equipment Rentals
6,568	3,969 (60%)	2,935 (45%)	2,898 (44%)	604 (9%)	1,498 (23%)	1,777 (27%)	1,350 (21%)

SOURCE: NSSF, *Where to Shoot*, homepage, undated-e.

³ NSSF, "Target Shooting in America: Millions of Shooters, Billions of Dollars," infographic, January 15, 2014.

⁴ NSSF, *NSSF Range Survey Report, 2016 Edition*, Newtown, Conn., 2016a.

⁵ Responsive Management and National Shooting Sports Foundation, *Hunting, Fishing, Sport Shooting, and Archery Recruitment, Retention, and Reactivation, A Practitioner's Guide*, Newtown, Conn., 2017.

Safety in Shooting Sports

We are not aware of detailed analyses or references on firearm safety incidents or injuries specifically resulting from participation in target shooting; however, information regarding such incidents in general is available.⁶ Firearms safety is a complex issue and it is difficult to ascribe and associate incidents to occurrences uniquely associated with shooting sports. The National Safety Council reports a broader range of safety statistics associated with firearms. For example, throughout the United States in 2015, there were 489 unintentional firearm incidents leading to mortality, a decrease from 606 in 2010 (crude rate [number of new cases per 100,000 population at risk] declined from 0.20 to 0.15).⁷ However, unintentional incidents leading to mortality across all activities (e.g., motor vehicle accidents, accidental poisoning) increased from 120,859 to 146,571 over the same period (crude rate rose from 39.14 to 45.60). Suicides from firearms have risen from 19,392 to 22,018 in the same period (crude rate rose from 6.28 to 6.85).⁸

Selection Criteria and Identification of Comparable Organizations

Complexity of Organizations Engaged in Target Shooting

There are thousands of places across the United States where interested individuals can participate in target shooting. Individuals can participate by themselves or as members of a club, team, or similar organization to seek marksmanship training or opportunities to compete.

Individuals seeking marksmanship training or opportunities to compete might be clients of private individuals, businesses, nonprofits, clubs, or other organizations, with each providing an aspect of those experiences. For example, a youth participant might be affiliated with a club but receive training from a private individual at a gun range owned by a for-profit business. Moreover, that youth's club might be affiliated with a national organization that governs all such clubs in the country. Furthermore, the individual could be affiliated with several organizations, and the organizations he or she belongs to might affiliate with multiple national organizations.

Given the complexity of a bottom-up approach of defining organizations, we instead adopted a top-down perspective by focusing on national-network organizations. We define *national-network organizations* as entities with national scope that conduct their activities through state or local subordinates or independent affiliates (affiliates can be individuals or other entities), in addition to those done by the national office. For example, CMP qualifies as a national-network organization because it has

⁶ NSSF, *Firearms-Related Accident Statistics*, Industry Intelligence Report, Newtown, Conn., 2017a.

⁷ National Safety Council, "Guns: Firearm-Related Deaths," webpage, undated-b.

⁸ National Safety Council, "All Injuries: Overview," webpage, undated-a; National Safety Council, undated-b.

national scope and conducts its activities through its affiliates and state associations (in addition to the events the national organization provides). Local gun clubs, individual businesses, and regional or state organizations would not qualify under our conceptualization. A national-network organization will have differing, possibly very complex, relationships among its constituent parts, with varying degrees of centralization and control. For example, the NCAA consists of a head office and its collegiate team affiliates, unlike the more-diverse CMP.

Selection Criteria

To find organizations to compare with CMP, we used the following selection criteria:

1. The organization must be a national-network organization with considerable focus on target shooting. (Specifically, this resulted in the exclusion of organizations that concentrate on areas of shooting associated with law enforcement, security, and hunting.)
2. The organization's sustained activities and stated mission must be directed toward at least one of CMP's three core functions from the analytic specification in the logic model discussed in Chapter Two:
 - a. **Instruct**—provide marksmanship training or access for U.S. citizens resulting in safe, proficient use of firearms.
 - b. **Conduct**—host or sanction competitions.
 - c. **Promote**—support achievement in marksmanship, safety, and related sports and increase the awareness of marksmanship, safety, and related sports.

As mentioned earlier, organizations in practical shooting or defensive shooting (e.g., the U.S. Practical Shooting Association) were excluded from the focus of our study. Incidentally, all the organizations meeting any of these criteria and that eventually were featured are nonprofits, although an organization being a nonprofit was not a selection criterion. Our criterion that the organization be a national-network organization might have restricted for-profit organizations, but this too was not an explicit intent of the selection criteria. We also noted organizations with a significant and stated youth-focus in shooting sports.

Data Collection

Identifying Comparable Organizations

We took the following steps to search for organizations meeting our selection criteria:

- We sent a preliminary questionnaire to CMP asking for identification of similar organizations.

- We conducted multiple internet searches:
 - We searched nonprofit databases using the keywords *marksmanship*, *firearms safety*, and *gun safety*.⁹
 - We performed iterative Google searches.
 - We conducted an iterative search by reviewing websites of organizations already found (e.g., partners, affiliates).
- We conducted a site-visit to CMP in Camp Perry, Ohio, in March 2018 that coincided with a national competition and the CMP Board of Directors meeting. Numerous organizations and key individuals in marksmanship sports not affiliated with CMP attended. We conducted semistructured interviews with attendees and requested names of additional organizations.
- When contacting individuals at organizations already selected or during informational interviews with the organization's management, we asked the organization to identify other organizations similar either to itself or to CMP.
- When collecting data from organizations already selected (summarized in the following section), the questionnaire submitted to the organization included a request to identify other organizations similar either to itself or to CMP.

The nonprofit keyword searches returned 116 matches, and the other search methods resulted in another 30 possible organizations. Some organizations were no longer in existence or had consolidated with other organizations. We reviewed websites and organizational missions and identified the following ten organizations satisfying the selection criteria:

1. the NRA/NRA Foundation (the NRA conducts competitions and carries out instruction; the NRA Foundation is its associated nonprofit foundation)
2. USA Shooting
3. NSSF
4. National Skeet Shooting Association (NSSA)/National Sporting Clays Association (NSCA)
5. Scholastic Shooting Sports Foundation (SSSF) (Scholastic Clay Target Program [SCTP]/Scholastic Action Shooting Program [SASP])
6. American Legion (Junior Shooting Sports Program)
7. NCAA
8. MidwayUSA Foundation
9. USA Youth Education in Shooting Sports (USAYESS)
10. Youth Shooting Sports Alliance (YSSA).

⁹ GuideStar, search page, undated; ProPublica, "Nonprofit Explorer," webpage, undated; Foundation Center, "Search by Keyword" webpage, undated.

Elicitation Measurement Data from Comparable Organizations

In collecting data, we sought to obtain measurement data comparable with the evaluation of CMP's core functions in the logic model described in Chapter Two. Data collection proceeded along two primary avenues. We submitted a questionnaire to all organizations, and we completed a review of each organization's website, including the retrieval of financial documents from relevant nonprofit databases.¹⁰

The questionnaire can be found in Table A.6 of the appendix. The questionnaire elicited quantitative program information for the years 2013–2017, the study period. It also included a request for a list of affiliates and for the organization to identify other comparable organizations. If the organization could not fulfill the data request, we provided them with an abbreviated questionnaire or conducted an information interview.

Additionally, we reviewed the websites of all organizations and nonprofit databases to retrieve information on organization mission, structure, and size; financials; affiliate costs (if applicable); costs of participating in competitions, firearm safety trainings, camps, and clinics; and significant publications featuring content related to firearms safety instruction (e.g., firearm safety course curricula, firearm safety manuals).

Responding to Data Request

To confer the importance of the study and encourage participation, the Office of the Administrative Assistant to the Secretary of the Army sent an introductory letter to all organizations that satisfied the study criteria. Next, we contacted all ten organizations by e-mail and phone. Seven organizations responded, agreed to participate, and fulfilled all or part of the data request by August 31 (70 percent). We took considerable steps and follow-up actions in requesting and seeking participation by the remaining organizations. Several concerns were expressed regarding the study—the comprehensive nature of the data request, incomplete or dispersed data records, organizational sensitivity over the information being collected, and organizational concern about respecting the privacy of its individual members. To be responsive to such concerns, we made assurances about the aggregated nature of the data request and about its eventual reporting. Similarly, we conducted several informational interviews with one organization in lieu of it completing the full data questionnaire. Likewise, we facilitated administering an abbreviated form of the data questionnaire with another organization.

For the three organizations that did not provide data—the NRA, NSSA/NSCA, and American Legion (Junior Shooting Sports Program)—we sought to replicate the requested information from assembled publicly available documents and sources, such as websites, annual reports, financial statements, press releases, and board meeting

¹⁰ GuideStar, undated; ProPublica, undated; Foundation Center, undated.

notes. In some cases, we used this information to make estimates of various marksmanship training and competition participation variables. Such computed estimates are properly noted in the following tables and discussion.

Results

Summary of the Comparable Organizations

Civilian Marksmanship Program

For reference and as the baseline, CMP is a 501(c)(3) nonprofit organization established by congressional charter in the NDAA FY 1996. Headquartered in Anniston, Alabama, and Camp Perry, Ohio, CMP is primarily oriented toward youth shooting sports, supporting both competitive and noncompetitive opportunities. CMP runs programs specifically for JROTC, the Boy Scouts of America, 4-H, and JROTC instructor certification. It maintains a secondary focus on adults and veterans, also supporting both competitive and noncompetitive opportunities.

CMP has more than 180 full-time employees to conduct its operations and is structured with a national association and subordinate state associations. Local clubs, teams, and ranges can affiliate and operate independently.

National Rifle Association/NRA Foundation

The NRA and the NRA Foundation cooperatively operate in support of a range of firearm-related public interest activities. The NRA Foundation is a 501(c)(3) nonprofit organization that raises tax-deductible contributions. The NRA uses this relationship and other funds to conduct each of the three core functions of CMP—instruct, conduct, and promote. Unlike CMP, the NRA is also involved in political lobbying and advocacy of Second Amendment rights.

The NRA is headquartered in Fairfax, Virginia; has 12,000 volunteers; and is structured with a national office and independent state associations. Local clubs, teams, and ranges can affiliate and operate independently.

In a role analogous to CMP's instruct function, the organization and its affiliates are oriented toward both youth and adult programs (both competitive and noncompetitive), offer firearm ranges and related businesses, and have targeted instructional programs. The NRA offers marksmanship training and development opportunities at the introductory, intermediate, advanced, and elite skill levels and seeks to increase access to firearms training through certification of marksmanship instructors and range officers. It maintains current and relevant curricula that incorporate firearm safety training, live-fire, and demonstration of skills for rifle, pistol, and shotgun.

The NRA, in a role analogous to CMP's conduct function, also hosts Postal Matches; National Championships; and other competitions in the categories of rifle, pistol, shotgun, and BB gun. It also sanctions local competitions in the same catego-

ries. Like CMP, the NRA is a recognized rules authority for conducting competitions by publishing annual guidelines updates.

In a role analogous to CMP's promote function, the NRA publishes promotional, training, and coaching guidance materials using different formats; recognizes achievement in marksmanship sports with awards and scholarships; and provides financial assistance through grants to youth marksmanship clubs and ranges to support firearm safety and marksmanship activities.

USA Shooting

USA Shooting is a 501(c)(3) nonprofit organization that supports U.S. athletes to be successful at Olympic and Paralympic events. It is recognized under a special charter of the U.S. Olympic Committee and governs international competitions in the United States.

USA Shooting is headquartered in Colorado Springs, Colorado, and is primarily oriented toward both Olympic-bound, elite shooting sports athletes (e.g., Junior Olympics, Olympics, Special Olympics) and youth training centers. USA Shooting has 25 full-time employees and is structured with a national office with which local clubs, teams, and ranges can affiliate and operate independently.

In a role analogous to CMP's instruct function, the organization or its affiliates sponsor and train Junior Olympic and Olympic shooters in the rifle, pistol, and shotgun categories and increases access to training through certification of both instructors and training centers for developing talented shooters.

In a role analogous to CMP's conduct function, USA Shooting or its affiliates host national championships and other competitions that can lead directly to recruitment for the Junior Olympic and Olympic teams in the rifle, pistol, trap, and skeet categories.

In a role analogous to CMP's promote function, the organization publishes promotional materials using different formats and recognizes achievement in marksmanship sports with awards.

National Shooting Sports Foundation

NSSF is a 501(c)(6) nonprofit organization that serves as the national trade association for the firearms industry with the aim of encouraging hunting and participation in the shooting sports. It also develops and sponsors new 501(c)(3) organizations (e.g., Project ChildSafe) to carry out related missions.

NSSF is headquartered in Newtown, Connecticut; it is primarily oriented toward firearm ranges, manufacturers, distributors, wholesalers, and industry-related businesses and secondarily oriented toward adult consumers of the firearms industry and industry services. It also engages in Second Amendment-related advocacy and lobbying. NSSF has 57 full-time employees and is structured with a national office. Local and national-level ranges and businesses can be members.

In a role analogous to CMP's instruct function, the organization has developed programs in the past, first providing firearms or marksmanship training and then, once these programs are sufficiently established, converting them to independent entities. One such organizational transition was the SSSF.¹¹ Currently, NSSF operates its own First Shots program, an introductory shooting program.

Similarly, in a role analogous to CMP's conduct function, NSSF developed programs for shooting competitions before converting them to independent entities. As of 2017, NSSF had converted its most recent rimfire shooting competition into an independent entity and was not conducting competitions.¹²

In a role analogous to CMP's promote function, the organization publishes promotional materials and research on shooting sports using different formats; maintains a compliance awareness and certification program to ensure ranges are operating within legal bounds; and offers a start-up course and guidance for individuals and small businesses interested in launching ranges, shooting programs, or related businesses in the firearm industry.

Scholastic Shooting Sports Foundation

SSSF is a 501(c)(3) nonprofit organization that exists to introduce school-age youth to shooting sports and to facilitate opportunities for youth to safely compete in team-based sports led by adult coaches. SSSF currently runs SCTP and SASP. The former was established and managed by the NSSF until SSSF was created in 2007, at which time the SCTP was transferred to SSSF—the only program under its auspices. SSSF created its second program, SASP, in 2012.¹³

SSSF is headquartered in San Antonio, Texas, and is oriented toward youth competitions. The organization has 18 full-time employees and the national office allows local clubs and teams to affiliate.

In a role analogous to CMP's instruct function, SSSF conducts junior development camps. Relative to CMP's conduct function, SSSF hosts regional and national championships in the categories of rifle, pistol, trap, skeet, and sporting clays and sanctions local matches in the same categories. Finally, in the promote role, SSSF publishes promotional materials using different formats, recognizes achievement in marksmanship competitions with awards and prizes, and provides financial assistance through grants to youth marksmanship clubs and ranges to support firearm safety and marksmanship activities.

¹¹ NSSF created and managed the SCTP until SSSF was created in 2007. In 2012, SSSF created the SASP. Today, SSSF operates both SASP and SCTP as one independent organization. See: SSSF, "About SSSF," webpage, undated-a; NSSF, "NSSF's Rimfire Challenge Makes Transition," October 16, 2017b.

¹² NSSF, 2017b.

¹³ SSSF, undated.

National Skeet Shooting Association/National Sporting Clays Association

NSSA/NSCA is a 501(c)(3) nonprofit organization that fosters competition in shotgun target shooting—skeet, international skeet, sporting clays, and similar clay target sports—either directly or through contributions to organizations that qualify.

NSSA/NSCA is headquartered in San Antonio, Texas, and is oriented toward competitive youth and adults programs. The organization has 123 full-time employees and the national office allows local clubs and teams to affiliate.

In a role analogous to CMP's instruct function, the organization provides certification and training for instructors. For the function of conduct, NSSA/NSCA hosts regional and national championships in the categories of skeet and sporting clays. Finally, it promotes the sport by publishing promotional and marksmanship materials using different formats.

American Legion (Junior Shooting Sports Program)

The American Legion is a 501(c)(19) nonprofit organization, and its Junior Shooting Sports Program is a gun safety education and marksmanship program that encompasses the basic elements of safety, education, and competition.

The program is headquartered in Indianapolis, Indiana, and is oriented exclusively toward youth and disabled youth. The program has seven full-time employees and 20 volunteers, and the national office directs its state associations.

In a role analogous to CMP's instruct function, the organization maintains current and relevant curricula that incorporate firearm and rifle safety training, live-fire, and demonstration of skills. In the conduct role, the program hosts national championships and sanctions local matches in the rifle category. The Junior Shooting Sports Program publishes promotional and marksmanship materials using different formats.

National Collegiate Athletic Association

The NCAA is a nonprofit organization that fosters collegiate athletics, including rifle shooting. It is headquartered in Indianapolis, Indiana, and is oriented toward competitive collegiate adults. The organization has 633 full-time employees; however, this figure covers all collegiate programs, not just rifle shooting. The national office allows collegiate teams to affiliate.

In a role analogous to CMP's conduct function, the NCAA hosts a national championship in the rifle category. It is not necessarily involved in broad-based instruction, other than coaching of individual team members by professional staff. The NCAA publishes promotional materials using different formats, offers opportunities for advancement beyond amateur level, and recognizes success in marksmanship competitions with awards. Academic institutions can award scholarships to both male and female shooting sports athletes.¹⁴

¹⁴ ScholarshipStats.com, "31 Schools Sponsored Varsity Rifle Teams During 2017–2018," webpage, undated.

MidwayUSA Foundation

The MidwayUSA Foundation is a 501(c)(3) nonprofit organization that helps organizations fundraise in support of high school, college, and youth shooting teams and activities. It is headquartered in Columbia, Missouri, has 11 full-time employees, and is oriented primarily toward youth, youth shooting sports programs, and related organizations. Accordingly, it performs only the analogous promote role of CMP by providing financial assistance (grants/endowment support) to youth marksmanship teams/programs and ranges and by recognizing achievement in marksmanship by offering scholarships.

USA Youth Education in Shooting Sports

USAYESS is a 501(c)(3) nonprofit organization that exists to support shooting sports and wildlife habitat and conservation programs; it introduces and educates youth about safe firearm handling, shooting sports, and outdoor conservation and other outdoor activities. USAYESS is headquartered in Colville, Washington, and is oriented toward youth.

In a role analogous to CMP's instruct function, the organization trains marksmanship instructors and offers firearm safety instruction in the rifle and shotgun categories. USAYESS also hosts state and regional championships and other competitions in the shotgun category. In terms of promotion, the organization recognizes achievement in marksmanship competitions with awards and prizes.

Youth Shooting Sports Alliance

YSSA is a 501(c)(3) nonprofit organization that identifies shooting sports programs that qualify for product support and/or financial assistance, develops ranges conducive to new shooter participation, and supports youth shooting sports programs. It is headquartered in Gretna, Nebraska, and is primarily oriented toward youth shooting sports programs.

The organization is exclusively focused on the promote function by providing financial assistance (grants/endowment support) to ranges and to youth marksmanship teams and programs and by recognizing achievement in marksmanship by offering scholarships.

Lobbying and Advocacy

CMP does not engage in lobbying and political advocacy. In fact, CMP, like all other 501(c)(3) nonprofit organizations, is restricted in that lobbying, propaganda, or other legislative activity must be kept relatively insubstantial (it cannot represent more than 10–20 percent of the organization's activities and cannot consume more than 10–20 percent of the resources of the organization).¹⁵ Intervention in political campaigns or the endorsement/anti-endorsement of candidates for public office is strictly prohibited.¹⁶ Two organizations, the NRA and NSSF, maintain or are directly affiliated with Second

¹⁵ IRS, 2018a.

¹⁶ IRS, 2018b.

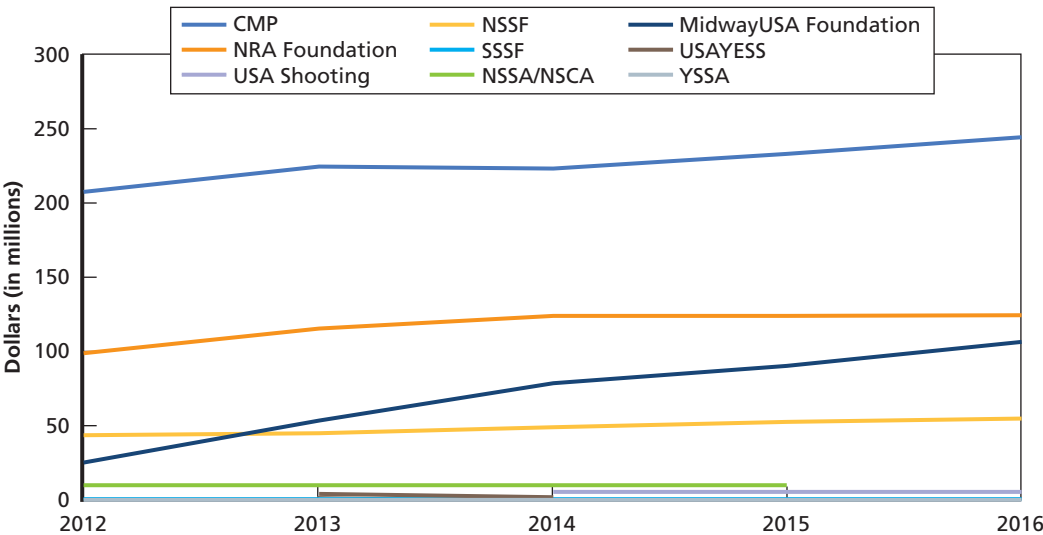
Amendment advocacy. NSSF maintains #GunVote, a voter registration and Second Amendment education campaign. The NRA also maintains the NRA Institute for Legislative Action.

Financials

Table A.7 in the appendix presents detailed summaries of selected financials for all reviewed organizations over the study period. Figure 3.1 depicts total assets. The financials for the NCAA and American Legion encompass activities outside the realm of shooting sports, such as all collegiate athletic programs for the former and veterans’ services for the latter; they are not included in the tallies, and the following remarks do not consider them.

The magnitude of assets for any organization potentially serves as available means for that entity to influence or affect shooting sports over an unspecified time frame. CMP had the most sizable assets for the organizations primarily engaged in shooting sports. This reflects CMP’s growing core endowment fund from program revenues and sales of transferred firearms and related equipment. The NRA Foundation had the next largest amount of assets, but it had the greatest amount of revenues (growing over time)—however, revenues minus expenses were comparable between the two

Figure 3.1
Total Assets of Comparable Organizations by Year



NOTE: The NCAA and American Legion encompass activities outside the realm of shooting sports; funding from those is not included here. For consistency across organizations, we report fiscal years using the corresponding year of the IRS 990 form. For example, CMP’s fiscal year 2017 covers October 1, 2016, through September 30, 2017, but was filed using the 2016 IRS 990 form. This table uses the IRS 990 form year as FY. This differs from the definition of FY used elsewhere in the report. All figures are in nominal dollars.

organizations. (The NRA Foundation is a subsidiary of the NRA, whose financials are separate.) The other organizations engaging in the activities analogous to the instruct or conduct functions that have sizable revenues compared with CMP were NSSA/NSCA, USA Shooting, and SSSF. Like CMP, SSSF is highly focused on youth development, training, and competition, and SSSF has revenues that have grown the most in the study period (54 percent, indicative of being a newcomer organization).

Except for SSSF, the organizations primarily engaged in the promote function—MidwayUSA, YSSA, and NSSF—have had variable revenues during the study period. NSSF and MidwayUSA have sizable assets tailored for their respective missions. MidwayUSA contributions and assets also grew significantly during the study period. YSSA was temporarily inactive for some of the study period but has since resumed its activities.

Affiliation or Membership Fees

Table 3.2 presents fees for affiliation or membership in the selected organizations, if applicable. Individual membership in these organizations, if available, is less than \$70 per year. Affiliation fees for all organizations except the NSSF and NCAA are also less than \$50 per year and are comparable with CMP. CMP has the lowest affiliate fee.

Fees to Participate in Marksmanship and Firearms Safety Training

Table 3.3 presents fees for attending selected training programs at the organizations. Table A.8 in the appendix provides additional details on the title and content of some of these programs. An introductory pistol, rifle, or shotgun course held by CMP will typically cost individuals \$0–\$50. More-experienced individuals will pay more at CMP for advanced instruction, as will individuals pursuing development or certification as a range officer or instructor (\$40–\$135). The NRA is the other organization that offers basic courses to broad audiences in the United States through its large network of trainers. Attendance fees vary widely by instructor and location; we observed fees ranging from \$50 to \$200 for a basic pistol and rifle course.¹⁷

Fees to Participate in Marksmanship Competitions

Table A.9 in the appendix presents fees for participating in competitions in selected organizations. Fees for CMP range from \$0–\$80. Fees are greater for more-selective or elite competitions (e.g., National Matches). Some terminal events, such as some championships, might not require fees because they require success in lower-level competitions or are by invitation only.

CMP's competition fees are comparable with those of other organizations; however, other organizations assess fees by entry, and an individual will typically enter multiple events in a competition, thereby multiplying the total fee required.

¹⁷ NRA, "Find an NRA Training Course Near You," webpage, undated-b.

Table 3.2
Cost to Affiliate with Each National Organization

Organization	Organization Type Affiliation	Annual Fee	Individual Type Affiliation	Annual Fee
CMP	MOU organization	\$0	N/A	N/A
	Non-MOU organization	\$30	N/A	N/A
NRA	Club, business, other	\$35	Individual	\$40
USA Shooting	Club and range	\$40	Fan club	\$20
			Junior	\$30
			Adult	\$40
NSSF	Supporting membership	\$450–\$15,000	Media membership	\$25
	Associate membership	\$500–\$15,000		
	Retail membership	\$75–\$15,000		
	Nonprofit membership	\$200		
SSSF	N/A	N/A	Junior athlete	\$20
			Coach	\$30
NSSA/NSCA	N/A	N/A	Junior	\$10–\$32
			Adult	\$30–\$64
American Legion	Youth club and team	N/A	N/A	N/A
NCAA	Team and institution	\$1,000–\$3,000	N/A	N/A
MidwayUSA Foundation	N/A	N/A	N/A	N/A
USAYESS	N/A	N/A	Athlete, coach, volunteer	\$25
YSSA	N/A	N/A	N/A	N/A

SOURCES: CMP, CMP Affiliation Application Form, webpage, undated-f; National Rifle Association, "Join NRA Today!" webpage, undated-c; NRA, *How to Start an NRA Club: A Guide for Club Leaders*, Fairfax, Va., December 2008; USA Shooting, "Become a Member of USA Shooting," undated-a; NSSF, "Annual Dues," fact sheet, April 2018; SSSF, "Scholastic Action Shooting Program," team registration form, Burlington, Wis., 2018–2019a; SSSF, "Scholastic Action Shooting Program," volunteer position registration form, Burlington, Wis., 2018–2019b; SSSF, "Scholastic Clay Target Program," team registration form, Burlington, Wis., 2018–2019c; SSSF, "Scholastic Clay Target Program," volunteer position registration form, Burlington, Wis., 2018–2019d; NSSA, "New Member Online Enrollment Form, 2018–2019," webpage, 2018a; NSCA, "New Member Online Enrollment Form, 2018–2019," webpage, 2018a; NCAA, "How to Register," webpage, undated-b; NCAA, Division I Manual, Indianapolis, Ind., August 1, 2018a; NCAA, *Division II Manual*, Indianapolis, Ind., August 1, 2018b; NCAA, *Division III Manual*, Indianapolis, Ind., August 1, 2018c; USAYESS, "Events," webpage, undated-b.

NOTE: All affiliate fees figures are collected from information on each organization's current website. Fee ranges indicate that annual affiliate fees vary because of additional benefits that are available.

Comparison of Instruct Core Function

Development of Standards Regarding Marksmanship Practice and Safety

Table 3.4 summarizes marksmanship safety training guidance, instructions, or curricula from various organizations. These materials were selected for review from the organizations' websites at our discretion. Training materials vary in their availability to the public and in terms of their breadth and detail. However, because of CMP's

Table 3.3
Cost to Participate in Marksmanship and Firearm Safety Trainings, Camps, and Clinics
Hosted by Each National Organization

Organization	Type of Activity	Level	Cost to Participate per Individual	
			Adult	Youth
CMP	Marksmanship	Beginner/ intermediate/ advanced	\$0–\$50	\$0–\$50
	JROTC instructor certification	Advanced	\$0	N/A
	Other instructor certification	Advanced	\$135	N/A
	Range safety officer certification	Intermediate/ advanced	\$40–\$75	N/A
NRA	Marksmanship	Beginner/ intermediate/ advanced/expert	Varies by location or instructor	Varies by location or instructor
	Range safety officer certification and instructor certification	Advanced	Varies by location or instructor	N/A
USA Shooting	Instructor certification	Intermediate/ advanced	\$10	N/A
	Referee certification	Advanced	\$10	N/A
NSSF	Firearm safety	Beginner/experienced	\$0	\$0
	Marksmanship	Beginner/ intermediate/ advanced/expert	\$2,995	\$0–\$2,995
SSSF	Marksmanship	Intermediate/ advanced	\$850	\$650
NCAA	N/A	N/A	N/A	N/A
NSSA/NSCA	Instructor certification	Beginner/ intermediate/ advanced	\$300	N/A
American Legion	Marksmanship	Beginner	N/A	\$25
MidwayUSA Foundation	N/A	N/A	N/A	N/A
USAYESS	Marksmanship	Beginner/experienced	N/A	\$30–\$185
	Instructor certification	NRA Level 1 certification required	\$175–\$385	N/A
YSSA	N/A	N/A	N/A	N/A

SOURCES: CMP, "CMP Basic Rifle Class," webpage, undated-h; CMP, "CMP Basic Pistol Course," webpage, undated-g; CMP, "Introduction to Shotgun Class," webpage, undated-q; CMP, "Small Arms Firing Schools," webpage, undated-x; CMP, "USMC Junior Highpower Clinic: 26–28 July 2019," webpage, undated-z; CMP, "Advanced CMP Highpower Clinic: 26–28 July 2019," webpage, undated-b; CMP, "Clinics," webpage, undated-c; CMP, undated-r; CMP, "GSM Master Instructor," webpage, undated-n; CMP, "Range Officer Training Course," webpage, undated-u; NRA, undated-a; USA Shooting, "Coach Academy," webpage, undated-c; USA Shooting, "Officials," webpage, undated-e; USA Shooting, "Certification and Testing," webpage, undated-b; NSSF, "Firearms Safety Videos," webpage, undated-a; *First Shots Reference Guide*, Newtown, Conn., 2009; NSSF, Shooting Sports Fantasy Camp homepage, undated-c; SSSF, "SCTP 2017 Junior Olympic Development Camp" application form, 2017; NSCA, "Instructor Support Materials," webpage, undated-a; American Legion, "Basic Marksmanship Course," June 30, 2014; USAYESS, "Education and Fundraising," webpage, undated-a.

NOTE: Most organizations offer more than one course for each type of activity based on the category of firearm or level. Some courses are provided free of charge.

Table 3.4
Listing of Safety Training Reviewed from Selected Organizations

Organization	Item	Media Type	Mode of Delivery	Type of Firearm	Intended Audience	Content Summary
CMP	<i>M1 Garand Operation, Safety, and Maintenance Guide</i>	Manual	Online/download	Rifle	Veteran and civilian service organizations, law enforcement, and national cemetery personnel	Safety and maintenance instructions for M1
	<i>Rifle Safety Manual</i>	Manual	Online/download	Rifle	General	Safety and maintenance instructions for M1
	<i>Junior Shooter's Guide to Air Rifle Safety</i>	Manual	Online/download	Rifle	Youth competitors	Safety and operations
	<i>JROTC Marksmanship Instructor Course</i>	Website	Online	Rifle	Instructors	Instruction and safety
American Legion	<i>Shooter's Guide to Position Air Rifle</i>	Manual	Online/download	Rifle	General	Safety and operations
	<i>The American Legion Junior Shooting Sports Program Adult Leader Manual</i>	Manual	Online/download	Rifle	Instructors	Instruction and safety
USA Shooting	"Safety Tips and Video"	Webpage	Online	Rifle	General	Safety
NRA	"NRA Gun Safety Rules"	Website	Online	Rifle, pistol, shotgun	General	Safety

SOURCES: Armament Research, Development and Engineering Center, 2015; CMP, undated-v; CMP, 2017c; CMP, undated-r; Lujan, 1996; American Legion, undated-a; USA Shooting, "Safety Tips and Video," webpage, undated-f; NRA, "NRA Gun Safety Rules," webpage, undated-f.

emphasis on youth and general audiences, we did focus on materials that would appeal to wider, younger, or more-introductory audiences. The intended audience can vary from beginners to more-experienced marksmen or hunters and the training can be deployed by various media.

Table 3.5 presents an abridged comparison of the training documents using a checklist taken from Hemenway et al. (a detailed comparison is available in Table A.1).¹⁸ Hemenway et al. provides a structured list for ascertaining the content of firearms training that was also grounded in observational data. We use this as a descriptive tool to facilitate comparisons across organizations on training content related to safety; we do not suggest that it be used to evaluate the effectiveness of the content or the appropriateness of including the content in each situation. CMP's *Rifle Safety Manual* is among the more-comprehensive documents, covering firearm operation, live-fire safety, storage, and the prevention of unsupervised access to children.¹⁹ Materials from USA Shooting and the NRA also cover laws relevant to firearm ownership and possession that the reviewed CMP materials do not. USA Shooting and American Legion materials cover youth and adolescent firearm accidents, and USA Shooting covers statistics and theft prevention of firearms. No material reviewed covers suicide, which is the most common preventable firearm injury in the United States, although NSSF has raised awareness in this regard.²⁰

Citizens Receiving Marksmanship/Safety Training

Table 3.6 summarizes attendance to marksmanship and safety training programs (e.g., courses, clinics, and seminars) for the organizations, including affiliates, for 2013–2017. Notwithstanding the NRA's undocumented claim on its website of training 1 million individuals per year, CMP and its affiliates train significantly more adults and youth than the other organizations surveyed (approximately 80,000, with 46,000 youth). Approximately, 15,000 of these attendees (adults and youth) will be trained by CMP's national programs, which is comparable with the total number of youth trained by SSSF and its affiliates. Adult and youth training participation at CMP and its affiliates has increased by 22 percent over the study period. Other organizations also experienced similar increases (14 percent–32 percent).

Increasing Access to Training

Table 3.7 summarizes one of the measures for improving access to firearm and safety training: the number of marksmanship and firearm safety instructors and officials trained per year by all organizations during the study period. CMP trained or certified an average of 2,100 instructors per year during the study period, which is greater than

¹⁸ Hemenway et al., 2017.

¹⁹ CMP, undated-v.

²⁰ National Safety Council, undated-b; NSSF, "Suicide Prevention Program for Retailers and Ranges," webpage, undated-d.

Table 3.5
Abridged Safety Content Checklist of Safety Training Reviewed from Selected Organizations

Checklist of Criteria from Hemenway et al.	CMP				American Legion	USA Shooting	NRA
	<i>M1 Garand Operation, Safety, and Maintenance Guide</i>	<i>Rifle Safety Manual</i>	<i>Junior Shooter's Guide to Air Rifle Safety</i>	<i>JROTC Marksmanship Instructor Course</i>	<i>Shooter's Guide to Position Air Rifle</i>	<i>"Safety Tips and Video"</i>	<i>"NRA Gun Safety Rules"</i>
Firearm anatomy	X	X	X	X	X		
Firearm operation	X	X	X		X	X	X
Live-fire							
Firearm safety	X	X	X	X	X	X	X
Relevant laws						X	
Storage		X	X			X	X
Theft						X	
Self-defense							
Children					X	X	
Suicide							
Statistics						X	

SOURCES: Hemenway et al., 2017; Armament Research, Development and Engineering Center, 2015; CMP, undated-v; CMP, 2017c; CMP, undated-r; Lujan, 1996; American Legion, undated-a; USA Shooting, undated-f; NRA, undated-f.

Table 3.6
Marksmanship and Safety Training Attendance, 2013–2017

Organization	2013	2014	2015	2016	2017
CMP total (all participants)	65,095	68,512	68,580	82,082	84,552
CMP youth	39,535	38,423	40,897	55,805	56,892
NRA ^a	Not listed	Not listed	Not listed	Not listed	Not listed
USA Shooting	2,430	2,897	3,132	2,916	3,316
NSSF ^b	1,500	1,500	1,500	1,500	1,500
SSSF (youth)	12,854	15,030	16,301	18,331	19,887
NSSA/NSCA ^c	N/A	N/A	N/A	N/A	N/A
American Legion ^d (youth)	2,000–6,000	2,000–6,000	2,000–6,000	2,000–6,000	2,000–6,000
NCAA	N/A	N/A	N/A	N/A	N/A
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A
USAYESS ^e (youth)	200	200	200	200	200
YSSA	N/A	N/A	N/A	N/A	N/A

SOURCES: Data supplied directly to the authors by CMP in August 2018; CMP, 2017b; NRA, “NRA Firearm Training,” webpage, undated-e; data supplied directly to the authors by USA Shooting in August 2018; NSSF, “First Shots,” webpage, undated-b; data supplied directly to the authors by SSSF in July 2018; American Legion, “Fast Facts,” webpage, undated-b; American Legion, “American Legion by the Numbers,” webpage, September 6, 2012; data supplied directly to the authors by USAYESS in August 2018.

NOTES: Figures include independent affiliates and instruction of marksmanship trainers. An individual might be counted more than once if he or she attended more than one training activity. N/A indicates organizations did not have this feature; “not listed” indicates data were unavailable from the sources.

^a The NRA did not provide data but promotional material on the NRA website estimates that 1 million individuals receive training each year.

^b Estimated from NSSF, *First Shots*, Industry Intelligence Reports, Newtown, Conn., 2005–2011.

^c NSSA/NSCA did not provide data. NSSA/NSCA trains and certifies instructors who then independently train individuals. These figures were not included.

^d The American Legion did not provide data. Estimated ranges were calculated from press releases.

^e USAYESS provided only the average or a range of estimates in a typical year.

other organizations for which data are available. Notably, one of the NRA’s key activities is to train and certify instructors.²¹ NRA training certification is widely known in the marksmanship community, and we expect that the NRA trains more marksmanship and safety instructors, or at least comparable numbers of them.

²¹ NRA, undated-b.

Table 3.7
Number of Marksmanship and Firearm Safety Instructors and Officials Trained per Year, 2013–2017

Organization	2013	2014	2015	2016	2017
CMP	2,110	2,129	1,905	2,260	2,279
NRA ^a	Not listed	Not listed	Not listed	Not listed	Not listed
USA Shooting	45	45	50	50	55
NSSF	N/A	N/A	N/A	N/A	N/A
SSSF	200	250	250	230	196
NSSA/NSCA ^b	0–300	0–300	0–300	0–300	0–300
American Legion	N/A	N/A	N/A	N/A	N/A
NCAA	N/A	N/A	N/A	N/A	N/A
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A
USAYESS ^c	100	100	100	100	100
Youth Shooting Sports YSSA	N/A	N/A	N/A	N/A	N/A

SOURCES: Data supplied directly to the authors by CMP in August 2018; CMP, 2017b; NRA, “Become an Instructor,” webpage, undated-a; data supplied directly to the authors by USA Shooting in August 2018; data supplied directly to the authors by SSSF in July 2018; NSCA, “Minutes and Reports,” webpage, undated-b; data supplied directly to the authors by USAYESS in August 2018.

NOTE: N/A indicates organizations did not have this feature; “not listed” indicates data were unavailable from the sources.

^a The NRA did not provide data.

^b NSSA/NSCA did not provide data. Ranges were estimated from publicly available corporate documents.

^c USAYESS provided only the average or a range of estimates in a typical year.

Reduce Firearm Incidents

Table 3.8 summarizes the number of unintentional firearm incidents at trainings conducted or at competitions hosted or sanctioned by each organization and its affiliates during the study period. Data from CMP affiliates report “the number, if any, of shooting or gun[-]related accidents or incidents that occurred in your organization’s marksmanship activities and that resulted in physical injury.”²² Our questionnaire to other organizations stated that “an unintentional firearm incident is defined as any unintentional discharge of a firearm; firearm-related injury to self, other participants, or spectators.” Because the absolute number of incidents does not adjust for the volume of the activity taken by the organization, we calculate annual incident rates (per 1,000)

²² CMP, undated-e.

Table 3.8
Number of Unintentional Firearm Incidents at Trainings Conducted and Competitions Hosted by Each Organization per Year, 2013–2018

Organization	2013	2014	2015	2016	2017	2018	Annual Incident Rate (per 1,000)
CMP (including affiliates)	10	25	19	35	28	Not listed	0.012
NRA ^a	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
USA Shooting	0	0	0	0	0	0	0
NSSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SSSF	0	0	0	0	0	1	0.001
NSSA/NSCA ^b	0	0	0	0	0	0	0
American Legion ^a	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
NCAA ^c	0.8	0.8	0.8	0.8	0.8	0	0.026
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USAYESS	0	0	0	0	0	0	0
YSSA	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCES: Data supplied directly to the authors by CMP in August 2018; NRA, undated-c; data supplied directly to the authors by USA Shooting in August 2018; data supplied directly to the authors by NSSF in August 2018; data supplied directly to the authors by SSSF in July 2018; NSCA, undated-b; American Legion, undated-b; American Legion, 2012; data supplied directly to the authors by NCAA in August 2018; data supplied directly to the authors by USAYESS in August 2018.

NOTES: Figures provided for organizations include independent affiliates, if applicable. CMP defines *incidents* as “shooting or gun related accidents or incidents that occurred in your organization’s marksmanship activities and that resulted in physical injury.” Our questionnaire to other organizations stated: “An unintentional firearm incident is defined as any unintentional discharge of a firearm; firearm-related injury to self, other participants, or spectators.” N/A indicates organizations did not have this feature; “not listed” indicates data were unavailable from the sources.

^a Organization did not provide data.

^b NSSA/NSCA did not provide data. We reviewed publicly available corporate documents and did not discover any unintentional firearm incidents.

^c NCAA reported four incidents during years 2013–2017. Training volume was assumed to be 29 teams of eight members participating in an average of 135 sanctioned events each year.

as the ratios of total incidents to total competition participants and marksmanship training attendees (averaged over five years).

No known incidents from any of these organizations resulted in mortality stemming from participation in marksmanship training or competitions. This is consistent with broader national figures on deaths from unintentional firearm incidents.²³

²³ National Safety Council, undated-b.

As shown in Table 3.8, CMP and its affiliates reported an average of 23 incidents per year. These reported incidents occurred at events held by CMP's affiliates and not by the national organization. SSSF reported one incident in 2018 and the NCAA reported four incidents during 2013–2017 (none leading to injury). However, total competition and training volume of CMP and its affiliates is considerably greater than either, whereas the rifle shooting component of the NCAA consists of 29 teams of four to eight individuals, usually members competing in events. Hence, the incident rates (per 1,000) are 0.012, 0.001, 0.026 for CMP, SSSF, and NCAA, respectively.

Comparison of Conduct Core Function

Host or Sanction Competitions

Table 3.9 summarizes the number of participants or competitions hosted and sanctioned by all organizations. With the possible exception of the NRA, which did not provide data, CMP and its affiliates host or sanction competitions with higher participation volumes than the other organizations for both youth and adults. The NRA website claims it hosts or sanctions 11,000 shooting tournaments each year.²⁴ If we assume 20–30 participants in each tournament, that would place the organization on a similar scale as CMP.

On average, total participation in CMP events was 43,000 (averaged at least 5,500 youth) in events hosted by the national organization and 307,000 (averaged at least 42,000 youth) for events sanctioned at affiliates. Participation in CMP competitions grew by 20 percent (29 percent for youth) during the study period. However, other organizations have had varied growth. SSSF has grown by 72 percent and USA Shooting has remained relatively stable, which is indicative of their focus on elite athletes.

Comparison of Promote Core Function

Support Achievement with Scholarships and Awards, and Marksmanship Sports with Grants

Table 3.10 summarizes the total value of scholarships, awards, and grants disbursed by all the organizations each year. CMP provided, on average, \$650,000 a year of such assistance. This factored in approximately \$170,000 in scholarships, \$400,000 for marksmanship competition awards and prizes, and \$80,000 in grants to marksmanship organizations and ranges. Total amount of scholarships awarded has been stable over recent years, whereas competition disbursements increased by more than 50 percent, and sometimes more than doubled, for each successive year.

SSSF primarily awarded \$110,000 and \$65,000, on average, for prizes and scholarships, respectively. Moreover, both disbursements made by the organization increased significantly each year during the study period.

²⁴ NRA, "NRA Competitive Shooting," webpage, undated-d.

Table 3.9
Number of Participants in Marksmanship Competitions Hosted and Sanctioned per Year, 2013–2017

Organization	2013	2014	2015	2016	2017
CMP total (all participants)	285,968	314,607	287,255	305,042	343,426
CMP youth	34,569	48,395	34,163	46,125	44,680
NRA ^a	Not listed	Not listed	Not listed	Not listed	Not listed
USA Shooting	6,124	6,432	6,743	6,954	6,895
NSSF	N/A	N/A	N/A	N/A	N/A
SSSF (youth)	18,000	21,000	23,005	24,943	28,012
NSSA/NSCA ^b	6,700–15,000	6,700–15,000	6,700–15,000	6,700–15,000	6,700–15,000
American Legion ^c (youth)	2,000–6,000	2,000–6,000	2,000–6,000	2,000–6,000	2,000–6,000
NCAA ^d	N/A	N/A	18,850	18,850	18,850
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A
USAYESS ^e (youth)	10,800–17,600	10,800–17,600	10,800–17,600	10,800–17,600	10,800–17,600
YSSA	N/A	N/A	N/A	N/A	N/A

SOURCES: CMP, 2017b; data supplied directly to the authors by USA Shooting in August 2018; data supplied directly to the authors by SSSF in July 2018; NSCA, undated-b; American Legion, undated-b; American Legion, 2012; data supplied directly to the authors by NCAA in August 2018; data supplied directly to the authors by USAYESS in August 2018.

NOTES: Figures provided for organizations include independent affiliates, if applicable. An individual might be counted more than once if he or she participated in more than one competition. N/A indicates organizations did not have this feature; “not listed” indicates data were unavailable from the sources.

^a The NRA did not provide data.

^b NSSA/NSCA did not provide data. Figures provided are estimates.

^c The American Legion did not provide data. We provided estimates based on press releases.

^d Estimates for the NCAA were calculated assuming 29 collegiate teams and approximately 135 competitions with five team members per competition.

^e USAYESS provided only the average or a range of estimates in a typical year.

NSSA/NSCA disbursed \$45,000–\$65,000 during the study period in the form of scholarships, grants for state events, and enhancements at sanctioned competitions.

In the 2017–2018 academic year, schools of NCAA-sponsored teams disbursed an average of 3.6 scholarships across 31 Division I and Division II NCAA varsity riflery teams, averaging \$14,076 per scholarship and totaling \$1,570,882 in assistance, according to a scholarship statistics tracking service.²⁵ The NCAA, in response to our

²⁵ ScholarshipStats.com, undated.

Table 3.10
Total Value of Scholarships, Awards, and Grants Disbursed by Year, 2013–2017

Organization	2013	2014	2015	2016	2017
CMP	\$328,644	\$410,648	\$421,957	\$707,123	\$1,109,576
NRA Foundation ^a	Not listed	\$32,900,000	\$33,500,000	\$34,000,000	Not listed
USA Shooting	\$0	\$0	\$0	\$0	\$300,000
NSSF	\$1,320,500	\$811,475	\$736,191	\$705,929	Not listed
SSSF	\$126,697	\$126,045	\$139,000	\$66,500	\$233,091
NSSA/NSCA ^b	\$46,809	\$45,606	\$64,074	\$60,000	\$60,000
American Legion ^c	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
NCAA ^d	\$0	\$0	\$0	\$0	\$0
MidwayUSA Foundation	\$698,000	\$2,700,000	\$3,578,000	\$4,160,000	\$4,204,976
USAYESS ^e	\$10,000–15,000	\$10,000–15,000	\$10,000–15,000	\$10,000–15,000	\$10,000–15,000
YSSA	\$0	\$0	\$0	\$0	\$16,000

SOURCES: Data supplied directly to the authors by CMP in August 2018; CMP, 2017b; NRA, 2016; NRA, *NRA Foundation Annual Report 2015*, Fairfax, Va., 2015; NRA, *NRA Foundation Annual Report 2014*, Fairfax, Va., 2014; data supplied directly to the authors by USA Shooting in August 2018; data supplied directly to the authors by SSSF in July 2018; NSCA, undated-b; American Legion, “Postal Match,” webpage, undated-c; American Legion, undated-b; American Legion, 2012; ScholarshipStats.com, undated; data supplied directly to the authors by MidwayUSA in June 2018; data supplied directly to the authors by USAYESS in August 2018.

^a The NRA did not provide data. Figures obtained from available annual reports (2014–2016).

^b NSSA/NSCA did not provide data. We obtained estimates from their IRS Form 990 for 2013–2015 and from advisory council meetings and promotional materials posted on their website.

^c The American Legion did not provide data. The national office disburses awards and scholarships for the 3PAR National Championship. State associations and local posts might disburse additional awards.

^d NCAA schools can provide significant financial assistance to participants. In 2017–2018, approximately \$1.6 million in scholarships were disbursed (see ScholarshipStats.com, undated).

^e USAYESS provided only the average or a range of estimates in a typical year.

data request, stated that it did not provide financial assistance on a national level itself; rather, this was a determination made solely by its individual affiliated schools.

The MidwayUSA Foundation provided, on average, \$3 million each year in financial assistance in various forms. These primarily consisted of grant contributions to shooting sport team endowments (approximately \$2 million) each year and the provision of more than \$1 million in fundraising equipment to teams at no cost. The foundation also contributes to endowments of other marksmanship organizations.

The YSSA was temporarily inactive at the beginning of the study period but renewed operations in 2017 and 2018. To date, YSSA has provided \$1.5 million in equipment to 350 youth shooting programs across the nation, with 72,000 total participating youth. YSSA does not distribute cash, grants, loans, scholarships, or prizes.

The NRA Foundation, for reported years, contributed more in grants and scholarships in a single year than all other organizations combined in all years of the study period. Since 1992, the NRA has awarded \$335 million through more than 42,000 grants to various entities involved in shooting sports including youth groups (e.g., 4-H, Boy Scouts of America, JROTC teams, Future Farmers of America), clubs, ranges, and other organizations.²⁶

Observations

As previously noted, we were constrained in our evaluation because CMP lacks strategy-driven, performance-outcome measures. We received many output metrics—e.g., numbers of individuals completing instruction—but no information about the quality or impact of that instruction. This restricted and limited our assessment in determining direct benefits to either individual citizens or the Army. Despite these limitations, **the findings demonstrate that CMP is effective in its core functions to instruct, conduct, and promote.**

With respect to the instruct function, CMP and its affiliates annually train 80,000 individuals, about half of them youth, in marksmanship, but it relies heavily on independent affiliates to carry out this instruction. Independent affiliates can affiliate with other national organizations and pursue other activities beyond those related to CMP (though data were not available to compute the degree of overlap). Other organizations either do not train as many adults or youth (SSSF, American Legion) or delegate training to independent or affiliated instructors, clubs, or affiliates (the NRA, NSSA/NSCA, etc.). The NRA and its affiliates presumably train significantly more individuals than CMP, but we were unable to substantiate this claim. CMP's training materials, particularly the *Rifle Safety Manual*, provide extensive safety information but do not cover topics related to theft, youth accidents, and suicide that are discussed in training material of other organizations. If the objective of the instruct function is to promulgate quality marksmanship instruction to as many citizen-adults and citizen-youth, then this is a potential avenue of growth. CMP had no unintentional firearm incidents, including any unintentional discharge of a firearm or firearm-related injury to self, other participants, or spectators at programs conducted by the national office during the study period. However, its affiliates did report some incidents; this should be an area of focus and quality control. This applies equally to other organizations

²⁶ NRA, *NRA Foundation Annual Report 2016*, Fairfax, Va., 2016.

with independent affiliates, such as the NRA, but we received no data from the NRA to make a definitive comparison. We found a comparably low incidence rate among other organizations during the study period. In the larger national context, accidental firearm-related mortality is rare, but more-comprehensive and standardized safety reporting might be worthwhile for all organizations to consider from the perspectives of improving marksmanship skills and of public-health research.

A definitive leader in the conduct function, CMP and its affiliates draw more participants in competitions than all the other organizations for which we have data. Moreover, it has contributed to the governance thereof and innovated with the use of electronic targeting, ECIs, and competition tracker, which partnering organizations also use. We note that smaller, less-established organizations, such as SSSF and USAYESS, have grown more during the study period. Both organizations have a youth focus but offer categories of competition that CMP traditionally does not emphasize (shotgun, skeet, pistol, trap, and sporting clays). Although the NRA did not provide data, participation in NRA competitive events might be at a similar level.

When comparing the total amounts of financial assistance provided by organizations when executing the promote function, CMP ranks only fourth among the organizations studied, after the NRA Foundation, MidwayUSA, and NSSF. Although CMP does undertake some notable activities with promotional appeal—such as its relationship with the Army (e.g., the Ceremonial Rifle Program) and its products (M1 Garand, M1911/M1911A1) or its use of brand ambassadors, state association, and media—it is remarkable that CMP holds significantly more financial assets than these three organizations in the form of its core endowment fund. However, the NRA Foundation, MidwayUSA, and NSSF are all foundations and have greater annual revenues.

The comparison of organizations establishes that CMP has a significant national presence in marksmanship instruction, competition, and promotion. However, CMP and all these organizations operate in the wider context of target shooting, which involves approximately 50 million individuals across the United States and where many citizens are first exposed to shooting or trained instead by a friend or family member.²⁷ In this regard, none of the organizations featured have demonstrated that they have the resources or scale to interact with this large of a population with respect to marksmanship instruction.

The comparisons in this chapter have limitations. Foremost, three organizations did not provide data or corroborate participation figures. These omissions weaken the quantitative comparisons, particularly those between the NRA/NRA Foundation and CMP, which are thought to be of similar scale. Second, the selection criteria and identification procedures might have excluded a potential candidate organization because our selection criteria led to a review that consisted of only nonprofits. Third, these comparisons relied on the strength of a logic model that was strictly based on CMP's

²⁷ NSSF, 2016b; NSSF, 2015.

core functions—there might have been other notable and significant activities undertaken by organizations that we did not fully consider or value. Despite the limitations, the analysis is reliable for the purposes of this report.

Evaluating the Benefits and Costs of the Civilian Marksmanship Program to the U.S. Army

In this chapter, we summarize our analysis of the third task by evaluating the various benefits of CMP to the Army and comparing these benefits with the Army's financial and staffing resources provided to and for CMP. Our objective is to determine whether CMP provides net value to the Army; that is, do the Army's CMP-related benefits outweigh the Army's CMP-related costs? The focus on the relative costs and benefits to the Army—as opposed to DoD more generally, to the U.S. government, or even to society—is deliberate and reflects the specific language in the NDAA for FY 2018. We start this chapter with a preview of findings, then turn to a discussion of the general methodological approach we took to doing the benefit-cost analysis, and then describe the results of that analysis.

Our principal observation is that the benefits CMP provides to the Army outweigh the costs to the Army. This finding is robust under sensitivity analysis, although the precise benefit-cost ratio is sensitive to assumptions about what the Army would do if CMP did not exist. All CMP-related benefits to the Army are avoided costs: The Army does not receive any financial payments from CMP, other than reimbursement for some expenditures that the Army makes on CMP's behalf. The benefits, therefore, are not funds that the Army could reprogram for other purposes. There are some potential costs and benefits for which data are unavailable and that we cannot measure precisely. Additional data collection could allow more benefits and more costs to be quantified but it would be methodologically difficult even then to uniquely ascribe certain benefits and costs to CMP. Although there were no adverse events associated with CMP during the years we analyzed, we cannot rule out the possibility that these might occur in the future. If they do occur, and if the Army were to be adversely affected, the Army would incur higher costs as a result of CMP than the ones we are able to estimate.

General Methodological Approach

We began by examining the statutory functions of CMP, discussed in Chapter Two,¹ and reviewing the most recent MOU between the U.S. Army and CMP.² From these, we assembled an initial list of potential Army costs and benefits associated with each of these functions. Following this, we conducted semistructured interviews with Army and CMP SMEs and asked them to identify the costs and benefits they believed were associated with the program. Where SMEs mentioned costs and benefits that were not on our initial list, we added these to create a comprehensive list of potential Army costs and benefits. Many that were added as a result of the interviews are potential benefits to the Army that are not part of the explicit intent of CMP (e.g., CMP is not a soldier recruitment program).

Once we completed this list, we attempted to collect data for each potential cost and benefit.³ However, it became clear that the ability to quantitatively measure each category varied: At one extreme, the Army and CMP have very detailed information; at the other, data are completely unavailable. In this analysis then, we organize our analysis of Army costs and benefits around four conceptual categories. The first category concerns the process for dealing with surplus firearms and related materiel, encompassing their transportation, handling, storage, destruction, or transfer to CMP. This is the category for which we have the most-precise data. The second category covers Army labor and facilities associated with CMP; these are somewhat less precisely measured but still reasonably estimated. The third category covers CMP support to programs and activities that, in principle, help the Army. Finally, we examine costs and benefits to the Army that we cannot measure precisely and for which data are unavailable.

In each section of the results, we explain our methodological choices, rules-based analytic treatment of each considered cost and benefit, and data sources. Where warranted, we also provide sensitivity testing to assess how much our assumptions and analytic choices influence our overall assessment. We discuss two key considerations before turning to the results.

Identifying Counterfactuals to Identify Costs and Benefits

In assessing the costs and benefits associated with any program, it is necessary to identify the likely counterfactuals associated with the program: What benefits would have accrued to the Army, and what costs would it have incurred, if the program did not exist? In principle, this is straightforward; if benefits and costs occur only because of the program's existence, they should be included in the analysis. However, if benefits and costs would have been realized even in the program's absence, they should be excluded.

¹ 36 U.S.C. § 40722.

² U.S. Army and CPRPFS, 2016.

³ We provide specific detail on data sources in a later discussion.

For each of the categories discussed, we explicitly list the likely counterfactuals that inform our analysis. Note that there are clear counterfactuals for some cases but not all. For example, if the Army were to experience a positive public relations outcome as a result of a CMP event, that is a benefit that occurred only because of CMP's existence. However, if an individual who participates in CMP eventually enlists in the Army, it is not clear if that benefit should be included in the analysis, because we cannot determine whether the individual would have enlisted in the Army anyway. In the cases where the counterfactuals are uncertain, we assess (where quantitatively feasible) how much different assumptions about the counterfactuals affect our conclusions.

Time Horizon an Important Consideration

CMP-related programs and activities often incur costs before they can produce benefits to the Army. This time lag complicates analysis. We aim to fairly assess the relative size of Army costs and benefits, despite the fact that some costs occur in one year that produce benefits in future years. Because CMP is a mature and ongoing program (more than two decades old), our analysis should not be affected by start-up or close-out considerations, as long as we examine more-recent time horizons. Because various CMP-related activities have been ongoing (albeit incrementally changing) for decades, focusing on recent years should minimize any impact of a time lag between incurring costs and reaping benefits.

At the same time, costs and benefits can fluctuate from one year to the next—for example, because of changes in the number of firearms released to CMP, the intensity of other CMP-related activities, or investments made in the program. Thus, the period of time over which costs and benefits are measured can still significantly affect the analysis outcomes.

Our baseline analysis focuses on calendar years 2013–2017, the five most recent years for which we were able to collect reliable data. This choice balances several competing priorities. Using more than one year of data smooths out unusual annual fluctuations and creates an “average year.” This time frame also more closely reflects present-day CMP operations and thus does not overly weight CMP “startup” operations, which would typically have more costs and fewer benefits. Finally, using the most recent five years of data also emphasizes the current state of CMP's cost relationship with the Army rather than its earlier or historical relationship. This time horizon of the five most recent years allows us to compare an “average full year of Army costs” with an “average full year of Army benefits.” Nevertheless, to the extent that idiosyncratic costs and benefits occur in this period, our estimates will not necessarily be representative of what the Army should expect in the future.

All financial data in this chapter are presented in 2017 dollars, calculated using the Bureau of Labor Statistics' Consumer Price Index.⁴

⁴ Bureau of Labor Statistics, “Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. City Average, All Items, by Month,” spreadsheet, 2018.

Benefits and Costs Analysis Results

Here, we discuss the results from our analysis organized around the four categories of results: (1) transferring surplus firearms and other related materiel to CMP; (2) Army labor and facilities associated with CMP; (3) CMP support to programs and activities; and (4) costs and benefits we cannot measure.

Category 1: Transferring Surplus Firearms and Other Related Materiel to CMP

The U.S. Army stores and then transfers a variety of firearms and other related materiel (such as spare parts and ammunition) to CMP, which can then issue, loan, or sell this materiel in accordance with its statutory functions. In this section, we examine these transfers' costs and benefits to the Army.

We examine three different scenarios that we can neither prove nor disprove but all of which are arguably plausible. In each scenario, we conclude that the Army avoids more costs than it incurs by transferring surplus materiel to CMP. However, the magnitude of the difference depends on the specific assumptions made with each counterfactual. Our estimates of CMP-related costs to the Army associated with these transfers range from approximately \$60,000 to \$175,000, depending on the scenario. Our estimates of costs avoided by the Army as a result of these transfers range from approximately \$460,000 to \$4.4 million, depending on the scenario.

Before we examine the results of the three scenarios, we discuss two underlying considerations.

The Storage and Transfer Process Is Outlined in Statute

Federal statute outlines the process by which this materiel is stored and transferred; the signed MOU between the Army and CMP provides clarifying information.⁵ The Army agrees to transfer all surplus firearms and other related materiel specified in statute. In addition, if other countries hold firearms and other related materiel loaned or granted by the U.S. government that are determined to be “excess to the needs of such country,” the Army can agree to recover and transfer them to CMP at CMP’s expense.

Federal statute also prevents the Army from using funds to demilitarize or dispose of surplus firearms and other related materiel.⁶ When this materiel is transferred to CMP, the costs of preparing and transporting the materiel is almost always incurred by CMP, but if the materiel is stored at DLA facilities, the Army incurs the cost of releasing the materiel from these facilities.

Category 1 Data Sources

We use several data sources in our analysis of the Army costs and benefits associated with the transfer of surplus firearms and other related materiel. Data on the number

⁵ 36 U.S.C. § 40728; U.S. Army and CPRPFS, 2016.

⁶ See, for example, Public Law 115-141, Consolidated Appropriations Act, 2018, Section 8018, March 23, 2018.

of surplus firearms transferred to CMP and their transfer dates were provided to us by Headquarters, Department of the Army (HQDA) and CMP. Information on costs comes from HQDA, TACOM, CMP, and DLA. Information on ammunition transfers to CMP was received in HQDA interviews and correspondence with CMP. As we describe the following analyses, we provide specific references for the data used in each component of our calculations.

Three Possible Scenarios

Identifying the counterfactual associated with storage and transfer of surplus firearms and other related materiel requires us to specify what the Army would have done had CMP *not* taken possession of this materiel. There are three different scenarios that we can neither prove nor disprove but all of which are arguably plausible. Therefore, we discuss each scenario here and analyze how much our results vary with each assumption.

Scenario #1: The Army Would Not Have Been Allowed to Destroy Surplus Materiel

One possibility is that, *if CMP did not exist, the Army would still bear the cost of storing materiel that Congress precludes it from destroying*. Section 8018 of the Consolidated Appropriations Act of 2018 states that “none of the funds available to the Department of Defense may be used to demilitarize or dispose of M-1 Carbines, M-1 Garand rifles, M-14 rifles, .22 caliber rifles, .30 caliber rifles, or M1911 pistols or to demilitarize or destroy small arms ammunition or ammunition components that are not otherwise prohibited from commercial sale under Federal law, unless the small arms ammunition or ammunition components are certified by the Secretary of the Army or designee as unserviceable or unsafe for further use.”⁷ This section of the appropriations act does not refer to CMP, and it is possible that Congress would continue to preclude this materiel’s destruction if CMP did not exist.

The Army reports that its preference is to store surplus materiel at Defense Distribution Depot, Anniston Alabama (DDAA).⁸ Therefore, we also assume that, if CMP did not exist, and if the Army were not allowed to destroy surplus materiel, the Army would store it at DDAA. DLA charges the Army for materiel intake and for storage at its facilities.

When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, the only CMP-related costs to the Army are those it currently bears.

When the DLA releases surplus rifles from DDAA, it charges the Army for each rifle. When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, the CMP-related benefits to the Army are costs that the Army avoids. Specifically, when surplus firearms and other related materiel are released directly to

⁷ Public Law 115-141, Consolidated Appropriations Act, 2018, Sec. 8018, March 23, 2018.

⁸ TACOM official, e-mail correspondence with authors, July 15–21, 2018.

CMP,⁹ the Army avoids the cost of transporting the materiel to DDAA, the intake costs charged by DLA, and the storage costs that otherwise would be incurred as a result of the restriction on destroying the materiel.

Scenario #2: The Army Would Have Been Required to Destroy Surplus Materiel

Another possibility is that, *if CMP did not exist, the Army would have been required to destroy the surplus firearms and other related materiel*. It is noteworthy that appropriations bills in years prior to the NDAA for FY 1996 (which established the CPRPFS), precludes specific materials' destruction.¹⁰ Nevertheless, going forward, we cannot rule out this second scenario's possibility, and we include it for completeness.

Surplus materiel is destroyed at DDAA. Therefore, we assume that if CMP did not exist and if the Army were required to destroy surplus materiel, the Army would have it destroyed at DDAA. There are both intake and destruction charges at this facility.

When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, there would be CMP-related costs to the Army: When DLA releases surplus rifles from DDAA, it charges the Army for each rifle, and the Army also incurs costs of storing materiel until the point at which it is transferred to CMP.

When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, the CMP-related benefits to the Army are costs the Army would avoid. When materiel is released directly to CMP, the Army avoids the cost of transporting the materiel to DDAA, intake costs charged by DLA, and the costs the Army otherwise would have incurred to destroy the materiel.

Scenario #3: The Army Would Not Have Repatriated Excess Firearms

A third possibility, raised in discussions with HQDA officials,¹¹ is that, *if CMP did not exist, the Army would not have repatriated excess firearms*. The rationale for this scenario is that if CMP did not exist, the Army would not have exerted any effort in identifying foreign countries willing to return firearms that had been loaned to them.

When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, there are CMP-related costs to the Army: DLA charges the Army for each surplus rifle it releases from DDAA, and the Army incurs costs of storing materiel until it is transferred to CMP.

When the Army *does* transfer surplus materiel to CMP, if this scenario were the counterfactual, the CMP-related benefits to the Army are costs it avoids. When materiel is released directly to CMP, the Army avoids the cost of transporting the materiel to DDAA, intake costs charged by DLA, and the costs the Army would have incurred

⁹ CMP has its own DoDAAC that uniquely identifies it as an activity that has the authority to receive, have custody of, issue, and ship DoD assets.

¹⁰ See, for example, Public Law 101-165, Department of Defense Appropriations Act, 1990, Sec. 9080, November 21, 1989.

¹¹ Author discussion with HQDA officials, September 20, 2018.

to destroy the materiel. The difference between the second and third scenarios is that, in the latter, excess firearms located abroad are not considered “surplus materiel.”

Scenario 1: Estimating Army Costs and Benefits of Transferring Surplus Materiel to CMP, Assuming the Army Would Not Have Been Allowed to Destroy It

The first scenario we examine assumes that the Army would not have been allowed to destroy surplus firearms and ammunition. In this scenario, the Army incurs CMP-related costs when DLA releases surplus rifles from DDAA. The CMP-related benefits to the Army are costs it avoids: the cost of transporting the materiel to DDAA, intake costs charged by DLA, and the storage costs that the Army otherwise would have incurred as a result of the restriction on destroying the materiel. In the following subsections, we provide the details of this analysis, separately examining the transfer of excess rifles from foreign countries, the transfer of surplus rifles from U.S. locations, and the transfer of surplus information.

Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus materiel to CMP was just under \$4.4 million in avoided costs. Most of these avoided costs were from 2017, given the relatively large transfers of rifles from the Philippines and from Turkey, and a large transfer of ammunition, in that year. In contrast, we estimate that the average annual costs incurred by the Army were just under \$60,000.

Excess Rifles Transferred from Foreign Countries

The Philippines. Historically, the U.S. Army loaned 86,360 M1 rifles to the Philippine military under the Military Assistance Program. Under the terms of this loan, the Philippine military used and then stored these firearms at no cost to the U.S. Army. However, in response to a query by the U.S. Army initiated by Congress, the Philippine government expressed its desire to return the M1s. This transfer request was approved, and the U.S. Army began in 2017 to inventory and transport these firearms back to the United States, with the intent to transfer them to CMP.¹²

In preparation for this transfer, CMP incurred several costs. Assuming the U.S. Army would have been responsible for these costs if CMP did not exist, CMP’s costs are considered benefits to the Army.¹³ Furthermore, the Army incurred no known unreimbursed financial expenditures associated with this transfer. The costs and benefits to the Army of this transfer are summarized in Table 4.1.

As Table 4.1 implies, the M1s in the Philippines were infested with termites and tested positive for asbestos contamination; thus, CMP was responsible for roughly

¹² HQDA, *Recovery of Excess Rifles, Ammunition, and Parts Granted to Foreign Countries and Transfer to Certain Persons: Report to Congress*, Washington, D.C., June 2017.

¹³ We explore the scenario where the Army would *not* have repatriated excess firearms but would have given these governments permission to destroy them, in Scenario #3.

Table 4.1

If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from the Philippines to CMP

Year	Costs	Avoided Costs				Total Avoided Costs
		Termite and Asbestos Mitigation	Inventory	Transportation	Intake	
2017	\$0	\$1,014,050	\$1,368,397	\$3,323,314	\$2,529,938	\$8,235,699
2013–2017 total	\$0					\$8,235,699
Annual average 2013–2017	\$0					\$1,647,140

SOURCES: Calculations based on CPRPFS, 2018b; and DLA, 2017.

\$1 million for termite and asbestos mitigation.¹⁴ CMP was also responsible for approximately \$1.4 million in DLA-related costs associated with the inventory and packing of these firearms, and about \$3.3 million in transportation costs.

Finally, CMP helped the Army avoid DLA processing fees for intake of the M1s, which arrived in the United States in December 2017. Data provided by DLA show an intake charge of \$29.30 per firearm; this translates to about \$2.5 million in additional Army-avoided costs.¹⁵

In 2017, then, the total benefit to the Army of transferring M1s from the Philippines to CMP was about \$8.2 million in avoided costs. This was also the total benefit over the 2013–2017 period, implying an average annual benefit of nearly \$1.7 million.

Turkey. In 2017, 13,097 M1s previously loaned to the Turkish military were transferred to CMP.¹⁶ The treatment of costs and benefits to the Army is similar to our analysis of the case of the Philippines and is summarized in Table 4.2.

CMP was responsible for about \$34,000 in costs associated with the inventory and packing of these firearms and just under \$50,000 in transportation costs; these costs are dramatically lower than in the case of the Philippines because, according to TACOM, CMP was able to “catch a free boat ride with a redeploying unit.”¹⁷ CMP also helped the Army avoid DLA processing fees totaling approximately \$384,000 for

¹⁴ CPRPFS, 2018b.

¹⁵ DLA, “DLA Distribution Fiscal Year 2018 (FY18) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 28, 2017.

¹⁶ HQDA, 2017.

¹⁷ CPRPFS, 2018b.

Table 4.2
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from Turkey to CMP

Year	Costs	Avoided Costs				
		Inventory	Transportation	Intake	Storage	Total Avoided Costs
2017	\$0	\$34,314	\$49,942	\$383,742	\$12,740	\$480,738
2013–2017 total	\$0					\$480,738
Annual average over 2013–2017	\$0					\$96,148

SOURCES: Calculations based on CPRPF5, 2018b; and DLA, 2017.

intake of the M1s, which arrived in the United States at the end of October 2017.¹⁸ Finally, CMP helped the Army avoid two months of storage costs in 2017. Data provided by DLA show a monthly storage charge of \$1.015 per cubic foot per month; this translates to just under \$13,000 in additional, Army-avoided costs.¹⁹

In 2017, then, the benefit to the Army of transferring M1s from Turkey to CMP was about \$481,000 in avoided costs. This was also the total benefit over the 2013–2017 period, implying an average annual benefit of slightly more than \$96,000.

Austria and Japan. During 2013, the Army transferred 1,290 rifles from Austria and one from Japan to CMP. Our estimates of the costs and benefits to the Army of these transfers are summarized in Table 4.3. Although we did not receive accounting information related to these shipments (beyond the number of rifles transferred), we estimate inventory and shipping costs using the Philippines rifles’ repatriation.²⁰ Specifically, we applied the average inventory and transportation costs per M1 for the transfers from the Philippines, leading to estimates of about \$20,500 in inventory costs and just under \$50,000 in transportation costs.

We assume that these rifles were shipped directly to CMP, allowing the Army to avoid intake and storage costs at DDAA. The earliest data on DLA intake charges per firearm are for FY 2015, and we use this rate to estimate that the Army avoided approximately \$38,700 in intake costs in 2013.²¹ The earliest data on DLA storage costs per

¹⁸ DLA, 2017.

¹⁹ DLA, 2017. TACOM provided us with an estimate of approximately 0.48 cubic feet per M1 (TACOM official, e-mail correspondence with authors, July 3, 2018).

²⁰ Because of the unique circumstance associated with the transfer from Turkey, we rely solely on the Philippines transfer for our estimate of transportation and inventory costs.

²¹ DLA, “DLA Distribution Fiscal Year 2015 (FY15) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., March 17, 2014.

Table 4.3

If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Rifles from Austria and Japan to CMP

Year	Costs	Avoided Costs				Total Avoided Costs
		Inventory	Transportation	Intake	Storage	
2013	\$0	\$20,460	\$49,688	\$38,679	\$3,656	\$112,483
2014	\$0	\$0	\$0	\$0	\$4,871	\$4,871
2015	\$0	\$0	\$0	\$0	\$4,871	\$4,871
2016	\$0	\$0	\$0	\$0	\$5,519	\$5,519
2017	\$0	\$0	\$0	\$0	\$7,423	\$7,423
2013–2017 total	\$0					\$135,167
Annual average over 2013–2017	\$0					\$27,033

SOURCES: Calculations based on CPRPFS, 2018b; and DLA, 2013, 2014, 2015, 2016.

firearm are for FY 2014; we use this rate to estimate storage costs in FY 2013 and then use actual rates for FYs 2014 through 2017 to estimate storage costs for those years.²²

Over the 2013–2017 period, then, we estimate that the Army avoided about \$26,300 in storage costs and that the benefit to the Army of transferring rifles from Austria and Japan to CMP was about \$135,000 in avoided costs. This implies an average annual benefit of slightly more than \$27,000.

Summary. Table 4.4 aggregates the data from Tables 4.1–4.3 to provide the total Army costs and benefits of transferring rifles from foreign countries to CMP over the 2013–2017 period. Over this period, we estimate that the average annual benefit to the Army of transferring rifles from foreign countries to CMP was just under \$1.8 million in avoided costs. Most of these avoided costs were from 2017, given the relatively large transfers from the Philippines and from Turkey in that year.

Surplus Rifles Transferred from Diffuse Locations in the United States

Surplus rifles also have been transferred from various locations in the United States to CMP. Table 4.5 lists the number of surplus Army rifles transferred from all U.S. locations, with the exception of DDAA, to CMP since 1998.²³ Although the CPRPFS was

²² DLA, “DLA Distribution Fiscal Year 2014 (FY14) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., May 22, 2013; DLA, “DLA Distribution Fiscal Year 2016 (FY16) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 3, 2015; DLA, “DLA Distribution Fiscal Year 2017 (FY17) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 6, 2016.

²³ TACOM official, e-mail with authors, June 28, 2018.

Table 4.4
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid
Costs by Transferring Rifles from Foreign Countries to CMP

Year	Costs	Avoided Costs
2013	\$0	\$112,483
2014	\$0	\$4,871
2015	\$0	\$4,871
2016	\$0	\$5,519
2017	\$0	\$8,723,859
2013–2017 total	\$0	\$8,851,603
Annual average over 2013–2017	\$0	\$1,770,321

SOURCES: Calculations based on CPRPFS, 2018b; and DLA, 2013, 2014, 2015, 2016, 2017.

Table 4.5
Surplus Army Rifles Transferred from U.S. Locations, Excluding
DDAA, to CMP

Year Transferred to CMP	Number of Rifles
1998	524
1999	1,243
2000	574
2001	16,618
2002	7,749
2003	4,865
2004	2,281
2005	334
2006	693
2007	33,723
2008	79,355
2009	13,780
2010	58,441
2011	6,956
2012	17,725
2013	5,235
2014	14,720
2015	884
2016	7,756
2017	9,505

SOURCE: TACOM e-mail, June 28, 2018.

NOTE: Does not include transfers from services besides Army.

established in 1996, the data provided to us do not show any surplus rifles transferred to CMP before 1998.²⁴

By transferring these rifles to CMP, the Army avoided the costs of transport, intake, and storage at DDAA.²⁵ Furthermore, the Army incurred no unreimbursed financial expenditures associated with their actual transfer to CMP.

The costs and benefits to the Army of this transfer are summarized in Table 4.6. For estimates of transportation costs, we use the average cost per M1 of domestic transportation (i.e., transportation costs incurred after the rifles reached the United States) from the Philippines and Turkey transfers for each year from 2013–2017. Intake and storage costs are estimated with the same DLA data used to generate the estimates in Table 4.3.²⁶ Over the 2013–2017 period, we estimate that the benefit to the Army of transferring rifles from U.S. locations, excluding DDAA, to CMP was about \$6.8 million in avoided costs. This implies an average annual benefit of almost \$1.4 million.

Table 4.7 lists the number of surplus rifles transferred from DDAA to CMP since 1998; the data provided to us do not show any surplus rifles transferred to CMP from

Table 4.6
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP

Year	Costs	Avoided Costs			Total Avoided Costs
		Transportation	Intake	Storage	
2013	\$0	\$15,297	\$156,843	\$933,894	\$1,106,035
2014	\$0	\$43,014	\$441,017	\$971,500	\$1,455,532
2015	\$0	\$2,583	\$26,494	\$1,000,945	\$1,030,022
2016	\$0	\$22,644	\$227,866	\$1,132,196	\$1,382,727
2017	\$0	\$27,775	\$161,915	\$1,603,268	\$1,792,958
2013–2017 total	\$0				\$6,767,272
Annual average over 2013–2017	\$0				\$1,353,454

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; and DLA, 2013, 2014, 2015, 2016.

²⁴ If additional surplus rifles were transferred to CMP before 1998, we are underestimating the benefits to the Army when using the data provided to us.

²⁵ Storage costs for all rifles transferred in the 1998–2017 period are included in the analysis; transfer and intake costs apply only to rifles transferred in the 2013–2017 period.

²⁶ DLA, 2013; DLA, 2014; DLA, 2015; DLA, 2016.

Table 4.7
Surplus Rifles Transferred from DDAA to CMP

Year Transferred to CMP	Number of Rifles
1998	36,446
1999	15,589
2000	51,088
2001	22,688
2002	53,657
2003	37,736
2004	4,295
2005	14,058
2006	1,386
2007	7,173
2008	3,709
2009	4,814
2010	13,244
2011	4,967
2012	9,294
2013	4,832
2014	9,212
2015	4,564
2016	197
2017	431

SOURCE: TACOM e-mail, June 28, 2018.

NOTE: Does not include transfers from services besides Army.

DDAA before 1998.²⁷ These rifles had already been shipped to the Army's central storage facility before transfer to CMP, so there are no cost savings associated with their transportation and intake. However, there are cost savings associated with no longer storing these rifles at DDAA. In addition, there are some unreimbursed Army costs associated with releasing these surplus rifles from storage.²⁸ Issue and storage costs are estimated with the same DLA data used to generate the estimates in previous tables.²⁹

²⁷ Again, if additional surplus rifles were transferred to CMP before this date, we are underestimating the benefits to the Army when using the data provided to us.

²⁸ TACOM personnel, telephone interviews with author, May 10, 2018, and September 6, 2018; DLA Disposition personnel, interview with author, July 19, 2018.

²⁹ DLA, 2013; DLA, 2014; DLA, 2015; DLA, 2016. The earliest data on DLA issue charges per firearm are for FY 2015, and we use this rate to estimate the Army's costs in 2013 and 2014.

The costs and benefits to the Army of these transfers are summarized in Table 4.8.³⁰ On average, releasing surplus rifles from DDAA to CMP cost the Army about \$60,000 per year over the 2013–2017 period and provided more than \$1.2 million per year in avoided costs during the same period. The costs avoided by the Army are clearly larger than the costs incurred to transfer these rifles.

Table 4.9 aggregates the data from Tables 4.6 and 4.8 to provide the total Army costs and benefits of transferring rifles from U.S. locations to CMP over the 2013–2017 period. Consistent with these two prior tables, the costs avoided by the Army are larger than the costs it incurred to transfer rifles from U.S. locations to CMP.

Transfer of Surplus Ammunition

According to an Army SME, the Army shipped 1 million rounds to CMP in 2017.³¹ CMP reports that it currently has slightly more than 2 million rounds supplied by the Army but could not provide data on receipt of surplus ammunition by year.³² Therefore, our estimates of the Army costs and benefits associated with transferring surplus ammunition to CMP are based on assumptions about when these rounds were transferred.³³

First, we assume the Army transferred these other 1 million rounds of surplus ammunition to CMP during the 2013–2017 period. Second, for simplicity, we assume

Table 4.8
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Rifles from DDAA to CMP

Year	Costs	Avoided Costs
2013	\$74,708	\$1,068,609
2014	\$142,428	\$1,103,648
2015	\$70,643	\$1,118,073
2016	\$3,061	\$1,149,351
2017	\$7,280	\$1,712,066
2013–2017 total	\$298,120	\$6,151,746
Annual average over 2013–2017	\$59,624	\$1,230,349

SOURCES: CPRPFS, 2018b; TACOM e-mail, June 28, 2018; and DLA, 2013, 2014, 2015, 2016.

³⁰ For surplus firearms transferred to CMP before 2013, we exclude costs incurred prior to 2013, but include the benefits incurred over the 2013–2017 period.

³¹ Army SME, telephone conversation with author, February 16, 2018.

³² CMP official, e-mail with authors, August 29, 2018.

³³ As Table 4.10 shows, the costs associated with surplus ammunition are small relative to the other dollar amounts presented throughout this chapter. Therefore, our overall conclusions are not likely to be sensitive to this assumption.

Table 4.9
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Rifles from U.S. Locations to CMP

Year	Costs	Avoided Costs
2013	\$74,708	\$2,174,644
2014	\$142,428	\$2,559,179
2015	\$70,643	\$2,148,094
2016	\$3,061	\$2,532,077
2017	\$7,280	\$3,505,024
2013–2017 total	\$298,120	\$12,919,018
Annual average over 2013–2017	\$59,624	\$2,583,804

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; and DLA, 2013, 2014, 2015, 2016.

that they were transferred during 2013–2016 in four equal installments.³⁴ If CMP received additional rounds beyond what is currently in inventory over this period, our estimates understate the benefits to the Army of transferring surplus ammunition.

For its current inventory, CMP provided documentation by type and by caliber. By comparing these descriptions and counts with weight estimates from HQDA, we estimated that the weight of the current inventory is approximately 177 tons.³⁵ Furthermore, DoD estimates the average cost per ton of storing ammunition to be \$43.44 per ton in 2017 dollars.³⁶

The costs and benefits to the Army of transferring this surplus ammunition to CMP are summarized in Table 4.10. We estimate that transferring surplus ammunition to CMP over the 2013–2017 period saved the Army approximately \$17,000 in storage costs, implying an average annual benefit of just under \$3,500 in avoided costs.

Summary

Table 4.11 aggregates the data from Tables 4.4, 4.9, and 4.10 to provide our estimates of the Army costs and benefits of transferring surplus firearms and ammunition to CMP over the 2013–2017 period. Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus materiel to CMP was slightly less

³⁴ The Army noted that it shipped 1 million rounds in 2017, so we assume that the other ammunition was shipped prior to 2017.

³⁵ HQDA, *Army Ammunition Data Sheets: Small Caliber Ammunition FSC 1305*, Washington, D.C., Technical Manual 43-0001-27, April 1994.

³⁶ GAO, *Defense Logistics: Improved Data and Information Sharing Could Aid in DOD’s Management of Ammunition Categorized for Disposal*, Washington, D.C., GAO-15-538, July 2015.

Table 4.10
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Ammunition to CMP

Year	Costs	Avoided Costs
2013	\$0	\$957
2014	\$0	\$1,913
2015	\$0	\$2,870
2016	\$0	\$3,826
2017	\$0	\$7,653
2013–2017 total	\$0	\$17,219
Annual average over 2013–2017	\$0	\$3,444

SOURCES: Calculations based on CMP email, August 29, 2018, HQDA, 1994; and GAO, 2015.

Table 4.11
If Not Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP

Year	Costs	Avoided Costs
2013	\$74,708	\$2,288,083
2014	\$142,428	\$2,565,964
2015	\$70,643	\$2,155,835
2016	\$3,061	\$2,541,423
2017	\$7,280	\$12,236,536
2013–2017 total	\$298,120	\$21,787,841
Annual average over 2013–2017	\$59,624	\$4,357,568

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; DLA, 2013, 2014, 2015, 2016, 2017; CMP email, August 29, 2018; HQDA, 1994; and GAO, 2015.

than \$4.4 million in avoided costs. Most of these avoided costs were from 2017 because of relatively large transfers of rifles from the Philippines and from Turkey and a large transfer of ammunition in that year. In contrast, we estimate that the average annual costs incurred by the Army were slightly less than \$60,000.

Scenario 2: Estimating Army Costs and Benefits of Transferring Surplus Materiel to CMP, Assuming the Army Would Have Been Required to Destroy It

The second scenario we examine assumes that the Army would have been required to destroy surplus firearms and ammunition. In this scenario, the Army incurs CMP-

related costs when DLA releases surplus rifles from DDAA and incurs costs of storing materiel until the point at which it is transferred to CMP. The CMP-related benefits to the Army are costs that the Army avoids: the cost of transporting the materiel to DDAA, intake costs charged by DLA, and the costs the Army would have incurred to destroy the materiel.

Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus materiel to CMP was \$2.3 million in avoided costs. In contrast, we estimate that the average annual costs incurred by the Army were about \$175,000.

Transfer of Surplus Rifles

To illustrate how the costs and benefits change with this alternative scenario, we present our estimates of the Army costs and benefits associated with transferring surplus rifles from U.S. locations, excluding DDAA. Over the 2013–2017 period, 38,100 rifles were transferred to CMP from these locations.³⁷ If the Army would have been required to destroy them, it would have transferred these rifles to DDAA and paid DLA to shred the items at its disposal facility.³⁸ Therefore, it would have incurred transportation costs and intake costs at DDAA, similar to the first scenario. However, there is an additional benefit not present in that scenario: destruction costs avoided. The Army estimates that it paid, on average, \$1.85 to shred each firearm.³⁹ For simplicity, we multiply this average cost by the number of firearms in each year and assume that the Army would have destroyed these firearms in the year in which they were actually transferred to CMP.⁴⁰

In this second scenario, there are costs to the Army. Because the Army would have destroyed these rifles, the Army incurs storage costs until it is able to transfer them to CMP. We use DLA storage rates as a proxy for the cost associated with the Army's storage of these firearms and calculate the costs of storage from the beginning of 2013 until the rifles were actually transferred. These costs decline over the 2013–2017 period as the stock of these rifles headed for CMP declines.

Table 4.12 presents our estimates of the Army costs and benefits associated with transferring surplus rifles from U.S. locations, excluding DDAA in this second scenario; for ease of reference, Table 4.13 replicates the data presented in Table 4.6. A comparison between the two tables shows two key differences. First, the average

³⁷ See Table 4.5.

³⁸ HQDA, *Repurposing and Reuse of Surplus Army Firearms: Report to Congress*, Washington, D.C., May 2018.

³⁹ HQDA, 2018. It is not clear what is meant by “on average”—whether it means an average across types of firearm, an average over time, or something else.

⁴⁰ TACOM official, telephone conversations with author, May 10, 2018, and September 6, 2018. TACOM reports that when rifles are ready for release by the Army, they are immediately transferred to CMP. Similarly, then, if the Army were otherwise required to destroy the firearms, we assume that it would do so when rifles are ready for release rather than incur unnecessary additional storage costs.

Table 4.12

If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP

Year	Costs	Avoided Costs			
		Transportation	Intake	Destruction	Total Avoided Costs
2013	\$139,009	\$15,297	\$156,843	\$9,685	\$181,825
2014	\$103,841	\$43,014	\$441,017	\$27,232	\$511,263
2015	\$69,447	\$2,583	\$26,494	\$1,635	\$30,712
2016	\$58,094	\$22,664	\$227,866	\$14,349	\$264,879
2017	\$31,228	\$27,775	\$161,915	\$17,584	\$207,275
2013–2017 total	\$401,619				\$1,195,954
Annual average over 2013–2017	\$80,324				\$239,191

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; HQDA, 2018; and DLA, 2013, 2014, 2015, 2016.

Table 4.13

If Not Allowed to Destroy Surplus Materiel, Army Would Avoid Costs by Transferring Surplus Army Rifles from U.S. Locations, Excluding DDAA, to CMP

Year	Costs	Avoided Costs			
		Transportation	Intake	Storage	Total Avoided Costs
2013	\$0	\$15,297	\$156,843	\$933,894	\$1,106,035
2014	\$0	\$43,014	\$441,017	\$971,500	\$1,455,532
2015	\$0	\$2,583	\$26,494	\$1,000,945	\$1,030,022
2016	\$0	\$22,644	\$227,866	\$1,132,196	\$1,382,727
2017	\$0	\$27,775	\$161,915	\$1,603,268	\$1,792,958
2013–2017 total	\$0				\$6,767,272
Annual average over 2013–2017	\$0				\$1,353,454

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; DLA, 2013, 2014, 2015, 2016.

NOTE: This table replicates Table 4.6.

annual cost avoidance by the Army is lower in this second scenario. Second, the average annual cost to the Army is non-zero, unlike in the first scenario. Nevertheless, it is worth noting that the Army still avoids more costs than it incurs in this example.

We performed comparable analyses for the transfer of excess rifles from foreign countries and for the transfer of surplus rifles from DDAA. For brevity, we do not present these individual calculations; instead, we provide a summary of the average annual Army costs and benefits of transferring rifles to CMP in Table 4.14 in this second scenario. Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus rifles to CMP was slightly less than \$2.2 million in avoided costs. Most of these avoided costs stemmed from the relatively large transfers of rifles from the Philippines and from Turkey in 2017. In contrast, we estimate that the average annual costs incurred by the Army were slightly more than \$100,000.

Storage of M1911/M1911A1 Pistols

In 2018, the Army transferred 8,000 M1911/M1911A1 pistols to CMP. Because this transfer occurred outside the 2013–2017 period, it was not included in our analysis of the first scenario. However, in the second scenario, the Army would have been required to destroy these firearms. Data provided to us by TACOM show that, on average, approximately 95,800 M1911/M1911A1s were being stored over the 2013–2017 period, with modest variation from one year to the next.⁴¹ TACOM also provided estimates of storage costs for each year, which we have converted into 2017 dollars. We also assume that the inventory on hand in 2013 would have been destroyed before 2013. However, M1911/M1911A1s arriving at DDAA during 2014–2017 would have been destroyed as they arrived, and these avoided costs are included as Army benefits.

Table 4.14
If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Rifles to CMP

Year	Costs	Avoided Costs
2013	\$202,412	\$473,683
2014	\$133,504	\$855,651
2015	\$80,697	\$201,336
2016	\$60,578	\$272,293
2017	\$33,395	\$9,115,801
2013–2017 total	\$510,587	\$10,918,764
Annual average over 2013–2017	\$102,117	\$2,183,753

SOURCES: Calculations based on CPRPFS, 2018b; TACOM e-mail, June 28, 2018; DLA, 2013, 2014, 2015, 2016, 2017; CMP email, August 29, 2018; HQDA, 1994; HQDA, 2018; and GAO, 2015.

⁴¹ TACOM official, e-mail to authors, June 20, 2018. We do not have 2012 data, so we are not able to estimate the net change in inventory during 2013. We therefore assume it is zero, a likely reasonable assumption because the inventory changed by only 13 M1911/M1911A1s from 2013 to 2014.

Table 4.15 presents our estimates of the Army costs and benefits associated with storing M1911/M1911A1s for CMP. We estimate the average annual cost to the Army of this storage to be slightly less than \$70,000. In contrast, the average annual cost avoidance by the Army is less than \$800, because the number of M1911/M1911A1s that would have been destroyed during this period is low.

Transfer of Surplus Ammunition

Table 4.16 shows our estimates of the costs and benefits to the Army of transferring surplus ammunition to CMP, in the scenario where the Army would have been required to destroy this materiel. The Army incurs storage costs until it is able to transfer the materiel to CMP. As Table 4.16 shows, these costs decline over the 2013–2017 period as the inventory of surplus ammunition declines. Furthermore, DoD estimates the average cost of destroying conventional ammunition to be \$2,068 per ton in 2017 dollars.⁴² We applied this estimate to the weight of the ammunition transferred each year. By actually transferring it to CMP, the Army is able to avoid the costs of destroying this materiel.

As Table 4.16 shows, the Army avoids more costs than it incurs by transferring surplus ammunition to CMP in this scenario. We estimate that, on average, the Army incurs about \$4,000 in storage costs per year but avoids more than \$70,000 per year in destruction costs.

Table 4.15
If Allowed to Destroy Surplus Materiel, Army Would Incur More Costs Than It Would Avoid by Storing M1911/M1911A1s for CMP

Year	Costs	Avoided Costs
2013	\$60,855	\$0
2014	\$60,957	\$151
2015	\$61,049	\$368
2016	\$68,345	\$457
2017	\$92,856	\$2,713
2013–2017 total	\$344,062	\$3,689
Annual average over 2013–2017	\$68,812	\$738

SOURCES: Calculations based on TACOM email, June 20, 2018, DLA, 2013, 2014, 2015, 2016, 2017; and HQDA, 2018.

⁴² GAO, 2015.

Table 4.16
If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Ammunition to CMP

Year	Costs	Avoided Costs
2013	\$6,696	\$45,553
2014	\$5,740	\$45,553
2015	\$4,783	\$45,553
2016	\$3,826	\$45,553
2017	\$0	\$182,211
2013–2017 total	\$21,045	\$364,423
Annual average over 2013–2017	\$4,209	\$72,885

SOURCES: Calculations based on CPRPFS, 2018b; HQDA, 1994; and GAO, 2015.

Summary

Table 4.17 aggregates the data from Tables 4.14–4.16 to provide our estimates of the Army costs and benefits of transferring surplus firearms and ammunition to CMP over the 2013–2017 period in the second scenario, in which the Army would have been required to destroy them. Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus materiel to CMP was slightly less than \$2.3 million in avoided costs. Most of these avoided costs were from relatively large transfers of rifles from the Philippines and from Turkey and a large transfer of ammunition in 2017. In contrast, we estimate that the average annual costs incurred by the Army were about \$175,000.

Table 4.17
If Allowed to Destroy Surplus Materiel, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP

Year	Costs	Avoided Costs
2013	\$269,963	\$519,236
2014	\$200,201	\$901,355
2015	\$146,529	\$247,256
2016	\$132,750	\$318,304
2017	\$126,251	\$9,300,725
2013–2017 total	\$875,694	\$11,286,875
Annual average over 2013–2017	\$175,139	\$2,257,375

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016, 2017; CPRPFS, 2018b; HQDA, 1994; HQDA, 2018; and GAO, 2015.

Scenario 3: Estimating Army Costs and Benefits of Transferring Surplus Materiel to CMP, Assuming the Army Would Not Have Repatriated Excess Firearms

The third scenario we examine assumes that the Army would not have repatriated excess firearms. For brevity, we present this scenario as an extension of the previous scenario, in which the Army would have been required to destroy surplus materiel in its possession.⁴³ In this third scenario, the Army incurs CMP-related costs when DLA releases surplus rifles from DDAA and incurs costs of storing materiel until it is transferred to CMP. The CMP-related benefits to the Army are costs it avoids: costs of transporting and intake and the costs the Army would have incurred to destroy the materiel. The only difference between this scenario and the second one is that excess firearms are not considered part of the materiel.

Table 4.18 provides our estimates of the Army costs and benefits of transferring surplus firearms and ammunition to CMP over the 2013–2017 period in the scenario in which the Army would not have otherwise repatriated excess firearms. Over the 2013–2017 period, we estimate that the average annual benefit to the Army of transferring surplus materiel to CMP was slightly less than \$460,000 in avoided costs. In contrast, we estimate that the average annual costs incurred by the Army were about \$175,000.

In Each Scenario, the Army Avoids More Costs Than It Incurs by Transferring Surplus Firearms and Ammunition to CMP

Table 4.19 reproduces the annual average estimates from Tables 4.11, 4.17, and 4.18 to compare the costs and benefits to the Army of transferring surplus firearms and ammunition to CMP in each scenario. The primary insight is that, in each scenario, the Army avoids more costs than it incurs by transferring surplus materiel to CMP.

Table 4.18
If Not Repatriating Excess Firearms, Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP

Year	Costs	Avoided Costs
2013	\$269,963	\$408,021
2014	\$200,201	\$901,355
2015	\$146,529	\$247,256
2016	\$132,750	\$318,304
2017	\$126,251	\$413,059
2013–2017 total	\$875,694	\$2,287,954
Annual average over 2013–2017	\$175,139	\$457,599

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016; CPRPF5, 2018b; HQDA, 1994; HQDA, 2018; and GAO, 2015.

⁴³ We could also present this scenario as an extension of the first scenario, in which the Army would not have been allowed to destroy surplus materiel. Because our intent is to show how much the cost-benefit analysis changes with each scenario, we present the one that shows the greatest change.

Table 4.19
The Army Would Avoid More Costs Than It Would Incur by Transferring Surplus Materiel to CMP for Each Scenario

Scenario	Costs	Avoided Costs
1. The Army Otherwise Would Not Have Been Allowed to Destroy Surplus Materiel	\$59,624	\$4,357,568
2. The Army Otherwise Would Have Been Required to Destroy Surplus Materiel	\$175,139	\$2,257,375
3. The Army Otherwise Would Not Have Repatriated Excess Firearms	\$175,139	\$457,599

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016, 2017; CPRPFS, 2018b; HQDA, 1994; HQDA, 2018; and GAO, 2015.

The magnitude of the difference, however, depends on the specific assumptions made with each counterfactual.

Category 2: Army Labor and Facilities Associated with CMP

Since 1996, when CMP took its current form, Army labor and facilities have been used on and for CMP-related activities. In this section, we estimate the Army costs and benefits of providing these resources, the second of the four categories we cover in this chapter. These analyses imply an average annual cost to the Army of slightly less than \$95,000, and an average annual cost avoidance of about \$70,000.

The Army’s Responsibilities Are Outlined in an MOU

The MOU between the Army and CMP outlines the Army’s responsibilities associated with these resources.⁴⁴ For example, the Army is required to provide “Department of Defense facilities that held the National Matches before 10 February 1996.” CMP is required to reimburse the Army for any “incremental direct costs” associated with their use of these facilities. The Army is also required to provide, without reimbursement, Army National Guard (ARNG) and U.S. Army Reserve (USAR) members to support these competitions. TACOM is responsible for providing logistical support to CMP’s operations, and CMP is required to reimburse the Army for both the administrative and personnel costs associated with this support.

Category 2 Counterfactuals Clearer Than Those for Surplus Materiel

Identifying the counterfactual associated with providing labor is relatively straightforward: If CMP did not exist, the Army would not have devoted time to supporting CMP. There are both costs and benefits to the Army of providing labor for CMP-related activities:

- The cost to the Army is the “opportunity cost” of spending time supporting CMP-related activities. It is unlikely that Army end strength or the size of the

⁴⁴ U.S. Army and CPRPFS, 2016.

civilian labor force would have been lower, however; these individuals would have been engaged in other Army functions.

- The benefits to the Army are avoided costs when CMP reimburses the Army for labor that also performs Army-related (not just CMP-related) functions.

We separate the facilities provided to CMP into two types. First is the land and offices used by CMP at Camp Perry, Ohio. Because the Army was not using these facilities before CMP began to use them and because the buildings themselves were in disrepair, we assume that *the Army would have continued to not use them if CMP did not exist*. The second type consists of facilities that are jointly used by the Army and CMP at Camp Perry and to which CMP made renovations and improvements. Because the Army continued to use these facilities, we assume that *the Army would have made the renovations and improvements if CMP did not exist*.

The Army incurs no costs in providing facilities for CMP-related activities, but there are costs avoided by the Army:

- There is no opportunity cost associated with providing land and offices to CMP because the Army was not using them.
- The benefits to the Army are costs avoided when CMP makes renovations and improvements to facilities that the Army uses.

Category 2 Data Sources

We use multiple data sources in our analysis of the Army labor and facilities associated with CMP. Our data on salaries come from the U.S. Office of Personnel Management.⁴⁵ To estimate the Army labor costs of providing oversight and congressional reporting on CMP, we combined these data on salaries with information from DoD's Cost Guidance Portal.⁴⁶ We relied on data from CMP budget analysts to estimate the costs and benefits of infrastructure improvements to Camp Perry.

Estimating Army Costs and Benefits of Providing Labor for CMP-Related Activities

A small number of Army civilian personnel spend a portion of their time on work related to CMP. Within HQDA, this includes a GS-14, who estimates devoting roughly 50 percent of his time to CMP-related activities. These activities include attending CMP board meetings, reporting to Congress on CMP activities, negotiating and documenting the Army's MOU with CMP, and doing other CMP-related work. This individual also estimates that his supervisor (a Senior Executive Service [SES] Level III) spends approximately 1 percent of his time on CMP-related activities. We did not independently verify these estimates; to the extent that they are under- or

⁴⁵ U.S. Office of Personnel Management, "Pay & Leave: Salaries & Wages," webpage, 2018.

⁴⁶ DoD, Cost Guidance Portal, "FY 2015 Military, Civilian, and SES Manpower Rates for the Cost Guidance Portal," undated. Not available to the general public.

overestimates, we are similarly under- or overestimating the Army costs of providing labor for CMP-related activities. We also do not have any information on travel-related expenses associated with these activities. This lack of data leads to an underestimate of the cost to the Army.

To estimate the Army's CMP-related costs of these individuals, we first assume that the reported percentages of their time remained constant over the 2013–2017 period. Differences in cost estimates by year, then, are the result of inflation-adjusted differences in salaries. We have added a load factor for training and benefits.⁴⁷

The Army is also required to provide USAR and ARNG members to support CMP competitions. However, we assume that the Army would continue to support the National Matches, which have taken place since 1903, if CMP did not exist. Therefore, there are no additional Army labor costs incurred with CMP's involvement in these competitions. For the same reasons, Army labor dedicated to interfacing with CMP to support the Ceremonial Rifle Program does not count as an Army cost for our analysis.

The Army also receives some labor-related financial benefit from its relationship with CMP because CMP reimburses the Army for one GS-13's salary. According to managers running the Ceremonial Rifle Program, this GS-13 devotes approximately 20 percent of his time to interfacing with CMP on work related to the Ceremonial Rifle Program.⁴⁸ This counts as an avoided cost because the Army uses CMP funds to perform functions related to the Ceremonial Rifle Program, which are ultimately for the Army (not for CMP).

Table 4.20 summarizes the Army costs and benefits of providing labor for CMP-related activities. Not surprisingly, the cost to the Army of labor exceeds the benefits. This is driven by the higher pay grades of the individuals working on CMP-related activities and the percentage of time spent on these activities compared with the individual being reimbursed by CMP while working on Army-related activities.

Estimating Army Costs and Benefits of Providing Facilities for CMP-Related Activities

CMP uses some Army facilities at Camp Perry, Ohio, for office space, sale of rifles and related products in a store, and competitions.⁴⁹ According to a Camp Perry representa-

⁴⁷ DoD, undated. Not available to the general public. This document shows amounts above base salaries for GS-14, a 39-percent load factor to account for benefits and training. The benefits load factors specifically mentioned in this document include OC11, OC12, and OC13 Load Factors provided by the U.S. Office of the Secretary of Defense, Cost Assessment and Program Evaluation. These same load factors and training costs also add 39 percent to GS-13 base salaries and 47 percent to the base SES Level 3 salary. We apply these percentages to create loaded labor costs for years 2013–2017, then we convert all loaded labor estimates into 2017 dollars.

⁴⁸ Again, we did not independently verify this estimate.

⁴⁹ CMP also provides details of CMP's financial relationships with Camp Perry. CMP official, e-mail with authors, April 12, 2018. According to ARNG, "CMP does all the improvements on inside. Major capital improvements (roof, HVAC, exterior) are the Army National Guard's responsibility." ARNG official, telephone interview with authors, August 23, 2018.

Table 4.20
The Army Incurs More Costs Than It Avoids by Providing Labor for
CMP-Related Activities

Year	Costs	Avoided Costs
2013	\$92,492	\$28,003
2014	\$93,415	\$28,283
2015	\$94,353	\$28,566
2016	\$95,716	\$28,924
2017	\$98,423	\$29,513
2013–2017 total	\$474,400	\$143,289
Annual average over 2013–2017	\$94,880	\$28,658

SOURCES: OPM, 2018; DoD, undated.

tive, the Army was not using these facilities before CMP began to use them, and the buildings themselves were in disrepair. The representative stated that it is unlikely the ARNG would have used the office building that CMP refurbished.⁵⁰ For this reason, we conclude that the Army would have continued to not use these facilities and that the facilities likely would not have been used by another tenant. In other words, there are no Army opportunity costs associated with providing these facilities to CMP.

CMP invested resources to improve these facilities over the 2013–2017 period, such as paving and resealing multiple parking lots and remodeling its headquarters building.⁵¹ However, because these facilities were being used by CMP over this period, the 2013–2017 benefits of these improvements accrued to CMP and not the Army.

CMP also uses some Army facilities at Camp Perry, Ohio, for the National Matches, which include the SAFS and a series of competitions. These ranges are not exclusively used by CMP; according to a Camp Perry representative, the Army also uses these facilities.⁵² Therefore, CMP improvements to these facilities over the 2013–2017 period did result in benefits to the Army. Specifically, over this period, CMP invested \$200,000 in 2016 in the Petrarca Range, adding electronic targets and updating the electrical system.⁵³

⁵⁰ ARNG telephone interview, August 23, 2018.

⁵¹ CMP e-mail, April 12, 2018.

⁵² ARNG telephone interview, August 23, 2018. For example, the representative stated that, “CMP Improvement to ranges and facilities have been great. Petrarca Range specifically is fantastic. CMP has offered the electronic targets to help soldiers with their marksmanship issues and that really helps us with fundamentals and improved training you can’t get anywhere else in the Army.”

⁵³ CMP e-mail, April 12, 2018. There are two ways to view this conceptually. One could assume that the Army would have otherwise made the same investment to upgrade the Range. Alternatively, the Army benefits from the CMP investment because it continues to use the Range.

Table 4.21 summarizes the Army costs and benefits related to sharing facilities with CMP. The Army incurs no costs by providing these facilities and avoids costs associated with the improvements that CMP makes to facilities that the Army continues to use. Over the 2013–2017 period, only one improvement to shared facilities was made, implying an average annual cost avoidance of slightly less than \$41,000.

Summary

Table 4.22 aggregates the data from Tables 4.20 and 4.21 to provide the total Army costs and benefits of providing labor and facilities for CMP-related activities over the

Table 4.21
The Army Avoids Costs by Providing Facilities for CMP-Related Activities

Year	Costs	Avoided Costs
2013	\$0	\$0
2014	\$0	\$0
2015	\$0	\$0
2016	\$0	\$204,261
2017	\$0	\$0
2013–2017 total	\$0	\$204,261
Annual average over 2013–2017	\$0	\$40,852

SOURCES: CMP e-mail, April 12, 2018; and ARNG telephone interview, August 23, 2018.

Table 4.22
The Army Incurs More Costs Than It Avoids by Providing Labor and Facilities for CMP-Related Activities

Year	Costs	Avoided Costs
2013	\$92,492	\$28,003
2014	\$93,415	\$28,283
2015	\$94,353	\$28,566
2016	\$95,716	\$233,185
2017	\$98,423	\$29,513
2013–2017 total	\$474,400	\$347,550
Annual average over 2013–2017	\$94,880	\$69,510

SOURCES: OMB, 2018; CMP e-mail, April 12, 2018; ARNG telephone interview, August 23, 2018; and DoD, undated.

2013–2017 period. We estimate an average annual cost to the Army of slightly less than \$95,000, and an average annual cost avoidance of about \$70,000.

Category 3: CMP Support to Programs and Activities

CMP provides support to several programs and activities in which the Army has interest, such as the Ceremonial Rifle Program, ROTC and JROTC programs and activities, the National Matches, and SAFS. In this section, we estimate this support's benefits to the Army; there are no costs incurred by the Army because of CMP's support to these programs. We estimate that, on average, the Army avoids about \$1 million per year in costs. This can be disaggregated into avoided costs associated with the Ceremonial Rifle Program (\$460,000 per year), Army ROTC and JROTC (\$160,000 per year), and the National Matches and SAFS (\$400,000 per year).

Counterfactuals Are Clear

Identifying the counterfactuals associated with CMP providing support to these programs and activities is clear: For each program, we assume that if CMP did not exist, the Army would have provided most of this support. With respect to the Ceremonial Rifle Program, CMP activities are functions that the Army previously handled or contracted out. CMP's role in Army ROTC and JROTC is a relatively small aspect of those programs' overall mission; the only support the Army would not have otherwise provided are those it is prohibited from funding. The National Matches and the SAFS have been in place since the early 20th century, and the Army has contributed resources to supporting these activities since their inception.

There are costs incurred by the Army when CMP provides support to these programs and activities, but there are also costs avoided by the Army, such as the following:

- the cost to refurbish, prepare, test, and ship rifles for the Ceremonial Rifle Program
- the costs of providing training, sponsoring championships, and providing scholarships and other firearms competition services for ROTC/JROTC
- the net costs of labor, travel, equipment maintenance and repair, and other operating costs associated with the National Matches and SAFS.⁵⁴

CMP Financial Data

We rely on detailed financial data provided by CMP and use these amounts as our estimates of the costs the Army would have otherwise incurred. These data are described in greater detail in Chapter Five.

⁵⁴ Competitors in the National Matches pay an entry fee, and we deduct these from the total expenses that CMP incurs.

Army Costs and Benefits of CMP Support to the Ceremonial Rifle Program

In accordance with federal statute, the Army Donations Program Office in TACOM has run the Ceremonial Rifle Program since 1998.⁵⁵ It currently manages and executes several Ceremonial Rifle Program functions, such as the process for approving organizations for participation in the program. CMP assists by refurbishing and shipping Ceremonial Rifle Program rifles to veterans’ service organizations, law enforcement agencies, and national cemetery organizations. CMP also adds blank adapters to prepare some rifles for Ceremonial Rifle Program use, test-fires rifles to ensure quality and performance, and ships some rifles to and from Ceremonial Rifle Program participating organizations.⁵⁶

Before CMP became involved with the Ceremonial Rifle Program, organizations participating in the Ceremonial Rifle Program returned rifles to Army storage at their own cost.⁵⁷ CMP is now paying for return shipping, which represents a savings to program participants, not to the Army, so we count only half of CMP-paid shipping as a cost avoided by the Army.⁵⁸

Table 4.23 summarizes the costs avoided by the Army because of CMP participation in the Ceremonial Rifle Program. Although the costs avoided by the Army vary from one year to the next, we estimate that, on average, CMP participation in the Ceremonial Rifle Program saves the Army about \$460,000 per year.

This average annual benefit is consistent with conversations with multiple CMP officials, who report that they save the Army about \$0.5 million a year based on

Table 4.23
The Army Avoids Costs Because of CMP Participation in the Ceremonial Rifle Program

Year	Costs	Avoided Costs
2013	\$0	\$781,166
2014	\$0	\$467,358
2015	\$0	\$304,875
2016	\$0	\$310,996
2017	\$0	\$431,442
2013–2017 total	\$0	\$2,295,837
Annual average over 2013–2017	\$0	\$459,167

SOURCE: CMP email, June 6, 2018.

⁵⁵ Ceremonial Rifle Program managers, telephone interview with authors, May 24, 2018. See also 10 U.S.C. § 4683.

⁵⁶ CMP also stores approximately 29,000 Army-controlled rifles for use in the Ceremonial Rifle Program (CPRPFS, 2018b). However, these have already been accounted for in the section of this chapter that focuses on surplus firearms and other related materiel.

⁵⁷ Army Donations Program SMEs, telephone interview with authors, May 24, 2018.

⁵⁸ We assume that half of all CMP-paid shipping is to ship to program participants with the other half for return shipping.

their Ceremonial Rifle Program scope of work.⁵⁹ Data provided by the Army Donations Program Office suggest even higher costs to the Army prior to the CMP–Ceremonial Rifle Program partnership based on explicitly contracting for Ceremonial Rifle Program services.⁶⁰ In other words, it is possible that the estimate in Table 4.23 is an underestimate of the costs avoided by the Army.

Army Costs and Benefits of CMP Support to Army ROTC and JROTC

According to CMP financial data, CMP supports ROTC and JROTC programs and activities by sponsoring National JROTC Championships, by providing JROTC Master Instructor training, and by providing other ROTC/JROTC support in the form of scholarships, rifle shipments, and firearms competition services. Most of this assistance helps the Army avoid costs that it otherwise would have incurred.⁶¹ However, the Army is not the only service with JROTC programs: The Marine Corps, Air Force, and Navy also have JROTC programs that CMP supports. According to CMP managers, Army JROTC participants made up roughly 31 percent of all participants in these competitions, on average.⁶² We assume that the other services would have provided proportionate support to these activities if CMP did not exist. Therefore, we assign 31 percent of each CMP-related benefit to the Army.

Table 4.24 summarizes the costs avoided by the Army because of CMP’s support of Army ROTC and JROTC programs and activities. We estimate that, on average, this CMP support saves the Army about \$160,000 per year. The majority of this benefit comes from CMP support of the National JROTC Championships, particularly in more recent years.

Army Costs and Benefits of CMP Support to the National Matches and SAFS

Finally, CMP partners with the ARNG to run the National Matches and partners with the AMU to run SAFS at the National Matches. These joint Army–CMP activities use both Army and CMP resources.

Table 4.25 summarizes the costs avoided by the Army because of CMP’s support to the National Matches and SAFS. We estimate an average annual benefit to the Army of more than \$400,000 per year.

⁵⁹ CMP officials, interview with authors, CMP South Headquarters, July 18–19, 2018.

⁶⁰ Army Donations Program Office official, e-mail to authors, September 13, 2018.

⁶¹ We exclude costs that the Army would have been prohibited from funding, such as the banquet awards dinner at the National JROTC Championships.

⁶² CMP official, email with authors, September 6, 2018. For the 2013–2014 season through the 2017–2018 season, 30.62 percent of all participants in JROTC Postal Matches were Army JROTC participants. According to CMP, teams are invited to the Service Championships based on how many participate in the Postal Match championships, so these percentages roughly apply throughout the JROTC competition circuit.

Table 4.24
The Army Avoids Costs Because of CMP Support to Army ROTC and JROTC

Year	Costs	Avoided Costs			
		National JROTC Championships	JROTC Master Instructor Training	Other ROTC/JROTC Support	Total Avoided Costs
2013	\$0	\$70,068	\$4,632	\$52,422	\$127,122
2014	\$0	\$45,969	\$8,916	\$52,482	\$107,366
2015	\$0	\$56,776	\$4,254	\$54,396	\$115,425
2016	\$0	\$149,153	\$5,189	\$54,897	\$209,238
2017	\$0	\$181,090	\$4,631	\$54,746	\$240,468
2013–2017 total	\$0				\$799,619
Annual average over 2013–2017	\$0				\$159,924

SOURCE: CMP emails, June 6, 2018, and September 6, 2018.

Table 4.25
The Army Avoids Costs Because of CMP Support to the National Matches and SAFS

Year	Costs	Avoided Costs
2013	\$0	\$365,042
2014	\$0	\$404,176
2015	\$0	\$378,868
2016	\$0	\$385,817
2017	\$0	\$481,811
2013–2017 total	\$0	\$2,015,714
Annual average over 2013–2017	\$0	\$403,143

SOURCE: CMP email, June 6, 2018.

Summary

Table 4.26 aggregates the data from Tables 4.23–4.25 to provide the total costs avoided by the Army because of CMP support to these programs and activities over the 2013–2017 period. Based on CMP financial data, we estimate that, on average, the Army avoids about \$1 million per year in costs. This can be disaggregated into avoided costs associated with the Ceremonial Rifle Program (\$460,000 per year), Army ROTC and JROTC (\$160,000 per year), and the National Matches and SAFS (\$400,000 per year).

Table 4.26
The Army Avoids Costs Because of CMP Support to Programs and Activities

Year	Costs	Avoided Costs
2013	\$0	\$1,273,330
2014	\$0	\$978,900
2015	\$0	\$799,168
2016	\$0	\$906,050
2017	\$0	\$1,153,721
2013–2017 total	\$0	\$5,111,169
Annual average over 2013–2017	\$0	\$1,022,234

SOURCE: CMP emails, June 6, 2018, and September 6, 2018.

Category 4: Costs and Benefits We Cannot Measure

Finally, there are some costs and benefits to the Army for which data are unavailable and that we cannot measure precisely. For the categories that cover potential costs, no adverse events occurred during the 2013–2017 period. Therefore, our cost-benefit analysis runs only the risk of underestimating the Army benefits associated with CMP over this period. At the same time, future adverse events could lead to higher costs for the Army than our estimates from this period imply.

These other categories represent potential benefits to the Army, but we emphasize that they are only potential. Without data to analyze these issues, we cannot rule out the possibility that they resulted in zero actual benefits to the Army.

Potential Costs and Benefits If CMP Changes Perceptions of the Army

One set of intangible outcomes that could occur focuses on any effects on perceptions of the Army because of CMP. A cost example of such an event would be a surplus fire-arm being sold by CMP to the public and subsequently being used in a crime or being associated with an accident leading to injury. Alternatively, a benefit example would be an individual receiving marksmanship training from CMP and crediting that training with the prevention of a crime or incident. To the extent that (a) these events occur, (b) individuals associate CMP with the Army when hearing of these events, and (c) the way these individuals perceive the Army changes, these would factor into a cost-benefit analysis. From these examples, these could be either costs (if they adversely affect perceptions of the Army) or benefits (if they improve perceptions of the Army).

In practice, however, it is virtually impossible to quantify the effect of a change in perceptions of the Army. If an incident (positive or negative) were to occur, one could, in principle, observe whether a measure of “perceptions of the Army” changed. Establishing causality, however, would be extremely difficult, given the likely existence of other confounding factors. One would also need to express the change in perceptions

in dollar terms to incorporate it into a cost-benefit analysis. At the same time, if an adverse event associated with CMP occurred that the Army felt would negatively affect perceptions, it is highly likely that Army senior leadership would become involved. This would result in a cost that, in principle, would be easier to measure: the opportunity cost of these leaders' time spent as a result of the event.

We are unaware of any concrete instances of an event, either positive or negative, that changed perceptions of the Army as a result of CMP over the 2013–2017 period. Therefore, for our analysis, we are confident that we are not missing any Army costs or benefits. Nevertheless, it remains a possibility that should be acknowledged. For example, the former Secretary of the Army is on the record with reservations about the potential risks associated with releasing the M1911/M1911A1s to CMP, noting that “we were concerned that there were no controls for handguns that ultimately would be traced back to the Army. . . . We believed the risks were too high.”⁶³

Potential Benefits If Participation in CMP Leads to an Increase in Army Accessions

In principle, if individuals join the Army as a result of participation in CMP, that is a benefit to the Army that should be included in our analysis. Although CMP is not intended as a recruitment tool, it is possible that an individual could join the Army specifically because of involvement in CMP.

Unfortunately, in this case, we cannot determine whether individuals joined the Army because of their participation in CMP or whether they would have joined anyway. In the former scenario, the cost avoidance by (and benefit to) the Army would be the marginal cost associated with recruitment; in the latter scenario, the cost avoidance by the Army would be zero. Published estimates of such recruitment costs vary, but they are not trivial. For example, Asch et al. estimated the marginal cost of expanding enlistments using military pay to be about \$66,000 (in 2017 dollars).⁶⁴

Even if the counterfactual were clear, the data are not available to identify Army accessions that participated in CMP: CMP was not able to provide us with a list of CMP participants that we could link to Army databases through the use of unique identifiers. Furthermore, no data from the Total Army Personnel Data Base or from the Regular Army Analyst indicate whether soldiers participated in CMP prior to accession.⁶⁵ If the Army or CMP has an interest in identifying the extent to which

⁶³ Neil Weinberg and Polly Mosendz, “This Group Teaches Kids to Love Guns, and U.S. Taxpayers Foot the Bill,” Bloomberg News, September 4, 2018.

⁶⁴ Beth J. Asch, Paul Heaton, James Hosek, Francisco Martorell, Curtis Simon, and John Warner, *Cash Incentives, Military Enlistment, Attrition, and Reenlistment*, Santa Monica, Calif.: RAND Corporation, MG-950-OSD, 2010.

⁶⁵ The Total Army Personnel Data Base contains longitudinal data on soldiers from the time they access into the Army until they separate from service. The Regular Army Analyst data contain a record for every enlisted contract and include demographics, aptitude scores, and the specifics of the enlisted contract. Both data sets are maintained by U.S. Army Human Resources Command.

participants join the Army, these data will need to be systematically collected in a way that allows individuals to be tracked from participation to accession.

Potential Benefits If Participation in CMP Leads to Human Capital Improvements of Army Personnel

It is possible that CMP programs increase the skills of some soldiers. Some might have experienced increases in their marksmanship, safety, or leadership skills as a direct result of participating in CMP competitions or training. These could have included JROTC competitions before the soldier joined the Army or participation in other CMP-sponsored activities after joining the Army.

As is true of Army accessions, the counterfactuals are unclear, and the data are not available to allow us to identify soldiers who participated. With respect to participation in CMP competitions and training, we would also need data on proficiency before and after participation to estimate any improvement attributable to the program. It is also possible that proficiency among nonparticipants improves during basic training, and there ultimately is no measurable difference between participants and nonparticipants. We were also unable to identify how many JMIC certifications applied to Army instructors versus those in other services. If the Army or CMP has an interest in quantifying the causal impacts of participation in these programs on the skills of soldiers, it will need to systematically collect these data.

Potential Benefits If Participation in CMP Improves Esprit de Corps

It is also possible that participation by soldiers in CMP competitions and training could lead to improved esprit de corps among fellow participants above and beyond that which is observed among other soldiers. There would be multiple measurement challenges associated with quantifying this potential benefit to the Army. Again, data do not currently exist that allow us to link CMP participants to Army personnel databases. In addition, one would need to develop a rigorous and observable measure of esprit de corps and assess how much it was associated with a tangible outcome that benefits the Army (e.g., lower attrition, higher collective training proficiency). Absent these data, we mention it here for completeness, as another potential, but intangible, Army benefit associated with CMP.

Potential Costs and Benefits If CMP Affects the Army's Legal Liability

A final potential cost or benefit would be any change in Army legal liability associated with providing firearms and ammunition to CMP. CMP does carry liability insurance, and although it has never had a claim filed against it, the fact that it has chosen to be insured reflects the potential perceived risk that this could occur. If legal action were ever taken against CMP, it is unknowable whether the plaintiff or plaintiffs would extend their claim to include the Army. If a future claim were also filed against the Army and were successful, any legal costs and financial penalties associated with this claim would be a cost to the Army.

On the benefits side, the fact that CMP runs the National Matches and sells firearms could shield the Army from some legal liability related to these endeavors.

For our analysis, however, this has not occurred, and we are not missing any Army costs or benefits related to liability over the 2013–2017 period in this category. Nevertheless, it remains a possibility that should be acknowledged.

Summary

This section outlines several categories of costs and benefits to the Army for which data are unavailable and that we cannot measure precisely. It is worth noting that for the two categories that include potential costs (perceptions of the Army and Army legal liability), no adverse events occurred during the 2013–2017 period. Therefore, our cost–benefit analysis runs the risk only of underestimating the Army benefits associated with CMP over this period. At the same time, future adverse events could lead to higher costs to the Army than our estimates from this period imply.

It is also worth emphasizing that the other categories represent only potential Army benefits. Without data to analyze these issues, we cannot rule out the possibility that they resulted in zero actual benefits to the Army over this period.

Observations

Looking across the cost-benefit analysis, we find that the Army avoids more costs than it incurs because of CMP. Tables 4.27–4.29 summarize our cost-benefit analyses across the four categories and allow us to explore how sensitive our analysis is to different assumptions. Specifically, Table 4.27 aggregates the data from the first row of Table 4.19, the data from Table 4.22, and the data from Table 4.26; this represents our

Table 4.27
If the Army Were Not Allowed to Destroy Surplus Materiel, It Would Avoid More Costs Than It Would Incur Because of CMP

Category	Costs	Avoided Costs
Transfer of surplus firearms and ammunition	\$59,624	\$4,357,568
Army labor and facilities associated with CMP	\$94,880	\$69,510
CMP support to programs and activities	\$0	\$1,022,234
Costs and benefits we cannot measure	\$0	Cannot measure
Total	\$154,504	\$5,449,312

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016, 2017; CPRPF5, 2018b; HQDA, 1994; HQDA, 2018; and GAO, 2015; OMB, 2018; CMP e-mails, April 12, 2018, June 6, 2018, and September 6, 2018; ARNG telephone interview, August 23, 2018; and DoD, undated.

NOTE: Benefit-cost ratio of 35:1.

Table 4.28
If the Army Were Required to Destroy Surplus Materiel, It Would Avoid More Costs Than It Would Incur Because of CMP

Category	Costs	Avoided Costs
Transfer of surplus firearms and ammunition	\$175,139	\$2,257,375
Army labor and facilities associated with CMP	\$94,880	\$69,510
CMP support to programs and activities	\$0	\$1,022,234
Costs and benefits we cannot measure	\$0	Cannot measure
Total	\$270,019	\$3,349,119

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016, 2017; CPRPFS, 2018b; HQDA, 1994; HQDA, 2018; GAO, 2015; OMB, 2018; CMP e-mails, April 12, 2018, June 6, 2018, and September 6, 2018; ARNG telephone interview, August 23, 2018; and DoD, undated.
NOTE: Benefit-cost ratio of 12:1.

Table 4.29
If the Army Would Not Repatriate Excess Firearms, It Would Avoid More Costs Than It Would Incur Because of CMP

Category	Costs	Avoided Costs
Transfer of surplus firearms and ammunition	\$175,139	\$457,599
Army labor and facilities associated with CMP	\$94,880	\$69,510
CMP support to programs and activities	\$0	\$1,022,234
Costs and benefits we cannot measure	\$0	Cannot measure
Total	\$270,019	\$1,549,343

SOURCES: Calculations based on DLA, 2013, 2014, 2015, 2016, 2017; CPRPFS, 2018b; HQDA, 1994; HQDA, 2018; GAO, 2015; OMB, 2018; CMP e-mails, April 12, 2018, June 6, 2018, and September 6, 2018; ARNG telephone interview, August 23, 2018; and DoD, undated.
NOTE: Benefit-cost ratio of 6:1.

overall cost-benefit analysis under the assumption that the Army would not have been allowed to destroy surplus materiel. Similarly, Table 4.28 aggregates the data from the second row of Table 4.19, the data from Table 4.22, and the data from Table 4.26; this cost-benefit analysis assumes that the Army would have been required to destroy surplus materiel. Finally, Table 4.29 aggregates the data from the third row of Table 4.19, the data from Table 4.22, and the data from Table 4.26; this cost-benefit analysis assumes the Army would have not repatriated excess firearms (and assumes that the Army would have been required to destroy surplus materiel already located in the United States).

Although the benefits to the Army outweigh the costs in all cases, the extent to which this is true depends heavily on the specific assumptions we make about what the

Army would do if CMP did not exist. Specifically, we estimate benefit-cost ratios ranging from 6:1 to 35:1. As these tables show, as a result of CMP, the Army avoided more costs than it incurred over the 2013–2017 period in all three scenarios. Table 4.27 implies a benefit-cost ratio of 35:1; Table 4.28 implies a smaller ratio at 12:1; and Table 4.29 implies an even smaller ratio at 6:1. The different assumptions we examine are all plausible and we can neither prove nor disprove them, so we have presented our analyses in a way that allows readers to evaluate each assumption and select the ones they believe to be most likely.

Under all scenarios, much of the incurred cost is the time spent by Army personnel on CMP-related activities: 35 percent to 60 percent (depending on the specific scenario) of these costs is the time spent by Army personnel on CMP-related activities. The remainder are costs associated with storing and then releasing some materiel to CMP. For avoided costs, 25 to 65 percent is the result of CMP support to the Ceremonial Rifle Program, Army ROTC and JROTC, and the National Matches and SFAS. The remainder are avoided costs as a result of the transfer of surplus firearms and ammunition to CMP.

Two additional points are worth noting. The first concerns the costs and benefits we cannot measure. As we have noted, we are confident there were no costs in these categories over the 2013–2017 period. Therefore, if the potential benefits to the Army of CMP are non-zero, the benefit-cost ratios would be even larger over the 2013–2017 period. However, future adverse events could lead to higher costs to the Army than our estimates from this period imply. If those costs were to occur, the benefit-cost ratios would be smaller.

The second, and related, point concerns how much the 2013–2017 period could be considered representative of business as usual. As we have noted earlier in this chapter, 2017 appears to be an outlier with large, one-time transfers of rifles from foreign countries and a large transfer of ammunition to CMP. The scenario in which the Army would have not repatriated excess firearms (Table 4.29) essentially shows the impact on our analysis of removing outliers, because the transfers from the Philippines and from Turkey are what make the 2017 data so different.

Assessing Civilian Marksmanship Program Funding Models: Current and Prospective

In this chapter, we present the results of Task 4 (Assess CMP's Current Funding Model and Prospective Funding Models That Would Support CMP's Transition to Self-Sustainment). To accomplish the task, CMP provided us with detailed financial information for FYs 2013–2017; our objective was to isolate revenues and expenses that could be attributed to the resources and excess firearms that the Army provides to CMP each year. Once removed, the remaining revenues and expenses represent what CMP's financial situation would be if the Army no longer provided those resources to CMP.

In addition to analyzing CMP's financial data, we also identified funding models typically used by nonprofit organizations, with the goal of identifying the model or models that CMP uses and what alternative models might be feasible for consideration.

Finally, we considered alternative opportunities for CMP to generate additional revenue to replace that currently created by the receipt of Army resources and excess firearms. In other words, if the Army discontinues the transfer of resources and excess firearms to CMP, what other activities might CMP engage in to generate revenue in new or expanded ways?

The main finding from this chapter is that, even in the absence of excess firearms and other resources from the Army, CMP would have earned positive profits (\$4 million to \$6.5 million) in the past five years if profits include interest income and gains on investments. Nonetheless, CMP might want to expand its mission or grow its programs in future years, so we use a framework of nonprofit funding models found in literature to identify alternative models that CMP could pursue. We also propose several additional options for generating additional revenue. Expenses would be incurred in the form of startup or expansion costs for each of these options, and each approach to revenue generation would be associated with some return on investment (ROI). We recommend that CMP examine the trade-offs between cost or effort and potential future profits to determine which, if any, of the options for generating additional revenue could support the organization's mission and programs if the Army no longer provides excess firearms or other resources in future years.

The following three sections describe the findings from these three activities.

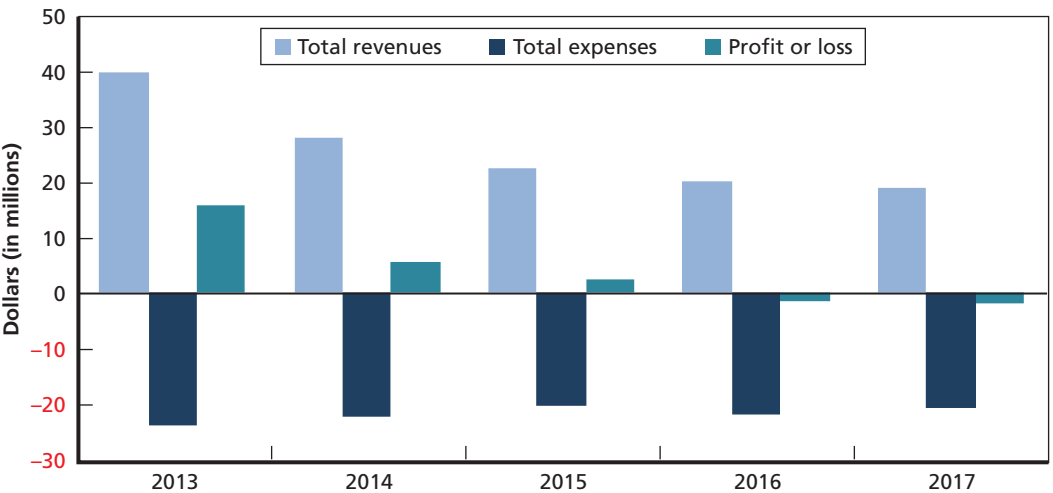
Findings from Activity 1: Analysis of the Civilian Marksmanship Program’s Financial Data

For the analysis of CMP’s financial data, CMP supplied us with four versions of its financial information: (1) Department of the Treasury IRS Form 990; (2) the audit opinion of CMP’s independent financial auditor, Warren Averett; (3) summary financial statements and supplemental information (e.g., schedules of program expenses and general and administrative expenses); and (4) Excel spreadsheets compiled by CMP with detailed financial information that breaks revenues and costs into those associated with sales, CMP programs, and other revenues and expenses (including such revenue items as donations and royalties and such expenses as board and administrative expenses and depreciation).

Figure 5.1 provides an overview of revenues, expenses, and profit or loss (revenues minus expenses) from FYs 2013–2017, as reported by the detailed Excel spreadsheets. This figure shows that revenues have consistently declined since FY 2013 but also stabilized around \$20 million while expenses are relatively constant at somewhat more than \$20 million. Accordingly, CMP earned profits in FYs 2013–2015 but experienced losses in FYs 2016 and 2017.

However, the summary financial statements contain additional data on interest and dividend income and on net realized and unrealized gains on investments. If

Figure 5.1
CMP Revenues, Expenses, and Profits/Losses, FYs 2013–2017



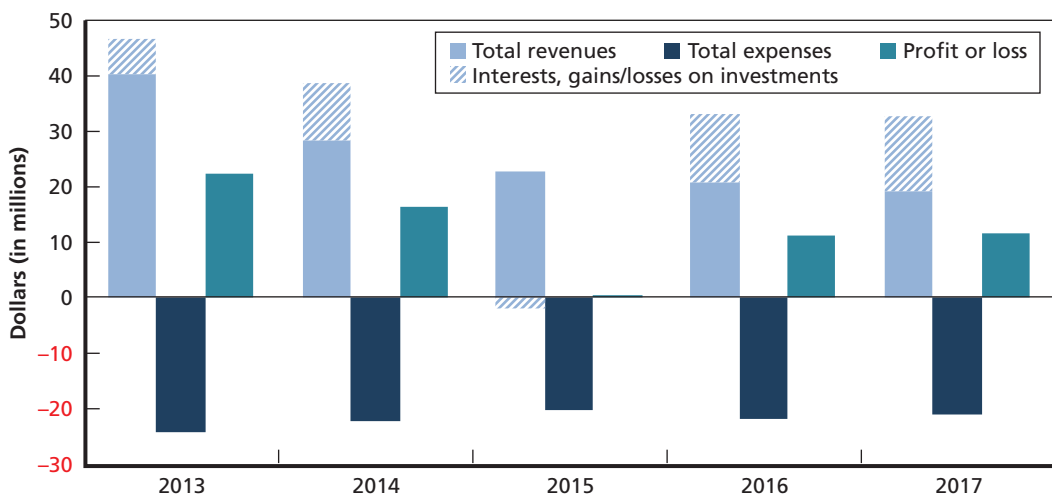
SOURCE: CMP, 2013–2017.

those revenues are included, CMP has experienced a positive profit in each year for FYs 2013–2017, as illustrated in Figure 5.2.¹

The detailed financial spreadsheets contain the level of information needed for the funding model analysis, but the summary financial information contains interest and dividend income and net gain on investments. Therefore, for the main analysis, we simply add interest and dividend income and net gains on investments from the summary financial data to the revenues contained in the detailed financial spreadsheets.

Figures 5.1 and 5.2 show overall revenues and expenses, but each of these totals can be disaggregated into a small number of categories, as shown in Figure 5.3 for FY 2017. Revenues appear in the left pie chart in shades of blue; expenses appear in the right pie chart in shades of green. As shown by the largest slices in each pie, sales accounted for almost 52 percent of revenue and slightly over 46 percent of expenses in FY 2017.² Approximately 41 percent of revenue comes from interest and dividend income and net gains on investments. In FY 2017, CMP received just under \$1 million in donations, representing 2.9 percent of revenues. Affiliation dues accounted for 0.1 percent of revenue. The cost of hosting competitions and instructional courses (“programs”) accounted for a little more than one-third of total expenses in FY 2017.

Figure 5.2
CMP Revenues (Including Interest and Gains on Investments), Expenses, and Profits/Losses, FYs 2013–2017



SOURCE: CMP, 2013–2017; CPRPFS, 2018a.

¹ In FY 2015, CMP earned \$5,300,612 in interest and dividend income, but experienced a loss on investments in the amount of \$7,332,612, for a combined loss of 2,032,171, as shown in Figure 5.2. This loss on investments was because the stock market was generally down that year.

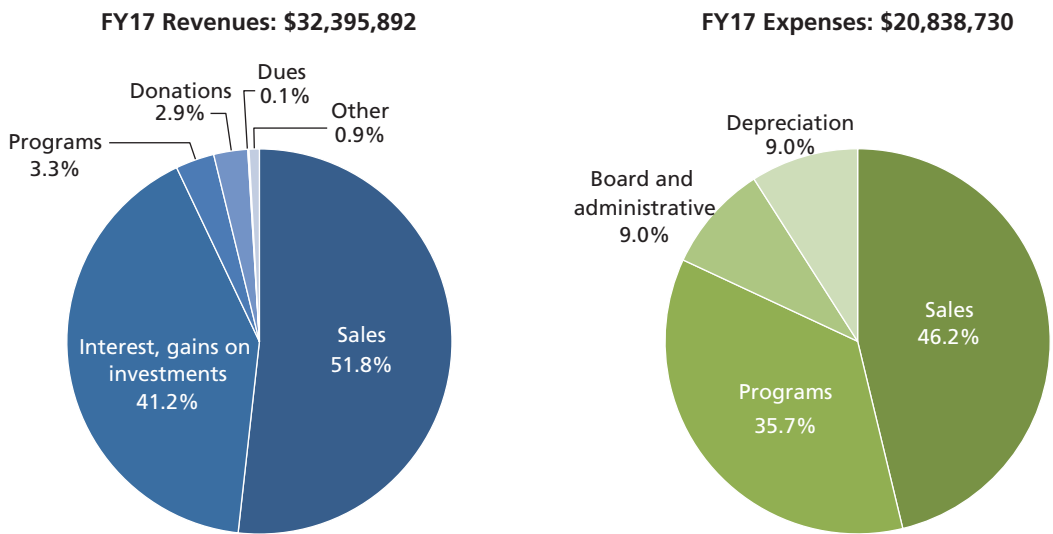
² Examples of expenses associated with sales are salaries, supplies, and shipping costs.

Board and administrative expenses and depreciation each represent 9 percent of total expenses.³

As shown in Table A.10 of the appendix, FY 2016 was similar to FY 2017 in terms of the proportion of revenues and expenses attributed to each category shown in Figure 5.3. In FY 2015, CMP experienced a loss on investments, so the distribution of revenues and expenses was very different than in other years when gains on investments were \$6 million or more. FYs 2013 and FY 2014 were quite different from more-recent years. Sales revenue accounted for 83 percent and 69 percent, respectively, with smaller proportions of revenues attributed to gains on investments. In both FY 2013 and FY 2014, depreciation and program expenses were a smaller proportion of overall costs while expenses associated with sales were higher.

As mentioned, to evaluate possible alternative funding models and consider other options for generating revenue, we need to isolate the revenues and expenses associated with receiving, refurbishing, and selling excess firearms from the Army. A portion of total sales revenue and expenses (the darkest blue and green slices in the pie charts in Figure 5.3) comes from excess firearms that the Army transfers to CMP, but CMP also sells commercial products. Therefore, one cannot simply remove sales from revenues and expenses; sales must be further disaggregated into those that can be attributed

Figure 5.3
Categories of Revenues and Expenses, FY 2017



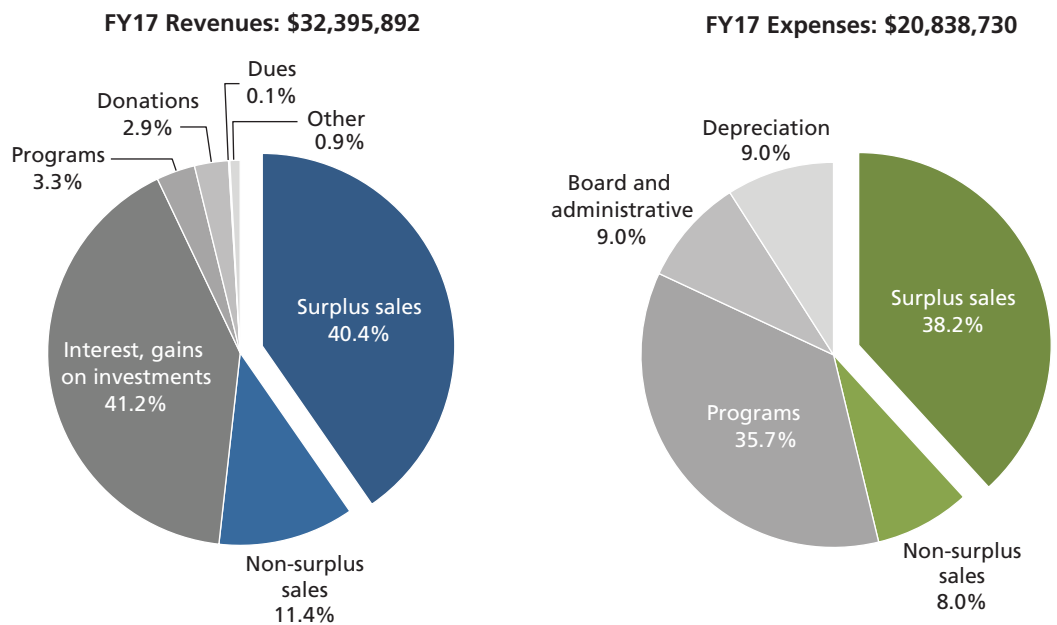
SOURCE: CMP, 2013–2017; CPRPFS, 2018a.

³ We grouped board and administrative expenses together because that is how CMP presents that information, but board expenses are only a small portion of this total. In FY 2017, board expenses totaled \$288,723, and administrative expenses were \$1,589,268, which reflects essentially all labor costs.

to the transfer of firearms from the Army to CMP and those that can be attributed to other sales. CMP provided us with a FY 2016 summary profit and loss workbook, which indicated that certain line items from the detailed financial statements could be aggregated into surplus sales revenue (line items beginning with 41*), commercial sales revenue (line items beginning with 43*), surplus cost and expenses (line items beginning with 51*), and commercial and program support (line items beginning with 54*). We used that definition to isolate revenues and expenses generated by surplus sales.

The result of this analysis is displayed in Figure 5.4, again for FY 2017.⁴ Sales account for 51.8 percent of total revenue (the sum of the two blue slices in the revenue pie chart in Figure 5.4), with 40.4 percent attributed to surplus sales and the remaining 11.4 percent to non-surplus sales. Similarly, expenses associated with sales account for 46.2 percent of all total expenses (the two green slices in the expense pie chart in Figure 5.4), which is divided into 38.2 percent owing to surplus sales and 8.0 percent to non-surplus sales.

Figure 5.4
Categories of Revenues and Expenses, Including Surplus and Non-Surplus Sales, FY 2017



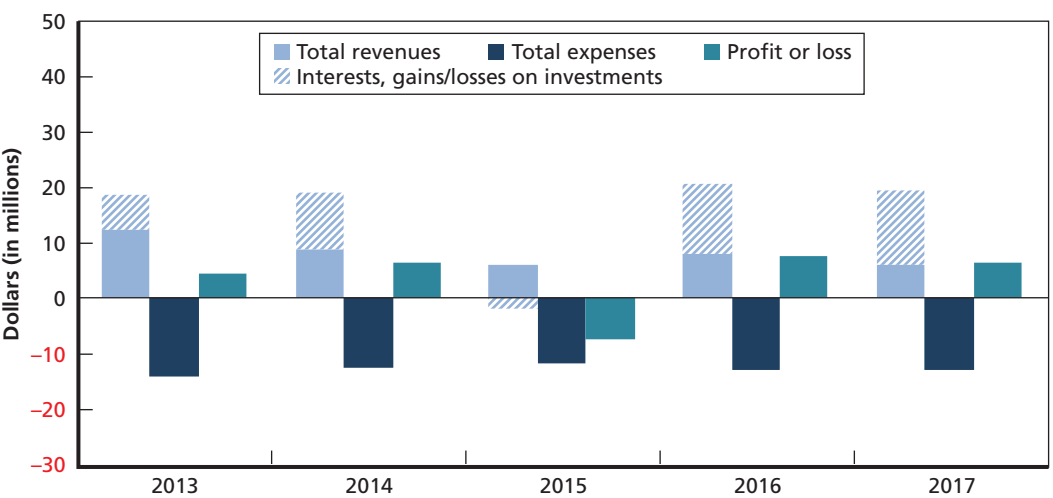
SOURCE: CMP, 2013–2017; CPRPFS, 2018a.

⁴ Appendix Table A.11 displays the proportion of revenues and expenses attributed to sales, split into surplus and non-surplus sales, for all five fiscal years.

With surplus sales revenue and expenses isolated, we can now recalculate what profits would have been in FYs 2013–2017 in the absence of the transfer of excess firearms from the Army to CMP. Figure 5.5 displays these results. With the exception of FY 2015 (when there was a loss on investments), CMP would have earned a profit even with no surplus sales.

However, this conclusion depends on CMP’s interest and dividend income and net realized and unrealized gains on investments counting toward revenue (which we added manually to the detailed financial information) and supporting expenses that exceed other revenue. Figure 5.6 recalculates what profits would have been if interest and dividend income and net realized and unrealized gains on investments were not used to fund CMP’s activities. In the absence of surplus sales, and not including interest and gains on investments, CMP would have experienced a loss each year, ranging from approximately \$2 million in FY 2013 to \$7 million in FY 2017. Later in this chapter, we present some options for generating new or additional revenue, which could allow CMP to operate without funding its programs with interest and gains on investments. However, there might be a transition period during which even new sources of revenue are insufficient to cover the costs associated with CMP’s competitions and training and safety events. Accordingly, interest income and gains from investments will be needed to help sustain the programs.⁵

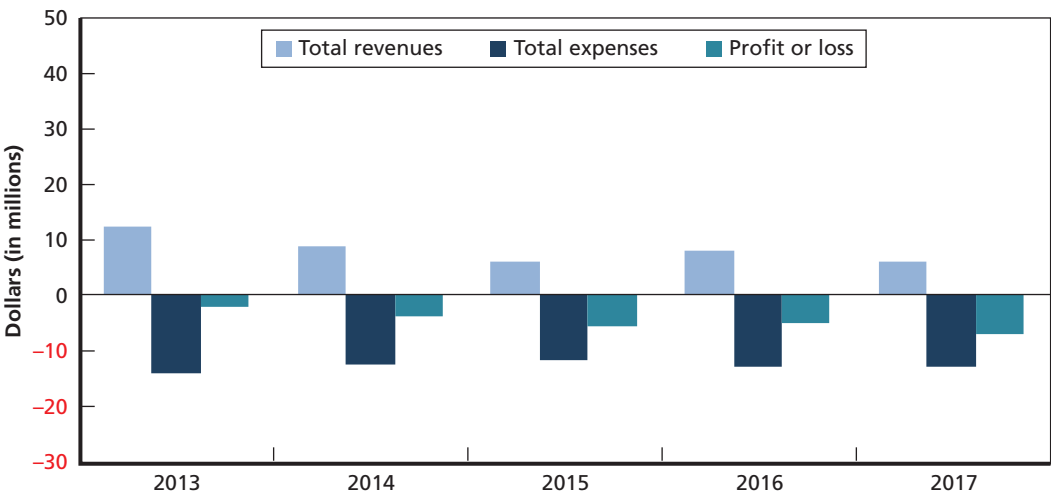
Figure 5.5
CMP Revenues, Expenses, and Profits and Losses, Including Interest and Gains on Investments, Excluding Surplus Sales, FYs 2013–2017



SOURCE: CMP, 2013–2017; CPRPFS, 2018a.

⁵ There is historical precedent for this use of interest and investment gains from the CMP endowment, as stated in the 2017 CMP annual report (2017a).

Figure 5.6
CMP Revenues, Expenses, and Profits and Losses, Excluding Interest, Gains on Investments, and Surplus Sales, FYs 2013–2017



SOURCE: CMP, 2013–2017.

Up to this point, we have described CMP’s funding model in recent years according to financial data. Next, we take a more theoretical approach to characterizing both the current model and other common nonprofit funding models that CMP could consider adopting if it no longer received Army resources or excess firearms.

Findings from Activity 2: Identifying Nonprofit Funding Models

To identify potential future funding models that would allow CMP to continue its mission without receiving Army resources or excess firearms, we examined literature for frameworks that characterize how nonprofits are typically funded. A taxonomy from Foster et al. is used most often (as measured by the number of times that other authors cite it) and has been used as the baseline for other frameworks that build upon it.⁶ Foster et al. defines ten models based on the organization’s source of funds, the types of decisionmakers, and the motivations of the decisionmakers. Table 5.1 lists each model’s name, description, and examples of nonprofit organizations that use it as

⁶ William Landes Foster, Peter Kim, and Barbara Christiansen, *Ten Nonprofit Funding Models*, Stanford, Calif.: Leland Stanford Jr. University, Stanford Social Innovation Review, 2009. For example, James P. LaRose Companies developed a framework that folds three of Foster, Kim, and Christiansen’s original ten models into seven and rebrands them. James P. LaRose Companies, *Nonprofit Income Models: Seven Fundamentals . . . An Overview of the Methodologies Nonprofits Use to Fund Their Missions*, Columbia, S.C.: Development Systems International, undated.

Table 5.1
Nonprofit Funding Models

Name	Description	Examples
Heartfelt Connector	Issues are important to large numbers of people at all income levels—popularly environmental, international, and medical research—who build connections between volunteers through fundraising. Religious, political, and sporting interests are usually not characterized by this model.	Salvation Army, Susan G. Komen
Beneficiary Builder	Funding primarily comes from fees paid by beneficiaries, but costs usually exceed this, so the nonprofit builds relationships with past beneficiaries to provide supplemental support. Donations are usually smaller than fees.	Johns Hopkins, Princeton University
Member Motivator	Individuals who are members of the organization donate money because the issue is important to everyday life. Typically, the nonprofit supports activities tied to such things as religion, the environment, or arts, culture, and humanities.	National Public Radio, NRA, NSSF, SSSF, NSCA/NSSA, <i>USA Youth Education in Shooting Sports, USA Shooting, American Legion Junior Shooting Sports Program, National Collegiate Athletic Association</i>
Big Bettor	Organization has a small number of individuals or foundations that provide major grants. Primary donor can be a founder who is deeply invested in the issue.	Howard Hughes Medical Institute, Conservation International, <i>NRA Foundation, MidwayUSA Foundation</i>
Public Provider	Government agency provides funding to allow nonprofit to provide essential social services. Funding is often established through reimbursement or requests for proposals and comes from existing government programs.	U.S. Agency for International Development
Policy Innovator	Nonprofit relies on government funding to address social issues that are not otherwise provided by the government. Nonprofit is usually able to provide the service more effectively and cost-efficiently than the government.	International AIDS Vaccine Initiative, <i>CMP</i>
Beneficiary Broker	Organizations compete for government funding or backing to provide services to beneficiaries, and beneficiaries choose which nonprofit to receive services from. Nonprofits who use this model typically provide housing, employment, health care, or student loan services.	East Boston Neighborhood Health Center
Resource Recycler	Businesses donate goods to Resource Recycler nonprofits if the goods would otherwise go to waste. The nonprofit then distributes these goods (usually food, agricultural, medical, and nutrition commodities) to needy recipients. In addition to in-kind donations, nonprofits raise funds to support operations.	Food for the Poor, Oregon Food Bank, YSSA
Market Maker	Organizations that provide services that cannot be lawfully provided (such as organ donation). Revenue generally comes from fees or donations.	American Kidney Fund
Local Nationalizer	National network of local operations, focusing on such issues as poor schools or role models for children, where government alone cannot provide the services. Organizations are generally small and raise money locally through donations and special events.	Teach for America, Big Brothers Big Sisters

SOURCE: Foster, Kim, and Christiansen, 2009.

NOTE: The italicized examples are the comparison organizations considered in Chapter Three, characterized according to the most closely associated nonprofit funding model. The James P. LaRose Companies taxonomy lists the NRA as an example of the Membership Program Model (their rebranding of Foster et al.'s Member Motivator).

defined by Foster et. al. The highlighted examples are the comparison organizations considered in Chapter Three, which we chose according to the most closely associated nonprofit funding model.

Based on the descriptions of these funding models and the example organizations provided by Foster et al., we determined that CMP's current funding model is primarily Policy Innovator (shaded in gray in Table 5.1), but with some funding coming from sources other than government, thereby making it a hybrid of four models: Policy Innovator, Member Motivator, Big Bettor, and Local Nationalizer.

Organizations that use a Policy Innovator funding mechanism are described as follows:

These nonprofits have developed novel methods to address social issues that are not clearly compatible with existing government funding programs. They have convinced government funders to support these alternative methods, usually by presenting their solutions as more effective and less expensive than existing programs.⁷

Because the Army (and the federal government more generally) do not provide the public service that CMP does, and because CMP receives such a large share of its profits from the sale of surplus firearms from the Army, the Policy Innovator model is the primary model that describes CMP's current funding structure.

As a reminder, the current task is to identify alternative funding models that would allow CMP to self-sustain if it no longer received excess firearms or other resources from the Army. Therefore, for the remaining discussion of alternative sources of funding, we make the assumption that CMP will not be bound by its current federal statutes or regulations because it would no longer operate under an MOU with the Army (if it no longer receives excess firearms and other resources from the Army) and would be free to pursue other sources of funding within the rules and laws that govern 501(c)(3) organizations. Alternatively, CMP could choose to become a for-profit organization. We also acknowledge that establishing and maintaining different programs or funding mechanisms can be costly and have different payouts, so at the end of the chapter, we offer a framework that CMP could use to determine which alternative funding models offer the best mix of upfront effort or cost and downstream ROI. In the same way that CMP operates as a hybrid of several nonprofit funding models today, it could choose to pursue multiple sources of alternative funding and continue to operate as a hybrid if it were to self-sustain without resources from the Army.

Possible Alternative Funding Models

CMP collects membership fees from affiliate organizations, receives donations, and has a broad reach to local markets through its affiliate program, which is why the

⁷ Foster, Kim, and Christiansen, 2009, p. 38.

Member Motivator, Big Bettor, and Local Nationalizer models also partially describe CMP's current funding structure, but to a much lesser extent than Policy Innovator. On the other hand, the descriptions of the models rule out characterizing CMP in other ways. For instance, the Heartfelt Connector model is specifically characterized as one that does not include organizations that have religious, political, or sporting interests. Public Provider and Beneficiary Broker also rely on government funds but draw from existing programs and compete for resources, respectively, neither of which describe how CMP operates. The remaining models can be similarly ruled out based on the interests of the organization or the types of funding that characterize them.

If any of these other sources of funding were expanded or redesigned, they might be suitable alternatives as the primary model for CMP to use. We discuss each in turn and how CMP could grow these sources of funding.

Member Motivator Funding Model

The first is the Member Motivator funding model, which relies on individual donations. According to Foster et al.,

individuals (who are members of the nonprofit) donate money because the issue is integral to their everyday life and is something from which they draw a collective benefit. Non-profits using the Member Motivator funding model do not create the rationale for group activity, but instead connect with members (and donors) by offering or supporting the activities that they already seek.⁸

CMP does not offer a membership program to individuals who are interested in participating in its events or in making purchases from CMP's retail shops. Instead, individuals who are interested in participating in a CMP program or event or in making a firearm purchase from CMP are encouraged to join a club that is affiliated with CMP; there are more than 2,000 such clubs in all parts of the country. Individuals pay a membership fee to an affiliated club, which in turn pays annual affiliation dues to CMP. In return, CMP trains and certifies instructors of affiliated clubs, offers the sale of ammunition and rifles at subsidized prices for target training, distributes newsletters and training publications, and sanctions and supports competitions and training clinics that are conducted by affiliate organizations.⁹

As an alternative to its current relationship with affiliated clubs, CMP could consider designing an individual-level membership program that would offer benefits to individuals, regardless of their participation with an affiliate club. A membership could offer, for instance, discounts on purchases from CMP's retail or custom shops, early registration to events, or reduced participation fees. It is unclear whether individuals who are members of affiliate clubs would view CMP's membership program as a sub-

⁸ Foster, Kim, and Christiansen, 2009, p. 36.

⁹ CMP, "How to Become Affiliated with the Civilian Marksmanship Program," webpage, undated-p.

stitute or would enroll in both programs, or how much revenue could be generated from such a program.

Big Bettor Funding Model

The Big Bettor funding model also relies on contributions, specifically major grants from a few individuals or foundations. Foster et al. explain that some Big Bettor non-profits are able to grow quickly if they start with significant financial backing already secured, which is the case with CMP, whose endowment was in excess of \$240 million in FY 2017. Then again, some existing organizations are able to identify a major donor who funds new activities.

To assess the feasibility of the Big Bettor model as a more prominent funding approach for CMP, we analyzed donation data provided by CMP.¹⁰ In most years, CMP receives several modest donations, a small number of donations ranging from \$1,000 to \$5,000, and one or two very large donations in the amount of several hundred thousand dollars or more. Table 5.2 shows the distribution of the types of donations that CMP has received from FYs 2013–2017. The modest donor—defined here as someone who contributes less than \$1,000—makes an average donation ranging from \$58 to \$135, depending on the year.

Given the distribution of donations made in recent years—characterized by a relatively small number of donors overall (58–75 in any given year), mostly contributing

Table 5.2
Distribution of Donations Made to CMP, FY 2014, FYs 2016–2017

Donor Type	2013 ^a	2014	2015 ^a	2016	2017
Very large (\$10,000 or more)		1		4	2
Large (amounts greater than \$1,000 and less than \$10,000)		11		3	1
Modest (amounts less than \$1,000)					
Number		62		68	55
Average amount		\$135		\$58	\$60

SOURCE: CMP “Copy of Donations.xls” spreadsheet.

^a FY 2013 and FY 2015 donations, as reported by CMP, are vastly different from the auditor’s donation totals. We did not assume that the donations reported by CMP were representative of the larger totals reported by the auditor and chose to exclude the data from these two years.

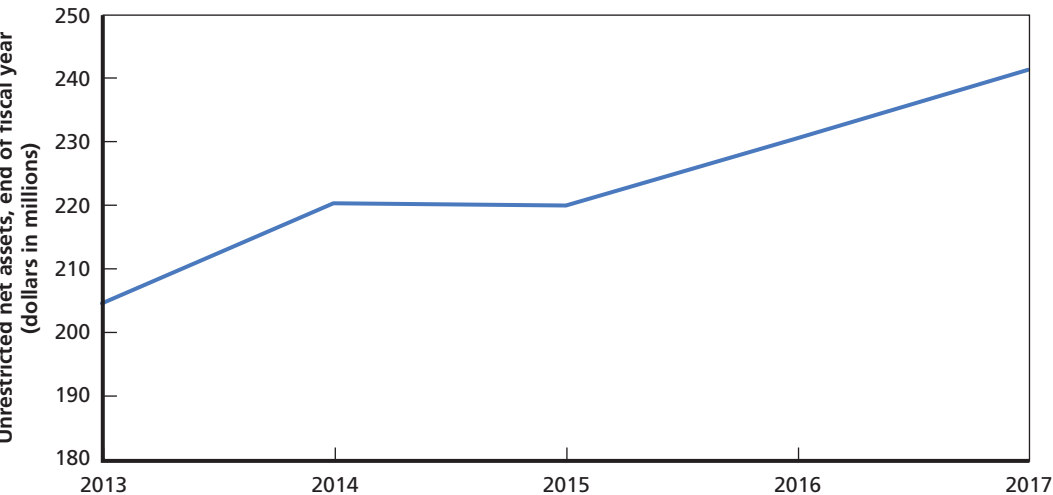
¹⁰ The numbers in Table 5.2 do not match donation numbers in the other parts of this chapter, which come from CMP’s annual auditors’ reports. For example, in FY 2014, the donation list (which was used to create Table 5.2) showed \$1,152,600 in total contributions, which included a single donation in excess of \$1 million. However, the summary financial statement from CMP’s auditor indicated that \$795,812 were received. Despite these differences, we used 2014, 2016, and 2017 donation-level data to analyze the feasibility of the Big Bettor model. We did not analyze 2013 or 2015 because the individual donations summed to an amount that differed too much from other data and from other years. Appendix Table A.12 summarizes the differences across data sources.

modest amounts with a few large and very large donations—there is room for growth in this area. It is unclear whether CMP could attract additional large or very large donations or the extent to which the number of small donors could expand. Furthermore, as the description of this model notes, individuals or organizations that make large donations to a nonprofit, such as a foundation supporting a nonprofit operating under the Big Bettor model, might do so because of their deep interest in the issue and could therefore influence the nonprofit’s mission. CMP has expressed that it has been reluctant to seek donations when a customer makes a purchase, but in the future, it might resort to fundraising efforts through donations.

Local Nationalizer Funding Model

The third alternative funding model as defined by Foster et al. is the Local Nationalizer model, which involves an organization growing “large by creating a national network of locally based operations.” Through its core endowment fund (the value of which—approximately \$242 million in FY 2017—is displayed in Figure 5.7), CMP has resources available to further its mission at the local level in instructing in marksmanship, promoting practice and safety in the use of firearms, and conducting competitions. This could mean, for example, building revenue-generating infrastructure (e.g., ranges) in more locations or identifying areas where there is demand for the services that CMP provides but a shortage of local clubs. However, we did not evaluate the cost of any specific activity that CMP might pursue and therefore do not have a sense of how much or what types of operations the current core endowment fund would support.

Figure 5.7
Value of CMP’s Core Endowment Fund, FYs 2013–2017



SOURCE: CPRPFS, 2018a.

Findings from Activity 3: Other Options for Generating Revenue

We now turn to additional options for generating revenue, which we broadly characterize as expanding existing services or programs and new revenue sources. We then recommend a framework that CMP can use to assess the feasibility of these options in terms of level of effort required to implement versus level of potential revenue generated.

Expanding Existing Services or Programs

We offer four options for generating additional revenue using programs or approaches already used by CMP. For each of these options, CMP would need to evaluate the profitability of their existing activities and prioritize those that already generate positive profits or those that could be expanded in the most cost-effective way.

Expand Fee-Based Courses and Competitions to New Demographics

CMP offers a wide range of marksmanship courses and competitions to youth and adults who are affiliated with such programs as the Boy Scouts of America, 4-H, school shooting teams, college shooting teams, and youth camps. CMP could consider offering these types of events to more demographic groups, such as high school programs and club or varsity sports (e.g., through a Varsity Letterman Program or CMP Letterman Club, currently being explored by CMP¹¹).

Use a Modified Fee Structure for Courses and Competitions

As discussed in Chapter Three, CMP and many comparable organizations charge annual affiliation fees (essentially organizational membership fees). Compared with the other organizations, CMP's fees are the lowest—from \$5 less than the NRA up to hundreds or thousands of dollars less than some other organizations with similar missions. CMP's affiliation dues generate approximately \$35,000 per year, so raising the annual fee by a small amount will not have a significant impact on overall revenue (recall that even in the absence of surplus sales, total revenue in FY 2017 would have been approximately \$20 million, of which just a tiny fraction comes from affiliation dues). Similarly, CMP's fee structure for marksmanship and instructional courses and for competitions appears to be lower than those for other organizations. CMP could explore the possibility of charging higher fees for its events. With a large number of participants, this could have an impact on total revenue. However, when prices increase, participation is likely to decrease. We do not know how responsive participants would be to price increases, and CMP would run the risk of not generating any additional revenue—or even incurring a loss—if decreased demand offsets the additional revenue created by higher prices. CMP could attempt to estimate how demand would change based on previous price changes or by starting with small price increases to see whether participants respond differently.

¹¹ CPRPFS, 2018b.

Expand Sponsorship for Competitions and Programs

The analysis earlier in this chapter showed that in the absence of surplus sales and excluding interest and gains on investments, CMP would have experienced losses ranging from \$2 million to \$7 million in FYs 2013–2017. It might be challenging to make up this difference with modest donations or increased prices for courses and competitions, but a small number of large contributions from corporate sponsors could restore CMP's profits. CMP already has gun and ammunition sponsors for its marksmanship park, so one option for generating additional revenue to cover program and other expenses is to expand the sponsorship program to other locations and events.

Expand Custom Services

CMP's custom shop repairs, upgrades, and provides specialized services for a wide range of rifles, but there is a long list of rifles that are not serviced by the custom shop, such as shotguns, pistols, revolvers, M14/M1A rifles, AR15 style rifles, and other commercially produced firearms.¹² If CMP were to expand its service offerings to include these products, additional revenue could be generated. At the same time, according to CMP, the custom shop is only slightly profitable.¹³ In addition, there is the issue of CMP's custom shop capacity. CMP issues 15 authorizations per week for custom rifle work, and all requests beyond 15 are added to the waitlist, which is currently estimated to be three months.¹⁴ If CMP were to expand its services, some of that revenue would be necessarily offset by the additional costs incurred to expand capacity to meet the expanded demand.

New Potential Revenue Sources

We now offer five additional ways that CMP might generate additional revenue. These options are not easily characterized as alternative funding models or as expansions of CMP's existing programs. Based on discussions with CMP leadership and our own review of CMP's existing program guides, these options were selected based on informed decisions about other types of activities that are most amenable to ways that CMP might choose to operate in the future.

Participate in Federal Program for the Disposition of Excess Military Items

DLA has a program for the disposal of excess military items—the Reutilization, Transfer, and Donation program—which is designed to avoid new DoD procurement costs and repairs.¹⁵ When DoD determines that it no longer needs vehicles, household or office furniture, hardware, and other items, the property is transferred to a DLA dis-

¹² CMP, undated-l.

¹³ CPRPFS, 2018b.

¹⁴ CPRPFS, 2018b.

¹⁵ DLA, "Reutilization, Transfer and Donation (R/T/D)," webpage, undated-b.

position service site where other military services, federal agencies, state and local governments, nonprofit organizations, or taxpayers can bid electronically for the items.¹⁶ CMP, as a nonprofit organization, can participate in this DLA program. For such participation to be revenue-generating, CMP would need to establish an inquiry system and a way of handling, temporarily storing, marketing, selling, transporting, and possibly also refurbishing and/or repackaging the excess items it acquires. This approach is essentially an extension of CMP's current business model for surplus rifles being applied to other surplus items thought to be of value to its clientele.

Contract with the Army for Ceremonial Rifle Program Services

CMP provides inspection, repair, test fire, installation of blank firing adapters, and shipment of ceremonial M1 Garand rifles to TACOM for its Ceremonial Rifle Program at no cost to the federal government.¹⁷ According to our calculations in Table 4.23, this service costs CMP about \$460,000 on average annually. If CMP no longer receives excess firearms and other resources from the Army in the future, one option for generating additional revenue is to update the MOU with the Army to contract for these services rather than providing them pro bono.

Charge for Unreimbursed Services to Veterans Organizations

Another service that CMP provides for free is inspecting and repairing rifles provided to veterans' organizations. In addition to the work performed on the rifles, CMP also pays for shipping them between the veterans' organizations and CMP. CMP could charge for these services, but the biggest drawback is likely resistance to this change from the organizations that currently benefit.

Develop and Sell Ancillary Materials for Collectors

Individuals who purchase rifles or other items from CMP often do so for their value as a collector's item. At recent CMP events, vendors have been onsite selling ancillary materials for collectors, such as glass cases to house M1s or other collectibles. CMP's Board of Directors was considering purchasing these items from a supplier and selling them at a markup. The expectation was that such items are in demand and could be a profitable activity, but there was concern about the difficulty in acquiring, storing, handling, and shipping these materials.

Grow the CMP Targets Program

A branch of CMP, CMP Targets, is the exclusive North American distributor of Kongsberg Target Systems electronic targets. These targets are widely used at CMP's Talladega Marksmanship Park and on Camp Perry's Petrarca Range, which has exposed thousands of participants at CMP events to the technology. CMP Targets has estab-

¹⁶ DLA, "Public Sales General Information," webpage, undated-a.

¹⁷ CMP, "CMP Support to Veteran Organization," webpage, undated-j.

lished a sales program that can assist clubs or individuals with purchasing similar equipment for their own ranges. To date, the program has not generated revenue. However, additional marketing—some of which could be aimed at police departments, for example—and continued exposure by CMP event participants to the benefits of using virtual scoring have the potential to create a new revenue stream for CMP.

Framework for Assessing Ways to Generate Additional Revenue

In this chapter, we explored several options for how CMP might generate additional revenue if the organization were to no longer receive excess firearms or other resources from the Army. If that had occurred during FYs 2013–2017, our analysis estimates that CMP would have experienced losses in the amount of \$2 million to \$7 million per year, excluding interest and gains on investments (Figure 5.6). If interest and gains on investments were included in these calculations, CMP would have earned positive profits ranging from \$4 million to \$6.5 million, except in FY 2015, when the stock market was down and CMP experienced a loss on investments (Figure 5.5). CMP stated in its 2017 Annual Report that it has made such “withdrawals from its endowment to support operations and programs.”¹⁸ Depending on CMP’s business goals (i.e., its willingness to maintain existing levels of program funding and other expenses), these estimates reflect the amount CMP would need to recover in additional revenue if the Army no longer transferred firearms and other resources to CMP.

It is beyond the scope of this effort to analyze the profit potential for each of the revenue-generating options discussed, but we present a framework for assessing which of these options is most likely to support CMP’s mission by generating revenues in new or expanded ways. We believe that it would be valuable for CMP to complete such a strategic exercise to evaluate the most-effective and most-efficient means to generate additional revenue versus the effort expended to get the additional revenue.

One can think of each option in terms of the impact it could have on generating revenue, balanced against the effort, and therefore costs, required to implement the activity. For simplicity, assume impact and effort are assessed as either high or low (i.e., high or low impact and high or low effort). This creates a 2-by-2 matrix that facilitates a simple, straightforward way to assess and characterize each option.

Table 5.3 is strictly notional but illustrates how this framework can be used to evaluate which options have the most potential for generating revenue. Based on limited analysis and lacking full appreciation of CMP programs and operations, we have placed “expand sponsorships” in the matrix as a low-effort, high-impact option for generating revenue. Because CMP already has sponsorship for its marksmanship program, there is a precedent for this activity (making it low effort), and there

¹⁸ CMP, *2017 CMP Annual Report*, 2017a, p. 3.

Table 5.3
Notional Matrix for Evaluating Options for Generating Additional Revenue

		Quick Wins, High Payoffs Accelerate—Do Now	Major Projects, Big investments Pilot Test—Invest
		• Expand sponsorships	• Use core endowment to further mission • Participate in federal program for disposition of excess inventory
Likelihood of generating additional revenue	High		
	Low	Low Priority, Easy to Do Consider Action—Assess • Design membership program • Modify fee structure • Contract with Army for the Ceremonial Rifle Program • Charge for unreimbursed services to veterans’ service organizations • Grow CMP Targets program • Develop and sell ancillary materials for collectors	Further Considerations Refine or Better Define—Defer • Expand custom services • Expand courses and competitions to new demographics • Solicit donations
		Low	High
Effort Involved in Developing Option			

NOTE: This table is notional. The placement of possible options for generating revenue into cells is based on limited information and our subjective opinions. The actual results in this table should not be used by CMP to make decisions about future activities. A more comprehensive assessment of the trade-off between cost or effort and the likelihood of generating additional revenue might be useful for determining which activities to pursue.

is the potential to generate a lot of revenue from the right sponsors (making it high impact). Because of its potential for supporting CMP programs by expanding something CMP already does, we have characterized it (or any low-effort, high-impact activity) as a quick win and high-payoff option that CMP might want to pursue. Then again, we have characterized “solicit donations” in the matrix as a high-effort, low-impact activity, one that likely requires additional analysis to further refine and define. CMP does not actively solicit donations, but it does receive some. Each year, the organization receives a small number of very large donations (tens of thousands of dollars), but most donations are modest, in the amount of \$100 or less. Modest donations, even a large number of them, are unlikely to recoup the millions of dollars in losses CMP would have experienced in the past five years in the absence of surplus sales (excluding interest and gains on investments), so CMP would likely have to establish a development branch of its organization with the sole function of securing large donations that could offset program expenses. Thus, this option would require considerable effort with an unknown potential for soliciting very large donations (high effort, low impact), and CMP might wish to better define this and other high-effort, low-impact options or eliminate them altogether as sources of additional revenue.

Observations

Using detailed financial data provided by CMP, we determined that CMP profits or losses during FYs 2013-2017 would have been determined by investment returns on its core endowment fund in the absence of surplus firearms or other resources from the Army. If returns or losses on investments are included in the profit calculation, CMP would have earned positive profits ranging from \$4 million to \$6.5 million per year, with the exception of FY 2015 when the stock market was down and there was a loss on investments and an overall loss of \$8 million. If returns or losses on investments are not included in the profit calculation, CMP would have experienced a loss each year, ranging from \$2 million to \$7 million in the absence of excess firearms and other resources from the Army.

To make up for any loss in revenue from forgoing the sale of excess firearms, we presented several options for generating new or additional revenue. These options can be characterized as: (1) an alternative funding model where CMP could establish a membership program or rely more heavily on donations or sponsors; (2) an expansion of existing services or programs; or (3) the development of a new type of revenue stream. Each of these options would require some level of effort by CMP, and each would generate some amount of impact as measured by revenue generated. To decide which might be a feasible source of revenue, CMP would need to assess and prioritize these options according to effort, effect, and other important dimensions.

Assessing Financial Aspects of Transferring M1911/M1911A1 Pistols

In this chapter, we present the results of Task 5—assessing the financial aspects of transferring M1911/M1911A1 pistols. As tasked by the Department of the Army in accordance with the 2018 NDAA, we performed an economic analysis of the costs and profits associated with sales of the transferred pistols. In this chapter, we discuss the underlying factors that drive the costs and profits of those sales, then the results of our economic analysis.

Because the sales had not occurred by the time of writing, we forecasted profits and costs using established methods and a range of feasible assumptions. Our estimate is that CMP will earn approximately \$3.4 million and \$2.0 million in profit for 2018 and 2019, respectively.

Underlying Factors Driving the Costs and Profits of M1911/M1911A1 Pistol Sales

CMP received legislative authorities from the 2018 NDAA to sell surplus M1911/M1911A1 pistols and generate revenues similar to the way it does with sales of the M1. The revenue resulting from these sales will be a function of many factors. First, enabling legislation and subsequent policy decisions made by the Secretary of the Army will determine the size of pistol inventories that are transferred to CMP. Second, the condition of the pistols transferred will determine the costs incurred by CMP to make the pistols saleable. Third, CMP will characterize each pistol into one of three sales grades based on explicit criteria that determine the fair market pricing of the firearms. Fourth, each of these factors (size of inventories, necessary investments based on inventory condition, and grading of inventories for individual sale) will all vary over time and thereby significantly affect the magnitude of revenues achieved by CMP in any given year.

We detail each of these respective factors, beginning with a description of the enabling legislation. We provide further background on the M1911/M1911A1 pistols and the program that CMP established to regulate and manage pistol sales. We sum-

marize the information that we specifically collected on CMP's program and finally describe a model to forecast and analyze costs, profits, and ROI of the program.

Enabling Legislative Authorities

Section 1091 of the 2018 NDAA authorizes the transfer of no more than 10,000 surplus .45 caliber M1911/M1911A1 pistols each year in FY 2018 and FY 2019 from the Department of the Army to CMP. Moreover, the legislation required that at least 8,000 pistols be transferred in FY 2018. These requirements include spare parts and related accessories for the same pistols that are also held in surplus.

The transfers are governed by 36 U.S.C. § 40728, which has governed transfers to CMP in the past, including those for the M-1 Garand. The NDAA also disallows transfers of the pistols by any other mechanism until either 60 days after the 2020 NDAA is enacted or June 1, 2020 (whichever is earlier).

In 36 U.S.C. § 40728, there is language allowing CMP to sell transferred items at fair market value to eligible individuals. As of September 2018, the Department of the Army had transferred 8,000 M1911/M1911A1 pistols in January 2018; however, CMP had not yet begun filling sales orders—something it plans to do after October 4, 2018, for appropriately qualified and documented individuals who fully satisfied an extensive application process.

M1911/M1911A1 Eligibility and Sales Management

CMP obtained a separate federal firearms license (FFL) that it will use solely for selling M1911/M1911A1 pistols. Records of the sales will remain separate and distinct from other CMP business activities to satisfy CMP's interpretation of the enabling legislation. CMP will treat each M1911/M1911A1 customer as a new customer, regardless of the customer's previous sales history or relationship with CMP. Potential buyers of the pistols must (1) be U.S. citizens age 21 or older, (2) be a member of a CMP-affiliated club, (3) (for those under 60 years of age) provide proof of participation in a marksmanship related activity,¹ (4) successfully pass background checks and not have been convicted of a felony, and (5) successfully complete and mail an order packet to CMP (must be postmarked between September 4, 2018, and October 4, 2018). As of September 2018, CMP had determined, based on its assessment of relevant law, that it could sell the pistols in all states except Massachusetts.

CMP will allow only one order per customer and will accept only mail orders. All physical deliveries will be made to a 01, 02, or 07 FFL dealer and the customer/FFL

¹ Proof of participation in a marksmanship activity could be current or past military service; current or past law enforcement service; participation in rifle, pistol, air gun, or shotgun competition; completion of marksmanship clinic that includes live-fire training; distinguished, instructor, or coach status; Concealed Carry License; Firearms Owner Identification Cards that included live-fire training; FFL or Curio and Relic Federal Firearm license; completion of a Hunter Safety Course that included live-fire training; and certification from range or club official or law enforcement officer witnessing shooting activity.

dealer must include in the order, or through e-mail or fax, the FFL with the customer's name attached.

After October 4, 2018, CMP will begin processing the orders that were collected. Because of the limited quantity of available pistols and highly anticipated demand, the list of all potential customers will be sorted using a random number generator. Potential customers will be e-mailed their position on this list.

Starting from the beginning of the new list, CMP will contact each customer by e-mail or telephone to offer a pistol for sale. Customers will have a day or more to respond and then will be able to select the desired grade of pistol (service, field, or rack) from those available (auction grade items are sold separately in auctions²). Grades are described further in following sections. Depending on their places on the list, customers will likely have different options available to them at the time they are contacted. For example, the last customers contacted might have only rack-grade items to choose from because previous customers already will have acquired all the higher-service or field-grade items.

If a customer decides to purchase a pistol, he or she has approximately one week to provide payment (check, money order, or credit card) and pass an NICS background check by receiving a "PROCEED" determination. These must occur prior to shipment to the FFL dealer. CMP has dedicated staff for processing these orders and for shipping and packaging orders. Customers are then required to complete a Form 4473 in person at the FFL dealer and pass a second NICS background check before the pistol can be transferred to them. CMP states that the first background check is required to satisfy the 2018 NDAA's requirement that the customer successfully passes a background check. Because the FFL dealer can transfer the firearm 72 hours after submitting a NICS check and not receiving a denial (but not necessarily receiving a "PROCEED" determination), CMP imposed the first NICS check to satisfy its interpretation of the legislation.³ The second NICS check is performed in accordance with standard procedures for transferring firearms and all applicable federal, state, and local laws.

M1911/M1911A1 Inventory

The M1911/M1911A1 was the standard-issue sidearm for the U.S. Armed Forces from 1911 to 1985. The original designation for the pistol was M1911. An updated design for the pistol was adopted in 1924 and designated as M1911A1. They are single-action, semiautomatic, magazine-fed, recoil-operated pistols chambered for the .45 ACP (Automatic Colt Pistol) cartridge.⁴ The M1911/M1911A1 pistols were replaced by Beretta

² CMP will not allow customers who purchased an auction-grade M1911/M1911A1 at an auction to also purchase one through the randomly generated list. Likewise, a customer who purchased one through the list will not be permitted to participate in an auction.

³ CMP, "1911 Information," webpage, May 9, 2018c.

⁴ Department of the Army, *Direct and General Support Maintenance Manual: Pistol, Caliber .45, Automatic, M1911A1*, Washington, D.C., Technical Manual 9-1005-211-34, 1964.

M9 pistols as standard-issue by the U.S. Armed Forces beginning in 1986. However, some military units and law enforcement agencies, both domestic and foreign, continue to use M1911/M1911A1 pistols or modified variants.⁵

M1911/M1911A1s hold a broad appeal among contemporary firearm collectors, firearm enthusiasts, veterans, and their families or descendants.⁶ The original model was designed by John Browning, an influential figure in the design of modern firearms. The model and its updated variant saw use by servicemen in numerous conflicts, including both World Wars, the Korean War, and the Vietnam War. Moreover, the model has been featured widely in American cinema and television.

As of September 2018, the Department of Army retained 90,016 surplus M1911/M1911A1s, not including the 8,000 already transferred to CMP or a prior cache of firearms that had been disposed of through the 1033 Program of the Law Enforcement Support Office within the DLA.⁷ The conditions and histories of the individual items vary considerably, as shown in Table 6.1. The DLA, which is tasked with storing the surplus items, defines supply condition codes, ranging from A to H, to describe that status of the items. In January 2018, the 8,000 M1911/M1911A1s were transferred to CMP. A large majority of the transferred items had the best condition codes, A (29.6 percent) or B (54.6 percent), while the remainder of the transfers were directly from the Army Museum and TACOM and did not have documented DLA supply condition codes.

Most of the pistols remaining in possession by DLA/TACOM are in Condition F (84.2 percent) and require repair, overhaul, or reconditioning. About a tenth of the remaining inventory is condemned (Condition H, 9.5 percent). If future transfers are authorized and no new inventory is found, CMP will receive Condition B pistols or worse, and mostly Condition F pistols. This will have implications for the profitability of CMP sales of M1911/M1911A1s in the future and for whether 2018 is a representative year for the analysis.

Policy Governing Transfers

The transfer of the M1911/M1911A1s is further governed by a Memorandum of Agreement (MOA) between the Army and CMP.⁸ Per the MOA, the Army agrees to coordinate the transfer of 8,000 M1911/M1911A1s in FY 2018 and up to 10,000 in FY 2019.

⁵ Leroy Thompson, *The Colt 1911 Pistol*, United Kingdom: Bloomsbury Publishing, 2011.

⁶ Thompson, 2011; David Maccar, "How to Buy CMP Surplus 1911," Range365, November 22, 2017; Jared Keller, "Here's the Plan for the Sale of the Army's Surplus M1911 Pistols," Business Insider, December 5, 2017; Jared Keller, "The Details of the CMP's Upcoming Army Surplus Pistol Sales Are Finally Here," *Task and Purpose*, May 9, 2018.

⁷ TACOM data set, provided to authors on June 20 and June 28, 2018.

⁸ U.S. Army and CPRPFS, "Transfer of Surplus Caliber .45 M1911/M1911A1 Pistols from the U.S. Army to the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc., During Fiscal Years (FY) 2018 and 2019," Memorandum of Agreement, January 17, 2018.

Table 6.1
M1911/M1911A1 Inventory

Condition Description	Condition Code	Number in Possession of DLA/TACOM as of September 2018	Transferred to CMP as of September 2018 ^a
Unknown	Unknown	0	1,264 ^b
New, used, repaired, or reconditioned material that is serviceable and issuable to all customers without limitation or restrictions. Includes material with more than six months of shelf life remaining.	A—Serviceable: Issuable without Qualification	0	2,367
New, used, repaired, or reconditioned material that is serviceable and issuable for its intended purpose but is restricted from issue to specific units, activities, or geographical areas by reason of its limited usefulness or short service life expectancy. Includes material with three to six months' shelf life.	B—Serviceable: Issuable with Qualification	3,240	4,369
Items that are serviceable and issuable to selected customers but that must be issued before Condition A and B material to avoid loss as a usable asset. Includes material with less than three months' shelf life.	C—Serviceable: Priority Issue	0	0
Serviceable material that requires test, alteration, modification, conversion, or disassembly. This does not include items that must be inspected or tested immediately prior to issue.	D—Serviceable: Test/ Modification	12	0
Material that involves only limited expense or effort to restore to serviceable condition and that is accomplished in the storage activity where the stock is located.	E— Unserviceable: Limited Restoration	2,407	0
Economically reparable material that requires repair, overhaul, or reconditioning. Includes reparable items that are radioactivity-contaminated.	F— Unserviceable: Reparable	75,755	0
Material requiring additional parts or components to complete the end item prior to issue.	G— Unserviceable: Incomplete	14	0
Material that has been determined to be unserviceable and that does not meet repair criteria; includes condemned items that are radioactivity-contaminated, Type I shelf life material that has passed the expiration date, and Type II shelf life material that has passed the expiration date and cannot be extended.	H— Unserviceable: Condemned	8,588	0
TOTAL		90,016	8,000

NOTE: Figures reported around September 2018.

^a The first transfer of pistols from the Army to CMP occurred on January 25–26, 2018.

^b 1,264 M1911/M1911A1s of undocumented condition were transferred from the Army museum to CMP (1,242) or from TACOM (22).

In return, CMP agrees to provide the following quarterly sales data on M1911/M1911A1s sold: numbers transferred, numbers sold, serial numbers of the pistols sold (not including personal data of customers), and any information about crimes committed with the pistols. The 2018 NDAA requires the Secretary of the Army to provide information, to the extent feasible, on any crimes committed using any such pistols transferred to or sold by CMP. CMP does have an auditable system to track, record, and monitor all firearms, sales, and sales inquiries until the final purchaser physically possesses the item. But after the final sale, the ability to report such incidents could be beyond the feasible capabilities of CMP and the Army.

CMP also agrees to pay for transportation of the material transferred and limit the sales thereof to one pistol per authorized customer. CMP is also required by the Army to ensure that the CMP storage and processing facility meets Army standards for the storage of Class IV weapons. The Army approved temporary storage of the pistols in a CMP facility with 24-hour security until an armored vault was installed and physically inspected. In the spring of 2018, CMP successfully completed vault installation and inspection.

Program Strategy and Initial Assessment

As of September 2018, CMP had no detailed knowledge of the inventory apart from the DLA condition codes on the right-hand side of Table 6.1—including the likely sales grade of each item. CMP conducts several manufacturing activities to refurbish each item (described in a subsequent section of this chapter). These activities culminate in the grading of the item for quality. Subsequent pricing will depend on the assigned grade. CMP plans to complete inventorying the 8,000 transferred items during Summer 2018 and sell all serviceable items, regardless of the grade assigned. However, the expected yield from this allotment will be 7,200–7,600 sold, because 5 percent to 10 percent of transferred items are expected to be unfit for public sale. Unserviceable items could be sold for ornamental (nonfiring) purposes.

Senior CMP managers expressed interest in acquiring the full inventory of M1911/M1911A1s held by DLA possession if possible. If future receipts are authorized by Congress and allowed by the Army, CMP will again request the items with the best condition codes. Moreover, given the inventory figures in Table 6.1, CMP receipts in successive years will be for M1911/M1911A1s of declining quality.

M1911/M1911A1 Storage, Grading, and Pricing

CMP was storing, processing, and grading its inventory of M1911/M1911A1s throughout the summer of 2018 and when sales began in the fall. Initially, the transferred pistols were stored in two locked steel containers inside a metal cage with additional locks. The cage was in a building with alarms, cameras, detectors with internal wall fencing, external door cages with Army-approved key control, and external fencing with Army-approved locks and cameras covering all external surfaces surrounding the

building. In addition, a 24-hour armed guard (off-duty police officers) was posted outside the building. Per Army approval, CMP removed the 24-hour armed guard in spring 2018 and replaced the steel containers and surrounding cage with an Army-approved armored vault. The vault has capacity for 100,000 M1911/M1911A1s and is sufficient to hold all pistols in TACOM/DLA's possession.

All pistols are equipped with Radio-Frequency Identification (RFID) tags that are to be removed only by the final customer. Also, all items, including serial numbers, are logged using the Elliot inventory management software. The software tracks serial numbers from time of receipt to time of sale; it also will not permit orders to take place unless the customer has provided the necessary eligibility information. CMP also has a Serial Number Control Department that inputs serial numbers, tracks them to location, verifies them, and routinely investigates any discrepancy.

In the same facility, CMP has dedicated staff for servicing the pistols. Servicing each pistol involves inspection (including disassembly and reassembly of pistol), grading, repair, and test-firing and will consume spare parts, ammunition, and overhead. There are four possible grades (all prices inclusive of shipping):⁹

1. **auction grade** (sales determined by auctioning the pistol): The condition of the auction pistol will be described when posted for auction. This is a special grade given to some pistols based on their rarity and function. CMP senior management does not yet know how many of the transferred 8,000 firearms are of this grade or what the proceeds of the auction will typically yield.
2. **service grade** (\$1,050): Pistol might exhibit minor pitting and wear on exterior surfaces and friction surfaces. Grips are complete with no cracks. Pistol is in issuable condition.
3. **field grade** (\$950): Pistol might exhibit minor rust, pitting, and wear on exterior surfaces and friction surfaces. Grips are complete with no cracks. Pistol is in issuable condition.
4. **rack grade** (\$850): Pistol will exhibit rust, pitting, and wear on exterior surfaces and friction surfaces. Grips might be incomplete and exhibit cracks. Pistol requires minor work to return to issuable condition.

As of September 2018, CMP management did not know how many pistols of each grade it would offer. In 36 U.S.C. § 40728, language requires CMP to charge fair market value for items it sells. CMP determined its pricing following ranges published in *The Blue Book of Gun Values*,¹⁰ an authoritative pricing reference among firearms collectors with figures based on contributors' observations of auctions, trade shows, and gun shows, in addition to communications with SMEs. However, this pricing is

⁹ CMP, 2018c.

¹⁰ Steven P. Fjestad, *Blue Book of Gun Values*, 39th ed., Minneapolis, Minn.: Blue Book Publications, 2018.

based on past market experience. It is unclear to what extent CMP's influential activities will affect future pricing of M1911/M1911A1s. CMP's Chief Operating Officer did claim that CMP will likely continue these price ranges into the future because the combination of both price increases and rationing orders (via the random number generator) could alienate its customer base.

Analysis of M1911/M1911A1 Program Costs and Profits

Data Collection

In April 2018, we submitted a detailed questionnaire to CMP's M1911/M1911A1 program that asked about inventory assessments, business strategy, sales management, costs, and pricing. CMP senior management returned the completed questionnaire in May 2018. We continued e-mail correspondence with management and conducted a site visit of CMP facilities in Anniston, Alabama, on July 18, 2018. The site visit consisted of unstructured interviews and tours of CMP facilities, including those dedicated to storage, processing, and sales of M1911/M1911A1s.

Cost Analysis

Our economic analysis consisted of two components: a detailed treatment of costs of CMP's M1911/M1911A1 program and a forecasting of profits for 2018, 2019, and over the course of the full inventory. The objective was to estimate the profit earned by CMP for its activities with M1911/M1911A1s and compute the ROIs CMP made for this program.

Fixed Costs, Capital Investments, Acquisitions, and Other Committed Resources

As shown in Table 6.2, CMP made approximately \$940,000 in investments in facilities, security certification, equipment, administration, and information technology for its M1911/M1911A1 program. These investments were incurred beginning in 2017 and through the summer of 2018. CMP financed these expenses from its endowment, current assets, and operating funds, but it did not incur any long-term debt. We noted the following investments, which were incurred during 2017 and the first half of 2018:

- **M1911/M1911A1 Building Construction and Activation:** The current facility where the M1911/M1911A1s are stored and processed was retrofitted for this program in 2017 and early 2018 on land obtained by CMP in 2006. CMP also had to satisfy site certification, licensing, and Army inspection requirements. CMP stated that retrofitting this building for the M1911/M1911A1 program precluded it from being used for other CMP operations unless a major overhaul was completed.
- **Security Equipment:** CMP was required to adhere to all Army security standards for the storage of the M1911/M1911A1s. After consultation, the Army and

Table 6.2
Fixed Costs, Capital Investments, Acquisitions, and Other Committed Resources

Category	Item	Subitem	Expense
M1911/M1911A1 building construction and activation	Site construction and activation	Construction	\$548,797
		Certification and licensing	\$10,000
	M1911/M1911A1 storage containers		\$7,000
	M1911/M1911A1 armored vault		\$59,255
Security equipment	Security equipment	(Sensors, RFID tags, etc.)	\$207,302
Information technology	Software and data	Elliot inventory management software	\$24,900
		Other	\$15,746
Administrative	Temporary security personnel and equipment		\$33,940
	Personnel training and recruitment		\$8,568
	Sales and advertising		\$23,000
Total			\$938,508

NOTE: All figures in nominal dollars and expenses were incurred in 2017 or the first half of 2018.

CMP agreed that installation of an armored vault was the most secure long-term solution. CMP also purchased sensors for the building and RFID tags to track the pistols.

- **Information Technology:** To keep its M1911/M1911A1 operations separate from its other activities, CMP acquired additional information technology—notably, a separate instance of the Elliot inventory management software.
- **Administrative:** In anticipation of greater staffing needs resulting from M1911/M1911A1 operations, CMP committed resources to recruiting new technical and sales personnel and retraining some of its current personnel. It also expended resources for website development, advertising, and communications on the M1911/M1911A1 program. Additionally, for the time the vault was under construction (approximately January through May of 2018), CMP temporarily hired 24-hour armed security and rented related equipment, including a trailer for the security personnel.

M1911/M1911A1 Refurbishment Costs

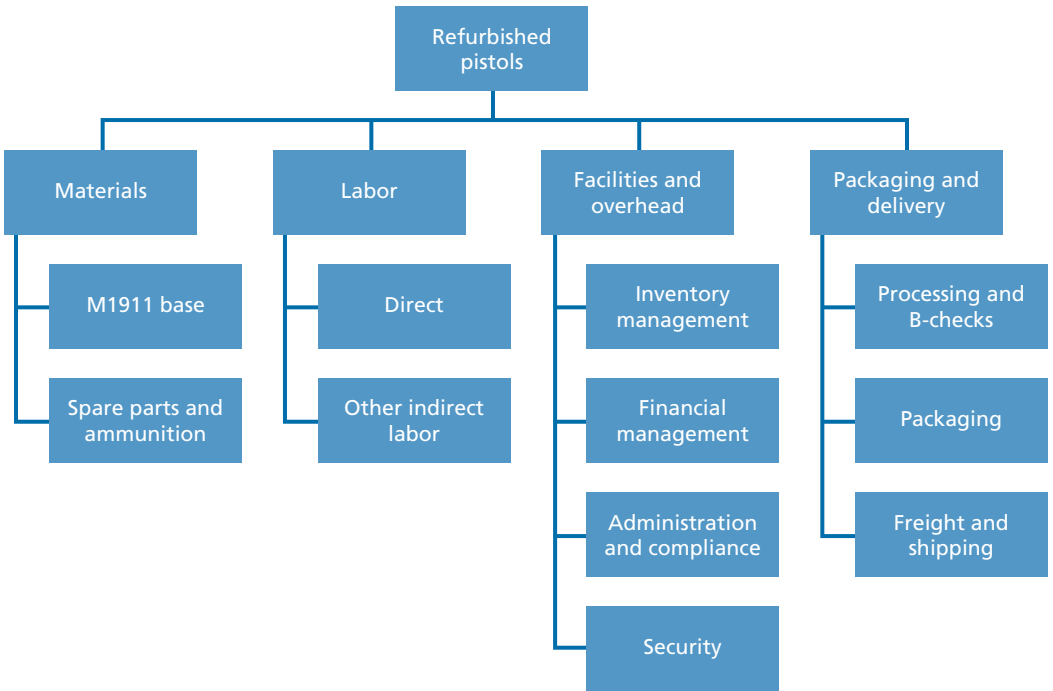
From an accounting perspective, we treated CMP's M1911/M1911A1 program as a manufacturing entity that refurbishes items. CMP uses raw materials (pistols and spare

parts) and employs highly skilled labor to inspect, grade, repair, and test the pistols. This work occurs at CMP facilities specialized for the M1911/M1911A1, which also require maintenance, security, compliance, and sales management, and which consume overhead. Once the pistols are refurbished, they are packaged and delivered by mail to a qualified customer.

To identify variable costs that are directly linked to the sale of each M1911/M1911A1 (e.g., direct labor) and quasi-variable costs linked to the M1911/M1911A1 program (e.g., overhead), we took a costing approach that followed the work breakdown structure depicted in Figure 6.1.¹¹ A work breakdown structure is a hierarchical structure that shows how cost elements relate to one another and to the overall end product. It begins with a single root node and successive levels of child nodes, whereby a given level of child nodes is a complete decomposition of the work expressed in the parent node. Refurbished M1911/M1911A1s can be completely decomposed into the materials (M1911/M1911A1 base and spare parts), labor (direct and indirect), facilities and overhead, and packaging and delivery.

CMP provided a statement in spring 2018 with estimates of overhead, direct and indirect labor, direct and indirect materials, and other direct costs for processing

Figure 6.1
Work Breakdown Structure of Refurbished M1911/M1911A1s



¹¹ GAO, *Cost Estimating Assessment Guide*, Washington, D.C.: GAO-09-3SP, 2009.

the surplus pistols received from the Army. Direct material costs consist of acquiring the M1911/M1911A1s spare parts, and ammunition for test firing. Direct labor consists of professional time and effort for inspecting, grading, repairing, and test-firing the pistol. Indirect labor factors in time for supervision and sales order management. Supervisory staff and sales clerks are dedicated to the program. Other direct costs are order processing, NICS background checks, freight, shipping, and packaging. Overhead factors in costs for management, material handling, equipment setup, inspection, maintenance, record-keeping, utilities, computer and communication systems, depreciation, insurance, rent, and property taxes. Delivery costs cover order processing (including background checks), packaging, handling, freight, and shipping to the customer. Table 6.3 breaks out these costs.

Table 6.3
M1911/M1911A1 Cost Statement

Category	Item	Subitem	Cost per Unit
Direct materials	M1911/M1911A1s and parts		\$312.53
Direct labor	Inspection		\$9.54
	Grading		\$9.54
	Repair	Service grade	\$28.63
		Field grade	\$57.26
		Rack grade	\$152.68
	Test firing		\$95.43
Indirect labor	Shipping clerks		\$6.42
	Sales clerks		\$6.18
	Supervisors		\$8.77
Other direct costs	Order processing and background checks		\$9.54
	Freight, shipping, and packaging		\$9.54
Overhead ^a			\$147.91
Total cost per unit		Service grade	\$644.03
		Field grade	\$672.66
		Rack grade	\$768.08

NOTE: Cost estimates were provided in the spring of 2018.

^a We included spare parts and supplies in overhead per unit. We estimated overhead per unit as 150 percent of average direct labor costs for inspection, grading, and repair.

The estimated unit costs of goods for a refurbished M1911/M1911A1 are approximately \$640, \$670, and \$770 for service, field, and rack grades respectively. Costs for grades differ because lower grades require additional parts and more extensive repairs.

Profit Analysis

We estimate the gross profit margins, gross profit, and ROI earned by CMP for sales of transferred M1911/M1911A1 pistols in 2018, 2019, and over the course of the full inventory, should Congress authorize the complete transfer of all pistols. As of September 2018, sales of the pistols were not to begin until October 2018. Therefore, we made several assumptions about future sales quantities, pricing, and inventories.

Demand Assumptions

Estimating demand and market structure for the M1911/M1911A1s is challenging. First, these pistols are mostly viewed by potential customers as collectible or antique items and CMP does not plan on creating marksmanship events that feature the pistol.¹² Antique items are highly elastic, idiosyncratic goods. Hedonic price studies have demonstrated that consumer willingness to pay for them depends greatly on rarity, age, and grade or quality, in addition to any other sentiment (these studies focused on antiques that were not firearms).¹³ The absence of sales of M1911/M1911A1s in recent years precludes the ability to accurately estimate the demand using revealed-preference data.

Second, CMP is statutorily required to sell the refurbished M1911/M1911A1s at fair market value, to limit sales to one order per customer, and to be the sole supplier of the pistols. Sales volumes will likely be large in absolute terms, but it is unclear how large sales will be relative to the underlying demand and to what extent the sales beyond the 8,000–18,000 authorized pistols for FY 2018 and FY 2019 will be absorbed.

We discussed rationing demand and related issues with CMP management during a site visit to Anniston, Alabama, in July 2018. CMP management was confident, based on its own experience and discussions with industry professionals, that the authorized number of pistols for FY 2018 and FY 2019 would be readily absorbed by the market at current price points. CMP also stated it would retain the same prices in 2019 to avoid alienating customers who were not selected by the random number generator in 2018. As discussed previously, the announcement of the forthcoming sales generated widespread interest in the marksmanship community, to the extent that the CMP website and telephone lines were overcome with inquiries about the pistol and

¹² Keller, 2017; Maccar, 2017; Chris Eger, “How, When and Where Will the CMP 1911s Be Available?” Guns.com, November 22, 2017.

¹³ Federico Etro and Laura Pagani, “The Market for Paintings in the Venetian Republic from Renaissance to Rococo,” *Journal of Cultural Economics*, Vol. 37, No. 4, 2013; Mark Dickie, Charles D. Delorme, and Jeffrey M. Humphreys, “Price Determination for a Collectible Good: The Case of Rare United-States Coins,” *Southern Economic Journal*, Vol. 61, No. 1, 1994.

temporarily shut down. Additionally, CMP has already invested in facility capacity for 100,000 pistols.

We made the following assumptions about demand:

- Up to 8,000 M1911/M1911A1s would be absorbed in 2018 at the prices of \$1,050, \$950, and \$850 for service, field, and rack grades, respectively. Moreover, 100 items would be of auction grade, with a price of \$5,000. The estimates of 100 items and \$5,000 per item were obtained from CMP senior managers based on their prior knowledge and experience. Because inventory quality will decline in future years, CMP management does not expect to find auction-worthy items in future allotments.
- Up to 10,000 M1911/M1911A1s would be transferred to CMP by the Army and absorbed in FY 2019 at the prices of \$1,050, \$950, and \$850 for service, field, and rack grades, respectively.
- Congress would authorize the transfer of remaining pistols in allotments of 10,000 per year to CMP by the Army in FY 2020 and beyond. All sales would be absorbed at the prices of \$1,050, \$950, and \$850 for service, field, and rack grades, respectively.

Other Assumptions

We made the following additional assumptions about future inventories of M1911/M1911A1s:

- From 5 percent to 15 percent of transferred pistols will not be fit for sale (washout rate). Washout rates will rise steadily because of the declining quality of inventory. CMP expects to observe these rates based on their experience with refurbishing transferred M1 Garand rifles.
- Future escalation of costs is 2 percent per year with pricing of each sales grade remaining constant at 2018 fair-market determined values. This escalation factor is within the standard range used in cost analyses. We do not include reductions in cost from increasing operational efficiencies, which are certainly possible in manufacturing operations.
- CMP will request that DLA/TACOM provide M1911/M1911A1s with the best condition numbers in FY 2019 and subsequent out-years (up to the authorized amount). This assumption is based on statements from CMP management and its wish to have items with higher expected profit margins sooner.
- Pistols bearing undocumented condition codes from the Army Museum or TACOM are 50 percent service, 30 percent rack, and 20 percent field grades. CMP found this assumption reasonable based on its prior knowledge and experience.
- Pistols bearing DLA Supply Condition Codes A–D will be converted into service grade sales items.

- Pistols bearing DLA Supply Condition Codes E will be converted into field grade sales items.
- Pistols bearing DLA Supply Condition Codes F–G will be converted into rack grade sales items.
- Pistols bearing DLA Supply Condition Code H (condemned) will be used for spare parts or ornamental pieces. We assume CMP will pay a nominal cost to obtain these parts and that these spare parts and materials have a salvage value of \$300–\$313 per unit, reflecting savings on the direct material costs for serviceable units.
- Estimation of profits, costs, and revenues for all remaining inventory in 2020 assumes that the Army, with congressional authorization, transferred 8,000 pistols to CMP in FY 2018 and 10,000 pistols in FY 2019.

Results

As shown in Table 6.4, gross margins from the sales of transferred M1911/M1911A1s are expected to be \$406 (39 percent), \$277 (29 percent), and \$82 (10 percent) per unit for service, field, and rack grades, respectively. Under the assumptions in the preceding sections, Table 6.5 and Figure 6.2 summarize the expected costs, profits, and ROI for different fiscal years and various amounts of firearms transferred by the Army. ROI is calculated as the ratio of gross profits to total startup costs—defined as fixed costs, capital investments, acquisitions, and other committed resources in 2017 and early 2018 that were shown in Table 6.2. Unlike FY 2018, the Army is not required to transfer a minimum number of pistols in FY 2019 and can choose an amount below the authorized limit of 10,000. Table 6.6 presents profits and costs for different levels of transfer in FY 2019.

Under current assumptions, CMP will earn \$3.4 million and \$2.0 million in profits for 2018 and 2019, respectively. One-year ROI for 2018 was approximately 360 percent. For reference, nominal ROI for the S&P 500 from September 2017 to September 2018 was 15.4 percent.¹⁴ Profits will decline in each year because of the

Table 6.4
Estimated M1911/M1911A1 Margins by Grade

Grade	Cost per Unit	Marginal Revenue	Gross Margin	Gross Margin (%)
Service	\$644	\$1,050	\$406	38.7
Field	\$673	\$950	\$277	29.2
Rack	\$768	\$850	\$82	9.6

¹⁴ DQDYJ, “S&P 500 Return Calculator, with Dividend Reinvestment,” webpage, October 4, 2018.

Table 6.5
Estimated M1911/M1911A1 Profits and ROI

Year	Transfers Authorized by Congress	Transfers Allowed by Army	Revenue	Costs	Gross Profit	ROI ^a (%)
2018	10,000	8,000	\$8,296,194	\$4,937,990	\$3,358,204	358
2019	10,000	10,000	\$8,733,723	\$6,685,507	\$2,048,216	218
2020	10,000	10,000	\$7,820,000	\$7,351,862	\$468,138	50
2021	10,000	10,000	\$7,735,000	\$7,417,390	\$317,610	34
2022	10,000	10,000	\$7,650,000	\$7,482,598	\$167,402	18
2023	10,000	10,000	\$7,565,000	\$7,547,447	\$17,553	2
2024	10,000	10,000	\$7,480,000	\$7,611,897	-\$131,897	-14
2025	10,000	10,000	\$7,395,000	\$7,675,906	-\$280,906	-30
2026	10,000	10,000	\$7,310,000	\$7,739,431	-\$429,431	-46
2027 ^b	10,000	10,000	\$3,715,737	\$1,271,694	\$2,444,043	260
2028 ^b	10,000	16 ^c	\$5,000	\$298	\$4,702	1
TOTAL	—	—	\$73,705,655	\$65,722,020	\$7,983,635	851

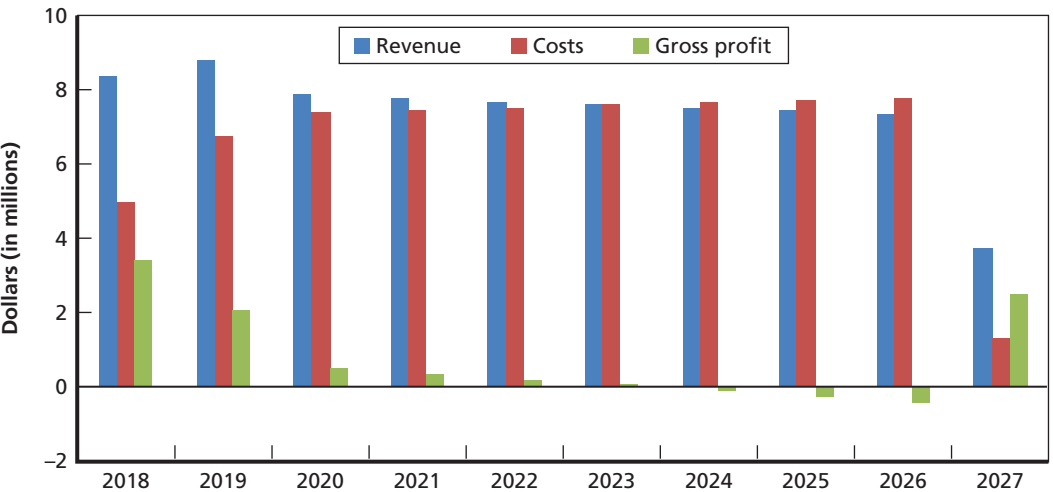
NOTES: All figures in nominal dollars. Congress authorized 10,000 maximum transfers for FY 2018 and required a minimum of 8,000. It also authorized 10,000 for FY 2019 but no minimum transfer.

^a ROI is computed as ratio of profits to startup costs. Startup costs are fixed costs, capital investments, acquisitions, and other committed resources described in Table 6.2.

^b Inventories are mainly condemned items that can be salvaged at lower cost.

^c Inventory exhausted.

Figure 6.2
Estimated M1911/M1911A1 Profits



NOTE: Profits decline as costs and washout rates increase and quality of inventory and high-grade items decrease. Estimated 2027 inventories are mainly condemned items that can be salvaged at lower cost. A negligible amount of transfers were predicted for FY 2028 and corresponding estimates are not shown. All figures in nominal dollars.

Table 6.6
Estimated M1911/M1911A1 Profits and ROI for Different Authorizations in FY 2019

Year	Transfers Authorized by Congress	Transfers Allowed by Army	Revenue	Costs	Gross Profit	ROI ^a (%)
2018	10,000	8,000	\$8,296,194	\$4,937,990	\$3,358,204	358
2019	10,000	0 ^b	\$0	\$0	\$0	0
2019	10,000	2,000	\$1,974,000	\$1,235,001	\$738,999	79
2019	10,000	4,000	\$3,877,688	\$2,490,535	\$1,387,153	148
2019	10,000	6,000	\$5,631,634	\$3,811,635	\$1,819,999	194
2019	10,000	8,000	\$7,229,634	\$5,284,515	\$1,945,119	207
2019	10,000	10,000	\$8,733,723	\$6,685,507	\$2,048,216	218

NOTE: All figures in nominal dollars. To exemplify variation in profits due to varying transfer amounts, amounts transferred by Army were chosen to be in increments of 2,000. Other values are possible.

^a ROI is computed as ratio of profits to startup costs. Startup costs are fixed costs, capital investments, acquisitions, and other committed resources described in Table 6.2.

^b For this scenario, we assume the Army determines to transfer no pistols.

rising washout rates and narrower profit margins from lower-quality inventory being transferred in addition to cost escalation. We did discuss with CMP management the prospect of obtaining condemned items earlier so that the resulting spare parts could be used to reduce costs, but senior managers responded that the uncertainty in future authorizations and transfers incentivized them to obtain the revenue-generating items (i.e., better-condition items) first. CMP will have to then pursue operational efficiencies to curb cost escalation or possibly alter its pricing in future years under current assumptions.

Observations

CMP invested \$940,000 in startup costs in 2017 and 2018 and has a potential of earning \$3.4 million in profits in 2018 and \$2.0 million in 2019. This represents a significant increase in CMP’s noninvestment income. CMP’s intended program for refurbishing and selling transferred M1911/M1911A1 pistols will likely generate solid financial gains in 2018, 2019, and successive years. However, CMP might need to pursue operational efficiencies or pricing adjustments after 2023 if Congress and the Army authorize additional transfers.

Moreover, CMP has invested in the capacity to hold the Army’s entire M1911/M1911A1 inventory, which could lead to savings in storage costs for the Army as dis-

cussed in earlier chapters. Per its memorandum of agreement with the Army, CMP agrees to report to the Army any information on crimes committed with purchased pistols. The 2018 NDAA requires the Secretary of the Army to provide information, to the extent feasible, on any crimes committed using any such pistols transferred to or sold by CMP. CMP does have an auditable system to track, record, and monitor all firearms (e.g., electronic tags), sales, and sales inquiries until the final purchaser physically possesses the item. But after the final sale, the ability to report such incidents could be beyond the feasible capabilities of CMP and the Army.

Our analysis has several limitations. First, we assumed that pricing would remain constant and all demand would be absorbed over the forecast period. This might be unrealistic after 2019, because only lower-grade items are expected to be available. Second, based on the best available information on current inventories, we assumed the numbers of actual grades that would be sold and the quality of future items. As of September 2018, CMP had made no actual sales or completed its initial inventory assessments and grading.

Conclusion

The NDAA for Fiscal Year 2018 tasked the Army to “enter into an agreement with a Federally funded research and development center with relevant expertise to conduct an evaluation of the Corporation for the Promotion for Rifle Practice and Firearms Safety [sic] for the purpose of assessing future transfers of excess firearms to the Corporation.”¹ At the request of the Administrative Assistant to the Secretary of the Army, RAND Arroyo Center conducted this evaluation. The NDAA language called for the following five discrete tasks:

1. Assess the effectiveness of CMP.
2. Compare CMP with similar organizations.
3. Evaluate the benefits that the Army receives from CMP relative to the resources the Army provides CMP.
4. Assess CMP’s current funding model and prospective funding models that would support CMP’s transition to self-sustainment.
5. Assess the costs and profits associated with the transfer of excess firearms from the Army to CMP with respect to surplus caliber .45 M1911/M1911A1 pistols.

We conclude by summarizing the findings for each discrete task.

Task 1: Assess the Effectiveness of the Civilian Marksmanship Program

As noted, we were constrained because CMP lacks strategy-driven, performance-outcome measures. We received many output metrics—e.g., numbers of individuals completing instruction—but no information about the quality or effect of that instruction. This restricted and limited our ability to determine direct benefits to either individual citizens or the Army. Despite these limitations, the findings demonstrate that **CMP is effective in its functions to instruct, conduct, and promote.**

¹ Public Law 115-91, 2017.

CMP offers a broad range of instruction to multiple audiences. The focus is primarily on rifle and pistol clinics at all levels, from beginners to experts. Participants are predominantly adults, but youth instructional programs are growing quickly, and CMP has engaged more-diverse populations, such as women and disabled persons. CMP also concentrates on delivering force-multiplying instructional programs that develop and deploy capable instructors who can teach the fundamentals and essentials of marksmanship to others in their local areas. One of CMP's focus areas is safety instruction, which includes certification of range safety officers who are qualified to conduct and oversee competitions. CMP is the sole organization responsible for developing and certifying JROTC instructors. CMP relies heavily on its affiliates to execute instruction and uphold good safety practices.

CMP conducts and sanctions many of the most-valued competitions in shooting sports, such as the National Matches and the JROTC Championships. It averaged 307,000 participants in its sanctioned competitions, with about 20-percent growth over the study period. Here, too, CMP relies heavily on its affiliates. The national organization has introduced considerable innovation in the sport through its use of electronic targets, a web-based results repository, and a highly visible CMP-designed safety device employed at all competitions.

CMP invests considerably in promoting the sport by publishing a robust range of supporting materials and maintaining a growing social media and electronic presence. It is notable that CMP distributed more than \$900,000 in 2017 to recognize marksmanship achievements through team endowments, individual awards and medals, and general program support. Similarly, in 2017, CMP recognized high school seniors who demonstrated marksmanship excellence by awarding almost \$172,000 in scholarships to support postsecondary and vocational education.

CMP depends primarily on revenues generated from sales of transferred items to execute its mission. To carry out its administrative functions, CMP uses an auditable system to secure and track firearms, control its inventory, and adhere to laws governing sales of firearms. CMP employs an independent accounting firm to provide annual financial audits and biannual operational compliance assessments. These auditor determinations identified no financial deficiencies in 2017. The accounting firm has yet to issue a final operational determination, but preliminary findings indicated only a single inconsistency that was promptly addressed by CMP management. In the operational realm, there is potential ambiguity in the Army memorandum of understanding and the statute about the title, timing, and transfer of firearms, which could raise concerns about liability and should be examined further.

Task 2: Compare the Civilian Marksmanship Program with Similar Organizations

Although each organization has a national presence in at least one of CMP's functions to instruct, conduct, or promote, **none of the organizations that provided data match CMP in scale and comprehensiveness of function.** With respect to scale, the only other organizations with the financial resources and extensive networks of affiliates required for widespread marksmanship instruction and sport proliferation is possibly the NRA/NRA Foundation or the National Shooting Sports Foundation. However, both organizations' scopes are quite broad, and their interests and activities extend beyond these areas to political advocacy.

With respect to the instruct function, CMP and its affiliates annually train 80,000 individuals—about half of them youth—in marksmanship, relying heavily on independent affiliates to carry out this instruction. Other organizations do not train as many adults or youth; delegate training to independent or affiliated instructors, clubs, or affiliates; or both. The NRA and its affiliates presumably train significantly more individuals than CMP, but we were unable to substantiate this claim; neither NRA organization responded to data requests.

A definitive leader in the conduct function, CMP and its affiliates draw more participants in competitions than all the other organizations for which we have data. Moreover, CMP has contributed to sports governance, published authoritative rules for the conduct of competitions, and innovated by incorporating technology into competitions. We note that smaller, less-established organizations have grown more during the study period. Such organizations have a youth focus and offer categories of competition that CMP traditionally does not emphasize. Although the NRA did not provide data, participation in NRA competitive events might be at a level similar to that for CMP.

When comparing the total amounts of financial assistance provided by organizations in executing the promote function, CMP ranks only fourth among the organizations studied. It does undertake some notable activities with promotional appeal, such as its relationship with the Army and its use of brand ambassadors, state associations, and media. CMP also holds significantly more financial assets than most other organizations in the form of its core endowment fund. However, the other organizations are all foundations that have much greater annual revenues.

This comparison of organizations establishes that CMP has a significant national presence in marksmanship instruction, competition, and promotion. However, CMP and all these organizations operate in the wider context of target shooting, which involves approximately 50 million individuals across the United States and is where many citizens are first exposed to shooting or are trained by a friend or family member. In this regard, none of the organizations examined have shown that they have the

resources or scale to interact with such a large population with respect to marksmanship proliferation, but there certainly is potential to make greater inroads.

The foregoing comparisons have limitations. Foremost, three organizations did not provide data or corroborate participation figures. These omissions weaken the quantitative comparisons, particularly those between the NRA/NRA Foundation and CMP, which are thought to be of similar scale. Second, based on the selection criteria and identification procedures, we did not consider for-profit entities. Such organizations can and do provide such functional services, but we did not have consistent means for capturing and characterizing their offerings. Third, these comparisons relied on the strength of a logic model that was strictly based on CMP's functions to instruct, conduct, and promote—there could have been other notable and significant activities undertaken by organizations that we did not fully consider or value. Despite these limitations, we believe that our analysis is credible for the purposes of this report.

Task 3: Evaluate the Benefits That the Army Receives from the Civilian Marksmanship Program Relative to Resources That the Army Provides

CMP benefits to the Army likely outweigh Army costs. We explored several alternative assumptions in our analyses, but, in all cases, we estimate that the costs incurred by the Army as a result of CMP are less than the avoided costs to the Army. Much of the incurred cost is the time spent by Army personnel on CMP-related activities; the remainder reflects costs associated with storing and releasing some materiel to CMP. Much of the avoided costs are a result of CMP providing support to programs and activities that the Army would have provided otherwise; the remainder of the avoided costs are a result of the transfer of surplus firearms and ammunition to CMP.

The benefit-cost ratio is sensitive to assumptions about what the Army would do if CMP did not exist. Although the benefits to the Army outweigh the costs in all cases, the extent to which this is true depends heavily on the specific assumptions we make about what the Army would do if CMP did not exist. Specifically, we estimate benefit-cost ratios ranging from 6:1 to 35:1. The different assumptions we examine are all arguably plausible and are ones that we can neither prove nor disprove. We have presented our analyses in a way that allows readers to evaluate each assumption and select the ones they believe to be most likely.

All CMP-related benefits to the Army are avoided costs. It is important to emphasize that all Army benefits are the result of cost-avoidance. The Army does not receive any financial payments from CMP, other than reimbursement for some expenditures that the Army makes on CMP's behalf. The benefits, therefore, are not resources that the Army could reprogram for other purposes.

Future adverse events could lead to higher costs for the Army. There are some potential costs and benefits for which data are unavailable and that we cannot measure

precisely. Although there were no adverse events associated with CMP during the years we analyzed, we cannot rule out the possibility that such events (for example, a surplus firearm being sold by CMP to the public and subsequently being used in a crime or being associated with an accident leading to injury) might occur in the future. If they do, and if the Army were to be adversely affected, the Army would incur higher costs as a result of CMP than the ones we are able to estimate.

Task 4: Assess the Civilian Marksmanship Program’s Current Funding Model and Prospective Funding Models That Would Support the Program’s Transition to Self-Sustainment

Excluding the receipt of excess firearms from the Army, CMP still has a viable business model that has shown a profit in all but one of the past five years while delivering a robust range of programs and services. Central to this is the existence of CMP’s core endowment fund of more than \$240 million in FY 2017. Revenues derived from the earnings and interest on this fund allow CMP to have a buffer that can be used to supplement its annual operating budget as needed. Accordingly and within reason, CMP can deal with unanticipated negative annual variances or can surge to cover emergent high-priority funding requirements. Theoretically, CMP would have had to tap into its returns on the core endowment fund for each of the past five years if it had not received excess firearms.

If ROIs are included in the profit calculation, CMP would have earned positive profits, ranging from \$4 million to \$6.5 million per year, from FY 2013 to FY 2017 (except for FY 2015, when the stock market was down) even without receiving Army resources. Conversely, if ROIs are not included in the profit calculation, CMP would have experienced a loss each year, ranging from \$2 million to \$7 million, in the absence of excess firearms and other resources from the Army.

To make up for any loss in revenue that would arise from the lost sale of excess firearms, we presented several options for generating new or additional revenue. These options can be characterized as (1) an alternative funding model under which CMP could establish a membership program or rely more heavily on donations or sponsors, (2) an expansion of existing services or programs, or (3) the development of a new type of revenue stream. Each of these options would require some level of effort by CMP, and each would generate some effect as measured by revenue generated. To decide which might be a feasible source of revenue, CMP would need to assess and prioritize these options according to effort, impact, and other important dimensions.

These analyses again highlight the need for CMP to have an overarching and guiding strategy. Such options for generating additional revenue could also be used as the basis for a strategic program expansion to further CMP’s overall mission and objectives, regardless of whether CMP receives future excess firearms.

Task 5: Assess Costs and Profits Associated with the Transfer of Excess Firearms from the Army to the Civilian Marksmanship Program with Respect to Surplus Caliber .45 M1911/M1911A1 Pistols

Based on the analysis, we find that CMP invested \$940,000 in startup costs in 2017–2018 and has the **potential to earn \$3.4 million in profits in 2018 and \$2.0 million in 2019**. Uncertainty associated with program specifics increases considerably in 2019 and beyond. Projected 2019 profits assume that past sale prices are retained and that the Army transfers the fully allowed complement of 10,000 pistols. The Army has yet to make this decision. Transferring 8,000 pistols would result in a revised 2019 profit of \$1.9 million. Profits in later years will decline as costs and washout rates (items not fit for sale) increase because of the lower quality of future transferred inventories. Demand for lower-grade pistols at current fair market prices might not be realistic in the future. This means that in order to break even, CMP could be forced to find operational efficiencies to reduce costs or to raise prices after 2023 under our current estimation assumptions—or they would have to sell pistols at a loss. All of these considerations illustrate limitations in our findings.

CMP has invested considerably in its capacity to store the Army's entire M1911/M1911A1 inventory securely; however, CMP currently stores only its initial annual increment of pistols. This represents a CMP-stored inventory of 8,000 pistols, not the full pistol inventory of more than 98,000. The Army retains the yet-to-be transferred inventory of 90,000 pistols at the Anniston Army Depot and pays for storage. Reexamining this policy could lead to Army savings in real and avoided storage costs.

Per its memoranda of agreement with the Army, CMP agrees to report to the Army any information on crimes committed with purchased pistols. The 2018 NDAA requires the Secretary of the Army to provide information, to the extent feasible, on any crimes committed using any such pistols transferred to or sold by CMP. CMP does have an auditable system to track, record, and monitor all firearms, sales, and sales inquiries until the final purchaser physically possesses the item. But after the final sale, the ability to report such incidents could be beyond the feasible capabilities of CMP and the Army.

Detailed Information Supporting Prior Referenced Information

The following are supplemental descriptions of CMP activities, organized by function. These activities are highlighted throughout Chapter Two.

The Instruct Function

Garand-Springfield-Military Master Instructor Course

The GSM Master Instructor Program began in April 2006 at Camp Perry. The CMP Master Instructor certification program trains and certifies advanced shooters and instructors as Master Instructors. These Master Instructors are then qualified to teach specific marksmanship instructional topics using CMP training material and curricula. The intent is for these Master Instructors to hold sanctioned clinics for new shooters at their shooting clubs using standardized CMP material. As of February 2018, there were 826 GSM Master Instructors.

JROTC Marksmanship Instructor Course

CMP took over the creation of and the training in a JMIC curriculum in 2004. The JMIC curriculum was developed in collaboration with JROTC command representatives, JROTC instructors experienced in marksmanship, and civilian marksmanship experts. JROTC Cadet Commands require that all JROTC Marksmanship programs be supervised and instructed by a JMIC-certified instructor. Each JMIC certification is good for two years.

The JMIC course objective is to train and certify JROTC instructors who will then teach gun safety and air rifle marksmanship to JROTC cadets. JROTC instructors also establish and manage safe air rifle ranges for cadet marksmanship activities.

Junior Air Rifle Camps

The CMP Junior Air Rifle Camps were established to help interested juniors improve their marksmanship and leadership skills. Although CMP provided support to the events starting in 1999, CMP took over full leadership in 2000.

Range Officer Program

The Range Officer program was created to train staff supporting CMP national matches. Until CMP took over in 2017, the NRA had recruited and trained the staff operating the ranges during CMP national matches. The program was created in response to feedback about a lack of knowledge of CMP rules on the line during matches. The Range Officer program is broken into three levels, and it features both general range and competition and discipline-specific (e.g., high-power rifle, 3PAR) information. Level I training is completed online, although Level II is offered at CMP's North and South headquarters and travel games. As of February 2018, Level III was still under development. Every new range officer must complete training and a refresher course every four years. All National Match support staff also will undergo annual orientation prior to the start of the matches.

The Conduct Function

CMP National Three-Position Air Rifle Championship

CMP has been involved in 3PAR championships for many years, but it did not have a CMP championship until 2012. In 2012, CMP created a 3PAR program to run a series of matches that culminated with the CMP National Championship match. The matches are open to all junior shooters, regardless of club affiliation. The four progressive matches are:

- Postal Match—consists of a 3x10 match fired on each team's home range.
- State Matches—consists of a shoulder-to-shoulder 3x20 match held at the state level.
- Regional Matches—consists of a training day followed by two days of 3x20 competitions and a final.
- National Match—consists of a 3x20 match and final. This one-day match is held in conjunction with the National 3PAR Championships.

The purpose of the CMP 3PAR program and its matches is to create opportunities for all junior shooters to compete in national matches. The championship also showcases CMP's "continued dedication to junior shooting in the United States," which coincides with its statutory requirement to prioritize youth in its activities.

Eastern Games and Western Games

Both the Eastern and Western Games are joint ventures with Creedmoor Sports, Inc. The purpose of the Eastern and Western Games is to take competitors through a smaller-scale match that resembles larger national matches. These games help familiarize participants with national-level-style matches and enable participants to compete

in events they otherwise might not have access to. The events are open to all shooters, regardless of skill level and regardless of whether they are recreational or competitive shooters.

The Eastern Games began in May 2007 and consist of seven days of events that are held in Camp Butner, North Carolina. The Western Games began in 2005 and currently are held at the Ben Avery Shooting Facility in Phoenix, Arizona. The Eastern Games last seven days, and the Western Games last eight days. Both games are divided between CMP and Creedmoor events.

Excellence-in-Competition Matches

EIC matches predate CMP and were created by the War Department to award Army service members. EIC matches were opened to civilians in 1926. EIC matches for service rifles and service pistols allow shooters to earn points toward their Distinguished Rifleman or Distinguished Pistol Shot badge. The EIC matches and Distinguished Badge program are conducted in tandem.

JROTC National Championship

Like the CMP 3PAR Championship, the JROTC National Championship is held in phases: (1) the Postal Match; (2) the service championships, which are a sort of regional championship; and (3) the national championship. The Postal Match enables JROTC teams to experience national-level competition while firing on their home range, and it also enables them to have national rankings as both individual cadets and teams. The results from the Postal Match phase are then used to select teams that will move onto the service championships and, ultimately, the national championship. The service championships enable JROTC cadets and teams to see how they compare with other schools, something they were unable to do prior to the program.

The JROTC National Championship consists of teams from the Air Force, Army, Marine Corps, and Navy JROTC programs. Unlike with the JROTC Postal Match and service championships, CMP governs all aspects of the JROTC National Championships. The JROTC National Championship enables cadets and teams from each of the services to compete against one another while earning EIC credit points toward distinguished badges. It also exposes JROTC cadets to college coaches who can recruit them for colleges and military academies. These teams often receive financial support from CMP to allow them to travel for the matches.

Mobile Air Rifle Range

The mobile air rifle range was built in 2010 to provide a venue for competitions and instructions other than Anniston and Camp Perry. The purpose of the mobile air rifle range is to expand CMP's reach to the western United States and to provide an opportunity to host national competitions simultaneously in three locations. It enables CMP

to go to different western locations through the use of three different trailers with a capacity of 40 targets per trailer.

National Junior Olympic Three-Position Air Rifle Matches

The National Junior Olympic 3PAR matches began in 1999 under USA Shooting's leadership. Early matches were sanctioned by USA Shooting, under the National Three Position Air Rifle Council rulebook. CMP provided staff for the events and financial support for USA Shooting and competitors. CMP increased its involvement in 2008 through such actions as holding the matches at its CMP facilities, sanctioning the matches so EIC points could be awarded, and sponsoring a program for awarding medals and trophies to participating JROTC shooters.

National Match Air Gun Events

Established in 2008, the National Match Air Gun Events (NMAGE) are designed to give national match competitors and noncompetitors the opportunity to compete in a variety of air gun matches. The NMAGE mirror the national matches with three different phases: pistol, small-bore, and high-power. The NMAGE feature a variety of matches that all have a \$5–\$10 entry fee. Three dollars from each fee go to a pot of money, with the total amount divided among the top eight-scoring individuals from each event.

National Matches

National CMP matches date back to 1903, when Congress authorized the National Board for the Promotion of Rifle Practice, CPRPFS's predecessor organization, and national matches. As reflected in CMP's statutory functions and mission, the legislation grew out of a desire to improve marksmanship and national defense preparedness. With the creation of the CPRPFS in 1996, both CMP and national matches were privatized. As recently as February 2018, CMP and the NRA run the matches jointly. The national matches consist of the CMP National Trophy Pistol and Rifle Matches, the Pistol and Rifle Small Arms Firing Schools, the CMP Games rifle events, and the NRA National Pistol, Smallbore Rifle, and Highpower Rifle Championships.

Sanctioned Garand Springfield Matches

The GSM Matches are a collection of different matches sanctioned by CMP. They consist of the Springfield and Rimfire Sporter Matches, Vintage Military Match, Carbine Match, Vintage Sniper Rifle Team Match, Modern Military Games Matches, Unlimited Garand Matches, Non-EIC Service Rifle, Pistol Matches, and State Championship games. CMP not only sanctions these matches but also provides certificates to give to all competitors who complete the course of fire. Match directors can also request supplies from CMP, such as scorecards, certificates, and ammunition.

State Games

CMP holds State Games each year at several locations in the United States to provide a competitive shooting program that is widely available. The State Games have occurred regularly since 2012 and are hosted by local organizations or clubs located in Oklahoma, Georgia, and Vermont.

Talladega 600

After construction of the Talladega Marksmanship Park in May 2015, CMP has hosted the Talladega 600 each year, which features training events and clinics and competitive events in rifle, pistol, and sporting clays.

Three-Position Air Rifle

CMP sanctions hundreds of competitions each year through its 3PAR program. Almost all affiliated schools and junior clubs with active marksmanship programs compete in this program, which consists of Junior Olympic Three-Position Air Rifle State Championships, CMP State Championships, and the National Three-Position Air Rifle Championships. The Junior Distinguished Badge for three-position air rifle is a medal program designed to be obtainable by successful high school competitors.

The Promote Function

4-H Shooting Sports

CMP provides some financial assistance to the 3PAR competition at the 4-H Shooting Sports National Championship, helping with coordination of the 3PAR competition and facilitating state-level grants to 4-H organizations.

CMP Brand Ambassador Program

The CMP Brand Ambassador Program's goal is to provide "an appropriate and encouraging environment for the athletic and personal development sports athletes who shoot and to provide CMP with dedicated, skilled employees to develop and run CMP events."¹ CMP employees are able to divide their time between training and work promoting CMP. Its purpose is to represent CMP's brand, including its training and facilities, and to gain national and international recognition among competitive shooters.

Competition Awards

CMP disburses financial awards, trophies, prizes, and badges/insignia for success in marksmanship competitions.

¹ CMP, undated-i, p. 17.

Marketing

The marketing program helps CMP advertise its missions of promoting marksmanship, safety, instruction, competitions, and youth participation. CMP's 2017 Marketing Review states that in most instances, "CMP accomplishes those missions in a complimentary [sic] fashion through its programming at Camp Perry, Anniston, CMP Talladega[,] and at travel games and events across the nation."² CMP sees local advertising as an important part of the CMP marketing program because much of its participation comes from outside of the local area.

National Match Junior Highpower Support

Since July 2000, this program has supported the junior high-power service rifle programs of CMP-affiliated clubs, and it promotes junior participation in the national matches. CMP provides some financial assistance to eligible members of junior high-power rifle teams competing in the National Trophy Rifle Matches, but the dollar amount of support is limited by CMP's budget and eligible pool of recipients.³

On the Mark: CMP's Newsletter for Coaches and Junior Shooters

On the Mark (OTM) is CMP's newsletter disseminating news and information about junior shooting activities. *OTM* is geared toward leaders and coaches at junior shooting clubs, teams, and camps. Its purpose is to "help youth shooting leaders teach firearms safety and marksmanship more effectively and assist junior shooting leaders and coaches in the continued success and improvement of their young shooters, regardless of skill level."⁴ *OTM* is distributed on the CMP website and through hard copies that are sent by mail and distributed at events, competition centers, and marksmanship parks. *OTM* is distributed four times per year.

Publications and Printers Review

CMP produces several printed training publications to support its mission. Most publications are also available on the CMP website. CMP publications offer a variety of program information, marksmanship instruction, forms and technical manuals, and safety information. Publications include *OTM*, the *Advanced Shooter's Journal*, the *CMP Rifle Score Book*, *CMP Guide to Junior Pistol Shooting*, and safety and rules guides.⁵ CMP publications are divided between those offered for free and those available for purchase. However, most CMP publications, including those available for purchase, are available for free through the CMP website.

² CMP, undated-i, p. 83.

³ Financial assistance is intended to help offset travel, entry fee, and lodging expenses. CMP, 2018a, p. 93.

⁴ CMP, undated-i, p. 109.

⁵ CMP, undated-i.

Scholarships

CMP operates a youth scholarship program. Initially, CMP provided approximately 150 \$1,000 scholarships to JROTC high school seniors and ROTC cadets. Initial criteria were a strong academic record, potential to become an officer in the U.S. Armed Forces, and a record of success in marksmanship competitions. These criteria have since expanded to include all graduating high-school seniors who participate in marksmanship activities. Recipients are allowed to use the funds for school-related fees at an accredited education program at a four-year college, a two-year college, or a vocational school.

State Directors and State Director Workshop

CMP state directors are appointed to provide leadership, publicity, and coordination to strengthen junior shooting programs in the states where they are appointed. State directors are volunteers with limited expense budgets. They are trained by CMP at the State Director workshop. Their duties consist of establishing communication with local junior programs, regardless of whether they are CMP affiliates; establishing new junior programs and providing assistance to those programs; contacting CMP-affiliated clubs to take advantage of resources available from CMP and other shooting organizations; and facilitating training of marksmanship instructors and coaches.

The First Shot, Shooters News, and Social Media

The CMP Communications Department regularly reports CMP shooting events and promotions to interested subscribers through an electronic newsletter (*Shooters News*), a printed newsletter (*The First Shot*), and social media (Facebook, Twitter, and Google).

Supplemental Measurement Results

The Instruct Function

Table A.1 provides greater detail to the abridged descriptions that were provided in Tables 2.6 and 3.5 by showing the sub-elements of Hemenway's criteria for firearms training.

Table A.1
Description of Safety Content in Selected CMP Materials

		CMP				American Legion	USA Shooting	NRA
Checklist of Criteria from Hemenway et al., <i>M1 Garand Operation, Safety, and Maintenance</i>		<i>Rifle Safety Manual</i>	<i>Junior's Guide to Air Rifle Safety</i>	<i>JROTC Marksmanship Instructor Course</i>	<i>Shooter's Guide to Position Air Rifle</i>	"Safety Tips and Video"	"NRA Gun Safety Rules"	
Firearm anatomy	Pistols	N/A	N/A	N/A	N/A	N/A		
	Revolvers	N/A	N/A	N/A	N/A	N/A		
	Ammunition	X	X	X	X	X		
Firearm operation	Checking	X	X	X			X	
	Loading	X	X	X				
	Unloading	X	X					
	Operating	X	X	X		X		
	Cleaning	X	X			X		X
	Clearing	X	X	X			X	
	Operating a lock		X					
	Live-fire	a	a	a	a			
Firearm safety	Point muzzle in safest direction	X	X	X	X	X	X	X
	Finger off until ready to shoot		X	X	X	X	X	X
	Be sure of target		X	X	X		X	X
	Be aware of what is behind target	X	X	X	X		X	X
	Gun unloaded until ready to shoot	X	X	X	X	X	X	X
	If magazine out, cartridge might be in firing chamber		X					
	Cartridge malfunctions	X	X	X	X	X		
	Ricochet		X		X			
	Carry only one gauge of ammunition		X					
	Remove ammunition from clothing after outing							
	Effects of alcohol		X				X	X
	Effects of illicit drugs		X				X	X
	Effects of prescription drugs		X				X	X

Table A.1—Continued

		CMP				American Legion	USA Shooting	NRA
Checklist of Criteria from Hemenway et al., <i>M1 Garand Operation, Safety, and Maintenance</i>		<i>Rifle Safety Manual</i>	<i>Junior's Guide to Air Rifle Safety</i>	<i>JROTC Marksmanship Instructor Course</i>	<i>Shooter's Guide to Position Air Rifle</i>	"Safety Tips and Video"	"NRA Gun Safety Rules"	
Relevant laws	State licensing/permitting rules						X	
	Liability							
	State disqualifications for possession							
	Federal disqualifications for possession							
Storage	Child access							
	Gun safes		X				X	X
	Trigger locks		X				X	
	Cable locks							
	Recommend: storing guns locked when not in use		X	X			X	X
	Recommend: storing ammunition separately		X				X	
	Recommend: storing guns unloaded when not in use		X	X			X	
	Recommend: lock self-defense guns during sleep							
Theft	Recommend: hiding guns							
	Prevention						X	
	Theft an important source of firearms used in crime						X	
	Recommend: reporting stolen firearms							

Table A.1—Continued

		CMP				American Legion	USA Shooting	NRA
Checklist of Criteria from Hemenway et al., <i>M1 Garand Operation, Safety, and Maintenance</i>		<i>Rifle Safety Manual</i>	<i>Junior's Guide to Air Rifle Safety</i>	<i>JROTC Marksmanship Instructor Course</i>	<i>Shooter's Guide to Position Air Rifle</i>	"Safety Tips and Video"	"NRA Gun Safety Rules"	
Self-Defense	Possible legal ramifications of shooting in self-defense							
	Additional options for self-defense (e.g., alarms, mace)							
	Decisionmaking in crises							
	Techniques for de-escalating threats							
	Recommend: use gun only as last resort							
	Recommend: build delay in gun access when sleeping							
Children	Prevent unsupervised access by children		X			X	X	
	Young children and gun accidents					X	X	
	Adolescents and gun accidents					X	X	
	Age at handgun ownership							
	Age at long gun ownership							
	Age at supervised handling							
	Age at unsupervised handling							
	Watch for signs of suicide in household members							

Table A.1—Continued

		CMP			American Legion	USA Shooting	NRA
Checklist of Criteria from Hemenway et al., <i>M1 Garand Operation, Safety, and Maintenance</i>		<i>Rifle Safety Manual</i>	<i>Junior's Guide to Air Rifle Safety</i>	<i>JROTC Marksmanship Instructor Course</i>	<i>Shooter's Guide to Position Air Rifle</i>	"Safety Tips and Video"	"NRA Gun Safety Rules"
Suicide	Most suicide attempts involve little planning						
	Attempts by other means less likely to kill						
	Consider off-site storage if household member at risk						
	Domestic violence						
	Domestic violence risk						
	On gun accidents					X	
Statistics	On gun suicides					X	
	On invader homicide						
	On gun-related domestic violence						

SOURCE: Hemenway et al., 2017.

^a Depending on the context in which this CMP instruction is provided, live firing of the firearm might also be presented.

The Promote Function

CMP supports achievement in marksmanship and related sports through spending on awards and medals, endowment awards, and competitor recognition. Tables A.2–A.4 provide complete information to the aggregated dollar values reported in Table 2.10 by category.

Table A.2
Dollar Value of Prizes Awarded in Recognition of Marksmanship Achievements by CMP, 2013–2017

Program	Category	2013	2014	2015	2016	2017
3-Position Air Rifle Program	Awards and Medals	306	410	3,107	0	1,524
3-Position Air Rifle Program	Competitor Recognition	3,694	0	N/A	N/A	N/A
3-Position Air Rifle Program	Program Support	5,105	90	794	746	960
Accessible Distinguished Program	Awards and Medals	306	2,242	7,776	N/A	1,268
Army Marksmanship Unit Support	Awards and Medals	N/A	410	3,107	N/A	1,524
CMP Competition Center South	Awards and Medals	0	N/A	2,803	1,571	5,225
CMP Junior Air Rifle Camps	Awards and Medals	0	1,991	N/A	N/A	N/A
CMP National 3P Air Rifle Championship	Awards and Medals	9,037	45,181	45,181	45,189	54,843
CMP National 3P Air Rifle Championship	Endowment Award	N/A	N/A	N/A	N/A	298,400
CMP National 3P Air Rifle Championship	Competitor Recognition	14,925	13,082	13,082	6,380	0
CMP Petrarca Range	Awards and Medals	104	N/A	N/A	N/A	N/A
CMP State Games—Oklahoma	Awards and Medals	14,543	2,242	7,776	2,412	11,569
CMP Talladega Marksmanship Park	Awards and Medals	N/A	N/A	100	22,135	9,028
Eastern Games	Awards and Medals	1,805	0	2,227	14,958	5,076
Excellence-in-Competition	Awards and Medals	3,452	542	489	16,637	8,359
Gary Anderson/CMP Competition Center	Awards and Medals	0	N/A	1,303	5,672	6,463
National 3P Air Rifle Junior Olympics	Awards and Medals	N/A	140	N/A	948	N/A
National JROTC Championship	Awards and Medals	28,495	28,797	36,158	37,978	25,196
National JROTC Championship	Endowment Award	0	0	0	309,600	418,000
National Match Air Gun Events	Awards and Medals	104	N/A	N/A	N/A	N/A
National Matches	Awards and Medals	51,868	93,684	90,012	47,983	41,960
National Matches	Endowment Award	N/A	N/A	N/A	N/A	24,000
Southern Games	Awards and Medals	N/A	N/A	N/A	0	1,268
Western Games	Awards and Medals	931	10,023	3,326	4,682	16,874
TOTAL		134,675	198,834	217,239	516,891	931,537

SOURCE: CMP, 2013–2017.

NOTE: N/A indicates award was not made according to the profit loss statements. All figures are in nominal dollars.

Table A.3
Dollar Value of Grants Awarded per Year by CMP, 2013–2017

Program	Category	2013	2014	2015	2016	2017
4-H Shooting Sports Support	Grants	0	0	0	0	1,400
4-H Shooting Sports Support	Sponsorship	6,400	8,000	6,400	5,400	4,000
National 3P Air Rifle Junior Olympics	Team Support	15,000	15,000	0	0	0
National Match Junior Highpower Support	Grants	1,146	25,004	25,818	18,832	0
National Matches	Grants	15,923	0	0	0	804
TOTAL		38,469	48,004	32,218	24,232	6,204

SOURCE: CMP, 2013–2017.

NOTE: All figures are in nominal dollars.

Table A.4
Dollar Value of Scholarships Awarded per Year by CMP, 2013–2017

Program	Category	2013	2014	2015	2016	2017
CMP National 3P Air Rifle Championship	Scholarships	0	6,000	6,000	0	1,000
JROTC/ROTC Support	Scholarships	155,500	157,810	166,500	166,000	170,835
TOTAL		155,500	163,810	172,500	166,000	171,835

SOURCE: CMP, 2013–2017.

NOTE: All figures are in nominal dollars.

Firearm Ranges, Facilities, and Services by State

Table A.5 provides a frequency of ranges by state in the United States. This table provides the details to what was presented in Table 3.1.

Data Collection Questionnaire

Table A.6 provides the questionnaire submitted to all organizations selected for our comparative study. The questionnaire elicited quantitative program information for the years 2013–2017.

Table A.5
Summary of Firearm Ranges and Facilities by State and Services Provided

State	Facilities				Program Offerings				
	Total	Public	Private	Handicapped-Accessible	General	Junior Programs	Women's Programs	Youth Program	Rentals
AK	31	25	6	21	14	6	11	9	9
AL	105	82	23	37	37	7	13	20	18
AR	63	46	17	33	31	5	14	22	19
AZ	79	62	17	55	45	11	29	31	28
CA	257	193	64	194	146	35	78	96	84
CO	119	81	38	85	63	17	31	36	23
CT	73	32	41	37	38	13	23	27	17
DE	11	7	4	3	4	1	2	2	2
FL	182	143	39	125	127	20	52	60	85
GA	153	133	20	81	64	12	46	38	50
HI	8	6	2	6	4	0	0	0	1
IA	83	46	37	52	37	5	16	24	15
ID	53	37	16	40	27	9	12	20	9
IL	177	104	73	99	102	18	59	63	55
IN	131	81	50	67	63	7	27	34	30
KS	94	71	23	48	31	0	25	18	20
KY	50	35	15	26	19	5	13	17	13
LA	57	41	16	35	27	5	18	16	19
MA	140	38	102	39	70	23	22	59	7
MD	84	54	30	32	42	12	16	24	18
ME	59	24	35	22	20	3	8	8	7
MI	294	186	107	135	128	37	66	96	55
MN	360	117	243	89	144	11	36	56	35
MO	161	114	47	70	69	14	37	41	37
MS	58	42	16	15	23	4	11	9	9
MT	95	64	31	34	40	11	15	21	8
NC	163	120	43	80	83	17	38	35	54
ND	48	27	21	15	16	5	13	12	8

Table A.5—Continued

State	Facilities				Program Offerings				
	Total	Public	Private	Handicapped- Accessible	General	Junior Programs	Women's Programs	Youth Program	Rentals
NE	96	61	35	40	35	7	16	24	14
NH	62	18	44	19	26	11	12	24	8
NJ	104	54	50	36	42	13	25	24	13
NM	63	46	17	22	22	8	15	18	9
NV	51	37	14	25	26	10	12	17	18
NY	412	192	220	141	162	31	58	85	43
OH	266	155	111	110	126	28	96	101	52
OK	125	83	42	44	41	4	21	22	28
OR	94	57	37	42	56	15	37	41	19
PA	466	194	272	149	144	33	100	123	56
PR	7	5	2	3	3	2	1	2	1
RI	23	10	13	8	13	6	4	4	4
SC	96	72	24	51	45	11	39	35	30
SD	78	58	20	22	25	2	5	13	7
TN	137	109	28	67	69	17	43	42	46
TX	495	286	209	213	242	35	118	109	135
UT	76	63	13	39	33	5	17	16	17
VA	115	76	39	50	46	7	25	23	25
VT	37	15	22	8	7	4	2	4	1
WA	165	103	62	63	63	14	35	42	26
WI	282	175	107	150	120	23	66	97	47
WV	79	51	28	36	21	2	7	6	9
WY	51	38	13	22	17	3	13	11	7
Total	6,568	3,969	2,598	2,935	2,898	604	1,498	1,777	1,350

SOURCE: NSSF, undated-e.

Table A.6**Questionnaire Submitted to Organizations**

Please provide for the following bulleted items and complete the table to the best of your ability. If you do not have data for every item or the item is not applicable to your organization, please indicate so or provide an estimate if applicable. Please return to the RAND Corporation no later than **July 1, 2018**.

- Any documented, detailed content of your safety training courses or from the safety training components and rules of your marksmanship courses, clinics, camps, or events. This includes, but is not limited to, syllabi, curricula, exams, learning materials or teaching materials.
- Please list the names of any national-level organizations that you feel are comparable to your own.
- A list of your organization's affiliates, including their address and zip code. (Affiliates – i.e., clubs, ranges, youth organizations, marksmanship teams; not private individuals).

Item	2013	2014	2015	2016	2017	2018
Number of Participants at Marksmanship and Safety Training Courses, Camps, Clinics, or Events [If possible, please indicate type of training]						
Number of <i>Youth</i> Participants at Marksmanship and Safety Training Courses, Camps, Clinics, or Events [If possible, please indicate type of training]						
Number of Marksmanship Training and Safety Courses Offered						
Number of Marksmanship Instructors Trained/Certified/Re-Certified						
Number of Range Safety Officials and Competition Officials Trained/Certified/Re-Certified						
Number of Unintended Firearm Incidents at Trainings, Competitions, or Events Conducted or Sanctioned by Your Organization						
Number of Competitions/Matches/etc. Conducted by Your Organization [if possible, please indicate type of competitive event]						
Number of Competitions/Matches/etc. Sanctioned by Your Organization [if possible, please indicate type of competitive event]						
Number of Participants at Competitions Conducted or Sanctioned by Your Organization [if possible, please indicate type of competitive event]						
Number of <i>Youth</i> Participants at Competitions Conducted or Sanctioned by Your Organization [if possible, please indicate type of competitive event]						
Number of Entrants per Competition Conducted or Sanctioned by Your Organization [if possible, please indicate type of competitive event]						
Dollar Value of Marksmanship Prizes Awarded						
Dollar Value of Scholarships Awarded						
Dollar Value of Grants Awarded						

"Incident" includes any unintentional discharge of a firearm; firearm-related injury to self, other participants, or spectators.

Supplementary Comparative Measurement Results

Table A.7 provides selected financials of comparable organizations that are discussed in Chapter Three.

Table A.7
Selected Financials for Organizations (dollars in thousands)

Organization	Item	Fiscal Year ^a				
		2012	2013	2014	2015	2016
CMP	Assets (total)	207,864	224,329	222,747	233,609	244,526
	Revenue (total)	35,343	25,245	23,164	20,135	33,464
	Expenses (total)	14,649	14,317	14,804	15,503	15,816
	Liabilities total	2,576	3,474	2,020	2,311	2,365
	Investment income	5,391	5,675	6,456	6,716	19,920
NRA Foundation	Assets (total)	98,215	115,157	123,265	123,163	124,308
	Revenue (total)	43,035	41,338	45,664	49,746	52,621
	Expenses (total)	29,902	31,485	38,644	45,577	47,057
	Liabilities total	7,757	8,953	8,456	7,384	8,346
	Investment income	1,445	1,615	2,162	2,012	1,882
USA Shooting	Assets (total)	Not listed	Not listed	5,463	5,621	5,508
	Revenue (total)	Not listed	Not listed	6,191	6,428	5,387
	Expenses (total)	Not listed	Not listed	6,480	6,150	5,433
	Liabilities total	Not listed	Not listed	525	486	375
	Investment income	Not listed	Not listed	49	66	41
NSSF	Assets (total)	43,122	44,835	48,766	52,326	54,322
	Revenue (total)	28,290	34,346	35,599	36,279	43,329
	Expenses (total)	30,226	36,504	33,278	32,210	46,382
	Liabilities total	4,596	12,037	14,372	15,468	18,620
	Investment income	785	4,735	1,702	882	548
SSSF	Assets (total)	556	478	466	697	757
	Revenue (total)	1,674	1,971	1,814	3,423	3,608
	Expenses (total)	1,618	2,163	1,797	3,245	3,521
	Liabilities total	184	98	65	114	87
	Investment income	2	-12	-10	-5	1
NSSA/NSCA	Assets (total)	10,006	10,595	10,122	10,552	Not listed
	Revenue (total)	8,589	9,125	8,858	9,336	Not listed
	Expenses (total)	7,908	8,657	8,729	9,223	Not listed
	Liabilities total	1,727	1,758	1,361	1,712	Not listed
	Investment income	83	101	159	152	Not listed

Table A.7—Continued

Organization	Item	Fiscal Year ^a				
		2012	2013	2014	2015	2016
American Legion ^b	Assets (total)	115,248	101,961	124,208	114,410	118,445
	Revenue (total)	67,988	68,695	69,749	72,257	71,228
	Expenses (total)	66,865	68,292	66,090	73,634	72,450
	Liabilities total	84,450	75,997	90,263	93,542	101,300
	Investment income	2,669	2,847	2,552	2,885	3,112
NCAAC ^c	Assets (total)	759,756	928,316	901,999	923,842	Not listed
	Revenue (total)	874,309	906,192	952,092	970,965	Not listed
	Expenses (total)	842,072	898,475	908,807	1,386,699	Not listed
	Liabilities total	121,306	209,982	192,861	619,175	Not listed
	Investment income	14,924	12,209	34,107	26,619	Not listed
MidwayUSA Foundation	Assets (total)	25,719	53,873	78,920	90,358	106,490
	Revenue (total)	18,195	26,537	35,215	19,741	17,015
	Expenses (total)	1,206	2,782	4,126	5,224	5,878
	Liabilities total	183	126	108	82	79
	Investment income	286	1,246	9,835	1,908	2,162
USAYESS	Assets (total)	N/A	761	16	15	23
	Revenue (total)	N/A	559	782	110	226
	Expenses (total)	N/A	81	1,245	118	212
	Liabilities total	N/A	1	1	8	7
	Investment income	N/A	Not listed	0	Not listed	0
YSSA	Assets (total)	62	251	263	362	625
	Revenue (total)	432	446	497	708	312
	Expenses (total)	444	539	824	694	231
	Liabilities total	Not listed	Not listed	Not listed	7	0
	Investment income	0	86	43	3	2

SOURCES: ProPublica, undated; GuideStar, undated

NOTES: All figures listed were sourced from available IRS Form 990, Return of Organization Exempt from Income Tax, for each organization for FYs 2012 through 2016 as pulled from the nonprofit databases maintained by GuideStar and ProPublica. There were no Forms 990 for FY 2017 available at the time of this study's publication. "Not listed" indicates no Form 990 was available for that organization for that fiscal year. All figures in nominal dollars.

^a For consistency across organizations, we report fiscal years using the corresponding year of the IRS 990 form. For example, CMP's FY 2017 covers October 1, 2017, through September 30, 2017, but was filed using the 2016 IRS 990 form. This table uses the IRS 990 form year as fiscal year. This differs from the definition of fiscal year used elsewhere in the report.

^b Financials for the American Legion are for the entire organization and not just the Junior Shooting Sports Program.

^c Financials for the NCAA are for the entire organization and not just the rifle shooting program.

Table A.8 expands upon the summary of costs of attending marksmanship training in Table 3.3.

Table A.9 presents fees for participating at competitions in selected organization and is discussed in Chapter Three.

Table A.8
Cost to Participate in Marksmanship and Firearm Safety Trainings, Camps, and Clinics Hosted by Each National Organization

Organization	Type of Activity	Title	Targeted Demographic	Level	Cost to Participate per Individual	
					Adult (21+)	Youth (21-)
CMP	Marksmanship	Basic Course	Youth/Adults	Beginner Experienced	\$20–\$30	\$20–\$30
	Marksmanship	Small Arms Firing School	Youth/Adults	Beginner Experienced	\$20–\$50	\$15–\$50
	Marksmanship	Highpower Clinic	Youth	Experienced	N/A	\$30
	Marksmanship	Service Rifle Clinic	Youth/Adults	Advanced	\$40	\$20
	Marksmanship	As-Issued Military Rifle Clinic	Youth/Adults	Beginner Experienced	\$0	\$0
	Instructor Certification	JROTC Marksmanship Instructor Course	Adults	Advanced	\$0	N/A
	Instructor Certification	GSM Master Instructor Workshop	Adults	Advanced	\$135	N/A
	Range Safety Officer Certification	Range Officer Training Courses	Adults	Experienced Advanced	\$40–\$75	N/A
NRA	Marksmanship	Basic Firearm Training (Self-Administered)	Youth/Adults	Beginner Experienced	\$0	\$0
	Marksmanship	Qualification Courses (Self-Administered)	Youth/Adults	Beginner Intermediate Expert	\$0	\$0
	Marksmanship	NRA Basic Courses	Youth/Adults	Beginner Experienced	Varies	Varies
	Marksmanship	Clinics, Camps	Youth/Adults	Beginner Experienced Advanced	Varies	Varies
	RSO Certification Instructor Certification	Instructor and Range Safety Courses	Adults	Advanced	Varies	N/A

Table A.8—Continued

Organization	Type of Activity	Title	Targeted Demographic	Level	Cost to Participate per Individual	
					Adult (21+)	Youth (21–)
USA Shooting	Instructor Certification	Qualification Tests: Rifle, Pistol, Shotgun	Adults	Intermediate/Advanced	\$10	N/A
	Referee Certification	Referee Certification	Adults	Advanced	\$10	N/A
NSSF	Firearm Safety	NSSF Firearm Safety & Range Etiquette Training (DVD)	Youth/Adults	Beginner/Intermediate	\$0	\$0
	Marksmanship	FIRST SHOTS	Youth	Beginner	N/A	\$0
	Marksmanship	Shooting Sports Fantasy Camp	Youth/Adults	Beginner/Intermediate/Advanced/Expert	\$2,995	\$2,995
SSSF	Marksmanship	Junior Olympic Development Camp	Youth/Adults (Coaches Only)	Intermediate/Advanced	\$850	\$650
NCAA	N/A	N/A	N/A	N/A	N/A	N/A
NSSA/NSCA	Instructor Certification	N/A	Adults (Coaches Only)	Beginner/Intermediate/Advanced	\$300	N/A
American Legion	Marksmanship	Basic Marksmanship Course: Rifle	Youth	Beginner	N/A	\$25
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A	N/A
USAYESS	Marksmanship	Breaking Basics	Youth	Beginner	N/A	\$30
	Marksmanship	Breaking Clays Clinics	Youth	Beginner/Intermediate	N/A	\$150–\$185
	Marksmanship	Open Olympic Mini Camp	Youth	Beginner/Intermediate	N/A	Not listed
	Instructor Certification	Coaching for Success	Adults	NRA Level 1 Certification Required	\$350–\$385	N/A
	Instructor Certification	Shotgun Coach Certification	Adults	NRA Level 1 Certification or	\$175–\$200	N/A
YSSA	N/A	N/A	N/A	N/A	N/A	N/A

SOURCES: CMP, "CMP Basic Rifle Class," webpage, undated-h; CMP, "CMP Basic Pistol Course," webpage, undated-g; CMP, "Introduction to Shotgun Class," webpage, undated-q; CMP, "Small Arms Firing Schools," webpage, undated-x; CMP, "USMC Junior Highpower Clinic: 26–28 July 2019," webpage, undated-z; CMP, "Advanced CMP Highpower Clinic: 26–28 July 2019," webpage, undated-b; CMP, "Clinics," webpage, undated-c; CMP, undated-r; CMP, "GSM Master Instructor," webpage, undated-n; CMP, "Range Officer Training Course," webpage, undated-u; NRA, undated-a; USA Shooting, "Coach Academy," webpage, undated-c; USA Shooting, "Officials," webpage, undated-e; USA Shooting, "Certification and Testing," webpage, undated-b; NSSF, "Firearms Safety Videos," webpage, undated-a; First Shots Reference Guide, Newtown, Conn., 2009; NSSF, Shooting Sports Fantasy Camp homepage, undated-c; SSSF, "SCTP 2017 Junior Olympic Development Camp" application form, 2017; NSCA, "Instructor Support Materials," webpage, undated-a; American Legion, "Basic Marksmanship Course," June 30, 2014; USAYESS, "Education and Fundraising," webpage, undated-a.

NOTES: Most organizations offer more than one course for each type of activity based on the category of firearm or level. Some courses are provided free of charge.

Table A.9
Fees to Participate in Marksmanship Competitions Hosted by Each National Organization

Organization	Type of Activity	Title	Targeted Demographic	Cost to Participate per Individual	
				Adult (21+)	Youth (21-)
CMP	Rifle/pistol/shotgun	CMP National Matches	Youth/adult	\$20–\$45	\$0–\$25
	Rifle (long range)	CMP National Matches	Youth/adult	\$50–\$80	\$35–\$40
	Rifle/pistol	Talladega D-Day Matches	Youth/adult	\$25–\$50	\$15–\$25
	Rifle/pistol	Talladega 600	Youth/adult	\$0	\$0
	Rifle	CMP State, Regional, or National Championships	Youth	N/A	\$0–\$5
NRA	Rifle/pistol	Intercollegiate Championships	Adult	N/A	\$45 per individual \$60 per team
	Not specified	NRA World Shooting Championship	Adult	Not listed	N/A
	Rifle/pistol	National Indoor Rifle/Pistol Sectional Championship	Youth/adult	Not listed	Not listed
	Rifle	National Championship—Smallbore Rifle, Highpower	Youth/adult	Not listed	Not listed
	Rifle	National 3-P & 4-P Conventional Smallbore	Youth/adult	\$10 per individual \$15 per team	\$5 per individual \$15 per team
	Rifle	National F-Class Championship	Youth/adult	\$200 long-range \$60 mid-range	\$60 long-range \$60 mid-range
	Pistol	NRA National Championship – Pistol, Open Air Pistol, Center Fire Pistol	Youth/adult	\$10 or Not listed	\$5-\$10 or not listed
	Air rifle	National Airgun Championship – Junior, Boy Scouts	Youth	N/A	\$45–\$50
	Air rifle	NRA Junior Championship - 3-P National Championship Indoor & Outdoor, JROTC	Youth	N/A	\$5 per individual \$15 per team
	Rifle	National Junior Club Smallbore Rifle Championship	Youth	N/A	\$5 per individual \$15 per team
	Bb gun	Daisy/Jaycee International Championship	Youth	N/A	\$0.00
USA Shooting	Rifle/pistol	National Junior Olympic Championship	Youth	N/A	\$125
	Shotgun	National Championships	Youth	N/A	Not listed
	Rifle/pistol	ISSF World Cup	Youth	N/A	€170.00 per individual €170.00 per team €50.00 per official
NSSF	N/A	N/A	N/A	N/A	N/A

Table A.9—Continued

Organization	Type of Activity	Title	Targeted Demographic	Cost to Participate per Individual	
				Adult (21+)	Youth (21–)
SSSF	Shotgun	SCTP International Championships	Youth	N/A	\$40–\$118
	Shotgun, rifle/pistol	SCTP/SASP Regional and Local Matches	Youth	N/A	Varies
	Rifle/pistol	SASP National Championships	Youth	N/A	Not listed
NCAA	Rifle	NCAA National Rifle Championships	NCAA D-I/ D-II/D-III Teams only	N/A	\$0
NSSA/NSCA	Shotgun	Regional & State Shoots	Youth/adults	Not listed	Not listed
	Shotgun	NSSA World Skeet Championships	Youth/adults	\$25–\$50 \$100 for World Event	\$25–\$50 \$100 for World Event
	Shotgun	Junior World Skeet Championships	Youth	N/A	\$50 per individual \$250 per 5-man team
	Shotgun	U.S. Open Skeet Championship	Youth/adults	Not listed	Not listed
American Legion	Rifle	American Legion 3-P Air Rifle National Championship	Youth	N/A	\$50
MidwayUSA Foundation	N/A	N/A	N/A	N/A	N/A
USAYESS	Shotgun	USAYESS State Collegiate Championships	Youth	N/A	Varies
	Shotgun	USAYESS Regional and State Championships	Youth	N/A	Not listed
	Shotgun	USAYESS National Clay Target Championships	Youth	N/A	Not listed
YSSA	N/A	N/A	N/A	N/A	N/A

SOURCES: CMP, “National Matches,” webpage, undated-s; CMP, “National Three-Position Air Rifle Championships,” webpage, undated-t; CMP, “CMP Regional Championships,” fact sheet, March 27, 2018b; CMP, *2018 CMP Talladega D-Day Matches*, schedule and program, June 2018d; CMP, “Talladega 600,” webpage, undated-y; CMP, *CMP National Air Rifle Postal*, invitation and fact sheet, August 29, 2018e; NRA, *Intercollegiate Rifle Sectionals*, Fairfax, Va., 2018b; NRA, *Intercollegiate Pistol Sectionals*, Fairfax, Va., 2018a; NRA, *2018 NRA Intercollegiate Rifle Club Championships*, Fort Benning, Ga.: official program, March 2018e; NRA, *2018 NRA National Junior Air Rifle Championships*, Bloomington, Ill.: fact sheet, June 2018f; NRA, *National Smallbore Rifle Championships*, Bristol, Ind.: fact sheet, July 2018i; NRA and Boy Scouts of America, “Summer Camp National Competition,” entry form, April 2017; NRA, “NRA National JROTC 2-Position Sporter Air Rifle Postal Match,” fact sheet, 2018c; NRA, “2018 F Class Long Range National Championship,” fact sheet, September 2018j; NRA, “NRA National Indoor Center Fire Pistol Postal Match,” fact sheet and entry form, undated-g; NRA, “NRA Open International Air Pistol Sectional and National Championships Official Match Program,” fact sheet and entry form, 2018d; NRA, “National Pistol Championship,” entry form, July 2018h; NRA, “2018 Daisy National BB Gun Championship Match Set to Begin,” June 27, 2018g; USA Shooting, *25th Annual USA Shooting National Championships Shotgun*, Colorado Springs, Col.: official program, September 2018c; USA Shooting, *World Cup Shotgun*, Tucson, Ariz.: fact sheet, July 2018b; USA Shooting, *2018 USA Shooting National Junior Olympic Championship Program Shotgun*, fact sheet, June 2018a; Stephanie Mallory, “Register Now for SCTP International-Style National Championships,” SSSF blog post, May 22, 2015; SSSF, *2018 SCTP & SASP National Team Championships*, Marengo, Ohio, July 2018; NSCA, “Regional Championships,” webpage, 2018b; NSSA, “2018 World Skeet Championships,” pre-registration form, 2018b; American Legion, “2018–2019 Junior Shooting Sports, Official Match Program,” fact sheet, 2018; NCAA, “Championships Finances,” webpage, undated-a.

NOTE: All competitions and corresponding information were identified through information on each organization’s current website or in publicly available materials produced, published, and circulated by each organization, including competition calendars and registration forms.

Supplementary Analysis Tables

Tables A.10–A.12 provide additional supporting analytic information for Chapter Five.

Table A.10
Composition of Revenues and Expenses, FYs 2013–2017

Categories	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Revenue (\$)					
Sales	\$38,564,223	\$26,315,535	\$21,295,570	\$18,484,675	\$16,769,793
Programs	878,372	387,065	949,584	1,016,857	1,053,697
Affiliation dues	37,380	39,030	32,820	35,105	34,060
Donations ^a	411,514	795,812	584,168	416,312	923,790
Interest, gains on investments	6,275,510	10,314,463	–2,032,171	12,653,291	13,334,488
CMP Paver Project		4,018	11,020	5,820	750
Other	109,557	43,018	–90,357	487,924	279,314
Total Revenue	\$46,276,555	\$38,386,942	\$20,750,634	\$33,090,032	\$32,395,892
Expenses (\$)					
Sales	\$15,642,991	\$13,492,758	\$10,728,002	\$11,393,970	\$9,634,108
Programs	5,401,747	5,316,277	6,118,915	6,579,368	7,441,433
Board and administrative	2,193,287	2,515,855	2,237,678	2,162,944	1,878,048
Depreciation	893,410	923,002	1,255,494	1,761,792	1,885,083
Total Expenses	24,131,435	22,250,506	20,350,991	21,899,786	20,838,730
Revenue (%)					
Sales	83.33	68.55	93.10	55.89	51.77
Programs	1.90	2.28	4.15	3.07	3.25
Affiliation dues	0.08	0.10	0.14	0.11	0.11
Donations	0.89	2.07	2.55	1.26	2.85
Interest, gains on investments	13.56	26.87		38.18	41.16
CMP Paver Project		0.01	0.05	0.02	0.00
Other	0.24	0.11		1.47	0.86
Expenses (%)					
Sales	64.82	60.64	47.74	52.03	46.23
Programs	22.38	23.89	27.23	30.04	35.71
CMP Paver Project		0.01	0.05	0.01	0.00
Board and administrative	9.09	11.31	9.96	9.88	9.01
Depreciation	3.70	4.15	5.59	8.04	9.05
Losses on investments			9.04		
Other			0.40		

^a Although donation data vary across sources, as shown in Table A.12, here we used the amount reported by the auditor. In all years except FY 2015, we were able to replicate the auditor's total using CMP's detailed financial spreadsheets. In FY 2015, our total was \$227,000 less than the auditor's, so we manually adjusted the total (deducting "other" by that amount) so that donation amounts match the auditor's total each year. Because of this manual deduction, "other" revenue in FY 2015 is negative, so we count it as an expense in the bottom panel (percentages), along with the loss on investments.

Table A.11
Proportion of Sales Revenues and Expenses Attributed to Surplus and Non-Surplus

Categories	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Revenue					
Total sales	\$38,564,223.14	\$26,315,534.70	\$21,295,570.20	\$18,494,675.33	\$16,769,792.97
Surplus	27,652,013.59 (71.70%)	19,411,049.99 (73.76%)	16,644,416.09 (78.16%)	12,576,773.81 (68.00%)	13,074,815.93 (77.97%)
Commercial	10,912,209.55 (28.30%)	6,904,484.71 (26.24%)	4,651,154.11 (21.84%)	5,917,901.52 (32.00%)	3,694,977.04 (22.03%)
Expenses					
Total sales	\$15,642,991.38	\$13,492,757.91	\$10,728,002.36	\$11,393,969.66	\$9,422,321.85
Surplus cost and expenses	9,873,519.23 (63.12%)	9,894,138.72 (73.33%)	8,678,337.31 (80.89%)	8,896,497.55 (78.08%)	7,960,886.51 (82.63%)
Commercial and program support	5,769,472.15 (36.88%)	3,598,619.19 (26.67%)	2,049,665.05 (19.11%)	2,497,472.11 (21.92%)	1,673,221.56 (17.37%)

SOURCE: The numbers in this table serve as an alternative way of calculating the proportion of sales revenue and expenses attributed to surplus and non-surplus (as shown in Figure 5.4 and are based on calculations contained in "Summary P & L" Excel files from September 2016, provided to us by CMP.

We received two sources of donation information from CMP: (1) annual donation-level data, and (2) annual donation totals, as reported by the auditor. These two sources do not align, but we have had to use both in different ways. Donation-level information was used to assess the feasibility of donations as a revenue source if CMP no longer receives excess firearms or other resources from the Army. The auditors' information, along with detailed financial spreadsheet data, was used as the main source of donation information for the analyses in the chapter. (This is because in some years, donation-level information could not have feasibly been complete, e.g., FY 2015 and FY 2013.) Table A.12 shows how these sources compare.

Table A.12
Donation Information

Data Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Donation-level total	\$4,784.43	\$1,152,600.21	\$59,737.96	\$472,251.03	\$796,808.56
Auditor total	\$411,513.00	\$795,812.00	\$584,168.00	\$416,312.00	\$923,790.00
Author calculation	\$411,513.52	\$795,812.33	\$357,168.20	\$416,312.18	\$923,790.41

NOTES: Donation-level total is the sum of individual donation amounts as reported by CMP. Auditor total is the "Donations" line for each fiscal year listed in CPRPFS, 2018a. Author calculation is a line item sum of information in CMP's detailed spreadsheets using the line items included in the auditors' calculations. CMP provided line items that the auditor used to calculate donation totals for each year. In FY 2015, the auditor includes a line item in the amount of \$358,600, Account: 40DO-MIDW-AY, Description: 40DO-MIDW-AY Donation-Midway. That same line item in the detailed financial spreadsheets provided to us by CMP contains a different amount: \$131,600, a difference of \$227,000, as reflected in this table. To work within the overall total revenues and expenses provided in the detailed spreadsheets, we manually added \$227,600 to the donation total for FY 2015 and reduced that same amount from "other" for the purposes of reporting revenue categories.

References

American Legion, *The American Legion Junior Shooting Sports Program Adult Leader Manual*, Junior Shooting Sports, undated-a.

———, “Fast Facts,” webpage, undated-b. As of October 21, 2018:
<https://www.legion.org/presscenter/facts>

———, “Postal Match,” webpage, undated-c. As of October 21, 2018:
<https://www.legion.org/shooting/postal-match>

———, “American Legion by the Numbers,” webpage, September 6, 2012. As of October 21, 2018:
<https://www.legion.org/membership/211952/american-legion-numbers>

———, “Basic Marksmanship Course,” June 30, 2014. As of October 21, 2018:
<https://nylegion.net/basic-marksmanship-course/>

———, “2018–2019 Junior Shooting Sports, Official Match Program,” fact sheet, 2018. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/ALMatchProgram.pdf>

Armament Research, Development and Engineering Center, *M1 Garand Operation, Safety, and Maintenance Guide for Veteran and Civilian Service Organizations, Law Enforcement, and National Cemeteries*, Picatinny Arsenal, N.J.: Civilian Marksmanship Program, June 15, 2015. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/M1GarandGuide.pdf>

Asch, Beth J., Paul Heaton, James Hosek, Francisco Martorell, Curtis Simon, and John Warner, *Cash Incentives, Military Enlistment, Attrition, and Reenlistment*, Santa Monica, Calif.: RAND Corporation, MG-950-OSD, 2010. As of October 30, 2018:
<https://www.rand.org/pubs/monographs/MG950.html>

Bureau of Labor Statistics, “Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. City Average, All Items, by Month,” spreadsheet, 2018.

Civilian Marksmanship Program, “About the CMP,” webpage, undated-a. As of October 21, 2018:
<http://thecmp.org/about/>

———, “Advanced CMP Highpower Clinic: 26–28 July 2019,” webpage, undated-b. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-national-matches/advanced-cmp-highpower-clinic/>

———, *Civilian Marksmanship Program Club and Competition Tracker*, website dashboard, undated-c. As of October 21, 2018:
<https://ct.thecmp.org/app/v1/>

- , “Clinics,” webpage, undated-d. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-national-matches/national-cmp-games-events/8880-2/>
- , “Club Annual Reports,” webpage, undated-e. As of October 21, 2018:
<http://thecmp.org/clubs/club-annual-reports/>
- , CMP Affiliation Application Form, webpage, undated-f. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/AFFILIATE-Application.pdf>
- , “CMP Basic Pistol Course,” webpage, undated-g. As of October 21, 2018:
<http://thecmp.org/competitions/matches/cmp-basic-pistol-course/>
- , “CMP Basic Rifle Class,” webpage, undated-h. As of October 21, 2018:
<http://thecmp.org/competitions/matches/cmp-basic-rifle-class/>
- , “CMP Publications and Training Manuals,” webpage, undated-i. As of October 21, 2018:
<http://thecmp.org/communications/publications/>
- , “CMP Support to Veteran Organization,” webpage, undated-j. As of October 21, 2018:
http://thecmp.org/cmp_sales/veteran-support/
- , “CMP Targets at Petrarca Range,” webpage, undated-k. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-targets-at-petrarca-range/>
- , “Custom Gunsmithing,” webpage, undated-l. As of October 21, 2018:
http://thecmp.org/cmp_sales/custom-gunsmithing/
- , “Find a CMP Affiliated Club,” webpage, undated-m. As of June 20, 2018:
<http://thecmp.org/clubs/search-clubs/>
- , “GSM Master Instructor,” webpage, undated-n. As of October 21, 2018:
<http://thecmp.org/training-tech/gsm-rifle-master-clinics/>
- , homepage, undated-o. As of October 21, 2018:
<http://thecmp.org>
- , “How to Become Affiliated with the Civilian Marksmanship Program,” webpage, undated-p. As of October 21, 2018:
<http://thecmp.org/clubs/affiliate/>
- , “Introduction to Shotgun Class,” webpage, undated-q. As of October 21, 2018:
<http://thecmp.org/competitions/matches/introduction-to-shotgun-class-2/>
- , “JMJC—JROTC Marksmanship Instructor Course,” webpage, undated-r. As of October 21, 2018:
<http://thecmp.org/training-tech/jmic-jrotc-marksmanship-instructor-course/>
- , “National Matches,” webpage, undated-s. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-national-matches/>
- , “National Three-Position Air Rifle Championships,” webpage, undated-t. As of October 21, 2018:
<http://thecmp.org/air/national-three-position-air-rifle-championships/>
- , “Range Officer Training Course,” webpage, undated-u. As of October 21, 2018:
<http://thecmp.org/training-tech/range-officer-training-course/>
- , *Rifle Safety Manual*, undated-v. As of October 21, 2018:
<https://thecmp.org/wp-content/uploads/CMPSafetyManualBook.pdf>
- , “Scholarship Program,” webpage, undated-w. As of October 21, 2018:
<http://thecmp.org/communications/cmp-scholarship-program/>

- , “Small Arms Firing Schools,” webpage, undated-x. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-national-matches/small-arms-firing-schools/>
- , “Talladega 600,” webpage, undated-y. As of October 21, 2018:
<http://thecmp.org/competitions/matches/talladega-600/>
- , “USMC Junior Highpower Clinic: 26–28 July 2019,” webpage, undated-z. As of October 21, 2018:
<http://thecmp.org/competitions/cmp-national-matches/usmc-junior-highpower-clinic/>
- , annual profit-loss spreadsheets, Excel files, 2013–2017, provided to authors June 6, 2018. Not available to the general public.
- , “CMP Welcomes Disabled During Second Annual Ohio Day at the Range,” webpage, September 16, 2015. As of October 21, 2018:
<http://thecmp.org/cmp-welcomes-disabled-during-second-annual-ohio-day-at-the-range/>
- , *2017 CMP Annual Report*, 2017a. As of November 8, 2018:
<http://thecmp.org/wp-content/uploads/CMPAnnualReport17w.pdf>
- , *Program Reviews*, internal document, 2017b. Not available to the general public.
- , *A Junior Shooter’s Guide to Air Rifle Safety*, May 2017c. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/JrSafetyGuidetoARSafety.pdf?ver=051817>
- , “Sign Up Now for Upcoming Women on Target® Marksmanship Clinic at Camp Perry,” webpage, August 19, 2017d. As of October 21, 2018:
<http://thecmp.org/sign-up-now-for-upcoming-women-on-target-marksmanship-clinic-at-camp-perry/>
- , *Program Reviews*, internal document, February 2018a. Not available to the general public.
- , “CMP Regional Championships,” fact sheet, March 27, 2018b. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/2018CMPRegProgram.pdf?ver=03272018>
- , “1911 Information,” webpage, May 9, 2018c. As of October 21, 2018:
http://thecmp.org/cmp_sales/1911-information/
- , *2018 CMP Talladega D-Day Matches*, schedule and program, June 2018d. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/CMP-Talladega-D-Day-Match-Program.pdf?ver=20180510>
- , *CMP National Air Rifle Postal*, invitation and fact sheet, August 29, 2018e. As of October 21, 2018:
<http://thecmp.org/wp-content/uploads/CMPPostalProgram.pdf?ver=10252017>
- Clotfelter, Charles T., Helen F. Ladd, and Jacob L. Vigdor, “Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effect,” *Journal of Human Resources*, Vol. 45, No. 3, 2010.
- CMP—*See* Civilian Marksmanship Program.
- Corporation for the Promotion of Rifle Practice and Firearms Safety, *Financial Statements and Supplementary Information*, independent auditors’ report for September 30, 2017 and 2016 prepared by Warren Averett, January 30, 2018a. Not available to the general public.
- , Board of Directors Meeting, schedule and briefing, Camp Perry, Ohio, March 23–24, 2018b. Not available to the general public.
- CPRPFS—*See* Corporation for the Promotion of Rifle Practice and Firearms Safety.

Defense Logistics Agency, “Public Sales General Information,” webpage, undated-a. As of October 20, 2018:

<http://www.dla.mil/DispositionServices/Offers/PublicSalesOfferings.aspx>

———, “Reutilization, Transfer and Donation (R/T/D),” webpage, undated-b. As of October 20, 2018:

<http://www.dla.mil/DispositionServices/Offers/Reutilization.aspx>

———, “DLA Distribution Fiscal Year 2014 (FY14) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., May 22, 2013.

———, “DLA Distribution Fiscal Year 2015 (FY15) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., March 17, 2014.

———, “DLA Distribution Fiscal Year 2016 (FY16) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 3, 2015.

———, “DLA Distribution Fiscal Year 2017 (FY17) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 6, 2016.

———, “DLA Distribution Fiscal Year 2018 (FY18) Reimbursable Rates,” memorandum for reimbursable customers of DLA distribution, New Cumberland, Pa., June 28, 2017.

Department of the Army, *Direct and General Support Maintenance Manual: Pistol, Caliber .45, Automatic, M1911A1*, Washington, D.C., Technical Manual 9-1005-211-34, 1964.

Dickie, Mark, Charles D. Delorme, and Jeffrey M. Humphreys, “Price Determination for a Collectible Good: The Case of Rare United-States Coins,” *Southern Economic Journal*, Vol. 61, No. 1, 1994.

DLA—See Defense Logistics Agency.

DoD—See U.S. Department of Defense.

DQDYJ, “S&P 500 Return Calculator, with Dividend Reinvestment,” webpage, October 4, 2018. As of October 21, 2018:

<https://dqydj.com/sp-500-return-calculator/>

Etro, Federico, and Laura Pagani, “The Market for Paintings in the Venetian Republic from Renaissance to Rococo,” *Journal of Cultural Economics*, Vol. 37, No. 4, 2013.

Fjestad, Steven P., *Blue Book of Gun Values*, 39th ed., Minneapolis, Minn.: Blue Book Publications, 2018.

Foster, William Landes, Peter Kim, and Barbara Christiansen, *Ten Nonprofit Funding Models*, Stanford, Calif.: Leland Stanford Jr. University, Stanford Social Innovation Review, 2009.

Foundation Center, “Search by Keyword” webpage, undated. As of October 21, 2018:

<http://search.foundationcenter.org>

GuideStar, search page, undated. As of October 21, 2018:

<https://www.guidestar.org/search>

Headquarters, Department of the Army, *Army Ammunition Data Sheets: Small Caliber Ammunition FSC 1305*, Washington, D.C., Technical Manual 43-0001-27, April 1994.

———, *Recovery of Excess Rifles, Ammunition, and Parts Granted to Foreign Countries and Transfer to Certain Persons: Report to Congress*, Washington, D.C., June 2017.

———, *Repurposing and Reuse of Surplus Army Firearms: Report to Congress*, Washington, D.C., May 2018.

Hemenway, David, Steven Rausher, Pina Violano, Toby A. Raybould, and Catherine W. Barber, "Firearms Training: What Is Actually Taught?" *Injury Prevention*, October 2017.

HQDA—See Headquarters, Department of the Army.

Independent Accountants' Report on Applying Agreed-Upon Procedures for the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc. under Memorandum of Understanding with the United States Army, September 12, 2016, draft report, September 2018. Not available to the general public.

Internal Revenue Service, "Exemption Requirements—501(c)(3) Organizations" webpage, December 28, 2017. As of October 21, 2018:

<https://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-section-501c3-organizations>

———, "Lobbying," webpage, January 3, 2018a. As of October 21, 2018:

<https://www.irs.gov/charities-non-profits/lobbying>

———, "The Restriction of Political Campaign Intervention by Section 501(c)(3) Tax-Exempt Organizations," webpage, September 4, 2018b. As of October 21, 2018:

<https://www.irs.gov/charities-non-profits/charitable-organizations/the-restriction-of-political-campaign-intervention-by-section-501c3-tax-exempt-organizations>

International Shooting Sports Federation, "ISSF Vice President Gary Anderson Awarded 'Olympic Order,'" November 16, 2012. As of October 21, 2018:

<https://www.issf-sports.org/news.ashx?newsid=1769>

IRS—See Internal Revenue Service.

ISSF—See International Shooting Sports Federation.

James P. LaRose Companies, *Nonprofit Income Models: Seven Fundamentals . . . An Overview of the Methodologies Nonprofits Use to Fund Their Missions*, Columbia, S.C.: Development Systems International, undated.

Johnson, Tyson Andrew, "The USAMU Squad Designated Marksman's Course, A Student's Perspective," *Infantry*, Vol. 97, No. 4, August 2008. As of October 15, 2018:

<http://www.benning.army.mil/infantry/magazine/issues/2008/JUL-AUG/pdfs/JUL-AUG2008.pdf>

Keller, Jared, "Here's the Plan for the Sale of the Army's Surplus M1911 Pistols," *Business Insider*, December 5, 2017.

———, "The Details of the CMP's Upcoming Army Surplus Pistol Sales Are Finally Here," *Task and Purpose*, May 9, 2018.

Landree, Eric, and Richard Silbergliitt, *Application of Logic Models to Facilitate DoD Laboratory Technology Transfer*, Santa Monica, Calif.: RAND Corporation, RR-2122-OSD, 2018. As of October 21, 2018:

https://www.rand.org/pubs/research_reports/RR2122.html

Lujan, Leo R., *Shooter's Guide to Position Air Rifle*, Junior Shooting Sports Publication (distributed by American Legion), 1996.

Maccar, David, "How to Buy CMP Surplus 1911," *Range365*, November 22, 2017.

Mallory, Stephanie, "Register Now for SCTP International-Style National Championships," SSSF blog post, May 22, 2015. As of October 21, 2018:

<https://sssfonline.org/international-championships-registration-opens-june-8/>

McLaughlin, John A., and Gretchen B. Jordan, "Logic Models: A Tool for Telling Your Program's Performance Story," *Evaluation and Program Planning*, Vol. 22, No. 1, 1999, pp. 65–72.

Moe, Ronald C., and Kevin R. Kosar, *The Quasi-Government: Hybrid Organizations with Both Government and Private Sector Legal Characteristics*, Washington, D.C.: Congressional Research Service, RL30533, 2005.

National Collegiate Athletic Association, “Championships Finances,” webpage, undated-a. As of October 21, 2018:

<http://www.ncaa.org/about/resources/finances/championships-finances>

———, “How to Register” webpage, undated-b. As of October 21, 2018:

<http://www.ncaa.org/student-athletes/future/how-register>

———, *Division I Manual*, Indianapolis, Ind., August 1, 2018a. As of October 21, 2018:

<http://www.ncaapublications.com/productdownloads/D119.pdf>

———, *Division II Manual*, Indianapolis, Ind., August 1, 2018b. As of October 21, 2018:

<http://www.ncaapublications.com/productdownloads/D219.pdf>

———, *Division III Manual*, Indianapolis, Ind., August 1, 2018c. As of October 21, 2018:

<http://www.ncaapublications.com/productdownloads/D319.pdf>

National Rifle Association, “Become an Instructor,” webpage, undated-a. As of October 21, 2018:

<https://firearmtraining.nra.org/become-an-instructor/>

———, “Find an NRA Training Course Near You,” webpage, undated-b. As of October 21, 2018:

<https://www.nrainstructors.org/search.aspx>

———, “Join NRA Today!” webpage, undated-c. As of October 21, 2018:

<https://membership.nra.org/Join/Annals>

———, “NRA Competitive Shooting,” webpage, undated-d. As of October 21, 2018:

<https://competitions.nra.org/>

———, “NRA Firearm Training,” webpage, undated-e. As of October 21, 2018:

<https://firearmtraining.nra.org>

———, “NRA Gun Safety Rules,” webpage, undated-f. As of October 21, 2018:

<https://gunsafetyrules.nra.org>

———, “NRA National Indoor Center Fire Pistol Postal Match,” fact sheet and entry form, undated-g. As of October 21, 2018:

<https://competitions.nra.org/documents/pdf/compete/Postals/NRA-CFPistol.pdf>

———, *How to Start an NRA Club: A Guide for Club Leaders*, Fairfax, Va., December 2008. As of October 21, 2018:

https://clubs.nra.org/documents/pdf/clubs/start_a_club.pdf

———, *NRA Foundation Annual Report 2014*, Fairfax, Va., 2014. As of October 21, 2018:

https://www.nrafoundation.org/media/1609/2014_nraf_ar.pdf

———, *NRA Foundation Annual Report 2015*, Fairfax, Va., 2015. As of October 21, 2018:

<https://www.nrafoundation.org/media/1785/2015-nra-foundation-annual-report.pdf>

———, *NRA Foundation Annual Report 2016*, Fairfax, Va., 2016. As of October 21, 2018:

<https://www.nrafoundation.org/media/2082/16nrafannualreportweb1.pdf>

———, *Intercollegiate Pistol Sectionals*, Fairfax, Va., 2018a. As of October 21, 2018:

https://competitions.nra.org/documents/pdf/compete/col_champs/2018-pistol-sectional-program.pdf

———, *Intercollegiate Rifle Sectionals*, Fairfax, Va., 2018b. As of October 21, 2018:

https://competitions.nra.org/documents/pdf/compete/col_champs/2018-rifle-sectional-program.pdf

———, “NRA National JROTC 2-Position Sporter Air Rifle Postal Match,” fact sheet, 2018c. As of October 21, 2018:

<https://competitions.nra.org/documents/pdf/compete/Postals/JROTC-Sporter.pdf>

———, “NRA Open International Air Pistol Sectional and National Championships Official Match Program,” fact sheet and entry form, 2018d. As of October 21, 2018:

http://pistol-competition.nra.org/documents/pdf/compete/pistol_tournament_forms/2018%20Air%20Pistol%20Sectional%20Program.pdf

———, *2018 NRA Intercollegiate Rifle Club Championships*, Fort Benning, Ga.: official program, March 2018e. As of October 21, 2018:

https://competitions.nra.org/documents/pdf/compete/col_champs/2018-rifle-sectional-program.pdf

———, *2018 NRA National Junior Air Rifle Championships*, Bloomington, Ill.: fact sheet, June 2018f. As of October 21, 2018:

<https://competitions.nra.org/documents/pdf/compete/2018-Air-Rifle-Championship-Program.pdf>

———, “2018 Daisy National BB Gun Championship Match Set to Begin,” June 27, 2018g. As of October 21, 2018:

<https://www.nrafamily.org/articles/2018/6/27/>

2018-daisy-national-bb-gun-championship-match-set-to-begin

———, “National Pistol Championship,” entry form, July 2018h. As of October 21, 2018:

<https://competitions.nra.org/documents/pdf/compete/natpdf/2018-npc-entry-form.pdf>

———, *National Smallbore Rifle Championships*, Bristol, Ind.: fact sheet, July 2018i. As of October 21, 2018:

<https://competitions.nra.org/competitions/nra-national-matches/national-smallbore-rifle-championships/>

———, “2018 F Class Long Range National Championship,” fact sheet, September 2018j. As of October 21, 2018:

[http://www.baldeaglesrc.org/resources/Documents/2018%20Matches/2018FCNLR\(rev.2132018\).pdf](http://www.baldeaglesrc.org/resources/Documents/2018%20Matches/2018FCNLR(rev.2132018).pdf)

National Rifle Association and Boy Scouts of America, “Summer Camp National Competition,” entry form, April 2017. As of October 21, 2018:

<https://competitions.nra.org/documents/pdf/compete/Postals/BSA-Camp.pdf>

National Safety Council, “All Injuries: Overview,” webpage, undated-a. As of October 21, 2018:

<https://injuryfacts.nsc.org/all-injuries/overview/>

———, “Guns: Firearm-Related Deaths,” webpage, undated-b. As of October 21, 2018:

<https://injuryfacts.nsc.org/home-and-community/safety-topics/guns/data-details/>

National Shooting Sports Foundation, “Firearms Safety Videos,” webpage, undated-a. As of October 21, 2018:

<https://www.nssf.org/safety/firearms-safety-videos/>

———, “First Shots,” webpage, undated-b. As of October 21, 2018:

<https://www.nssf.org/ranges/first-shots/>

———, Shooting Sports Fantasy Camp homepage, undated-c. As of October 21, 2018:

<http://shootingsportsfantasycamp.com>

———, “Suicide Prevention Program for Retailers and Ranges,” webpage, undated-d. As of October 21, 2018:

<https://www.nssf.org/safety/suicide-prevention/>

———, *Where to Shoot*, homepage, undated-e. As of October 21, 2018:

<http://www.wheretoshoot.org>

- , *First Shots*, Industry Intelligence Reports, Newtown, Conn., 2005–2011.
- , *First Shots Reference Guide*, Newtown, Conn., 2009. As of October 21, 2018: https://d3aya7xwz8momx.cloudfront.net/wp-content/uploads/2017/06/FS_ReferenceGuide.pdf
- , *Americans' Attitudes Toward Hunting, Fishing, and Target Shooting*, Newtown, Conn., 2011.
- , “Target Shooting in America: Millions of Shooters, Billions of Dollars,” infographic, January 15, 2014.
- , *Changing Faces of the Shooting Sports: Meeting the Needs of an Increasingly Diverse Customer Base*, Newtown, Conn., 2015.
- , *NSSF Range Survey Report, 2016 Edition*, Newtown, Conn., 2016a.
- , *NSSF Report: Sport Shooting Participation in the United States in 2016*, Newtown, Conn., 2016b.
- , *Firearms-Related Accident Statistics*, Industry Intelligence Report, Newtown, Conn., 2017a.
- , “NSSF’s Rimfire Challenge Makes Transition,” October 16, 2017b. As of October 21, 2018: <https://www.nssf.org/nssfs-rimfire-challenge-makes-transition/>
- , “Annual Dues,” fact sheet, April 2018. As of October 21, 2018: <https://d3aya7xwz8momx.cloudfront.net/wp-content/uploads/2018/04/2018MemberBenefitChart.pdf>
- National Skeet Shooting Association, “New Member Online Enrollment Form, 2018–2019,” webpage, 2018a. As of October 21, 2018: <https://www.nssa-nscs.com/Webforms/NSSAMbrNew/Default.aspx>
- , “2018 World Skeet Championships,” pre-registration form, 2018b. As of October 21, 2018: <http://mynssa.nssa-nscs.org/wp-content/uploads/sites/6/2017/11/EARLY-2018-World-Skeet-Registration.pdf>
- National Sporting Clays Association, “Instructor Support Materials,” webpage, undated-a. As of October 21, 2018: <http://nscs.nssa-nscs.org/instructor-materials/>
- , “Minutes and Reports,” webpage, undated-b. As of October 21, 2018: <http://nscs.nssa-nscs.org/minutes-reports/>
- , “New Member Online Enrollment Form, 2018–2019,” webpage, 2018a. As of October 21, 2018: <https://www.nssa-nscs.com/Webforms/NSCAMbrNew/Default.aspx>
- , “Regional Championships,” webpage, 2018b. As of October 21, 2018: <http://nscs.nssa-nscs.org/regional-championships/>
- NCAA—*See* National Collegiate Athletic Association.
- NRA—*See* National Rifle Association.
- NSCA—*See* National Sporting Clays Association.
- NSSA—*See* National Skeet Shooting Association.
- NSSF—*See* National Shooting Sports Foundation.
- ProPublica, “Nonprofit Explorer,” webpage, undated. As of October 21, 2018: <https://projects.propublica.org/nonprofits/>

Public Law 101-165, Department of Defense Appropriations Act, 1990, Section 9080, November 21, 1989.

Public Law 104-106, National Defense Authorization Act for Fiscal Year 1996, February 10, 1996.

Public Law 115-91, National Defense Authorization Act for Fiscal Year 2018, December 12, 2017.

Public Law 115-141, Consolidated Appropriations Act, 2018, Section 8018, March 23, 2018.

Responsive Management and National Shooting Sports Foundation, *Hunting, Fishing, Sport Shooting, and Archery Recruitment, Retention, and Reactivation, A Practitioner's Guide*, Newtown, Conn., 2017.

Savitz, Scott, Miriam Matthews, and Sarah Weiland, *Assessing Impact to Inform Decisions: A Toolkit on Measures for Policymakers*, Santa Monica, Calif.: RAND Corporation, TL-263-OSD, 2017. As of October 30, 2018:

<https://www.rand.org/pubs/tools/TL263.html>

ScholarshipStats.com, "31 Schools Sponsored Varsity Rifle Teams During 2017–2018," webpage, undated. As of October 21, 2018:

<http://www.scholarshipstats.com/rifle.html>

Scholastic Shooting Sports Foundation, "About SSSF," webpage, undated-a. As of October 21, 2018: <https://sssfonline.org/about-sssf/>

———, "SCTP 2017 Junior Olympic Development Camp" application form, 2017. As of October 21, 2018:

http://sssf.wpengine.com/wp-content/uploads/2017/03/JODC_Information_2017-Revised.pdf

———, *2018 SCTP & SASP National Team Championships*, Marengo, Ohio, July 2018. As of October 21, 2018:

https://sssfonline.org/wp-content/uploads/2018/06/2018_SSSF_Nationals_Program_Web.pdf

———, "Scholastic Action Shooting Program," team registration form, Burlington, Wis., 2018–2019a. As of October 21, 2018:

<https://sssfonline.org/wp-content/uploads/2018/08/SASP-Team-Registration-08-2018.pdf>

———, "Scholastic Action Shooting Program," volunteer position registration form, Burlington, Wis., 2018–2019b. As of October 21, 2018:

<https://sssfonline.org/wp-content/uploads/2018/08/SASP-Adult-Volunteer-08-18.pdf>

———, "Scholastic Clay Target Program," team registration form, Burlington, Wis., 2018–2019c. As of October 21, 2018:

https://sssfonline.org/wp-content/uploads/2018/08/SCTP_TRG.pdf

———, "Scholastic Clay Target Program," volunteer position registration form, Burlington, Wis., 2018–2019d. As of October 21, 2018:

https://sssfonline.org/wp-content/uploads/2018/08/SCTP_POS.pdf

SSSF—See Scholastic Shooting Sports Foundation.

Thompson, Leroy, *The Colt 1911 Pistol*, United Kingdom: Bloomsbury Publishing, 2011.

U.S. Army and Corporation for the Promotion of Rifle Practice and Firearms Safety, "Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc., dba the Civilian Marksmanship Program," Memorandum of Understanding, September 12, 2016.

———, "Transfer of Surplus Caliber .45 M1911/M1911A1 Pistols from the U.S. Army to the Corporation for the Promotion of Rifle Practice and Firearms Safety, Inc., During Fiscal Years (FY) 2018 and 2019," Memorandum of Agreement, January 17, 2018.

USA Youth Education in Shooting Sports, “Education and Fundraising,” webpage, undated-a. As of October 21, 2018:

<https://www.usayess.org/page/show/3400278-education-and-fundraising>

———, “Events,” webpage, undated-b. As of October 21, 2018:

<https://www.usayess.org/our-events>

USAYESS—*See* USA Youth Education in Shooting Sports.

U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part III, Training, Chapter 401, Training Generally, Section 4308, Promotion of Civilian Marksmanship: Authority of the Secretary of the Army, August 10, 1956 (since repealed).

U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part III, Training, Chapter 401, Training Generally, Section 4310, Rifle Instruction, Detail of Members of Army, August 10, 1956 (since repealed).

U.S. Code, Title 10, Armed Forces, Subtitle B, Army, Part IV, Service, Supply, and Procurement, Chapter 443, Disposal of Obsolete or Surplus Material, Section 683, Excess Non-Automatic Service Rifles: Loan or Donation for Funeral and Other Ceremonial Purposes, August 10, 1956.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter I, Corporation, Section 40702, Governing Body, August 12, 1998.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40721, Responsibility of Corporation, August 12, 1998.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40722, Functions, August 12, 1998.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40724, Priority of Youth Participation, August 12, 1998.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40728, Transfer of Firearms, Ammunition, and Parts, November 25, 2015.

U.S. Code, Title 36, Patriotic and National Observances, Ceremonies, and Organizations, Subtitle II, Patriotic and National Organizations, Part B, Organizations, Chapter 407, Corporation for the Promotion of Rifle Practice and Firearms Safety, Subchapter II, Civilian Marksmanship Program, Section 40731, Issuance or Loan of Firearms and Supplies, and Section 40732, Sale of Firearms and Supplies, August 12, 1998.

U.S. Department of Defense, Cost Guidance Portal, “FY 2015 Military, Civilian, and SES Manpower Rates for the Cost Guidance Portal,” undated. Not available to the general public. As of May 22, 2018 (login required):

<https://costguidance.osd.mil/CostGuidance/docs/ManpowerRatesNewMethodologyFY2015.pdf>

U.S. Government Accountability Office, “Military Preparedness: Army’s Civilian Marksmanship Program is of Limited Value,” Washington. D.C.: GAO/NSIAD-90-171, 1990.

- , “Civilian Marksmanship Program: Corporation Needs to Fully Comply with the Law on Sales of Firearms,” Washington, D.C.: GAO/NSIAD-99-41, 1999.
- , *Cost Estimating Assessment Guide*, Washington, D.C.: GAO-09-3SP, 2009.
- , *Defense Logistics: Improved Data and Information Sharing Could Aid in DOD’s Management of Ammunition Categorized for Disposal*, Washington, D.C., GAO-15-538, July 2015.
- U.S. Office of Personnel Management, “Pay & Leave: Salaries & Wages,” webpage, 2018. As of October 30, 2018:
<https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/>
- USA Shooting, “Become a Member of USA Shooting,” undated-a. As of October 21, 2018:
<http://www.usashooting.org/membership>
- , “Certification and Testing,” webpage, undated-b. As of October 21, 2018:
<http://www.usashooting.org/membership/officials/officialcertificationandtesting>
- , “Coach Academy,” webpage, undated-c. As of October 21, 2018:
<http://www.usashooting.org/membership/coaches/coachacademy>
- , “Hall of Fame—Gary L. Anderson,” webpage, undated-d. As of October 21, 2018:
<http://www.usashooting.org/alumni-association/hall-of-fame/gary-l-anderson>
- , “Officials,” webpage, undated-e. As of October 21, 2018:
<http://www.usashooting.org/membership/officials>
- , “Safety Tips and Video,” webpage, undated-f. As of October 21, 2018:
<http://www.usashooting.org/11-resources/safetytipsandvideo>
- , 2018 USA Shooting National Junior Olympic Championship Program Shotgun, fact sheet, June 2018a. As of October 21, 2018:
<http://www.usashooting.org/membership>
- , *World Cup Shotgun*, Tucson, Ariz.: fact sheet, July 2018b. As of October 21, 2018:
http://www.usashooting.org/library/Competitions/0_2018/2018_SG_World_Cup/WC_SH_USA_2018_General_Information.pdf
- , *25th Annual USA Shooting National Championships Shotgun*, Colorado Springs, Col.: official program, September 2018c. As of October 21, 2018:
http://www.usashooting.org/library/Competitions/0_2018/18_SG_Nationals/Program/18_SG_Natls_Program_814_Update.pdf
- Weinberg, Neil, and Polly Mosendz, “This Group Teaches Kids to Love Guns, and U.S. Taxpayers Foot the Bill,” Bloomberg News, September 4, 2018. As of October 21, 2018:
<https://www.bloomberg.com/news/features/2018-09-04/this-group-teaches-kids-to-love-guns-and-taxpayers-foot-bill>

The Civilian Marksmanship Program (CMP) began in 1903 with the goal of encouraging individuals to develop marksmanship skills in case they were called on to serve during wartime. Congress expanded the program's focus over the ensuing decades, and in 1996 created the Corporation for the Promotion of Rifle Practice and Firearms Safety, a 501(c)(3) nonprofit organization, to govern and promote CMP. The National Defense Authorization Act for Fiscal Year 2018 required a federally funded research and development center to conduct an evaluation of the Corporation for the purpose of assessing future transfers of excess firearms to the Corporation. This report summarizes the RAND Arroyo Center evaluation of the Corporation, with analyses of the five discrete tasks in the legislative language: an assessment of the effectiveness of CMP, a comparison of CMP with similar organizations, an evaluation of the benefits the Army receives from CMP relative to the resources the Army provides CMP, an assessment of CMP's present funding model and prospective funding models that would support CMP's transition to self-sustainment, and an assessment of the costs and profits associated with the transfer of excess firearms from the Army to CMP with respect to surplus caliber .45 M1911/M1911A1 pistols.



www.rand.org

\$42.00

ISBN-10 1-9774-0198-8
ISBN-13 978-1-9774-0198-4

