The advantages and disadvantages of converting the Naval Postgraduate School to a Navy Working Capital Fund Activity

Didjurgis, Tim J.; Fullerton, Kyle J.

Monterey, California: Naval Postgraduate School

http://hdl.handle.net/10945/42627
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

MBA PROFESSIONAL REPORT

THE ADVANTAGES AND DISADVANTAGES OF CONVERTING THE NAVAL POSTGRADUATE SCHOOL TO A NAVY WORKING CAPITAL FUND ACTIVITY

By:    Tim J. Didjurgis,
        Kyle J. Fullerton
        June 2014

Advisors: Robert Eger,
          Wilhelmina Pizzini

Approved for public release; distribution is unlimited
# The Advantages and Disadvantages of Converting the Naval Postgraduate School to a Navy Working Capital Fund Activity

**MBA Professional Report**

**Abstract**

The Naval Postgraduate School (NPS) is the Navy’s principal institution for providing advanced education to the Navy and Marine Corps. Funded in part by direct funding through annual appropriations, NPS also receives a substantial amount of reimbursable funding through sponsored research, education, professional development, and other sponsored activities. In recent years, the amount of reimbursable funding NPS receives on an annual basis has grown considerably while direct funding has remained relatively constant. Consequently, the Naval Inspector General conducted inspections of NPS in 2009 and 2012 to address this as well as other issues. As a result, there has been ongoing discussion regarding NPS's mission and the role reimbursable funded work should play at the school. Like other Navy organizations, NPS is also working toward achieving auditable financial statements in compliance with the Department of Defense Comptroller’s Financial Improvement and Audit Readiness Plan by 30 September 2017.

The purpose of this MBA professional report is to evaluate the feasibility and appropriateness of converting NPS from a direct and reimbursable funded organization to a Navy Working Capital Fund activity to uphold the school’s mission and support the Navy in achieving financial auditability.

**Subject Terms**

- Navy Working Capital Fund
- Defense Working Capital Fund
- Naval Postgraduate School
- mission funding
- direct funding
- reimbursable funding
- reimbursable research
- financial management
THE ADVANTAGES AND DISADVANTAGES OF CONVERTING THE NAVAL POSTGRADUATE SCHOOL TO A NAVY WORKING CAPITAL FUND ACTIVITY

Tim J. Didjurgis, Lieutenant, United States Navy
Kyle J. Fullerton, Lieutenant, United States Navy

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

NAVAL POSTGRADUATE SCHOOL
June 2014

Authors: Tim J. Didjurgis
Kyle J. Fullerton

Approved by: Robert Eger, Co-Lead Advisor
Wilhelmina Pizzini, Co-Lead Advisor
William R. Gates, Dean
Graduate School of Business and Public Policy
THE ADVANTAGES AND DISADVANTAGES OF CONVERTING THE NAVAL POSTGRADUATE SCHOOL TO A NAVY WORKING CAPITAL FUND ACTIVITY

ABSTRACT

The Naval Postgraduate School (NPS) is the Navy’s principal institution for providing advanced education to the Navy and Marine Corps. Funded in part by direct funding through annual appropriations, NPS also receives a substantial amount of reimbursable funding through sponsored research, education, professional development, and other sponsored activities. In recent years, the amount of reimbursable funding NPS receives on an annual basis has grown considerably while direct funding has remained relatively constant. Consequently, the Naval Inspector General conducted inspections of NPS in 2009 and 2012 to address this as well as other issues. As a result, there has been ongoing discussion regarding NPS’s mission and the role reimbursable funded work should play at the school. Like other Navy organizations, NPS is also working toward achieving auditable financial statements in compliance with the Department of Defense Comptroller’s Financial Improvement and Audit Readiness Plan by 30 September 2017.

The purpose of this MBA professional report is to evaluate the feasibility and appropriateness of converting NPS from a direct and reimbursable funded organization to a Navy Working Capital Fund activity to uphold the school’s mission and support the Navy in achieving financial auditability.
THIS PAGE INTENTIONALLY LEFT BLANK
# TABLE OF CONTENTS

## I. INTRODUCTION

A. OBJECTIVES ................................................................. 1

B. RESEARCH QUESTIONS .................................................. 2

  1. Primary Research Question .......................................... 2
  2. Secondary Research Questions ...................................... 2

C. SCOPE ........................................................................... 2

D. METHODOLOGY ............................................................. 3

E. ORGANIZATION ............................................................... 3

## II. BACKGROUND

A. NAVAL POSTGRADUATE SCHOOL .................................... 5

  1. History ........................................................................... 5
  2. Mission .......................................................................... 6
  3. Academic Information .................................................... 6
      a. Mission Performance Findings ..................................... 8
      b. Fiscal Management Findings ...................................... 9

B. NAVAL POSTGRADUATE SCHOOL FUNDING ...................... 10

  1. Direct Funding ............................................................. 11
     a. Executive Preparation ............................................... 11
     b. Congressional Consideration ..................................... 11
     c. Budget Execution ..................................................... 13
  2. Reimbursable Funding .................................................. 18
     a. Definition .................................................................. 18
     b. Reimbursable Orders ................................................ 19
     c. Reimbursable Accounting ......................................... 20
  3. ASN (FM&C) Memorandum on Financial Management at NPS ......................................................... 21

C. NAVY WORKING CAPITAL FUND ..................................... 23

  1. History ........................................................................... 23
  2. Purpose and Objectives .................................................. 24
  3. Operations ..................................................................... 26
     a. Cost Accounting ......................................................... 27
  4. Budget Process ............................................................ 28
  5. Requirements and Restrictions ....................................... 29

D. DEPARTMENT OF DEFENSE AUDITABILITY ..................... 30

  1. History ........................................................................... 30
  2. FIAR Priorities .............................................................. 30
  3. FIAR Requirements for Defense Working Capital Funds .... 31

## III. DATA ANALYSIS .......................................................... 33
A. ANALYSIS OF DIRECT AND REIMBURSABLE FUNDING AT NPS ................................................................. 33
   1. Ratio of Direct and Reimbursable Funding at NPS ............ 33
   2. Indirect Cost Rates ....................................................... 34
   3. Impact on Auditability .................................................... 36
   4. DOD-focused Education and Research ...................... 37
   5. Relevant Educators ....................................................... 39
B. POTENTIAL APPLICATION OF THE NAVY WORKING CAPITAL FUND AT NPS .......................... 40
   1. Customer Base ............................................................ 40
   2. Cost Visibility ............................................................. 42
   3. Indirect Cost Rates and Financial Management Transparency ... 43
   4. Impact on Auditability .................................................... 45
   5. NWCF Business Areas ..................................................... 46

IV. FINDINGS AND RESULTS ......................................................................................................................... 47
A. FEASIBILITY .......................................................................................................................................... 47
B. POTENTIAL ADVANTAGES OF CONVERTING NPS TO A NWCF ACTIVITY ................................. 48
   1. Total Cost Visibility ........................................................ 48
   2. Auditability ................................................................. 49
C. POTENTIAL DISADVANTAGES OF CONVERTING NPS TO A NWCF ACTIVITY ............................ 50
   1. Approval Process and Initial Cash Corpus ..................... 50
   2. Primary Mission .......................................................... 51
   3. Strategic Vision ........................................................... 52
D. UNKNOWN FACTORS ......................................................................................................................... 53
   1. Cultural Implications and Transitional Challenges .......... 53
   2. Relationship with Curriculum Sponsors ......................... 54
   3. Timing ........................................................................... 55

V. CONCLUSIONS AND RECOMMENDATIONS ......................................................................................... 57
A. CONCLUSIONS ..................................................................................................................................... 57
B. RECOMMENDATIONS FOR FURTHER STUDY ................................................................................. 58
   1. Dual Funded Organizations ............................................ 58
   2. Previous Transitions between Direct Funding and Revolving Funds ............................................. 58
   3. Customer Base .............................................................. 58
   4. Financial Comparison between the Current Model at NPS and NWCF at NPS ............................. 58

APPENDIX A. EXCERPT FROM 22 OCTOBER 2012 NAVINSGEN COMMAND INSPECTION OF NAVAL POSTGRADUATE SCHOOL ...... 61
APPENDIX B. NPS MEMORANDUM OF RECORD FOR FY 13 INDIRECT COST RECOVERY RATES ........................................... 67
APPENDIX C. INTERVIEW QUESTIONS ...................................................................................................... 69
LIST OF REFERENCES ..................................................................................................................71
INITIAL DISTRIBUTION LIST ..................................................................................................77
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Average on-board student population by service (from Naval Postgraduate School, 2014, p. 30) ................................................................. 8</td>
</tr>
<tr>
<td>2</td>
<td>Flow of funds through the Department of the Navy (from Potvin, 2012, p. 19) .................................................................................................................. 14</td>
</tr>
<tr>
<td>3</td>
<td>NPS funding expenditures FY00 to FY13 from NPS update: President’s brief on 20 February 2014 (after O. Moses, personal communication, 2014) .................................................................................................................. 15</td>
</tr>
<tr>
<td>4</td>
<td>NPS funding expenditures by program type FY07 to FY13 from NPS update: President’s brief on 20 February 2014 (after O. Moses, personal communication, 2014) .................................................................................................................. 16</td>
</tr>
<tr>
<td>5</td>
<td>2013 NPS operating budget revenues by source (from Naval Postgraduate School, 2013, p. 34) .................................................................................................................. 17</td>
</tr>
<tr>
<td>6</td>
<td>2013 NPS operating budget expenditures by category (from Naval Postgraduate School, 2013, p. 34) .................................................................................................................. 17</td>
</tr>
<tr>
<td>7</td>
<td>Reimbursable account cycle (from Potvin, 2012, p. 109) .................................................. 21</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1.  Degree program students by type of enrollment: Average onboard trends (after Naval Postgraduate School, 2014, p. 30) .................................................................8
Table 2.  Congressional budget process timetable (from Congressional Budget and Impoundment Control Act, 1974, p. 513).................................................................12
Table 3.  Navy Working Capital Fund business areas (after Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 12) .................................................................................................................................26
Table 4.  Department of the Navy major commands (after Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 13) ...........................................................................................................................................26
THIS PAGE INTENTIONALLY LEFT BLANK
### LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Authorizing accounting activity</td>
</tr>
<tr>
<td>ADA</td>
<td>Anti-Deficiency Act</td>
</tr>
<tr>
<td>AFIT</td>
<td>Air Force Institute of Technology</td>
</tr>
<tr>
<td>AOB</td>
<td>Annual operating budget</td>
</tr>
<tr>
<td>AOR</td>
<td>Accumulated operating result</td>
</tr>
<tr>
<td>ASN (FM&amp;C)</td>
<td>Assistant Secretary of the Navy (Financial Management &amp; Comptroller)</td>
</tr>
<tr>
<td>BUPERS</td>
<td>Bureau of Naval Personnel</td>
</tr>
<tr>
<td>CBR</td>
<td>Concurrent budget resolution</td>
</tr>
<tr>
<td>CNO</td>
<td>Chief of Naval Operations</td>
</tr>
<tr>
<td>CR</td>
<td>Continuing resolution</td>
</tr>
<tr>
<td>CRADA</td>
<td>Cooperative research and development agreements</td>
</tr>
<tr>
<td>DBOF</td>
<td>Defense Business Operations Fund</td>
</tr>
<tr>
<td>DFAS</td>
<td>Defense Finance and Accounting Service</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DON</td>
<td>Department of the Navy</td>
</tr>
<tr>
<td>DWCF</td>
<td>Defense Working Capital Fund</td>
</tr>
<tr>
<td>DOD FMR</td>
<td>DOD 7000.14-R, Financial Management Regulation</td>
</tr>
<tr>
<td>FIAR</td>
<td>Financial improvement and audit readiness</td>
</tr>
<tr>
<td>FMB</td>
<td>Navy Office of Budget</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal year</td>
</tr>
<tr>
<td>G&amp;A</td>
<td>General and administrative</td>
</tr>
<tr>
<td>GAAP</td>
<td>Generally accepted accounting principles</td>
</tr>
<tr>
<td>GSBPP</td>
<td>Graduate School of Business and Public Policy</td>
</tr>
<tr>
<td>GSEAS</td>
<td>Graduate School of Engineering and Applied Sciences</td>
</tr>
<tr>
<td>GSOIS</td>
<td>Graduate School of Operational and Information Sciences</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
</tr>
<tr>
<td>JON</td>
<td>Job order number</td>
</tr>
<tr>
<td>JPME</td>
<td>Joint professional military education</td>
</tr>
<tr>
<td>KFS</td>
<td>Kuali Financial System</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>MCU</td>
<td>Marine Corps University</td>
</tr>
<tr>
<td>MOA</td>
<td>Memorandum of agreement</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of understanding</td>
</tr>
<tr>
<td>NAVINSGEN</td>
<td>Naval Inspector General</td>
</tr>
<tr>
<td>NDAA</td>
<td>National Defense Authorization Act</td>
</tr>
<tr>
<td>NOA</td>
<td>New obligation authority</td>
</tr>
<tr>
<td>NOR</td>
<td>Net operating result</td>
</tr>
<tr>
<td>NPS</td>
<td>Naval Postgraduate School</td>
</tr>
<tr>
<td>NWCF</td>
<td>U.S. Naval War College</td>
</tr>
<tr>
<td>NWCF</td>
<td>Navy Working Capital Fund</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and maintenance</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>OPN</td>
<td>Other procurement, Navy</td>
</tr>
<tr>
<td>OSD</td>
<td>Office of the Secretary of Defense</td>
</tr>
<tr>
<td>PI</td>
<td>Primary investigator</td>
</tr>
<tr>
<td>PII</td>
<td>Personally identifiable information</td>
</tr>
<tr>
<td>PME</td>
<td>Professional military education</td>
</tr>
<tr>
<td>PPBE</td>
<td>Planning, programming, budgeting, and execution</td>
</tr>
<tr>
<td>PRESBUD</td>
<td>President’s budget</td>
</tr>
<tr>
<td>PwC</td>
<td>PricewaterhouseCoopers</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>RDT&amp;E</td>
<td>Research, development, test and evaluation</td>
</tr>
<tr>
<td>SECDEF</td>
<td>Secretary of Defense</td>
</tr>
<tr>
<td>SECNAV</td>
<td>Secretary of the Navy</td>
</tr>
<tr>
<td>SIGS</td>
<td>School of International Graduate Studies</td>
</tr>
<tr>
<td>SPFA</td>
<td>Sponsored program financial analyst</td>
</tr>
<tr>
<td>TOA</td>
<td>Total obligation authority</td>
</tr>
<tr>
<td>TSA</td>
<td>Technical service agreement</td>
</tr>
<tr>
<td>TWCF</td>
<td>Transportation Working Capital Fund</td>
</tr>
<tr>
<td>UCG</td>
<td>Unit cost goal</td>
</tr>
<tr>
<td>USD (C)</td>
<td>Under Secretary of Defense (Comptroller)</td>
</tr>
<tr>
<td>WASC</td>
<td>Western Association of Schools and Colleges</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

We would first like to thank our advisors Dr. Robert Eger, Dr. Wilhelmina Pizzini, and Professor Wythe Davis for their help and guidance to make this MBA project a success. We would also like to thank Captain Kory Fierstine, USN for his immensely helpful guidance in formulating and scoping this study. Thank you as well to all of those we interviewed for taking the time to speak with us and for providing us with their knowledge and insight. All of the conversations were extremely beneficial and provided us with great information. Thank you as well to all of the faculty and staff at the Graduate School of Business and Public Policy for imparting your knowledge upon us throughout our time at NPS.

Last, but not least, we would like to thank our family and friends for their help and support while working on this research project.
I. INTRODUCTION

Initially founded as the School of Marine Engineering at the U.S. Naval Academy in 1909 and established as a postgraduate school in Monterey, California in 1951, the Naval Postgraduate School (NPS) is the Navy’s principal institution for providing advanced education to Navy and Marine Corps officers. Over the years, NPS has expanded to offer graduate education to other military and civilian members of the Department of Defense (DOD), other U.S. government agencies, and a number of international partners across the globe. In addition to providing advanced educational opportunities, NPS also offers a robust research capability. As NPS has evolved over time, the amount of reimbursable education and research funding the school received from various Navy and non-Navy sources has become a significantly higher percentage of the school’s total budget compared to the amount of direct funding appropriated in the Navy’s budget.

In 2012, the Naval Inspector General (NAVINSGEN) conducted a command-wide inspection of NPS, addressing a variety of areas. In its findings, NAVINSGEN expressed concern regarding the increase in reimbursable funding in relation to relatively constant direct funding from the Navy in recent years. The inspection raised additional concerns regarding the complexity of the methods NPS uses to charge customers for indirect costs incurred from reimbursable funded projects.

In addition to NPS, DOD overall is becoming more focused on financial practices due to the mandate in the 2010 and 2014 National Defense Authorization Acts (NDAA) for the department to achieve financial auditability by 2017. Determining an appropriate ratio of reimbursable to direct funding and accounting for each type of funding in a simple and transparent manner is an important goal for NPS to establish to help support auditability. Given the importance of achieving financial auditability by 2017 and the value of the advanced education and research capability NPS provides, there is discussion regarding the suitability of NPS to operate as a Navy Working Capital Fund (NWCF) activity.
This MBA project will identify the advantages and disadvantages associated with operating as a direct and reimbursable funded activity and operating as a NWCF activity; it will also determine the impact to the school and the Navy of converting NPS to a NWCF activity.

A. OBJECTIVES

This MBA project addresses the suitability of NPS to operate as either a direct and reimbursable funded activity or a NWCF activity. The goal is to determine the applicability of each of the two funding methods to NPS, the impact each method has on supporting financial auditability, and the challenges associated with potentially converting the school’s financial structure.

B. RESEARCH QUESTIONS

This research addresses the following questions:

1. Primary Research Question

Is becoming a Navy Working Capital Fund activity a feasible method of funding the Naval Postgraduate School?

2. Secondary Research Questions

• How does NPS operating as a direct and reimbursable funded activity affect DOD achieving financial auditability?
• How does NPS operating as a NWCF activity affect DOD achieving financial auditability?

C. SCOPE

This research uses NPS budget and execution financial data, the results of the NAVINSGEN command inspection of NPS, applicable laws, regulations, and policies associated with the financial aspects of NPS and the NWCF, and interviews with key financial personnel at NPS, Navy Office of Budget (FMB), and various NWCF activities.
D. METHODOLOGY

To carry out this research the following were conducted:

- A review of the history, mission, and function of NPS.
- A discussion of the sources of funding NPS receives and how those funds are managed. Those data were obtained from DON budget estimates, NPS factbook, NPS annual report, NPS strategic plan, NAVINSGEN command inspection of NPS, and discussion with NPS financial management personnel.
- A discussion of the history, function, and operation of the NWCF.
- An analysis of the laws, regulations, and policies relating to the financial aspects of both NPS and the NWCF. This information was obtained from Title 10 U.S.C., Navy instructions on NPS, DOD financial management regulation (DOD FMR), DON financial management policy manual, and the NWCF 101 training course.
- Personal interviews with key financial management personnel from NPS, FMB, and various NWCF activities.

E. ORGANIZATION

The remainder of this MBA project is organized as follows. Chapter II provides a background of the history and mission of NPS, describes the sources of funding the school currently receives, and discusses the NWCF. Chapter III provides an analysis of the applicable laws, regulations, and policies as well as the information gathered from interviews with NPS, FMB, and NWCF financial management personnel. Chapter IV discusses the findings and results from this study. Chapter V provides the conclusions reached in this study and recommendations for further research.
II. BACKGROUND

A. NAVAL POSTGRADUATE SCHOOL

To provide context for evaluating the school’s financial structure, this project will discuss NPS’s history, mission, and academic composition, as well as the results of recent investigations conducted by the Naval Inspector General at NPS.

1. History

NPS was originally established as the School of Marine Engineering at the U.S. Naval Academy in Annapolis, Maryland by the Secretary of the Navy in 1909. In 1912, NPS expanded its curriculum from exclusively marine engineering to also include ordnance and gunnery, electrical engineering, radio telegraphy, naval construction, and civil engineering (Office of Institutional Research and Planning, 2012, p. 9). The school was officially renamed the Naval Postgraduate School in 1919; NPS was not authorized as a degree-granting institution, however, until 1945. Prior to 1945, officers attending NPS would complete their graduate education at other accredited degree-granting institutions throughout the U.S. after completing their studies at NPS (Naval Postgraduate School, 2006, p. 2). In 1945, Public Law 250 enacted by the 79th Congress authorized NPS to confer masters’ and doctoral degrees in engineering and related fields (United States Government Printing Office, 1946, p. 603). In 1947, Congress authorized the Navy to establish a postgraduate school in Monterey, CA; subsequently, in 1951 NPS was moved from Annapolis to Monterey (Herrmann, 1950, p. 4; Office of Institutional Research and Planning, 2012, p. 7).

From 1951 to present, NPS gradually evolved from a technical school focused on science and engineering to a fully-accredited institution that offers a diverse range of defense-focused educational programs while also conducting a significant amount of research supporting national defense. Together, NPS’s education and research functions allow the school to “directly support all facets of national defense and homeland security” (Office of Institutional Research and Planning, 2012, p. 8).
2. **Mission**

From its beginnings as the School of Marine Engineering, the primary mission of NPS has been to educate naval officers. NPS receives its authority from 10 U.S.C. Ch. 605 § 7041, which states the school’s primary function is “to provide advanced instruction and professional and technical education and research opportunities for commissioned officers of the naval service (“United States Naval Postgraduate School,” 2012, pp. 2087–2088). Throughout the years, the mission expanded to incorporate other military services, DOD civilians, other government agencies, and international students. Upholding its obligations according to Title 10, the Chief of Naval Operations (CNO) provides his guidance for the mission and function of the school:

> The mission of the Naval Postgraduate School is to provide relevant and unique advanced education and research programs to increase the combat effectiveness of commissioned officers of the Naval Service to enhance the security of the United States. In support of the foregoing, and to sustain academic excellence, foster and encourage a program of relevant and meritorious research which both supports the needs of Navy and Department of Defense while building the intellectual capital of Naval Postgraduate School faculty. (Chief of Naval Operations, 2012, p. 3)

The latter part of the mission statement reflects the increasing emphasis on research and is the result of various statutory changes throughout the years to include the 2006 amendment to 10 U.S.C. Ch. 605, which added § 7050, authorizing NPS to accept research grants for scientific, literary, or educational purposes (“United States Naval Postgraduate School,” 2012, pp. 2093–2094).

3. **Academic Information**

NPS has the authority, under 10 U.S.C. Ch. 605, to educate the following groups: officers and enlisted personnel from all of the military branches, reserve officers, foreign military officers, students at other institutions of higher education on an exchange basis, and defense industry civilians (“United States Naval Postgraduate School,” 2012, pp. 2087–2094). In addition to the authority provided in 10 U.S.C. Ch. 605, a number of other statutes allow NPS to provide education to other governmental and non-governmental civilian personnel. Some examples include the following: 5 U.S.C. § 4107,
Academic Degree Training, authorizing federal agencies to pay for employee education at governmental and non-governmental institutions; 22 U.S.C. § 2770(a), Arms Export Control Act, authorizing training for foreign civilian defense agency personnel; and 42 U.S.C. § 4742, Admission to Federal Employee Training Programs, authorizing state and municipal government employees to receive homeland defense-related education (Naval Inspector General, 2012, pp. 4–9). There is, however, some question regarding NPS’s authority to provide education to these other groups (Naval Inspector General, 2012, p. 5). Appendix A from the 2012 NAVINSGEN inspection of NPS provides a more detailed history of the changes made over time to NPS’s authority to educate students and makes recommendations to clarify some of the outstanding questions.

NPS is comprised of four graduate schools: the Graduate School of Business and Public Policy (GSBPP), the Graduate School of Engineering and Applied Sciences (GSEAS), the Graduate School of Operational and Information Sciences (GSOIS), and the School of International Graduate Studies (SIGS) (Office of Institutional Research and Planning, 2012, p. 10). In addition to the four graduate schools, NPS has four research institutes, a Center for Executive Education, and additional research centers made up of “faculty and staff with a significant concentration of expertise in a particular area of practical application” (Office of Institutional Research and Planning, 2012, p. 10). The four research institutes are: the MOVES Institute for Defense Modeling and Simulation, the Wayne E. Meyer Institute of Systems Engineering, the Cebrowski Institute for Innovation and Information Superiority, and the National Security Institute (Office of Institutional Research and Planning, 2012, p. 10).

NPS offers master’s and doctoral degrees in 56 resident graduate education programs and 18 distance learning programs, as well as 38 certificate programs and various professional development courses (Naval Inspector General, 2012, p. 10). Figure 1 and Table 1 show the school’s average enrollment from 2002–2013 by student organization and by the distribution of full-time resident and distance-learning students.
Figure 1. Average on-board student population by service (from Naval Postgraduate School, 2014, p. 30)

Table 1. Degree program students by type of enrollment: Average onboard trends (after Naval Postgraduate School, 2014, p. 30)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time Resident</td>
<td>1,244</td>
<td>1,314</td>
<td>1,481</td>
<td>1,560</td>
<td>1,732</td>
<td>1,739</td>
<td>1,566</td>
<td>1,489</td>
<td>1,557</td>
<td>1,647</td>
<td>1,707</td>
<td>1,633</td>
</tr>
<tr>
<td>Distance Learning</td>
<td>221</td>
<td>247</td>
<td>322</td>
<td>523</td>
<td>501</td>
<td>847</td>
<td>719</td>
<td>707</td>
<td>819</td>
<td>921</td>
<td>1,013</td>
<td>1,001</td>
</tr>
<tr>
<td>Total</td>
<td>1,465</td>
<td>1,561</td>
<td>1,803</td>
<td>2,083</td>
<td>2,233</td>
<td>2,586</td>
<td>2,285</td>
<td>2,196</td>
<td>2,376</td>
<td>2,568</td>
<td>2,720</td>
<td>2,634</td>
</tr>
</tbody>
</table>

Figure 1 and Table 1 depict the increasing demand for NPS’s educational programs and a larger portion of distance-learning enrollment in relation to the school’s overall student population. According to a 2011 study by the NPS Committee on the Future, the school’s maximum capacity for resident students is approximately 2,200, with an ideal range between 1,500 and 2,000 students to operate most efficiently (Ellis et al., 2011, p. 48). NPS operates on a four-quarter academic year with the highest enrollment typically occurring during the summer quarter from July through September (Office of Institutional Research and Planning, 2012, p. 11).


In November 2011, NAVINSGEN initiated a year-long investigation of the President of NPS, Vice Admiral Daniel Oliver (USN, Ret) and Executive Vice President and Provost, Dr. Leonard Ferrari. The investigation resulted in both the president and provost being relieved of their positions and raised additional concerns regarding NPS’s operations. From 4 June through 22 June 2012, NAVINSGEN also conducted a
command inspection of NPS. The purpose of the inspection was “to provide Navy leadership with a complete and accurate picture of the operations at NPS” to follow up on concerns raised by the previous investigations (Naval Inspector General, 2012, p. 1). Due to the widespread nature of the inspection’s findings, further discussion will focus on only the mission performance and fiscal management aspects relevant to this study.

### a. Mission Performance Findings

In addition to the questions raised regarding the statutory authority to educate civilian employees, the other main point regarding mission performance is the balance between education and research. The 2008 NPS strategic plan, *Vision for a New Century*, and the 2011 study, *The Future of Naval Postgraduate School: Setting the Stage* by the NPS Committee on the Future, both emphasize expanding research opportunities at NPS. One challenge cited in the NAVINSGEN report associated the increase of reimbursable education and research at NPS to the corresponding increase in faculty size. In 2001, NPS had 197 faculty members; by 2010, the school had grown to include 591 faculty members (Naval Inspector General, 2012, pp. 12–13). The large increase in faculty is addressed by NAVINSGEN as a challenge for the school because “the faculty growth was not programmed with mission funds” (Naval Inspector General, 2012, pp. 12–13). Furthermore, to afford the increased faculty costs the school needs to continue to bring in reimbursable education and research funding to pay for the additional positions (Naval Inspector General, 2012, pp. 12–13). NAVINSGEN expressed concern that due to uncertainty in the federal budget in the future there may be increased competition among faculty to secure a smaller pool of research funding and also prompt funding to be sought from the private sector (Naval Inspector General, 2012, p. 14).

### b. Fiscal Management Findings

The NAVINSGEN inspection report discusses various concerns with aspects of NPS’s fiscal system, funding, and fundraising practices. The Kuali Financial System (KFS) is an “internal financial system oriented to managing commercial university budget requirements” that NPS uses to manage its funding (Naval Inspector General, 2012, p. 22). The NAVINSGEN questioned the suitability of KFS as the school’s
financial accounting system. Specific concerns included lack of access restrictions and proprietary information and personally identifiable information (PII) vulnerabilities (Naval Inspector General, 2012, p. 22). Another finding of note is NPS “does not reconcile the indirect costs projected in establishing overhead recovery rates against what is actually collected and then against how the collected funds are spent” (Naval Inspector General, 2012, p. 23). This is cited as a concern because NPS was previously directed to validate its indirect rates to “verify that indirect funds are not augmenting mission funding” (Naval Inspector General, 2012, p. 23).

The method in which NPS manages its direct funds and reimbursable funds is also of interest for the NAVINSGEN. Early in each fiscal year (FY), NPS “covers [its] reimbursable liability by reserving direct funds to cover the liability until earnings catch up with expenditures” (Naval Inspector General, 2012, p. 30). NPS accomplished this by creating an “interim account” to allow reimbursable work-related costs to be incurred before funding is in place. Although NPS does have procedures in place in the event insufficient funds are available to cover the expenses in the interim account, there is risk of an Anti-Deficiency Act (ADA) violation when a continuing resolution (CR) or government shutdown occurs or mission funding is insufficient to cover the expenses incurred (Naval Inspector General, 2012, p. 30). Other fiscal management findings from NAVINSGEN include concerns with funding execution, document processing, the allocation of labor hours for reimbursable work, and gift acceptance and fundraising practices. Since the 2012 inspection, NPS has put forth a great deal of effort to address almost all of the concerns and implement the recommendations made by NAVINSGEN. These new measures will be discussed in subsequent chapters.

B. NAVAL POSTGRADUATE SCHOOL FUNDING

NPS currently receives funding to execute its annual budget in two forms: direct funds and reimbursable funds. This section describes the processes for receiving direct and reimbursable funding and reviews the roles of each type of funding in DOD.
1. **Direct Funding**

Direct funding, sometimes referred to as mission funding, relates to funds appropriated by Congress to DOD. An appropriation, however, is not money; rather, it provides government organizations with the authority to obligate the government for immediate or future payments by the Treasury (Potvin, 2012, p. 84). Congress forms and provides the government with appropriations annually through a legislative process consisting of three phases: execution preparation, congressional consideration, and budget execution (Tyzkiewicz & Dagget, 1998, p. 2).

**a. Executive Preparation**

Prior to the president of the United States submitting a budget to Congress, DOD formulates its annual budget requirements. With guidance passed down from the White House and the Office of Management and Budget (OMB) through OMB Circular No. A-11, the DOD uses the planning, programming, budgeting, and execution (PPBE) process to form its budget to meet its various requirements. Each military service then submits its budget to the Secretary of Defense (SECDEF) and OMB for approval (Tyzkiewicz & Dagget, 1998, p. 2). Once approved by the SECDEF, the president reviews and submits the budget to Congress as required by the Budget and Accounting Act of 1921. The president’s budget (PRESBUD) requests budget authority from Congress based on the recommendations received from various programs and agencies. Budget authority is set in federal law by Congress and allows the U.S. government to obligate funds once it is approved by the president (Tollestrup, 2012, p. 2).

**b. Congressional Consideration**

To provide appropriated funds through budget authority, the federal government must execute the legislative process articulated in Article I § 9 of the U.S. Constitution:

No money shall be drawn from the Treasury, but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time. (U.S. Const. art. I, § 9)
While the U.S. Constitution establishes the budget process, the Budget and Accounting Act of 1921 and the Congressional Budget and Impoundment Control Act of 1974 (Congressional Budget Act) establishes the laws for the annual budget process that the federal government currently follows. Table 2 illustrates an example of the model schedule for the congressional budget process.

Table 2. Congressional budget process timetable (from Congressional Budget and Impoundment Control Act, 1974, p. 513)

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Monday in February</td>
<td>President submits his budget.</td>
</tr>
<tr>
<td>February 15</td>
<td>Congressional Budget Office submits report to Budget Committees.</td>
</tr>
<tr>
<td>Not later than 6 weeks after the President submits the budget.</td>
<td>Committees submit views and estimates to Budget Committees.</td>
</tr>
<tr>
<td>April 1</td>
<td>Senate Budget Committee reports concurrent resolution on the budget.</td>
</tr>
<tr>
<td>April 15</td>
<td>Congress completes action on the concurrent resolution on the budget.</td>
</tr>
<tr>
<td>May 15</td>
<td>Annual appropriation bills may be considered in House.</td>
</tr>
<tr>
<td>June 10</td>
<td>House Appropriations Committee reports last annual appropriation bill.</td>
</tr>
<tr>
<td>June 15</td>
<td>Congress completes action on reconciliation legislation.</td>
</tr>
<tr>
<td>June 30</td>
<td>House completes action on annual appropriation bills.</td>
</tr>
<tr>
<td>October 1</td>
<td>Fiscal year begins.</td>
</tr>
</tbody>
</table>

Once Congress receives the PRESBUD, it will develop and pass a budget resolution, called the concurrent budget resolution (CBR) to set new budget authority for the next FY (Tollestrup, 2012, p. 3). The CBR allocates the amount of budget authority for certain functions; DOD is in the National Defense Function (Function 050)
(Tyzkiewicz & Dagget, 1998, p. 32). In the case of DOD, prior to appropriating budget authority, the House of Representatives and Senate will pass authorizing legislation called the National Defense Authorization Act (NDAA). This act serves the purpose of defining the scope of, and approving funding for, specific DOD programs (Tyzkiewicz & Dagget, 1998, p. 34). Once authorized and using the CBR as a guide for total budget authority, the House and Senate subcommittees determine the amount of budget authority they will appropriate for specific programs within the DOD in the upcoming FY. Once the House and Senate agree on the appropriation and authorization bills, Congress submits the bills to the president to be signed into law.

c. **Budget Execution**

After Congress appropriates funds by passing the appropriation and authorization bills and the president signs them into law, budget authority is transferred to the agencies to execute budgets. Agencies are able to obligate funds when the Treasury issues an appropriation warrant to OMB. This allows OMB to apportion the appropriations from Congress to agency heads to carry out budget plans (Potvin, 2012, p. 17). The spending authority flows down the chain of command from the Under Secretary of Defense (Comptroller) USD (C) through allocations of budget authority to the respective services, and then the services further distribute the authority down to subordinate units (Potvin, 2012, p. 18). The agencies are then able to obligate the government for contracts and subsequent payments from the Treasury to fulfill those contracts (Potvin, 2012, p. 9). It is important to note that apportionments comply with 31 U.S.C § 1341 and 1517, the Anti-Deficiency Act, which governs the time, amount, and purpose that apportionments can be obligated (Potvin, 2012, p. 96). Figure 2 is an example of how funds flow from Congress to the Treasury down through the DON chain of command.
The budget authority NPS receives through appropriations for its operating budget to execute its mission of educating Navy and Marine Corps officers is only part of its total obligation authority (TOA). TOA consists of new obligation authority (NOA), unexpired budget authority, and reimbursable authority (Potvin, 2012, p. 198). In FY 2013, NPS requested $86,512,000 in direct funding and $64,587,000 in reimbursable funding in the Navy operation and maintenance (O&M) budget (Department of the Navy, 2013, p. 8). In addition to Navy O&M funding, NPS receives additional funding from the other Navy appropriations categories such as research, development, test and evaluation (RDT&E) and other procurement, Navy (OPN). Currently, the majority of NPS’s funding comes from reimbursable funding from DOD, other military branches, civilian entities, and other countries for educational and research-related services. In 2013, NPS’s total operating budget was $294.5 million (Naval Postgraduate School, 2013, p. 18). 

Figure 3
illustrates the trend over time of direct and reimbursable funding spent each FY and, in particular, the significant increase of reimbursable funding over direct funding in recent years.

![Figure 3. NPS funding expenditures FY00 to FY13 from NPS update: President’s brief on 20 February 2014 (after O. Moses, personal communication, 2014)](image)

Additionally, Figure 4 displays the distribution between the various categories of direct (mission) funds and reimbursable funds at NPS; NPS’s reimbursable funded categories are: sponsored research, sponsored education, sponsored professional development, and other sponsored activities. Sponsored research is defined as “all research and development activities that are sponsored by Federal and non-Federal agencies and organizations” (Office of the Vice President and Dean of Research & Office of the Vice Provost for Academic Affairs, 2012, p. 1). Sponsored research most commonly includes basic and applied research “consulting”-type arrangements for DOD and DON, student thesis support, and cooperative research and development agreements (CRADA) (Office of the Vice President and Dean of Research & Office of the Vice Provost for Academic Affairs, 2012, p. 1). Sponsored education is a “specific instructional activity established by a reimbursable arrangement that is provided for academic credit” and includes degree or certificate programs, single course offerings, course or curriculum development, and instructional-focused chair professorships (Office
Sponsored professional development is “specific instructional or training activity established by reimbursable arrangement that is provided as a no-credit offering” (Office of the Vice President and Dean of Research & Office of the Vice Provost for Academic Affairs, 2012, p. 1). Other sponsored activities are “programs and projects funded by Federal and non-Federal agencies and organizations, which involve the performance of work other than instruction and research and are normally outside of the NPS mission” (Office of the Vice President and Dean of Research & Office of the Vice Provost for Academic Affairs, 2012, p. 1). Examples include technical service agreements (TSAs) or circumstances when NPS acts as an executive agent for a DOD and DON sponsor (Office of the Vice President and Dean of Research & Office of the Vice Provost for Academic Affairs, 2012, pp. 1–2).

Figure 4. NPS funding expenditures by program type FY07 to FY13 from NPS update: President’s brief on 20 February 2014 (after O. Moses, personal communication, 2014)

NPS’s 2013 annual report shows NPS received approximately 29 percent of its total funding from direct funds, while the remainder came from reimbursable funding
Figures 4 and 5 from the NPS 2013 annual report provide a snapshot of the school’s sources of revenue and the programs’ direct and reimbursable funding supports.

Figure 5. 2013 NPS operating budget revenues by source (from Naval Postgraduate School, 2013, p. 34)

Figure 6. 2013 NPS operating budget expenditures by category (from Naval Postgraduate School, 2013, p. 34)
As discussed earlier in the results of the NAVINSGEN inspection, the large proportion of reimbursable funding as compared to direct funding invites concern regarding the fulfillment of NPS’s mission and increase in workforce programmed outside of direct funding. These concerns will be further discussed in Chapters III and IV.

2. Reimbursable Funding

a. Definition

The total annual funding NPS receives includes reimbursable authority (or reimbursable funding) as well as direct funding. Reimbursable funding is governed by 10 U.S.C. § 2205, which addresses reimbursements and the scope in which reimbursements are available for obligation by the DOD when services are rendered to another department or agency (“Reimbursements,” 2011, p. 1082). DOD directive 4000.19 governs reimbursable funding earned from the selling of goods or services through support agreements that allow DOD components to provide services with other government agencies to maximize efficiency and benefit the DOD (Under Secretary of Defense (Comptroller), 2008, p. 15-6). DOD may provide services to conduct reimbursable work through either intra-agency or interagency support agreements (Under Secretary of Defense (AT&L), 2013, p. 11-13). Essentially, reimbursable work occurs when another DOD component performs services through intra-agency or interagency agreements for a DOD component or other government agency because the requesting agency does not have the necessary resources to perform the work itself (Under Secretary of Defense (AT&L), 2013, p. 9). Reimbursable agreements between agencies thus create a buyer-supplier relationship in which a supplier provides goods or services in exchange for funds from the buyer (Potvin, 2012, p. 102). As stated in the DOD directive on support agreements, intra-agency or interagency services may only be exchanged if the following conditions are met:

- Funds are available
- The head of the requesting agency or unit decides the order is in the best interest of the U.S. government
- The agency or unit to be asked to fill the order is able to provide or get by contract the ordered goods or services
The head of the requesting agency decides that ordered goods or services cannot be provided by contract as conveniently or economically by a commercial enterprise. (Under Secretary of Defense (AT&L), 2013, p. 11)

DOD can conduct reimbursable work through various types of orders such as project orders and Economy Act orders, which are governed by 41 U.S.C. § 6307, the “Project Order Law,” and 31 U.S.C. § 1535 of the Economy Act, respectively (Potvin, 2012, p. 102; Under Secretary of Defense (Comptroller), 2013a, p. 1-3).

b. Reimbursable Orders

(1) Project Orders. DOD FMR Volume 11A describes a project order much like a contract; it is a “specific, definite, and certain order issued under the authority contained in 41 U.S.C. § 6307” (Under Secretary of Defense (Comptroller), 2013c, p. 2-4). Much like private sector contracts, when a project order is placed it forms a contractual relationship between the buyer and seller, and work is ordered based on a bona-fide need during the current FY (Under Secretary of Defense (Comptroller), 2013c, pp. 2-7–2-9). While project orders are subject to the appropriation from which they are funded, work may carry over between FYs because these tasks are non-severable (Potvin, 2012, p. 105). Severable tasks are recurring support tasks (such as R&D), and non-severable tasks are a single undertaking (such as construction) (Potvin, 2012, pp. 74, 94). Project orders are only issued to components within the DOD; orders outside the DOD require different regulation as directed by the Economy Act (Under Secretary of Defense (Comptroller), 2013c, p. 2-7).

(2) Economy Act Orders. The Economy Act, 31 U.S.C. § 1535 allows DOD components to enter into support agreements with other DOD components and non-DOD components (other government agencies), unlike project orders. Economy Act orders reduce redundancy in the federal government and allow agencies to provide services to each other (Under Secretary of Defense (Comptroller), 2013c, pp. 3–4). Unlike project orders, work may not carry over between fiscal years because Economy Act orders are normally used for routine, severable tasks (Potvin, 2012, p. 106). Currently, NPS’s reimbursable work is almost exclusively Economy Act orders, with only a small amount of project orders each year (Interview 8, personal communication, 2014).
c. Reimbursable Accounting

DOD FMR Volume 11A addresses the policies regulating the rates at which DOD components charge other components for reimbursable work. These rates vary depending on the type of component and the type of service rendered (Under Secretary of Defense (Comptroller), 2013c, p. 1-3). When the supplying activity collects funds from its customers for services rendered, the supplier may only collect the direct cost of the work provided; furthermore, if the work the supplier provides is included in the appropriations of the supplier’s budget, the supplier cannot collect reimbursement. Overhead and general and administrative costs (G&A) are indirect costs that cannot be directly traced to the work provided to the customer by the suppliers. Thus, indirect costs are not normally included in the reimbursable rate unless the customer is a non-DOD agency (Under Secretary of Defense (Comptroller), 2013c, p. 1-10). Though the DOD FMR states indirect costs are not normally charged by DOD direct-funded activities to other DOD customers there is an exception made if the costs are significant and incremental. In September 2010, the Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN (FM&C)) sent a memo to the Commander, Bureau of Naval Personnel (BUPERS) citing this exception in the case of NPS. The exception to charging indirect costs to DOD customers comes from historical decision results made by the Comptroller General. The policy states,

Overhead costs can be properly charged, retained and expended if those costs are significantly related to the work performed by the activity, would not normally have been incurred had the reimbursable work not been performed (i.e., incremental), and if the reimbursed expenses are not funded by other available funds. (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 6)

In addition, DOD FMR Volume 11A states, “if an organization has a significant amount of reimbursable effort, such costs are [to be] accumulated in a cost pool and allocated to customers” (Under Secretary of Defense (Comptroller), 2013c, p. 1-10).

Based on these two policies ASN (FM&C) authorized NPS to charge indirect costs related to reimbursable work to DOD customers (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 6). Other important aspects of the 2010 ASN (FM&C) memo will be discussed in the next section.
For reimbursable orders, once the customer and supplier have a contract established the customer’s authorizing accounting activity (AAA) will then reserve obligation authority for the reimbursable work order. The supplier’s AAA will then increase its activity’s obligation authority for the same amount. The supplier then performs the work using its own resources and charges the customer through its own AAA for the costs incurred (Potvin, 2012, p. 108). Figure 7 details the process for reimbursable work between a customer and provider.

![Figure 7. Reimbursable account cycle (from Potvin, 2012, p. 109)](image)

3. ASN (FM&C) Memorandum on Financial Management at NPS

Reimbursable funding at NPS has been a topic of discussion in recent years, and reimbursable funds management has undergone a number of changes as a result. One of the most important changes is contained in a September 2010 memo from the ASN (FM&C) to BUPERS. This memo, regarding the management of reimbursable funds at NPS, is based on the results of the August 2009 NAVINSGEN Command Inspection of NPS. NAVINSGEN conducted the inspection in 2009 to address two topics: “1) NPS’s practice of charging indirect costs to reimbursable customers and 2) determine the compliance with the DOD FMR” (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 3). A team consisting of representatives from
ASN (FM&C), BUPERS, and NPS was formed to address NAVINSGEN’s findings and establish new financial management procedures for NPS (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 3). The ASN (FM&C) memo defines for NPS which activities will be considered mission (direct) funded and which will be considered reimbursable funded. Mission-funded categories are defined as being “directly related to NPS’s predominant purpose in supporting the DON,” whose activities include:

- Resident graduate education at NPS for DON military members
- Graduate education for Navy military members resident at civilian institutions
- Non-resident graduate education for DON military members
- Academic certificate programs for DON military members
- Research efforts for new faculty funded in the Research Initiation Program, and in support of course and curriculum development, where the courses and curriculum are predominately for mission-funded students, and student thesis activities on DON topics or for mission-funded students
- Congressional adds to the DON provided specifically for NPS and therefore placed in the NPS Navy O&M funding line, as long as they do not violate legal parameters of NPS’s mission (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 4)

Reimbursable-funded categories are then defined as “efforts [that] may or may not support the DON and are predominately driven by the customer in their choosing to have NPS be the provider of the education, professional training or research effort” and include:

- Resident graduate education for non-DON military members (to include Air Force, Army, Coast Guard military, military from foreign countries) and all civilians
- Non-resident graduate education for non-DON military members and all civilians
- Professional development training for DON and non-DON military members and all civilians that does not provide academic credit
- Academic certificate programs for non-DON military members and DON reserve military members
- Research funding that is not described in the direct category
- All support agreements (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 5)
In addition to formally defining the two categories of work at NPS, the memo authorizes NPS to charge DOD customers for indirect (overhead) costs related to reimbursable work, as discussed in the previous section.

C. NAVY WORKING CAPITAL FUND

1. History

Working capital funds are revolving funds that, unlike direct-funded activities, do not receive annual appropriations from Congress. Starting in the 1870s, the U.S. Navy used stock funds for procuring materials in bulk from commercial sources and then holding them in inventory until they were needed to be sold to customers (Under Secretary of Defense (Comptroller), 2010, pp. 9-4–9-5). In the 1940s, the Navy added industrial funds to provide the Navy with industrial and commercial goods and services (e.g., depot maintenance, transportation, research and development (R&D)) (Under Secretary of Defense (Comptroller), 2010, pp. 9-4–9-5). The National Security Act Amendments of 1949 formally authorized the establishment of revolving funds in DOD “to reorganize fiscal management in the national military establishment to promote economy and efficiency” (National Security Act Amendments of 1949).

In the 1991 DOD Appropriations Act, Congress approved combining the existing stock and industrial funds operated by each military service into a single revolving fund centrally managed by DOD called the Defense Business Operations Fund (DBOF) (“Working Capital Funds,” 2012, p. 1111). Consolidating under the DBOF subsequently caused significant cash flow issues because funds were jointly shared across all of the fund’s activities (Potvin, 2012, p. 110). Congress then required DOD to conduct a thorough study of the DBOF and submit proposed solutions to Congress for approval. As a result, in December 1996 the DBOF was reorganized into four working capital funds (Army, Navy, Air Force, and Defense-Wide) (Potvin, 2012, pp. 110–111). In 1997, the DOD added a fifth working capital fund for the Defense Commissary Agency, which took effect in 1999, and the overall organization was officially established as the Defense Working Capital Fund (DWCF) (Potvin, 2012, pp. 110–111). Under the DWCF, each component is responsible for its own cash management and the operations of its activities.
instead of being centrally managed by the USD (C) (Potvin, 2012, pp. 110–111). 10 U.S.C. Ch. 131 § 2208 provides the statutory authority for DOD to operate the DWCF, and within the Navy the revolving fund is called the Navy Working Capital Fund (NWCF).

2. **Purpose and Objectives**

DOD FMR Volume 11B governs the policies and procedures pertaining to the DWCF. According to the DOD FMR, for an organization within DOD to be considered for addition to the DWCF it must meet all of the following criteria:

- Production of goods or provision of services that are common to requirements of more than one major command and/or DOD component
- A cost accounting system is available that is capable of collecting costs of producing outputs [and] the capability to charge prices or rates that are capable of recovering the full funded costs of the provided goods and services
- The demand for the goods or services to be provided by the program or organization must come from multiple customers within DOD and/or other federal government entities
- Identification of a buyer-seller relationship to the extent that the buyer can influence cost and workload and the buyer has alternative sources that can provide the products or services (Under Secretary of Defense (Comptroller), 2013d, pp. 2-4–2-5)

If a DOD organization meets all of the requirements to be added under the DWCF, the organization can submit a charter to the USD (C) Revolving Funds Directorate for approval. Once approved, the DWCF activity is required to review its charter annually and submit any changes to the USD (C) Revolving Funds Directorate as well as request approval if new lines of business are added (Under Secretary of Defense (Comptroller), 2013d, pp. 2-4–2-5).

Revolving funds do not rely on direct appropriations for funding; instead, these funds operate by accepting work orders from customers, funding the work using the activity’s working capital, and then billing the customer for the goods or services provided. Although revolving funds receive payment from their customers for goods and
services, the goal is to, over time, incur neither profit nor loss, but to break even (Potvin, 2012, p. 110). According to the DOD FMR, activities chartered under the DWCF are designed to achieve the following objectives:

- Provide more effective means for controlling costs
- Provide flexibility in financing, budgeting, and accounting
- Create contractual relationships with customers
- Provide flexibility in using manpower, materials, and other resources
- Promote business relationships between DOD components
- Provide better visibility of the costs of products (Under Secretary of Defense (Comptroller), 2013d, pp. 11-3–11-4)

In addition to these main objectives, a number of specific goals for DWCF activities include the following: improved cost estimation by comparing estimated and actual costs, “forward-looking” financial planning, stabilized rates to provide customers with better financial planning, and budget flexibility to changes in supply and demand (Under Secretary of Defense (Comptroller), 2013d, pp. 11-3–11-4).

Tables 3 and 4 from the NWCF 101 online training course provide a list of the major business areas in the NWCF and the DON major commands that are responsible for the financial management of its subordinate activities (Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 13). Most of these organizations have been in the NWCF since its inception.
Table 3. Navy Working Capital Fund business areas (after Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 12)

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Management</td>
<td>Navy Supply (NAVSUP)</td>
</tr>
<tr>
<td></td>
<td>Marine Corps Supply Management Activity Group (MC SMAG)</td>
</tr>
<tr>
<td>Depot Maintenance</td>
<td>Fleet Readiness Centers (FRC)</td>
</tr>
<tr>
<td></td>
<td>Marine Corps Depot Maintenance Activity Group (MC DMAG)</td>
</tr>
<tr>
<td>Research and Development</td>
<td>Naval Air Warfare Center (NAWC)</td>
</tr>
<tr>
<td></td>
<td>Naval Surface Warfare Center (NSWC)</td>
</tr>
<tr>
<td></td>
<td>Naval Undersea Warfare Center (NUWC)</td>
</tr>
<tr>
<td></td>
<td>Space and Naval Warfare Systems Centers (SSC)</td>
</tr>
<tr>
<td></td>
<td>Naval Research Laboratory (NRL)</td>
</tr>
<tr>
<td>Transportation</td>
<td>Military Sealift Command (MSC)*</td>
</tr>
<tr>
<td>Base Support</td>
<td>Naval Facilities Engineering and Expeditionary</td>
</tr>
<tr>
<td></td>
<td>Warfare Center (NAVFAC EXWC)</td>
</tr>
<tr>
<td></td>
<td>Facilities Engineering Commands (FEC)</td>
</tr>
</tbody>
</table>

*MSC operates in both the NWCF and Transportation Working Capital Fund (TWCF)*

Table 4. Department of the Navy major commands (after Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 13)

<table>
<thead>
<tr>
<th>DON Major Commands</th>
<th>Subordinate Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Air Systems Command (NAVAIR)</td>
<td>NAWC, FRC</td>
</tr>
<tr>
<td>Naval Sea Systems Command (NAVSEA)</td>
<td>NSWC, NUWC</td>
</tr>
<tr>
<td>Naval Facilities Engineering Command (NAVFAC)</td>
<td>NAVFAC EXWC, FEC</td>
</tr>
<tr>
<td>Office of Naval Research (ONR)</td>
<td>NRL</td>
</tr>
<tr>
<td>Space Naval Warfare Systems Center (SPAWAR)</td>
<td>SSC</td>
</tr>
<tr>
<td>Naval Supply (NAVSUP)</td>
<td>NAVSUP</td>
</tr>
<tr>
<td>Military Sealift Command (MSC)</td>
<td>MSC</td>
</tr>
<tr>
<td>U.S. Marine Corps (USMC)</td>
<td>MC DMAG, MC SMAG</td>
</tr>
</tbody>
</table>

3. Operations

Once an organization’s charter is approved and it is added to the DWCF, it “receives its initial working capital through an appropriation or a transfer of resources
from existing appropriations of funds” (Under Secretary of Defense (Comptroller), 2013d, p. 11-5). These funds provide the initial capital to get the new DWCF activity started. The funds used to establish, increase the size of, or replace significant losses in a DWCF activity are called the corpus (total investment) (Under Secretary of Defense (Comptroller), 2008, p. 19-3). After the DWCF activity receives the corpus, the funds it generates from customers do not have a fiscal year limitation, unlike direct-funded appropriations (Under Secretary of Defense (Comptroller), 2013d, p. 11-5). The DOD FMR authorizes DWCF activities to conduct business with the following customers:

- Any DOD command, organization, office, or other element
- Non-DOD federal government agencies
- Private parties and concerns when authorized by law including foreign governments, and state and local governments
- Those U.S. manufacturers, assemblers, or developers authorized by 10 U.S.C. § 2208(h) and in accordance with 10 U.S.C. § 2563 and § 4543. (Under Secretary of Defense (Comptroller), 2013d, p. 11-5)

To operate, a DWCF activity, once established, relies solely on the revenues generated from providing goods and services to its customers. DWCF activities operate on a break-even basis over time, thus the rate activities charge their customers for goods and services must be adjusted annually to ensure an activity is not operating at a profit or loss. The activity calculates its net operating result (NOR) on an annual basis by subtracting its expenses from its revenues (Potvin, 2012, p. 126). A positive NOR indicates a profit and a negative NOR indicates a loss during the year. The NORs from all prior years are then summed to calculate the accumulated operating result (AOR), which over time should become zero by adjusting the rate customers are charged as necessary to offset prior year profits or losses (Potvin, 2012, p. 118).

a. Cost Accounting

One of the key advantages of a DWCF is it “identifies the total or ‘true’ cost of DOD goods and services” (Moreau, 2002, p. 25). DWCF activities are required to recover the full costs of the goods and services they provide to operate on a break-even basis. A cost accounting system is utilized because it “improves operational efficiency and enhances decision making through better, more meaningful cost and budgetary
information” (Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), n.d., p. 45). All costs associated with the activity’s goods and services need to be adequately identified to enable full cost recovery in the customer rate. These costs are used to determine the unit cost of each product or service the activity provides. Unit cost is calculated by taking the total costs for a product or service and dividing by a measurement of the output produced, such as cost per direct labor hour or cost per unit (Potvin, 2012, p. 116). One of the key aspects in achieving full cost recovery is to accurately identify “for each unit of output, how the direct, indirect, and G&A costs must be allocated...since the activity’s budget and rates are based on this allocation” (Potvin, 2012, p. 117).

4. Budget Process

Much like the stock and industrial funds first used by DOD, the DWCF is divided into two categories: supply management and non-supply management (Potvin, 2012, p. 119). These two categories are used to calculate an activity’s customer rates. Supply management activities provide goods and “use commodity costs in conjunction with a cost recovery factor to establish customer rates” (Potvin, 2012, p. 119). The commodity cost is the current cost of an item and the cost recovery factor is made up of the activity’s operating costs, the costs to transport the goods, inventory costs, adjustments for inflation, and repair costs (Potvin, 2012, p. 119). Non-supply management activities provide services such as depot maintenance and R&D. These activities use unit cost rates to account for the services they provide (Potvin, 2012, p. 119).

Each year, DWCF activities create and submit an annual operating budget (AOB) to its service component; for the Navy the AOB is submitted to the ASN (FM&C). The AOB consists of two parts: the operating budget and the capital budget (Under Secretary of Defense (Comptroller), 2013d, p. 11-6). The operating budget consists of the annual operating costs of the activity, as well as expenses incurred for depreciation and amortization (Under Secretary of Defense (Comptroller), 2013d, p. 11-6). Some of the costs factored into the operating budget are labor, materials, supplies, and utilities (Potvin, 2012, p. 122). The capital budget consists of financial resources authorized for
capital expenditures and includes investment expenses such as equipment, construction, information technology (IT) infrastructure, and software (Under Secretary of Defense (Comptroller), 2013d, p. 11-6). An important element in the AOB is the unit cost goal (UCG), which is an “estimated total cost to produce an estimated number of outputs” and “serves as the basis for the working capital fund budget, the rate charged to the customer, and for evaluating the activity’s performance” (Potvin, 2012, pp. 116–117).

5. Requirements and Restrictions

Under normal circumstances, DWCF activities operate solely from the revenue received from their customers unless there is a need to “increase the size of or replace significant losses in” the fund’s corpus (Under Secretary of Defense (Comptroller), 2008, p. 19-3). An exception to this policy is the requirement to maintain a mobilization capability. The FMR requires DWCF activities associated with a mobilization capability requirement to “plan for and maintain the capability to expand or alter operations…to meet an operational contingency as documented in defense planning guidance or operational plans” (Under Secretary of Defense (Comptroller), 2013d, p. 11-7). The costs of maintaining this capability, however, are not included in the rates charged to customers and are reimbursed by direct appropriations (Under Secretary of Defense (Comptroller), 2013d, p. 11-7).

DWCF activities also have a “cash corpus” requirement to “maintain 7 to 10 business days of cash plus and an additional 6 months of disbursements for capital investments” (Under Secretary of Defense (Comptroller), 2008, p. 19-3). These requirements are in place because DWCF activities pay for their expenses using revenue from the goods and services they provide and having the “cash corpus” safeguards against having insufficient funds available to pay for expenses that would result in an ADA violation for exceeding budget authority. Each DWCF activity is required to ensure it remains solvent, but overall cash management is managed by each military service component (Potvin, 2012, p. 126).
D. DEPARTMENT OF DEFENSE AUDITABILITY

1. History

In December 2005, the DOD Comptroller issued the financial improvement and audit readiness (FIAR) plan. The FIAR plan was written and designed to achieve the goal of DOD “obtaining auditable financial statements” (Under Secretary of Defense (Comptroller), n.d.). Obtaining an unqualified audit opinion is a priority for DOD to help ensure service members have the necessary resources for mission accomplishment and also show taxpayers DOD is a good steward of appropriated funds (Under Secretary of Defense (Comptroller), 2013b. p. ES-1). To achieve auditability, the FIAR plan was developed to enable a strategic approach for addressing the financial challenges and weaknesses within DOD (Government Accountability Office, 2010, p. 7). The 2010 NDAA mandated that DOD have auditable financial statements by 30 September 2017 (National Defense Authorization Act for Fiscal Year 2010, 2009, p. 251). To achieve this goal, DOD has set a deadline of 30 September 2014 for each service’s Statement of Budgetary Resources to be auditable (Under Secretary of Defense (Comptroller), n.d.).

2. FIAR Priorities

The USD (C) published DOD’s FIAR priorities in 2009. These priorities are guidance for DOD to follow in order to achieve the objectives set in the FIAR plan. Specifically, the two priorities discussed are budgetary information and mission-critical asset information. Budgetary information focuses on appropriated funds and seeks to improve controls and processes to achieve an auditable Statement of Budgetary Resources. Elements include:

- Improve the visibility of budgetary transactions resulting in more effective use of resources
- Provide for operational efficiencies through more readily available financial information
- Improve fiscal stewardship (ensures that funds appropriated, expended and recorded are reported accurately, reliably and timely)
- Improve budget processes and controls (Under Secretary of Defense (Comptroller), 2013a, p. 5)
DOD also places significant emphasis on the effective management of mission-critical assets such as real property, inventory, operating material and supplies, and general equipment (ships, aircraft, combat vehicles, etc.) (Under Secretary of Defense (Comptroller), 2013a, p. 6).

3. **FIAR Requirements for Defense Working Capital Funds**

Because the DWCF operates differently than direct-funded organizations receiving funds from Congress, DOD has promulgated more specific guidance concerning the auditability of the DWCF. Rather than focusing on budgetary information like direct-funded organizations, DOD directed DWCF organizations to focus their efforts on proprietary information (Under Secretary of Defense (Comptroller), 2013a, p. 6). DWCF organizations should align their “lines of service” to assessable units, as well as ensuring direct and indirect cost accumulation processes and controls are ready for audit (Under Secretary of Defense (Comptroller), 2013a, pp. 6, 8).

DWCF activities are not required to meet the FY 2014 DOD requirement of achieving an auditable Schedule of Budgetary Resources; DWCF activities, however, work routinely with direct-funded entities, and will need to provide them certain information to assist them in becoming audit ready (Under Secretary of Defense (Comptroller), 2013a, p. 6). DOD FIAR guidance further states DWCF activities are subject to the same requirements as direct-funded organizations and should work toward achieving “full financial statement audit readiness” by the end of FY 2017 (Under Secretary of Defense (Comptroller), 2013a, p. 6).
III. DATA ANALYSIS

To evaluate the feasibility and suitability of converting NPS to a NWCF activity, this study used relevant statutes, regulations, instructions, and financial information, as well as conducting interviews with financial personnel at NPS, FMB, and various organizations within the NWCF. The questions asked during interviews are found in Appendix C. Using this approach, several key factors associated with each type of funding were identified and enabled an assessment of the advantages and disadvantages discussed further in Chapter IV.

A. ANALYSIS OF DIRECT AND REIMBURSABLE FUNDING AT NPS

1. Ratio of Direct and Reimbursable Funding at NPS

As previously discussed in Chapter II, the mission of NPS mandated by the president and Congress in 10 U.S.C. § 7041 is “to provide advanced instruction and professional and technical education and research opportunities for commissioned officers of the naval service (“United States Naval Postgraduate School,” 2012, pp. 2087–2088). The increase in reimbursable funding over direct funding in recent years has prompted questions from financial managers in the DON as to whether the expansion of reimbursable work is in keeping with NPS’s mission. In the last ten years, the ratio of reimbursable funding to direct funding the school receives has increased significantly; the ratio was 1.04:1 in FY03, peaked at 2.6:1 in FY10, and decreased slightly to 2.4:1 in FY13 (O. Moses, personal communication, 2014). NPS is also currently the only non-NWCF organization within DON receiving more reimbursable funding than mission funding on an annual basis (Interview 3, personal communication, 2014). Although education and research are both components of NPS’s statutory mission, a significantly greater proportion of reimbursable funding over direct funding can present the impression that the education of Navy and Marine Corps officers has become a secondary rather than primary role for the school. A general impression from interviews and also highlighted in NAVINSGEN’s report on its inspection of NPS is that education and research are
isolated functions at NPS. In many ways the two are interlinked, such as the requirement in all of NPS’s degree programs for students to complete a thesis or project prior to graduation.

In addition to the ideological discussion about the linkages between education and research there are also financial management challenges. Many of those interviewed cited the continued challenge in ensuring the work NPS employees accomplish is appropriately tied to mission and reimbursable funds. Currently, NPS employees who perform work related to either mission- or reimbursable-funded functions allocate their time between the two using a workload calculation made by the comptroller’s office. According to the Anti-Deficiency Act, reimbursable funds cannot augment mission funds and therefore it is critical for NPS to have procedures in place that clearly delineate how each type of funding is spent. The interviews also revealed there is currently ongoing discussion to evaluate the merits of assigning employees as solely direct funded or solely reimbursable funded, regardless of whether work is done in both categories. This would potentially allow for simplified and transparent management of both types of funds; it could also, however, create other financial management challenges and inefficiencies such as redundant staff positions (Interview 1, 3, personal communication, 2014).

As previously discussed in the results of the 2012 NAVINSGEN inspection of NPS, the increase in reimbursable funding over the past decade resulted in NPS hiring additional employees to support the increased workload. Since those additional positions were added as a result of increased reimbursable funding rather than direct funding, a decrease in reimbursable funding could potentially force NPS to make difficult decisions regarding staff levels.

2. Indirect Cost Rates

As discussed in Chapter II, typically direct-funded DOD activities do not charge other DOD customers for indirect costs. A 2010 ASN (FM&C) memo authorizes NPS as an exception to this rule because the school’s reimbursable indirect costs are incremental and significantly related to the work performed (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 1). The ASN (FM&C) memo also
requires NPS to use a job order number (JON) process to allocate indirect costs (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 6). To monitor progress against allotted funds, NPS also uses a cost accounting system (Interview 1, personal communication, 2014).

Indirect rates at NPS are calculated based on the percentage of time spent on mission-funded work or reimbursable-funded work using direct labor hours as the cost driver. In some circumstances, overhead costs are calculated on an organizational or departmental level (i.e., 60 percent of a particular office does reimbursable work; therefore, the indirect rates will be based on the labor hours of 60 percent of the employees in that office). In other circumstances, however, indirect rates are based on individual allocation of labor hours between mission-funded and reimbursable-funded work. After the projected total overhead is determined, it is divided by the number of direct labor hours and then pooled into four product lines: research, academic education for credit, professional development and education, and education not for credit. In coordination with NPS, ASN (FM&C) sets the rates for each product line during a FY. In FY13, the rates were $26.24 per direct government labor hour and contracted labor hour for sponsored research, $27.02 for sponsored education, $16.02 for sponsored professional development and training, and $6.01 for other sponsored activities (Nickles, 2012, p. 1). The Memorandum of Record for FY13 Indirect Cost Recovery Rates can be found in Appendix B.

In recent years, NPS has undergone many changes to the process of calculating the rates at which NPS charges its customers for services. Many of those interviewed expressed concern about the process’s complexity. Specifically, the concern is the methodology used in calculating overhead rates for NPS employees who conduct both direct and reimbursable-funded work (Interview 3, personal communication, 2014). Because employees have the ability to do work on both mission-funded and reimbursable work all within different product lines, many calculations and procedures are necessary to be able to recover full cost for reimbursable work without subsidizing mission-funded work. Because of the complex accounting methods and disagreement over the most
effective method, there is a proposal for NPS to use a simpler single rate for all reimbursable work regardless of product line (Interview 2, personal communication, 2014).

3. Impact on Auditability

As discussed in Chapter II, the DOD is preparing for the 2017 statutory requirement to produce auditable financial statements. Currently, as a direct-funded organization NPS will have to comply with the requirements set by the FIAR plan with respect to budgetary information.

The 2013 FIAR guidance lists some of the common challenges present in each stage of implementation of the audit readiness strategy. Some of the challenges noted in the FIAR guidance that may affect NPS are: establishing a historical record of transaction documentation, reconciliation and traceability of interagency agreements, and accounts payable accruals (Under Secretary of Defense (Comptroller), 2013a, pp. 13, 19). A concern also mentioned during interviews was the duration of time between the upcoming audit and the most recent audit conducted at NPS in 2004 (Interview 1, personal communication, 2014). This long duration without an audit presents a challenge for NPS to produce documentation from past years largely due to the aforementioned complexity in calculating and tracking indirect rates. In the past 10 years, the procedures for calculating indirect rates and the allocation of costs has changed multiple times, starting with the recommendations made by PricewaterhouseCoopers (PwC) in 2004 and later updated by ASN (FM&C) in 2009 (Interview 2, personal communication, 2014).

Another concern relating to auditability is the transfer of funds or costs between mission-funded and reimbursable-funded activities (Interview 3, personal communication, 2014). Since NPS employs personnel that conduct both mission-funded and reimbursable-funded work, a clear procedural basis to include accounting data and corroborating evidential matter for why costs were transferred will be necessary for an auditor to give an audit opinion (Public Company Accounting Oversight Board, 2010). Transfer of funds or costs between different activities leaves the possibility that reimbursable funds are subsidizing mission funds, as noted by the NAVINSGEN in its
2012 inspection of NPS and discussed in interview 3 (Naval Inspector General, 2012, p. 23; Interview 3, personal communication, 2014). Without proper procedures and controls in place, there is a potential for an ADA violation because of the possibility of errors or misstatement in the receipt and distribution of funds (Under Secretary of Defense (Comptroller), 2013a, p. C-2). Ineffective internal controls will also make auditability a challenge.

To strengthen its internal controls, NPS promulgated an instruction in May 2014 requiring the attestation of sponsor-funded reimbursable work. The purpose of this instruction is to ensure all labor charges to sponsor-funded reimbursable accounts are appropriate costs. To do this, faculty primary investigators (PIs) and sponsored program financial analysts (SPFAs) prepare and attest sponsored accounts quarterly to ensure the accuracy. This instruction acts as a control to verify accounts are charged correctly to identify and correct erroneous charges unrelated to the reimbursable work (President, Naval Postgraduate School, 2014, pp. 1–3).

4. **DOD-focused Education and Research**

NPS is one of the few institutions within DON that provides graduate education to military personnel. The Naval War College (NWC) located in Newport, Rhode Island and Marine Corps University (MCU) located in Quantico, Virginia also offer advanced education to Navy and Marine Corps students; these institutions, however, have a much more specific focus than NPS. While the Naval War College offers a Master of Arts in National Security and Strategic Studies and Marine Corps University offers Master of Arts degrees in Strategic Studies, Operational Studies, and Military Studies, the mission of both of these institutions is to provide professional military education (PME) rather than DOD-focused education in a variety of academic disciplines (U.S. Naval War College, 2013, p. 2; Marine Corps University, n.d.).

In addition to the differing educational focuses, both the Naval War College and Marine Corps University are smaller institutions than NPS. In 2013, the in-resident student population at the NWC was 545 students, and MCU had 277 in-resident students in master’s degree curriculums (U.S. Naval War College, 2013, p. 2; Marine Corps University, n.d.).
In addition, the NWC had another 5,372 distance education students. Only 619 of these students, however, were enrolled in a graduate degree program; the remaining students were enrolled in various non-resident means of completing DOD-required joint professional military education (JPME).

Also within DOD, the Air Force Institute of Technology (AFIT) located in Dayton, Ohio, like NPS, has a statutory mission to provide “relevant defense-focused technical graduate and continuing education, research, and consultation” (Air Force Institute of Technology, n.d.). In academic year 2012–2013 AFIT had approximately 700 full and part-time students (Air Force Institute of Technology Graduate School of Engineering and Management, 2013, p. 34). Since both institutions provide advanced education to military members, a 2002 memorandum of agreement (MOA) was signed between NPS and AFIT to “eliminate unnecessary duplication and identify efficiencies between the two schools (Naval Postgraduate School, 2008, p. 4). Additional memoranda of understanding (MOUs) were signed between NPS and AFIT in 2004 and 2008 to further improve collaboration between the two schools (Naval Postgraduate School, 2008, p. 4).

When asked about the services NPS provides, most subject matter experts interviewed mentioned the importance of the unique capability NPS offers to both DON and DOD (Interview 1, 2, 3, 7, 8, personal communication, 2014). There are numerous postgraduate institutions that offer similar masters’ and doctoral degrees to those at NPS; few, however, offer the specifically DOD-focused education NPS provides (Mauz & Gates, 2000, p. 61). Because NPS is specifically charted to give defense-focused education it has few competitors but, if the military’s demand is for graduate education in general, then NPS has numerous competitors (Interview 2, personal communication, 2014). Furthermore, SECNAVINST 1524.2B requires NPS to maintain its unique DOD focus by requiring that “programs of education shall not be offered at the NPS if programs of comparable cost, quality, and focus are readily available at other institutions” (Secretary of the Navy, 2005, p. 3) To support this endeavor, both the Secretary of the Navy (SECNAV) and CNO instructions mandate the review and update of every degree-granting curriculum by the military curriculum sponsor at least once
every two years (Chief of Naval Operations, 2012, p. 4; Secretary of the Navy, 2005, p. 4). These curriculum reviews guide NPS’s programs to remain current and relevant to the educational needs of DOD.

Although there are a multitude of organizations that provide alternatives to the research NPS conducts, those interviewed argued that the academic focus and recent operational experience of NPS’s student population add uniqueness to the research conducted by NPS. A subject matter expert interviewed stated “one of the real attractors about funding work at NPS [are] the students…students are a really unique asset that I think our sponsors like to tap into. The [currentness] and relevancy is kind of what’s driving the research that does come from [students]” (Interview 8, personal communication, 2014). NPS’s four research institutes and various research centers also provide focused research related to DOD. Research aligns with the NPS mission because the largest research customers for NPS are the DOD and DON (Interview 2, personal communication, 2014). Additionally, because faculty typically conduct research focused in their specific field of study, the relationship between faculty researchers and their sponsors is different than at organizations operating in the R&D business area of the NWCF. One individual interviewed described the relationship as “NPS pushing vice the customer pulling;” (Interview 8, personal communication, 2014); essentially, NPS faculty and student researchers typically contact DOD organizations with proposed research rather than DOD organizations first approaching NPS. The implications of this type of relationship will be discussed further in the following chapter.

5. Relevant Educators

When asked about faculty research at NPS, several of those interviewed mentioned that the mix of both direct and reimbursable funding at NPS helps to encourage faculty to conduct DOD-focused research, as well as enabling sustained scholarship in their particular field of study. NPS uses workload models to determine the amount of time faculty should spend on education-related work and the amount of time
spent on research-related projects. This system results in many faculty being direct funded for only a portion of the FY, while the remainder of the year their pay is generated by sponsored research projects.

In support of NPS’s mission, faculty are evaluated on their contributions in their academic field as well as the benefit they bring to the Navy and Marine Corps. NPS faculty are required to be evaluated for “pay, promotion, and tenure” on “the quality of teaching, contributions to knowledge (e.g., publications and research), and the active application of that knowledge to the mission of the Navy and Marine Corps” (Secretary of the Navy, 2005, p. 3). The CNO’s direction to NPS further supports the importance of empowering faculty to be leaders in their field to strengthen education at NPS. He directs NPS to “maintain a strong, relevant and viable faculty research effort at the NPS to support student, Navy and DOD research requirements. Research assures the latest processes, materials, and technologies can be transferred to the Navy and Marine Corps to help strengthen the nation’s defense” (Chief of Naval Operations, 2012, p. 5). Whether NPS continues to operate as a direct and reimbursable funded organization or converts to a NWCF activity assuring the school has effective educators is vital to the school’s success.

B. POTENTIAL APPLICATION OF THE NAVY WORKING CAPITAL FUND AT NPS

1. Customer Base

Customer base was a recurring key factor in interviews to determine if NPS could operate as a NWCF activity. Interviews were consistent in emphasizing the importance of a diverse and robust customer base to support an ongoing business in the working capital fund (Interviews 3, 4, 5, 6, personal communication, 2014). As mentioned in Chapter II, an activity needs to meet certain criteria to operate in the DWCF, such as an identifiable product or service, a cost accounting system, a buyer-seller relationship, and a customer base (Under Secretary of Defense (Comptroller), 2013d, pp. 2-4–2-5). Customer base is a main focus for those organizations in the DWCF because the working capital fund structure aims at creating efficiencies and reducing costs. To function properly, a working
capital fund activity needs a robust customer base to spread out overhead costs over a larger pool of customers. Overhead costs remain constant despite fluctuations up and down in workload; thus, periods of reduced workload present challenges to WCF activities (Interview 6, personal communication, 2014). Furthermore, “there is constant pressure to reduce overhead from the resource sponsors and from FMB” (Interview 6, personal communication, 2014). If an organization’s customer base is not large or diverse enough, any loss of business would result in excess capacity; moreover, the excess capacity would result in a net operating loss and subsequent higher rates in the future (Congressional Budget Office, 2007, p. 20). As a NWCF activity, NPS would have to continually attract an adequate amount of work to achieve full cost recovery. If full costs cannot be recovered, future rates will need to be adjusted upward to over time achieve an AOR of zero. The organization’s customer base needs to be large and stable to maintain and continue funding future operations (Interview 4, personal communication, 2014).

In the case of the naval shipyards, the DON was essentially the only customer and the shipyards were converted from a working capital fund to a mission-funded activity. Conversely, the Navy R&D labs have a diverse customer base. R&D labs conduct work for the DON as well as other DOD and non-DOD organizations (Interview 3, personal communication, 2014). In FY12, NPS had between 160 and 170 different customers that provided reimbursable funding (Interview 8, personal communication, 2014). DOD accounted for approximately 55 percent of the reimbursable funding received during that year (Naval Postgraduate School, 2013, p. 34). Budget uncertainty for DOD in upcoming years can cause less work for NPS, resulting in subsequent rate increases to cover costs.

To attract enough work, NPS may have to adopt more of a “pull” strategy to attract potential customers rather than the current “push” method previously discussed in the “DOD-focused Research and Education” section of this chapter. In conjunction with being able to attract a large enough customer base, NPS will also need to forecast its future revenues to set its rates on an annual basis with the goal of breaking even over time. For working capital funds, “projecting workload accurately is a key element in setting prices that will help a business area break even over time” (Government Accounting Office, 1998, p. 24). Working capital funds need to project future workload
accurately so customers do not get over- or undercharged, leading to inefficiencies in the year of budget execution (Interview 4, personal communication, 2014). NPS currently does not forecast reimbursable work because workload tends to follow the overall DOD budget expansion and contraction (Interview 8, personal communication, 2014).

2. Cost Visibility

Enabling improved visibility of the cost of products and more effective means for controlling costs are central tenants of the DWCF (Under Secretary of Defense (Comptroller), 2013d, pp. 11-3–11-4). Working capital funds provide greater cost visibility, efficiency and flexibility as compared to a mission-funded organization (Interview 5, personal communication, 2014). Receiving both direct and reimbursable funds currently makes it difficult for NPS to accurately calculate the full costs associated with the various services the school provides. Converting to a NWCF activity would require NPS to account for the total cost of the school’s activities and in turn charge its customers accordingly to recover those costs. The 2010 ASN (FM&C) memo on financial management at NPS requires overhead costs directly related to the “overall operation of the school regardless of any reimbursable customers” to be direct funded and additional costs “needed to support the increased workload as a result of reimbursable work” to be funded by charging customers for indirect (overhead) costs related to reimbursable work (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 6). As discussed earlier, however, because many NPS employees are funded by both direct and reimbursable funding it is more difficult to accurately identify the full costs associated with particular functions.

To meet the requirement of breaking even over time, a clear understanding of the costs associated with all of NPS’s activities needs to be clearly identified and a reliable model for forecasting the expected amount of education and research-related work would need to be developed. Responses from individuals familiar with both NPS and the NWCF suggested NPS’s relatively high overhead costs as compared to other NWCF business areas could potentially be a problem in developing customer rates competitive with other education and research alternatives to NPS (Interview 4, personal communication, 2014).
In addition, converting NPS to a NWCF activity would require NPS to also account for capital budget costs such as property, plant, equipment, and software with a cost of $100,000 or more and a useful life of two years or greater (Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), 2002, p. 2-108). The capital budget required by the NWCF would help NPS capitalize or reinvest in major pieces of equipment primarily used for reimbursable work, which is more difficult for the school to do under the current system (Interview 1, personal communication, 2014). As a direct- and reimbursable-funded activity, NPS operates under a landlord-tenant relationship with Naval Support Activity, Monterey and therefore is not currently required to account for base operating and support costs. As a NWCF activity, however, NPS would be required to reimburse Naval Support Activity, Monterey for its services and include those costs in its customer rates. Although improved cost visibility is important, follow-on study needs to be conducted to compare the prices customers of NPS currently pay for services versus a NWCF activity where full cost recovery is required.

3. **Indirect Cost Rates and Financial Management Transparency**

The rate NPS charges its reimbursable customers for indirect costs associated with reimbursable work has been a contentious issue in recent years. PwC was commissioned by NPS in 2003 to conduct a study of the rates charged for reimbursable work and provide recommendations to the school for changes. The rate structure NPS subsequently adopted based on PwC’s study was later rejected by FMB, and currently NPS and FMB are working to develop a more simplified system. Should NPS become a NWCF activity, it would no longer have to address the challenge of determining the proper amount of indirect costs charged only to reimbursable work; rather, NPS would instead focus on full cost recovery. Since as a NWCF activity NPS would no longer receive direct funding, it would need to ensure all of the school’s costs were covered in the rate customers are charged for services. Full cost recovery would, however, require NPS to account for expenses not included under the current system, such as depreciation of capital assets and the cost of military personnel assigned to the school. Since military graduate education students are permanently assigned to NPS while completing their
degrees, their associated military personnel costs would have to be included in the customer rate in addition to military personnel assigned to NPS as faculty and staff. Converting to a NWCF activity would enable greater financial transparency by requiring full cover recovery, but adding additional costs will impact the school’s customers as well.

DWCF organizations need to account for a fully burdened cost but customers also do not want to be overcharged and will put pressure on NPS to reduce costs (Interview 4, personal communication, 2014). Indirect rates need to support full cost recovery but higher rates can make it more difficult to be competitive (Interview 1, personal communication, 2014). Full cost recovery as a NWCF activity significantly decreases the complexity in calculating indirect cost rates because separating direct-funded and reimbursable-funded work would no longer be required. Furthermore, customers who previously did not recognize the full burden of overhead because a portion of those costs were being covered by Navy direct funding will bear some of those costs in the rate they are charged for services. In addition to greatly simplifying the challenge in determining indirect cost rates there would also be increased financial management transparency as well. Some of the main elements of the DOD’s FIAR guidance are to “improve the visibility of budgetary transactions, resulting in more effective use of resources and improve budget processes and controls” (Under Secretary of Defense (Comptroller), 2013a, p. 5).

Evident in the results of the 2012 NAVINSGEN inspection of NPS and from interviews are various concerns regarding NPS’s current financial management processes. There is a concern that overhead charged to customers for reimbursable work has not always been used to exclusively pay for those overhead functions (Interview 3, personal communication, 2014). Specifically, the 2012 NAVINSGEN inspection of NPS cited concerns with KFS, the use of interim accounts at the beginning of a FY for reimbursable funding, as well as the difficulty in setting and managing indirect cost rates. Following NAVINSGEN’s inspection, NPS has since made great strides in addressing nearly all of NAVINSGEN’s concerns and is continuing to make process improvements on the remaining items. Beginning in FY14, interim accounts were discontinued and a
working group consisting of members from NPS, FMB, and BUPERS was formed to address the ongoing issue of setting and managing indirect rates. The aim of the working group is to establish a more simplified rate structure and put procedures in place that will help to support auditability.

Since NWCF activities are required to recover full costs and operate using the activity’s working capital, it is critical to have effective processes and controls in place to be successful. Clearly defined and transparent processes and effective internal controls are key enablers of auditability. Based on the information gathered from interviews, it is difficult to fully determine if converting NPS to a NWCF activity would enable greater financial management transparency and process improvement over the changes already being adopted in the wake of 2012 NAVINSGEN inspection.

4. Impact on Auditability

As discussed in Chapter II, the FIAR guidance does not require DWCF activities to follow the same procedures to achieve auditability as direct-funded organizations. The FIAR guidance prioritizes budgetary information and mission-critical asset information in support of auditability and, while DWCF activities do have to meet the same requirements, there are other priorities specifically set for working capital funds. DWCF organizations will instead focus on proprietary information. Because of the customer-provider relationship between DWCF organizations and direct funded organizations, however, DWCF organizations need to provide the necessary information to allow their DOD customers to provide sufficient documentation for an audit of their financial statements (Under Secretary of Defense (Comptroller), 2013a, p. 6). Even if NPS converted to a NWCF activity and was not directly subject to the FIAR plan, it would still need to provide support documentation. Moreover, if NPS were to convert to a NWCF activity, approximately 84 percent of NPS’s revenue would be from DOD sources, and providing necessary and accurate information to these clients is vital to achieving full audit readiness (Naval Postgraduate School, 2013, p. 34). Interviews also highlighted that NWCF activities will need to adopt similar practices to the mission-funded activities to provide the necessary documentation for auditors. NWCF activities
generally have business-like accounting principles and in some cases are required to follow the standards set forth by the generally accepted accounting principles (GAAP); such as for calculating depreciation of capital assets ("Working Capital Funds," 2011, p. 1108). Similarly, interviews also highlighted the importance of using cost accounting to support the audit process (Interview 3, personal communication, 2014). Converting NPS to a NWCF activity would require the school to adopt new business practices mandated by the FIAR plan. Fortunately, NPS is already using a job order cost accounting system also used by working capital funds. Because working capital funds already use a job order cost accounting system and have good financial processes in place, they may have less difficulty in achieving auditability (Interview 5, personal communication, 2014).

5. NWCF Business Areas

Many of those interviewed voiced concern that should NPS convert to a NWCF activity it would be the only education-focused business area in the NWCF. Operating as the only activity within a newly created business area would create initial challenges due to a lack of historical examples for comparison. As a NWCF activity, NPS would in reality be conducting work in two business areas, the newly created business area of education and the preexisting business area of R&D. Creating a new education business area in the NWCF in which NPS is the only organization requires careful study and evaluation of the impacts of the decision. It is important to consider the financial as well as political ramifications to DON by converting NPS to a NWCF activity, especially since there are not any other education-focused working capital fund organizations (Interview 3, 7, personal communication, 2014). Whether or not NPS meets the feasibility requirements to convert to a NWCF activity will be discussed in the next section.
IV. FINDINGS AND RESULTS

A. FEASIBILITY

There are currently five business areas within the NWCF: supply management, depot maintenance, R&D, base support, and transportation (Office of the Assistant Secretary of the Navy (Financial Management and Comptroller), 2002, pp. 2-106–2-107). To be evaluated for inclusion as an activity in any of the revolving funds under the DWCF, an organization needs to meet all of the criteria previously outlined in the “NWCF Purpose and Objectives” section of Chapter II. If all of the aforementioned criteria are met and a thorough impact study is conducted, then a charter is submitted to the USD (C) Revolving Funds Directorate for approval. Since NPS has a significant amount of reimbursable funding that provides education, professional development, research, and other sponsored functions to a wide variety of DOD and non-DOD customers, the school “could be a prime candidate for the working capital fund” (Interview 3, personal communication, 2014). The data gathered during the course of this study indicates NPS meets the four requirements for inclusion as a NWCF activity. In Chapter II, Figure 5, “NPS operating budget revenues by source,” demonstrates that NPS fulfills the first requirement because it receives funding and provides services to all components of DOD, as well as the U.S. Coast Guard, civilian organizations, and international partners. The second requirement, a cost accounting system and the ability to recover fully funded costs, is met as well. Interviews with financial managers indicate NPS does use a cost accounting system. The 2010 memo from ASN (FM&C) requires NPS to “establish a JON process for each reimbursable order to provide better management controls and help ensure auditability of funds management” (Assistant Secretary of the Navy (Financial Management and Comptroller), 2010, p. 6). Additionally, enabling NPS to charge overhead to reimbursable customers allows NPS to recover full costs. The third requirement for inclusion in the DWCF involves demand from customers. Figure 5 also reflects the diversity of funding sources NPS receives and shows there is demand from multiple customers both within and outside of DOD. Additionally, in Chapter II, Figure 1 and Table 1 show NPS’s diverse student population
and increasing demand for advanced education provided by NPS, especially through
distance learning. Finally, interviews indicate NPS meets the last requirement, a buyer-
seller relationship and the ability to influence cost and workload. With regard to NPS’s
educational programs, cost and workload are most directly affected by curriculum
sponsors. Curriculum sponsors can influence workload requirements through periodic
curriculum reviews that tailor NPS’s educational programs to their specific needs. NPS’s
customers can also influence cost through the ability to choose other government and
non-government universities and laboratories for education and research needs. If NPS’s
costs are too high, military departments can opt to send their officers to other graduate
degree institutions as an alternative (Interview 4, personal communication, 2014).
Customers of NPS’s non-education functions such as sponsored research can also
influence cost and workload. Sponsors set the budget for a project, which in turn affects
costs because PIs need to work within the budget constraints of their sponsors. According
to the data, NPS meets all of the requirements listed in the DOD FMR and it is feasible
for NPS to convert to a NWCF activity. The next section will discuss the potential
advantages, disadvantages, and unknowns to conversion.

B. POTENTIAL ADVANTAGES OF CONVERTING NPS TO A NWCF
ACTIVITY

1. Total Cost Visibility

The purpose of the DWCF is to create awareness of total costs (Congressional
Budget Office, 2007, p. 10). Additionally, one of the best benefits to a working capital
fund is cost visibility (Interview 4, personal communication, 2014). This awareness
comes from the client-customer relationship that is necessary for a working capital fund
to function. This business-like relationship would create efficiencies and provide
improved cost awareness for NPS. For example, by knowing the exact cost per student,
NPS will have the ability to understand the financial consequences of increasing and
decreasing the student population (Interview 4, personal communication, 2014).

NPS would also have access to more cost data as a NWCF activity. In recent
history, the naval shipyards transitioned from a working capital fund to a mission
funding. Subsequently, the Congressional Budget Office concluded that the ability for the shipyards operating as a working capital fund depended on accurate financial metrics (total cost visibility) to be able to provide correct rates to customers; nevertheless, the transition to mission funding would make, “cost data less available” (Congressional Budget Office, 2007, p. 10).

As a working capital fund, NPS would distribute the costs of items such as its buildings and military personnel with all of its customers vice the Navy solely paying for them through direct funding. As a NWCF activity, all customers would be charged for their share of NPS’s total costs, vice currently where the Navy pays for most of those costs through direct funding (Interview 4, personal communication, 2014). These new costs would now be recognized by all of NPS’s customers. With the knowledge of true costs, NPS could conduct operations or change its practices to be more efficient. Moreover, if total costs are known and thus allocated to each customer, NPS may be able to improve utilization of its various programs and facilities.

2. Auditability

Analysis of the data suggests NPS may achieve auditability with greater ease by operating as a NWCF activity as opposed to a direct-funded activity. This ease comes from less-complex indirect rate calculations and eliminating the need for cost transfers between mission funds and reimbursable funds.

The FIAR plan gives guidance to DOD activities to develop business-like practices to achieve an unqualified audit opinion. If NPS were to operate as a working capital fund, these business-like practices would be a necessity to track costs and accurately set rates, which is key for the proper function of a working capital fund. With more accurate cost data due to better cost tracking and decreased complexity in accounting processes, fewer controls would be needed and transparency would be increased.
C. POTENTIAL DISADVANTAGES OF CONVERTING NPS TO A NWCF ACTIVITY

1. Approval Process and Initial Cash Corpus

For NPS to convert to a NWCF activity, it would require approval as well as funds to establish the school’s initial cash corpus. As previously discussed, additions to the DWCF need to meet the requirements listed in the DOD FMR and then submit a charter to the USD (C) Revolving Funds Directorate for approval. NPS, DON, and DOD would need to conduct in-depth study of the associated advantages and disadvantages to fully explore the implications of the transition before drafting a charter and submitting it to the USD (C). In addition, since NPS provides education and research to the other military components, other government agencies, and international partners, input from these components and agencies would likely be provided before the final decision was made.

Congressional notification or approval is not specifically required in the charter process, but would be required for the initial cash corpus. Direct appropriations or a transfer of funds from other accounts are required “to start, increase the size of, or replace significant losses to a working capital fund” (Under Secretary of Defense (Comptroller), 2008, p. 19-3). Using a direct appropriation, such as O&M funding, to establish NPS’s initial cash corpus would certainly require Congressional review and approval and likely be conducted as a part of the PPBE process. If the Navy were able to provide the initial cash corpus using existing funds from the NWCF, it would instead only require Congressional notification. 10 U.S.C. Ch. 131 § 2208 requires,

the transfer of funds from a working-capital fund, including a transfer to another working-capital fund, shall not be made…unless the Secretary of Defense submits, in advance, a notification of the proposed transfer to the Congressional defense committees in accordance with customary procedures. (“Working Capital Funds,” 2012, p. 1109)

If after thorough study it is advantageous for NPS to convert to a NWCF activity and the school’s charter is approved, funding the school’s initial cash corpus would still be challenging. Since DOD’s budget is currently in a state of uncertainty due to the Budget Control Act of 2011, finding sufficient funds by direct appropriation or transfer of
funds to establish NPS’s initial cash corpus would present difficulties. Because evaluation, approval, and acquiring the initial cash corpus for a NWCF is a lengthy process, NPS would have difficulty implementing the NWCF structure in time to take advantage of more flexible accounting procedures offered for working capital funds prior to the 2017 auditability requirement.

2. **Primary Mission**

One significant concern for NPS to convert to a NWCF activity is the potential further imbalance between education and research. As discussed earlier, NPS would operate under two business areas of the NWCF: education and R&D. Education would be a new business area of the revolving fund and therefore would present some unique learning curve challenges. In addition, adopting a NWCF structure could also take the focus off of NPS’s primary mission of educating naval officers. While education at NPS has a limited capacity (such as maximum class size), research and other sponsored activities on the other hand have a greater capacity. Research functions could more easily expand with the intention of “pulling” more customers to utilize NPS’s services vice its educational function, which has limited capacity. As mentioned in Chapter III, the goal of a revolving fund is to create efficiencies and reduce costs, especially by reducing overhead costs to keep customer rates low. A larger customer base spreads overhead costs over a larger pool of customers and reduces the rate customers pay for services. Expanding the education customer base is more challenging because of statutory restrictions on the types of students NPS can educate. As previously discussed in Chapter II, NPS uses statutes such as 5 U.S.C. § 4107, Academic Degree Training and 42 U.S.C. § 4742, Admission to Federal Employee Training Programs to accept non-DOD government employees. NPS is currently working with DON to clarify and consolidate the various instructions governing the type of students NPS can educate. Background on the changes to these statutes and recommendations by NAVINSGEN can be found in Appendix A. NAVINSGEN cited in its report that there currently appears to be an imbalance between research and education at NPS; the data obtained in this study, however, does not support the basis that becoming a NWCF activity would improve this issue.
Another potential challenge for NPS and its primary mission by becoming a NWCF activity is a decrease in demand for services due to uncertainty in DOD’s budget. NPS has a highly skilled workforce and, consequently, high overhead costs compared to typical NWCF activities (Interview 4, personal communication, 2014). Budget uncertainty combined with high labor and overhead costs would present challenges if NPS’s workload decreases. If the amount of research services or workload decreases, overall customer rates, including education rates, will need to increase to cover costs. As a working capital fund, overhead rates need to be controlled to be competitive with the private sector (Interview 3, 7 personal communication, 2014). If NPS’s customer rates increase excessively, military departments may be incentivized to send officers to other higher education institutions to reduce costs in their own budgets. As a result, NPS’s resources would be under-utilized and NPS would be forced to continue to raise its customer rates to recover costs, leading to what is commonly known as the “death spiral” in revolving funds. As a NWCF, research would impact education more than it would as a direct-funded activity because the rates of each business area would impact each other as supply and demand increase and decrease. As a direct and reimbursable-funded activity, education is funded through direct funding and is not affected by increases and decreases in demand for research.

3. Strategic Vision

If NPS were to operate as a NWCF activity, the current superior-subordinate relationship between NPS and DON would change to a customer-client relationship. This change would produce a new business model and NPS would have to change the way it conducts research. Currently, NPS operates on a reactive, rather than proactive basis with regard to how research is presented to potential sponsors (Ellis et al., 2011, pp. 21–22). Because of NPS’s mission, “research at NPS…is strongly guided by Navy, or more broadly defense or national security relevance,” unlike the more open-ended approach of civilian universities (Ellis et al., 2011, pp. 21–22). Faculty researchers, under a NWCF structure, would need to adopt a proactive approach to research (i.e., the “pull” method) by more actively trying to attract research sponsors. This change would be driven by the customer-client relationship fostered by a NWCF model. Faculty researchers would have
to proactively anticipate and flex to meet the research needs of customers, rather than military curriculum sponsors directing research focus areas based on current national security needs.

With respect to education programs, NPS conducts biennial reviews with military curriculum sponsors to ensure NPS’s education and research is meeting DON and DOD’s needs. These curriculum reviews provide the CNO with the ability to guide NPS’s focus so the school remains current and relevant. If NPS converts to a NWCF activity, the focus of the school would instead be on customer needs. Rather than biennial reviews, NPS would have to annually forecast and project the specific needs of its customer base to meet demand and properly set rates. Furthermore, as a direct-funded activity, DON can direct resources and provide direct guidance to NPS as the school’s primary customer and direct superior. This superior-subordinate relationship and the direct control it entails would change if NPS transitioned to a NWCF structure, giving DON less control over NPS’s operations and areas of focus. The proactive, or “pull” approach to meet customer needs, coupled with the loss of the superior-subordinate relationship, will give DON less influence over NPS and could alter NPS’s mission of providing advanced education and research opportunities to the Navy.

D. **UNKNOWN FACTORS**

1. **Cultural Implications and Transitional Challenges**

The transition from a military command environment to a business-like environment presents unknown cultural implications. Comments made in Interview 3 suggest NPS may struggle with the transition due to recent changes NPS has already undergone in recent years (Interview 3, personal communication, 2014). Some relevant questions are: what are the employment implications caused by such transition and will NPS have to increase the use of contractors rather than full-time employees to more quickly reduce or increase manpower as demand fluctuates? While other revolving funds may be able to do this with the use of skilled labors and contractors, many of the education and research business areas at NPS require PhD-level staff.
There will be greater difficulty in retaining a PhD-level staff if staff levels are forced to increase and decrease frequently with demand. Furthermore, PhDs with tenure pose another challenge if staff size needs to decrease. NPS currently has 259 tenure track faculty and 460 non-tenure track faculty (Naval Postgraduate School, 2013, p. 32). The supporting or administrative staff would face these cultural transition challenges as well. Currently, many employees generally enjoy more permanent positions at NPS rather than temporary work. Would the change to a NWCF activity influence NPS to make these positions temporary to better deal with increases and decreases in workload?

2. **Relationship with Curriculum Sponsors**

One of the unique aspects of NPS is its ability to adapt to change and adjust its curricula accordingly. The biennial reviews conducted jointly by military curriculum sponsors and NPS ensure that NPS’s curricula are aligned with the educational needs of DOD. Admiral Mauz (USN, Ret) and Dr. William Gates (current Dean of GSBPP) published an article in the August 2000 issue of *Proceedings* discussing NPS’s unique value to the Navy and DOD. The article states, “NPS curricula have the advantage of being uniquely tailored to satisfy Department of the Navy subspecialty requirements as well as civilian-sector degree requirements and accreditation standards” (Mauz & Gates, 2000, p. 61). Should NPS transition to a NWCF activity it is difficult to determine what the impact would be to the school’s ability to remain aligned with the needs of curriculum sponsors. Since the relationship would change from a superior-subordinate relationship to a customer-client relationship, DOD might have less of an ability to make curriculum changes, especially if they required increased costs for the school. In their article, Admiral Mauz and Dr. Gates assert that if the Navy wanted to replicate the same DOD-focused education at civilian universities “it would have to establish Navy and Marine Corps programs under civilian control (with significant augmentation)...[and] would have to be contractually specified in civilian universities, with questionable results” (2000, p. 61). Because of the challenge in creating the same DOD-focused education NPS offers at civilian universities, further studying the impact of NPS as a NWCF activity on its relationship with military curriculum sponsors is an important factor to consider. One of the subject matter experts the authors of this research
interviewed asked, “if we no longer get funding from [DON], is there no longer a Navy education office? Does this change everything so that the funding for Navy education does not go through N1, but rather it is given out to all of the OPNAV codes…you have x dollars here for education of your officers this year, spend it where you like” (Interview 2, personal communication, 2014).

3. **Timing**

With the DOD approaching FY15, this will only leave two years to further study, plan, transition, and stabilize the processes of operating as a NWCF. Two years may be too short of a time-frame to consider the transition from mission funded to NWCF because of the many challenges involved in such transition. According to FIAR guidance, NPS would have to transition the prioritization of its audit readiness preparation from budgetary information to proprietary information. As mentioned above, the NWCF may have a strong basis for these business practices, yet it will be a new accounting process for NPS to adopt.
THIS PAGE INTENTIONALLY LEFT BLANK
V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

NPS’s ability to provide unique DOD-focused advanced education and research is a vitally important aspect of Navy’s education strategy. Since its inception as the School of Marine Engineering at the U.S. Naval Academy in 1909 and its subsequent establishment in Monterey, CA as the Naval Postgraduate School in 1951, NPS has provided unique educational and research opportunities unavailable at other institutions. Regardless of whether NPS continues to operate as a direct- and reimbursable-funded organization or converts to a NWCF activity, accomplishing the school’s primary mission as codified in 10 U.S.C. is of the utmost importance.

Achieving auditable financial statements as mandated by the 2009 and 2010 NDAA is also an important undertaking for DOD in the near future. All DOD organizations, including NPS, will need to adopt a number of changes to their procedures, practices, and internal controls to support the success of this endeavor. Converting NPS to a NWCF activity potentially offers some notable benefits in support of auditability over the current system, such as improved cost visibility, simplified financial management procedures, and greater transparency. Despite these improvements, it is still uncertain if a working capital fund model would be the best approach for the school to adopt. In many ways, converting NPS to a NWCF activity would benefit the Navy in achieving financial auditability; the evidence gathered throughout the course of this study, however, has been largely anecdotal. Further study needs to be conducted to gain more quantitative evidence before one system is designated as clearly superior over the other. Both financial systems have associated advantages and disadvantages, but to make a complete comparison a comprehensive study of what NPS would look like as a NWCF activity will need to be conducted. NPS offers significant educational and research benefits to DON and DOD and, regardless of how the school is funded in the future, maintaining a thriving and successful Naval Postgraduate School is in their best interest.
B. RECOMMENDATIONS FOR FURTHER STUDY

1. Dual Funded Organizations

Although rare, some organizations in DOD are funded by both the DWCF and appropriated funds (including reimbursable funds). Further study should be conducted to evaluate the feasibility and impact of maintaining the education of Navy and Marine Corps students at NPS as direct funded while converting all reimbursable-funded programs at NPS into a NWCF activity. One example of a dual-funded organization is the Naval Facilities Engineering and Expeditionary Warfare Center (NAVFAC EXWC), formerly known as Naval Facilities Engineering Service Center (NFESC), in the base support business area of the NWCF.

2. Previous Transitions between Direct Funding and Revolving Funds

In both the DWCF and DBOF, organizations have transitioned from direct funding into the revolving fund and vice versa. Further study should be conducted on previous commands that were unsuccessful operating as revolving funds and compare the relevant factors to NPS. Previous examples include the naval shipyards and the naval ordnance business area of the NWCF.

3. Customer Base

A broad and financially viable customer base is critical to the success of a NWCF activity. Further study should be conducted to compare NPS’s customer base with the customer bases of various NWCF activities to ascertain the ideal range needed to sustain a healthy working capital fund.

4. Financial Comparison between the Current Model at NPS and NWCF at NPS

Much of the data gathered during the course of this study provided anecdotal evidence on the advantages and disadvantages of converting NPS to a NWCF activity. Analysis on the specific operation and function of NPS as a NWCF is beyond the scope of this thesis. Further quantitative study should be conducted to better understand what
NPS might look like financially as a NWCF activity to identify the impact to the price customers of NPS pay for education, research, and other services.
APPENDIX A. EXCERPT FROM 22 OCTOBER 2012 NAVINSGEN COMMAND INSPECTION OF NAVAL POSTGRADUATE SCHOOL

One of the issues NAVINSGEN discusses in its 2012 command inspection of NPS is the statutory authority granted to the school to provide education for various types of students. There have been a number of changes to the regulations over time and, according to NAVINSGEN, further clarification is still needed. NPS is currently working to create a list of the authorities permitting NPS to provide education to various categories of students. NPS’s authority to provide education to a diverse population is an important factor to consider if NPS were to convert to a Navy working capital fund activity because the regulations could limit the number of potential customers NPS is authorized to conduct business with. The following excerpt from the 22 October 2012 NAVINSGEN command inspection of NPS provides a history of the changes made to NPS’s authority to educate students as well as recommendations from NAVINSGEN to clarify some of the outstanding questions.

3. Statutory Authority to Educate Students. After the 2009 NAVINSGEN inspection, some questions about statutory authority to educate various categories of personnel remained unanswered. Subsequently, by memorandum dated 25 June 2010, the NPS Staff Judge Advocate (SJA) provided a detailed review of the matter. Most of the statutes appear in Chapter 605 of Title 10, United States Code (U.S.C.), which establishes the NPS and sets forth its authority to educate personnel and grant degrees. The categories of personnel mentioned in those statutes include: U.S. military personnel including enlisted members and reserve officers (Title 10 U.S.C. 7041, 7045); military officers of foreign countries (Title 10 U.S.C. 7046); students at other institutions of higher learning on an exchange basis (Title 10 U.S.C. 7047); and Defense Industry Civilians (Title 10 U.S.C. 7047). The SJA memorandum included a matrix identifying each of the Chapter 605 statutes and Title 5 U.S.C. 4107, discussed below. The memorandum also states that NPS “lacks statutory authority to permit the attendance of civilian employees who have no federal government affiliation.”

a. NPS looks to Title 5 U.S.C. 4107, Academic Degree Training, for its authority to train civilian employees of other federal agencies. Enacted in 1958 as part of the Government Employees Training Act (and originally codified at Title 5 U.S.C. 2301 et. seq.), the statute authorizes federal agencies to pay for employee academic degree training at governmental and non-governmental facilities. The history of the legal determination of its applicability to NPS is interesting, at least to lawyers, and is summarized here because the question of NPS’ authority to invoke this statute has been raised several times over the years.
b. In January 1959, only a few months after passage of the Act, the DON’s Office of Industrial Relations requested the Chief of Naval Personnel (CNP) authorize the training of a “limited number of civilian personnel in the Management School of [NPS],” observing that DON civilians had been receiving management development training at Army facilities. Recognizing that none of the NPS enabling statutes authorized the training of civilian personnel at that time, CNP requested a legal opinion from the Judge Advocate General (JAG).

c. Focusing exclusively on the language in Title 10, and relying in part on a 1951 JAG opinion, the JAG concluded NPS did not have the authority to train civilians. DON thereupon requested a legislative fix, but in reviewing the proposed legislation, the Department of Defense (DOD) Office of the General Counsel concluded the Government Employees Training Act already authorized NPS to educate federal civilians and issued a memorandum to that effect dated 17 December 1962. By memorandum dated 9 April 1963, the JAG rescinded his earlier opinions on this subject. When this question came up again in 1975, the JAG relied on the 1962 DOD legal memorandum and on 2 August 1976, ASN (M&RA) signed out SECNAVINST 12410.17, “Civilian Use of Educational Facilities at Naval Postgraduate School” which established the policy that in selecting educational facilities to meet training needs, “NPS be given first considerwation for civilian employees.” The lesson we take from this discussion is that the statutory authority and regulatory authority for NPS educational efforts that is not set forth in Chapter 605 should be memorialized in a SECNAV instruction.

d. Also, in follow-up to the 2009 IG report, the Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN (FM&C)), was asked to determine if NPS could charge overhead to reimbursable orders. ASN (FM&C) letter Ser ASN (FM&C)/U170 of 23 September 2010 provides opinions on the statutory authorities of NPS to educate each category of students by education program with the exception of hiring and subsequent education of research assistants. The letter confirmed that NPS could charge overhead to reimbursable orders. The letter included a review of NPS statutory authority that identified the same Chapter 605 authorities as did the NPS SJA memorandum, and mentioned the authority to accept qualifying research grants provided in Title 10 U.S.C. 7050, which requires SECNAV to issue implementing regulations. The letter did not discuss the authority to educate federal civilian employees under Title 5.

e. Subsequently, NPS personnel expanded the matrix included in the SJA memorandum to cover other categories of personnel, including civilians in federal agencies outside of DOD. For example, the matrix indicates NPS relies on a provision of the Arms Export Control Act, Title 22 U.S.C. 2770(a), “Exchange of training and related support,” for authority to educate civilian foreign defense agency personnel.

f. A footnote in the NPS SJA memorandum of 25 June 2010 indicates that NPS has the authority to accept reimbursement from other agencies pursuant to the Economy Act, citing Title 31 U.S.C. 1535, “Agency agreements.” The ASN (FM&C) memorandum did not address the Economy Act and its discussion of reimbursable funding appears to be limited to military and civilian personnel within DOD. In reviewing the NPS SJA memorandum and matrix in 2011, the Chief of Naval Personnel Legal Office (CNP Legal) raised concerns about the NPS authority to collect fees under Title 5 U.S.C. 4107 that led to an e-mail exchange between that office, the NPS SJA, and
OPNAV N1, N135 (Personnel Readiness and Community Support) over the authority of NPS to collect reimbursable fees from agencies outside of DOD. This exchange, which relied on information provided by third parties and included a comparison of the authority of Air Force Institute of Technology (AFIT) to NPS, does not appear to have been resolved. While we expect that an agency that has the authority to provide educational services under Title 5 U.S.C. 4107 has the authority to be reimbursed by the agency whose employees receive the training, and the Economy Act may be an appropriate mechanism, it may be the case that NPS needs additional regulatory authority to accept payments when they come from sources outside of the DOD. For example, OPNAVINST 5450.210C, cited in the exchanges, expressly authorizes NPS to “collect the cost of instruction from” the Departments of the Army, Air Force, Homeland Security, and defense industry contractors, but does not mention employees of other federal agencies.

g. We were provided documents that discuss other NPS initiatives to train civilian personnel. For example, in 2002, NPS maintained it has the authority to educate state and municipal government employees who perform homeland defense activities pursuant to Title 42 U.S.C. 4742, “Admission to Federal Employee Training Programs,” and DODINST 4000.19. NPS invokes the Economy Act and authority to enter into Interagency Personnel Agreements (IPAs) to obtain reimbursement for these efforts. However, it also received a 14 June 2002 opinion from the Department of Justice Office of General Counsel indicating it was not necessary for NPS to enter into an IPA when training state and local emergency responders because the NPS training would be provided under the authority of the Office for Domestic Preparedness to provide training to respond to terrorist attacks.

h. More recently, NPS has sought to provide additional training to non-federal civilian personnel pursuant to the SMART Scholarship Program, the Federal Cyber Corps, the DOD Contractors Program, the Global Research Assistant Programs, and the National Security Institute. There is statutory authority for the SMART and Cyber Corps programs that requires subsequent government service or reimbursement of tuition costs. No such authority has been identified for the other programs. A 2009 series of e-mails on this topic explains that the Provost was seeking to get more civilians to attend NPS with the expectation or hope they would obtain employment with the federal government upon graduation. The e-mail exchange, which included attorneys at the Office of Naval Research, expresses skepticism about the legal authority for the efforts that are not grounded in statute. We have been unable to obtain information indicating these concerns have been resolved. Assuming the authority to engage in such efforts exists, it is appropriate to ask, as we suggest below, whether DON leadership wants NPS to engage in such activity.

i. NPS relies on Title 22 U.S.C. 2770(a), “Exchange of training and related support,” as authority to educate civilian foreign defense agency personnel. This statute, part of the Arms Export Control Act, authorizes the President of the United States, acting through the Secretary of a military department, to “provide training and related support to military and civilian defense personnel of a friendly foreign country or an international organization.” The statute requires an agreement for reciprocal training of U.S. personnel or reimbursement of the cost of training the foreign personnel, and an annual report to
Congress. The President of the United States has delegated his authority to the Secretary of Defense. We requested NPS provide copies of its recent submissions for the annual report, but did not receive them.

j. We also learned that NPS has entered into several agreements for the exchange of professors, students, and research efforts with such institutions as the National University of Singapore, the German Jordanian University/Talal Abu Ghazaleh College of Business, and the Jordanian Armed Forces/Royal Jordanian National Defense College. These documents have at various times been called either non-binding statements of intent or letters of accord. NPS has not identified the authority it has to enter into agreements for the provision of such services with foreign governments or universities, except to the extent it is dealing with foreign defense agencies and its military and civilian personnel. We reviewed a series of e-mail exchanges between NPS and the Navy International Program Office (NIPO). According to NIPO attorneys, the purpose of its support to NPS has been to assure that NPS does not inadvertently enter into international agreements that require extensive documentation and approval by OSD. NIPO has explained to NPS that it does not conduct the activities or enter into the type of agreements that are contemplated by the statements of intent or letters of accord. NIPO has also said it may not sub-delegate any of the authority it has received from OSD to NPS.

k. Assuming legal authority exists or may be established for the underlying exchange of professors, students or research contemplated by these statements of intent or letters of agreement, the central question, in our opinion, is whether NPS should be engaging in those activities.

l. Two of the statutes NPS relies on for its authority, Title 10 U.S.C. 7049 and Title 22 U.S.C. 2770(a), impose requirements to make determinations and issue reports. Pursuant to Title 10 U.S.C. 7049, which authorizes NPS to educate defense industry employees, the Secretary of the Navy must make an annual determination that providing instruction to them in the coming year (1) will further the military mission of NPS; (2) will enhance the ability to reduce the product and project lead times required to bring defense systems to initial operational capability; and (3) will be done on a space-available basis without requiring an increase in the NPS faculty, course offerings, or infrastructure. We requested NPS provide recent Secretarial determinations, but did not receive them. We previously noted that NPS also did not provide us the annual reports required by Title 22 U.S.C. 2770(a).

**RECOMMENDATIONS**

040-12 That SECNAV determine the mission, function, and task of NPS.

041-12 That General Counsel of the Navy (GC) confirm that NPS has authority to accept funds that reimburse it for the expense of educating federal civilian personnel pursuant to Title 5 U.S.C. 4107.

042-12 That SECNAV determine whether it is in the Department’s interest for NPS to educate non-DOD personnel pursuant to such programs as SMART, Cyber Corps,
DOD Contractors Program, Global Research Assistant Programs, or the National Security Institute; if so, GC should determine whether existing authority is sufficient to undertake these efforts and propose remedial legislation if necessary.

043-12 That SECNAV determine whether it is in the Department’s interest for NPS to enter into programs with foreign universities for the exchange of professors, students and research efforts; if so, GC should determine whether existing authority is sufficient to undertake these efforts and propose remedial legislation if necessary.

044-12 That DON/AA determine whether the annual reports required by Title 22 U.S.C. 2770(a) are being submitted and if they are not, take appropriate action to ensure they will be submitted in the future.

045-12 That DON/AA determine whether the SECNAV annual determinations required by Title 10 U.S.C. 7049 are being made and if they are not, take appropriate action to ensure they will be made in the future.

046-12 That, although the e-mail exchange indicates that ASN (FM&C) personnel thought it appropriate to charge tuition for “federal civilian students,” we recommend that ASN (FM&C) confirm this; and with GC, identify the specific statutory and/or regulatory authority, and suggest any language that would be prudent to add to existing authority, such as OPNAVINST 5450.210D.

047-12 That NPS, under direction of CNO, develop a matrix that identifies all current functions and the corresponding authority upon which NPS relies to perform these functions. GC should determine whether cited authority is appropriate, identify any additional authority supporting these functions, and recommend whether additional authority is required. (Naval Inspector General, 2012, pp. 4–9)
APPENDIX B. NPS MEMORANDUM OF RECORD FOR FY 13
INDIRECT COST RECOVERY RATES

18 July 2012

MEMORANDUM FOR THE RECORD

Subj: FY13 INDIRECT COST RECOVERY RATES

NPS has received guidance from the Office of the Assistant Secretary of the Navy, Financial Management and Comptroller, regarding FY13 indirect cost recovery rates. The rates listed below apply to all sponsored activities to be executed in FY13, no matter when the original proposal was submitted or funding provided. There is no "grand-fathering" for any multi-year projects currently funded or any project proposed utilizing FY12 rates.

The indirect cost rate will be applied to Total Direct Labor hours, which include both NPS faculty/staff labor hours and contracted labor hours charged as a direct cost to a sponsored activity. Please refer to the Research and Sponsored Programs Office website at: http://intranet.nps.edu/ResAdmin/FY12/FY12proposalguidelines.html, under Proposal Budget, LLC, Contract Support Labor, for the definition of contracted labor.

The NPS indirect cost recovery rates\(^1\) for FY13 are:

- Sponsored Research $26.24/direct government labor and contracted labor hour
- Sponsored Education $27.02/direct government labor and contracted labor hour
- Sponsored Professional Development & Training $16.02/direct government labor and contracted labor hour
- Other Sponsored Activities $6.01/direct government labor and contracted labor hour

For FY13, all indirect cost recovery will be budgeted to appropriate academic and support units, except for Principal Investigator (PI) bid and proposal for Sponsored Research. Research PIs will receive 16% of the indirect cost recovery collected on sponsored research projects, calculated based on research projects aligned with the PI. No bid and proposal amounts for Education, Professional Development & Training, or Other Sponsored Activities are included in the above rates. As such, there will be no bid and proposal budgeted/allocated for Education, Professional Development & Training, or Other Sponsored Activities. During FY13 NPS will closely monitor the spending of PI bid and proposal recoveries, as NPS must fully justify bid and proposal amounts based on the costs incurred.

Additional guidance will be posted as it becomes available. For questions, please email research@nps.edu or cnickles@nps.edu.

Colleen Nickles
Vice President, Finance & Administration

\(^1\) Definitions for sponsored activities can be found at http://intranet.nps.edu/ResAdmin/SPPGM-12-20.pdf.
APPENDIX C. INTERVIEW QUESTIONS

- Describe the accounting system your organization uses to manage its funds.
- Describe the process your organization uses to manage funds provided by mission funding and funds provided by reimbursable funding.
- Describe the accounting system your organization uses to account for funding associated with both mission funding and reimbursable funding.
- Do customers of NPS have alternate sources for the goods and services NPS provides?
- Are there goods and services that NPS provides that cannot be accomplished elsewhere in DOD?
- Describe the actions your organization is taking to meet the 2017 requirement for DOD to achieve auditability.
- What factors drive the decision to shift an organization from mission funding to the NWCF?
- Describe the process DON uses to evaluate a NWCF organization’s performance.
- What is the procedure for converting an organization between mission funding and the NWCF?
- What are some of the benefits from operating as a NWCF activity?
- What are some of the challenges from operating as a NWCF activity?
- In your opinion, could NPS operate successfully as a NWCF activity?

*Additional questions asked during interviews were tailored specifically to the organization and individual being interviewed.
LIST OF REFERENCES


INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California