

*Managerial Cost  
Accounting in  
the Federal  
Government:*

*Providing Useful Information  
for Decision Making*

**AGA CPAG Research Series:  
Report No. 22  
September 2009**

# ACKNOWLEDGEMENTS

## About the Authors

Anna D. Gowans Miller, MBA, CPA, the writer of this report and the primary researcher for the project, has been with the Association of Government Accountants (AGA) since early 2004 and is currently the AGA Director of Research. She started her auditing career with Touche Ross (now Deloitte & Touche) in Houston, Texas, and later was an auditor with the Corporation for Public Broadcasting in Washington, D.C. She served as technical manager for the Government Accounting and Auditing Committee and Members in Government Committee at the AICPA in Washington, D.C. in the early nineties. She was later a professional staff member with responsibility for financial management and business process improvement oversight (CFO Act, GMRA, GPRA, TQM, etc.) for the U.S. House of Representatives Government Reform and Oversight Committee. She has evaluated cost and other quantifiable performance results in all branches of the military for the Office of the Secretary of Defense Quality Management Office and has taught managerial cost accounting to all branches of the military services. Views expressed in this report are those of the author and are not necessarily the views of AGA.

AGA wishes to thank the following for their help and contributions to this research study: Timothy F. Soltis, DoD; Jeffrey Smith, CFO, EEOC; Steve Porter, PTO; Jay Hurt and Joe Tracey, FSA; Betty Buxton, BLM; Kathy Tynan, FWS; Gene Park, MMS; Christopher Richey, NBC; Milton Brown, NRC; Jeffrey Hild, SSA; Frank Sanders, FAA; Bob Tuccillo, Kristine Leiphart and Peter Chipman, FTA; and Lloyd Farmer and John L. Roland of MIL Corporation.

## Corporate Partner Advisory Group Leadership

### Chairman

**Hank Steininger, CGFM, CPA**

Managing Partner, Global Public Sector, Grant Thornton LLP

### Vice Chairman

**John Cherbini, CGFM, CPA**

Partner, KPMG LLP

## AGA Professional Staff

**Relmond Van Daniker, DBA, CPA**

Executive Director

**Anna D. Gowans Miller, MBA, CPA**

Director of Research

**Susan Fritzen**

Director of Corporate Partner Program

**Marie Force**

Director of Communications

**Christina Camara**

Publications Manager

**AGA is Proud to Recognize the Firm Supporting this Effort:**



## AGA's Corporate Partner Advisory Group Research Program: Building the Bridge Between Government and Industry

AGA's Corporate Partner Advisory Group (CPAG), executive director and director of research are creating research projects of value to governments, industry and the entire AGA membership. These studies are expected to result in reports assessing current and/or best practices and make recommendations for future improvements in federal, state and local governmental accounting, auditing and financial management. CPAG members support AGA research through either cooperative or sponsored research projects. "By undertaking research, AGA is fulfilling its mission as a thought leader in advancing government accountability," said AGA Executive Director Relmond Van Daniker, DBA, CPA. "This is one of numerous research initiatives that will benefit government and bridge the gap between the public and private sectors."

The CPAG was organized in 2001 as a business element within AGA. The mission of the CPAG is to bring industry and government executives together to exchange information, support professional development, improve communications and understanding, solve issues and build partnership and trust, thereby enhancing AGA's focus on advancing government accountability. Corporate member involvement in the CPAG is limited to organizations that sign up for the AGA Corporate Partner membership program. For more information on the research program, please visit [www.agacgfm.org/research/default.aspx](http://www.agacgfm.org/research/default.aspx) or contact Anna Miller at [amiller@agacgfm.org](mailto:amiller@agacgfm.org).

# TABLE OF CONTENTS

<b>Abstract</b> .....	4
<b>Introduction</b> .....	4
<b>Background</b> .....	4
<b>Why We Did This Research</b> .....	5
<b>Methodology</b> .....	5
<b>Entities Participating in Research Study</b> .....	5
<b>Case Studies of Successful Managerial Cost Accounting Systems in Federal Government Agencies</b>	
<b>1. Department of Commerce, United States Patent and Trademark Office</b> .....	5
<b>2. Department of Education, Federal Student Aid</b> .....	8
<b>3. Department of the Interior, Bureau of Land Management</b> .....	10
<b>4. Department of the Interior, Fish and Wildlife Service</b> .....	12
<b>5. Department of the Interior, Minerals Management Service</b> .....	13
<b>6. Department of the Interior, National Business Center</b> .....	16
<b>7. Nuclear Regulatory Commission</b> .....	17
<b>8. Social Security Administration</b> .....	18
<b>9. Department of Transportation, Federal Aviation Administration</b> .....	21
<b>10. Department of Transportation, Federal Transit Administration</b> .....	22
<b>Characteristics of Case Studies</b> .....	23
<b>Findings</b> .....	23
<b>Recommendations</b> .....	25
<b>Pitfalls to Avoid</b> .....	25
<b>Conclusion</b> .....	26
<b>Appendices</b>	
<b>Appendix A: Glossary</b> .....	27
<b>Appendix B: Helpful References</b> .....	27
<b>Appendix C: Interview Questionnaire</b> .....	28
<b>End Notes</b> .....	33

# MANAGERIAL COST ACCOUNTING

## Abstract

This research examined the status of managerial cost accounting (MCA) implementations within federal government agencies. Ten case studies are described and conclusions drawn regarding shared characteristics that seem to be correlated with successful implementations. The case studies depict entities at various stages of implementation, from one that has been in existence for more than thirty years, and other mature systems (more than ten years in existence) to some that have only just started (two years or less).

The late 1990s saw a flurry of activity in managerial cost accounting implementations using Activity Based Costing (ABC) and many of these have thrived. ABC is a set of management information and accounting methods used to identify, describe, assign costs to and report on an organization's operations.<sup>1</sup> Some of the ABC implementations have developed into full-fledged Activity Based Management (ABM) systems, able to integrate cost with performance and budgetary data. This report discusses the similarities and differences among the ten case studies and uses them to extract advice for any federal entity considering setting up an MCA system.

## Introduction

This research study focuses on managerial cost accounting (MCA) and its implementation within various departments and agencies of the federal government of the United States. Managerial cost accounting is about providing information that is useful in the day-to-day operations of an entity, unlike financial accounting that looks to the past and provides historical information. Forecasting can be done from historical information but it becomes more accurate if more timely information can be used. Cost accounting traditionally is used for planning, which includes forecasting, and control, which includes achieving cost-effectiveness in operations. The information provided has to be timely, targeted and relevant. The information provided has to be pertinent to the manager, and tailored to his or her role in the organization. In addition, in the federal government environment, performance, budgetary and compliance issues must also be considered as well as any special information needs of stakeholders such as Congress and the Office of Management and Budget (OMB).

MCA involves the accumulation and analysis of financial and nonfinancial data, resulting in the allocation of costs to organizational pursuits such as performance goals, programs, activities and outputs. What kind of data gets analyzed depends on operations and needs of the organization or entity within the organization. Nonfinancial data measure the occurrences of activities and can include, for example, the number of hours worked, units produced, grants managed, inspections conducted, people trained or time needed to perform certain functions.

The Chief Financial Officers (CFO) Act of 1990 (Public Law 101-576) contains several provisions related to MCA, including one that states that an agency's CFO should develop and maintain an integrated accounting and financial

management system that provides for the development and reporting of cost information. Another provision calls for the integration of accounting and budgeting information. Principles used in accounting for program costs are to be consistent with those used in developing program budgets. The clear linking of budgeting and accounting information can benefit both management control and planning. The CFO Act led to the establishment of the Federal Accounting Standards Advisory Board (FASAB), which issues standards for federal government accounting and reporting. FASAB Statement of Federal Financial Accounting Standards (SFFAS) No. 4, *Managerial Cost Accounting Concepts and Standards for the Federal Government*, made effective July 31, 1995, is the standard that provides guidance on managerial cost accounting.

SFFAS No. 4 correctly allows for some flexibility in setting up a managerial cost accounting system. Organizations are different, with different missions; different entities within an organization have different needs. One size does not fit all. But certain common threads exist in the practices and approaches of entities in the federal government that have successfully implemented managerial cost accounting. This report describes several of these and discusses the reasons for their success. It is hoped that other federal entities reading this report will be inspired to implement a managerial cost accounting system and enjoy the benefits that it can provide. They include: enhanced awareness of the value of activities conducted in pursuit of effective mission delivery, more engaged program management, cost-effectiveness and efficiency, and easier compliance with requirements such as audits, budget justifications and testifying to Congress.

## Background

A report, GAO-07-679, issued by the Government Accountability Office (GAO) in response to congressional requesters, provides on pages 6 and 7 an excellent overview of cost accounting in the federal government (see Appendix A for source reference).

"There are many potential applications for cost information in the federal government. This information can be used by federal executives for budgeting and cost control, performance measurement, determining reimbursements and setting fees and prices, program evaluations, and decisions that involve economic choices, such as whether to do a project in-house or contract it out. The Congress can also use MCA information to determine how to fund programs and monitor agency performance, as well as to analyze the merits of proposals advocated by different parties. The public, in turn, can benefit from greater transparency about program performance and ready access to information on how its tax dollars are spent.

Managerial cost accounting entails answering a very simple question. How much does it cost to do something, be it an extensive overall program effort or the incremental and iterative efforts associated with a project activity? As such, it involves accumulating and analyzing both financial and nonfinancial data to determine the costs of achieving performance goals, delivering programs and pursuing other

# IN THE FEDERAL GOVERNMENT

activities. The principal purpose is to assess how much it costs to do whatever is being measured, thus allowing management to analyze whether that cost seems reasonable, or to establish a baseline for comparison with others to do similar work. The factors analyzed and the level of detail depends on the operations and needs of the organization. Reliable financial and nonfinancial data are cornerstones of this assessment because if the data are wrong, the resulting analysis can give a distorted view of how well the organization is doing, thereby affecting decision-making.”

## Why We Did the Research

MCA has been slow to take hold in the federal government. SFFAS No. 4 has been around for years but many agencies have still failed to fully utilize managerial cost accounting. AGA and its corporate partner MIL Corporation thought that by highlighting the strategy and approach of multiple federal entities’ successes with implementing managerial cost accounting system, with examples of how cost information really helps them in their day-to-day activities, this report would go a long way toward encouraging other agencies to do the same. If more top-level managers realized what everyone in the organization could gain from having access to the kind of information provided by MCA, perhaps the rate of implementation could be accelerated. This was the stimulus for this research study. The AGA Director of Research conducted the research and corporate partner MIL Corporation sponsored the project.

## Methodology

The research approach was to identify several federal government departments, agencies or entities within departments that had implemented MCA and were successfully using the information and making the information available to program managers. Once identified, in-depth interviews were carried out with the selected entities, see below.

The objective of the research was to discuss with selected federal agencies/entities their approaches, successes and challenges associated with developing, implementing, executing and operating a managerial cost accounting system. The interview questionnaire we developed (see Appendix C) included questions on various aspects of development and implementation that are generally recognized to be best practices that lead to a successful outcome. The questions were developed from the knowledge and experience of the researcher and a Special Evaluative Report issued by the Nuclear Regulatory Commission Office of Inspector General in 2000, called *Best Practices in Implementing Managerial Cost Accounting*.<sup>2</sup>

## Entities Participating in Research Study

- Department of Commerce, Patent and Trademark Office (USPTO)
- Department of Education, Federal Student Aid (FSA)
- Department of the Interior, Bureau of Land Management (BLM)

- Department of the Interior, Fish and Wildlife Service (FWS)
- Department of the Interior, Minerals Management Service (MMS)
- Department of the Interior, National Business Center (NBC)
- Nuclear Regulatory Commission (NRC)
- Social Security Administration (SSA)
- Department of Transportation, Federal Aviation Administration (FAA)
- Department of Transportation, Federal Transit Administration (FTA)

This does not mean that there are not other entities within the federal government that have successful managerial cost accounting systems. Our time and resources were limited and we did not exhaustively research every entity within the federal government that has an MCA system. We chose a sample of entities that have received recognition from GAO, Offices of Inspectors General (OIGs) and others as being examples of successful cost accounting implementations. We hope that the case studies described in this report give a comprehensive picture of the various ways managerial cost accounting is being used successfully today in the federal government. Eight are entities within larger departments; two are separate entities that have implemented MCA entity-wide (SSA and NRC).

We also had conversations with some other federal entities that are preparing to set up MCA systems, or that have a MCA system but underutilizing it, for example, only using it for labor distribution reporting. Their experiences shed light on what is needed for a successful MCA implementation.

Each case study highlights best practices and lessons learned in their journey in the use of managerial cost accounting. All of these entities have implemented MCA such that it is not viewed as just a data collection exercise but is providing information to managers in a form that they find essential for effective decision making. These ten case studies exemplify the typical journey for an agency. The organizations may be at different stages of MCA implementation throughout the organization but all recognize MCA’s benefits.

## Case Studies of Successful Managerial Cost Accounting Systems in Federal Government Agencies

### 1. Patent and Trademark Office, Department of Commerce

The United States Patent and Trademark Office (USPTO) is a user fee-funded agency within the U.S. Department of Commerce that grants patents and registers trademarks. The USPTO is 100 percent fee funded and although past fee revenue has consistently increased, fee revenue during the economic downturn has decreased greatly requiring careful management. Twelve years ago, in 1997, the USPTO began using MCA agency-wide and the MCA system is now fully

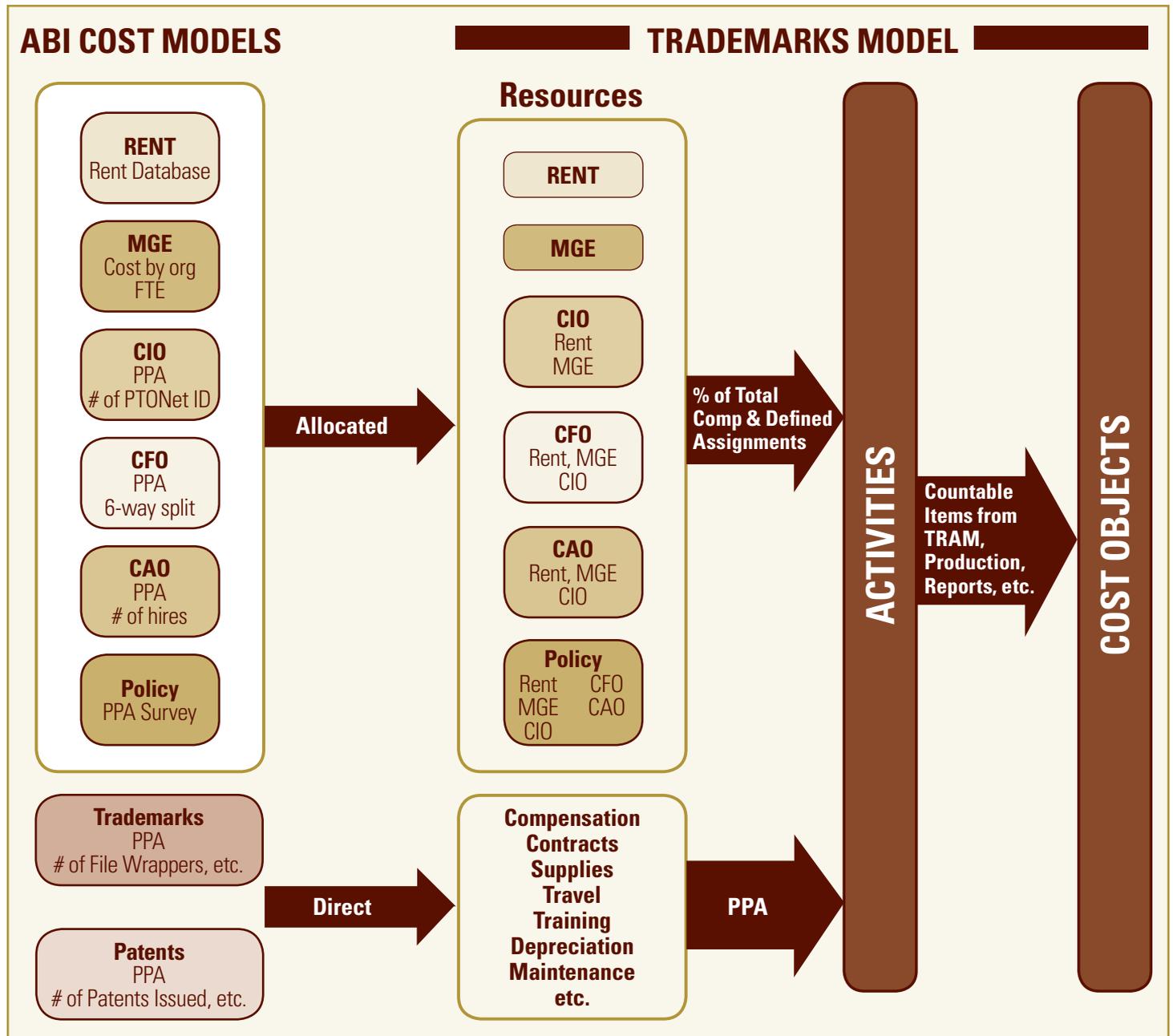
# MANAGERIAL COST ACCOUNTING

mature. When the USPTO implemented MCA, a business process reengineering (BPR) study had just been performed of the Patent and Trademark processes. The activities identified in the BPR were incorporated into the MCA models, making startup much easier. Building support organization models was more difficult because BPRs had not been performed and activities had to be identified for them. Initially, the support organization models were simplistic and were modified to produce more detail in the following year.

The USPTO uses MCA, called the Activity Based Information System (ABIS), to provide cost and workload information to help with making business decisions; develop the Statement of Net Cost; inform fee setting; inform budget formulation, and develop performance reporting data. Currently, perhaps due to the economic downturn, the primary focus of ABIS is providing cost data for fee setting. However, costs are not the only factor in fee setting since many of the USPTO fees are statutorily set.

The USPTO was one of the first government agencies to begin using activity-based costing (ABC) on an agency-wide basis. ABC is known as activity based information (ABI) at the USPTO. ABC is a set of management information and

**Figure 1: Trademark Fee Cost Analysis**



Source: USPTO, Office of the Chief Financial Officer, Report to USPTO Trademark Public Advisory Committee, Feb. 19–20, 2009.

accounting methods used to identify, describe, assign costs to and report on an organization's operations. The USPTO has about 600 activities spread across eleven full cost models and uses a variety of methods (direct trace code reporting, surveys and workload drivers) to capture, allocate and report costs in a variety of ways (direct, indirect, by BOC, by organization, etc.). ABIS integrates cost and performance and provides input that generates an initial budget. ABIS is an implementation of SAP Profitability and Cost Management (PCM). Financial data, time and attendance data and workload data are all reported into an electronic data warehouse (EDW) and pulled from EDW to ABIS. Reporting is quarterly but is in the process of becoming monthly and the USPTO eventually is planning to provide cost data on demand. Standardized cost and workload data is produced automatically by the 15th day after quarterly close. A supplemental round of reporting is produced by the 30th day after quarterly close.

The cost models include multiple support cost centers: Rent, Miscellaneous General Expenses (MGE) and the offices of the Chief Administrative Officer (CAO), Chief Information Officer (CIO), Chief Financial Officer (CFO) and Policy. Their costs are allocated/assigned to the two lines of business (Patents and Trademarks). *Figure 1* shows how the costs are allocated for a Trademark Fee Cost Analysis.

**Cost Accounting System**—The USPTO uses SAS PCM as the calculation engine and pulls data from an ORACLE data warehouse (EDW) populated from a variety of financial and workload systems using Business Objects software. The EDW contains about 10 data marts including cost accounting, patents, human resources, finance, etc. This process for fully costed data is called ABIS. The cost models in ABIS were built to mimic the way USPTO organizations do business and were based on BPR models. By replicating the business processes, the cost models produce data useful for support of management decision making. Everyone throughout the USPTO is responsible for supplying ABIS data from reporting their compensation time in WebTA to recording procurement data in Momentum, to recording workload data in PALM or TRAM.<sup>3</sup> All purchases are recorded by costs codes, captured in Momentum and subsequently loaded into the EDW where they are picked up by ABIS.

**Quality Control**—ABIS staff monitor the cost data with a control sheet to ensure accuracy and reliability. They also check driver data to ensure any significant variations are explained. The Statement of Net Cost (SNC) is also additionally reviewed by the Financial Reporting and Analysis Division staff to ensure SNC accuracy. ABI staff maintain an internal controls binder that is provided to the auditors for their assurance that PALM and TRAM have security controls in place. Changes to models, drivers, or reporting codes are approved by steering committee before being implemented. For the auditors, they have reliance that the system controls are in place and the security controls are in place.

**Agency Culture, Management Attitudes and Core Competencies**—An agency's culture plays an important role in ensuring the success of any accounting project. Some agencies emphasize and practice good financial management, intending to set an example that other agencies can emulate. These agencies have taken the lead in implementing managerial cost accounting. A culture of practicing good financial management is influenced by senior management attitudes and staffing capabilities. The tone at the top is very important in ensuring that new approaches become institutionalized and accepted. At the USPTO, the culture has been supportive of cost accounting, management thinks of ABIS as a useful tool. Financial management in general is very strong at USPTO.

Good cost accountants require a slightly different skill set than financial accountants. Good quality cost accountants need: excellent analytical skills, outstanding communication skills, and a good understanding of the organization's activities and the processes used to accomplish those activities. USPTO has sufficient staff but certainly could use more. ABI staff have overlapping responsibilities so there is always a back up even though there is very little turnover. There are ten people in ABI, four federal employees and six contractors. The staff must be highly talented, technically skilled people. After 12 years, ABI has developed very strong working relationships with customers throughout the USPTO organization.

**Project Implementation Practices**—Certain practices have been associated with success in developing and implementing managerial cost accounting. These are the use of teams or committees, pilot testing, communication, using the interim period for experimentation and encouraging buy-in, and auditor involvement. It helps if the teams or committees have clearly defined objectives, even a written charter.

The USPTO employed most of these practices. ABIS was implemented agency-wide in 1997 with business teams for each USPTO organization. Business teams included staff from the specific organization, a finance team member (implementer) and a contractor. The finance team members and contractors each participated in several business teams. All the business team models were developed in parallel. A steering Committee provided guidance to the business teams and encouraged organizational participation was absolutely indispensable. Looking backwards, the USPTO's advice is to record the date of Steering Committee decisions and the discussions leading to the decisions, and to keep the documentation of this indefinitely. The Steering Committee continues to approve any changes to models, drivers or reporting codes as they are encountered.

ABIS implementation was conducted by the Office of Finance. Training sessions at the beginning were extensive and continue to be ongoing as needed. When recording codes are changed it may mean that hundreds of people need to be trained. When a new USPTO Director is appointed, or executives change, they are briefed on ABIS and its value. In 1998, before ABC was commonly understood within the federal government, the USPTO sent several

# MANAGERIAL COST ACCOUNTING

Department of Commerce IG staff members to ABC training so that they could later appropriately review the USPTO ABC program in a special IG Study.

## *Successes*

- The goals when the project initially started in 1997 were to mimic business processes to provide useful information for decision making and to prepare the statement of Net Cost. Those goals have been achieved.
- Currently cost information is additionally used in fee setting, budget formulation, and external performance reporting with the goal being to make managerial cost accounting embedded within USPTO processes.
- Questions related to cost can be answered easily, creating considerable time savings. When organizations such as human resources ask cost questions, the answers can be provided immediately.
- Over the course of the twelve years that the program has been in operation, there have been budget shortfalls and occasionally the cost accounting program has been cut. However, in the midst of some of the most severe cuts in many years, ABIS funding has not been cut because executives see the value of the program, especially in hard times.

## *Challenges*

- You have to accept that there will be changes to the organization that will lead to cost changes. If a new treaty is signed, work may be performed differently and costs will change. If costs change, programs may no longer meet targets set in the past before the work changed. With a non-mature or non-well understood process, this may cause conflict unless managed well.
- If you are using the cost information in the budget development process, and then the work process changes and subsequently the cost models and costs change, you will need to make sure the budget is adjusted as well.
- The difference between obligations and expenses is always an issue. People care more about the budget and about obligations than about the expense side. When it comes to discussions with OMB and congressional appropriations committees, it is the budget and obligations that count.

## *Advice*

- Cost accounting uses vary from preparing the Statement of Net Cost to shaping business decisions to budget formulation. It helps if the cost models mimic the organization's business processes so that the costs mimic the way you do business. A secondary purpose is for external reporting.
- You need a very active formal Steering Committee with a charter and a process for change. Everything should be documented, not just decisions, but alternatives not chosen and the rationale for choosing a particular alternative. When you have a mature model, with many users, there are going to be some problems and it helps to know why you got to where you are with the current model. All

requests for changes, justifications, decisions, etc., plus the discussion during meetings, should be documented. With a mature model with many users, making changes can be a problem if not managed well.

- Make sure your additions of new cost accounting purposes don't conflict with existing ones, or if they do, that people understand and accept this.
- You need a review process to "squelch the small stuff." Suggestions might be to use some sort of certification, the audit process or peer review.

## **2. Federal Student Aid, Department of Education**

Federal Student Aid (FSA) is one of many program offices at the Department of Education. FSA has an operational MCA system. FSA independently developed the MCA system after being statutorily designated as a performance-based organization<sup>4</sup> (PBO) in 1998. One of the statutory requirements was that FSA had to show reduction in administrative costs on an ongoing basis. The organization has to measure its administrative costs and continue to measure them year after year in a consistent, reliable way. To achieve this, FSA developed an Activity-Based Costing Model. It is now a mature system. The first objective for its use is calculation of operational unit costs and the reporting of these unit costs and cost targets in the Strategic Plan and Annual Report. To ensure data integrity, information from the model ties to the Statement of Net Cost (that is, an audited financial statement). Reports are issued quarterly and controls over the accuracy of the data are the responsibility of the FSA OCFO. The key control for the cost drivers is that they tie back to other sources. The numbers taken are numbers for which managers are already accountable. The champion for the MCA system is the FSA CFO.

In a 2008 USDA OCFO Survey of Managerial Cost Accounting (see Appendix A for source reference), FSA reported the challenges of developing and implementing an MCA system as follows: differing levels of skill of personnel using or generating MCA information; gaining the trust of program managers, as some fear the loss of power; resource constraints in time, people, money; too much detail; two seasonal peaks, which influence trend analysis; and FSA programs are administered by contract. Currently FSA has two FTEs working on managerial cost accounting at the HQ level. In general, FSA labor costs are less than 5 percent of the total because most of the work is done under contract.

Various oversight entities in the federal government make use of the results. GAO used the results when it removed the department's Student Financial Assistance programs, as administered by Federal Student Aid, from its High-Risk List in January 2005. In addition, OMB requests the unit cost data in annual budget justifications. Department management and program managers use the data internally also.

There have been several iterations of the ABC Model in FSA. Several models were developed from FY 1988 through FY 2001. In an April 2002 report, GAO had concerns about the first model for several reasons:

# IN THE FEDERAL GOVERNMENT

- the basis for unit cost reporting was obligations not costs;
- the unit costs reported did not contain fully loaded information; and
- the unit costs calculation was not consistent from year to year.

FSA developed a new model from FY 2002 through FY 2004, with contractor help, then, on its own, developed the FY 2005 through FY 2008 model. It is not based on timesheets, rather on interviews with managers. It incorporates 360 activities. Part of the latest model is the implementation of Cost Perform (CP) ABC software, which is an improvement on past models. For example, FSA managers at one time had no direct access to the system and had to rely on the cost accounting team to provide information. CP ABC allows better scenarios, allows tiered pricing, and can model backward as well as forward. With CP ABC, anyone with a need to access cost information directly can do so. The desktop application is easy to use and it is easy to train people to use it. It allows broader access to users, desktop based, with 25 licenses. It also has better security features such as access controls, read-only and different layers. In

October 2008, FSA implemented its new ABC/ABM system that links and integrates budget, cost and performance management information.

In the development phase, FSA used Steering Committees, which met monthly and included liaisons to each business unit. FSA is not using the system to evaluate or reward managers, but it could be used for that purpose.

FSA is using the model to:

- Establish cost targets and report FSA performance externally.
- Supplement current budget justification by also predicting budgets based on volumes.
- Identify targets for business process improvement.
- Standardize cost-benefit analysis for new investments.
- Improve contract negotiations and contract oversight.

Figure 2 shows the report developed to accomplish FSA's first objective. Note that it includes direct costs only. Fully loaded unit costs would not be meaningful in this analysis, although the system can produce fully loaded cost information.

**Figure 2: Comparison of Unit Costs and Cost Targets FYs 2006–2008**

Metric	FY 2006	FY 2007	FY 2008	FY 2008	Performance
			TARGET	ACTUAL	
Reduce the Unit Cost to Process an Electronic FAFSA	\$5.04	\$4.34	\$4.03	\$3.91	Target Met
Reduce the Unit Cost of Originating and Disbursing Direct Loans and Pell Grants	\$4.42	\$4.03	\$3.98	\$3.65	Target Met
Reduce the Unit Cost of Servicing a Direct Loan Borrower	\$20.95	\$21.45	\$18.44	\$19.59	Improved
Reduce the Unit Cost of Collecting One Dollar in Default Status	\$0.14	\$0.13	\$0.12	\$0.14	Target Not Met

**Figure 3: Direct Unit Costs FYs 2003–2007**

Measure	Actual FY03	Actual FY04	Actual FY05	Actual FY06	Actual FY07
FAFSA Applications	\$7.85	\$8.23	\$6.64	\$5.85	\$5.00
Pell Disbursements	\$2.63	\$3.99	\$3.47	\$3.56	\$3.61
SMART Disbursements				\$3.12	\$3.61
ACG Disbursements				\$3.12	\$3.61
Direct Loan Disbursements	\$6.22	\$4.28	\$5.11	\$5.07	\$3.73
Direct Loan Consolidations	\$81.26	\$71.30	\$41.60	\$35.33	\$99.60
PLUS Disbursements	\$5.81	\$4.22	\$5.69	\$5.82	\$3.76
FSEOG Program Disbursements to Schools	\$1.18	\$1.42	\$1.32	\$1.43	\$1.23
Perkins Loan Program Disb. To Schools	\$1.25	\$1.53	\$1.41	\$1.52	\$1.34
Federal Work Study Disb. To Schools	\$1.27	\$1.57	\$1.43	\$1.52	\$1.34
Leap/Sleep Program Grants	\$0.08	\$0.24	\$0.17	\$0.16	\$0.10
Direct Loan Servicing	\$26.99	\$26.26	\$15.82	\$21.45	\$19.59
Conditional Disability Discharge				\$73.06	\$119.78
Default Collections	\$0.13	\$0.14	\$0.15	\$0.13	\$0.14
FFELP Monitoring of Financial Partners	\$1,977	\$2,136	\$1,993	\$1,372	\$1,490
FFEL Reviews				\$51,551	\$35,812
School Compliance Reviews				\$5,762	\$5,040
Oversight and Management of Schools	\$8,100	\$7,506	\$6,508	\$2,937	\$2,918

# MANAGERIAL COST ACCOUNTING

The model output allows a comparison of FY 2003-2007 Actual Federal Student Aid Direct Unit Costs for 18 measures shown in *Figure 3*. The measures in *Figure 3* are slightly different than the metrics used in *Figure 2*.

FSA explains the unit cost and trends as appropriate when they present the annual model results to the FSA Leadership.

## Successes

- Establishing cost targets and reporting FSA performance externally.
- Moving toward Activity-Based Management by providing access and training to business unit staff on the ABC software and working with the staff to validate ABC results.
- Predicting budgets based on volumes, supporting budget requests.

## Challenges

- Due to hiring constraints, FSA has delayed the process of training business unit staff on the cost impacts of workload variance, capacity variance and cost variance, using our Budget Planning Model.
- Applying overhead costs fairly.
- Working with business unit staff to determine new uses for the model's results and the quarterly models.

## Advice

- Senior management commitment and buy-in are extremely important to the success of the project.
- Start the ABC/M initiative as a pilot, for a specific area, before taking on the entire organization. Begin with an objective before designing the model. Start small and answer the question, "What are you going to do with it?" before you start.
- Keep information flowing to management and users. Additionally, give users 'direct' access to the information.
- Don't try to cost everything.
- Have enough resources to develop and sustain the project.

## 3. Bureau of Land Management, Department of the Interior

The Bureau of Land Management (BLM) is a bureau within the Department of the Interior. BLM's mission is to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. BLM has 12,500 employees in 400 locations and is the most complicated bureau in the Department of the Interior.

BLM's MCA system is an activity-based costing system (actually an activity-based management system) with direct tracing of labor and operations costs, allowing full costs and everything in between to be reported. The BLM implemented its Management Information System (MIS) in 1999. The MIS is a data warehouse containing multiple interactive modules including both summary and transactional level

financial information, billing and collections, labor cost, cost management (activity-based costing/management), workload measures (outputs), performance measures (outcomes), budget planning/formulation, customer survey, property, space and vehicle and other data. Since the MCA system is part of the MIS system, BLM has had its MCA system since 1999. It was automated in 2000.

BLM's MCA system antedated the Department of the Interior system and the BLM core team that developed the MCA system for BLM assisted in the department-wide initiative.

Financial data are extracted from BLM's general ledger and nonfinancial data are added to the MCA system from a BLM-specific system called the Performance Management System. Labor distribution reports are completed by employees and turned in biweekly via QuickTime (BLM's time and attendance system). The data contained in the MIS is updated nightly and is available to all BLM employees on the bureau's Intranet. The cost management system relates financial accounting data to the work that is actually produced by programs. It also contains considerable data analysis, and is used regularly by field office, state and headquarters managers, program leads, budget staffs and others. Users can view BLM cost data at a high level and drill down into more specific data.

The MCA system was developed in-house at an initial cost of about \$200,000 and can provide data on two bases: obligations and expense. Initially, the champion was the Assistant Director who later became the Deputy Assistant Secretary. Now it is the Deputy Chief Financial Officer. The initial development and use of the system was mandated by BLM's Assistant Director. Initiatives like establishing an MCA system must come from top management.

The BLM has an organization-wide statement clearly defining the objectives and uses of cost accounting. There is a Training Manual and an online *User Guide*, which explains how to use and how not to use the data. It is available to all BLM employees and explains everything in the system.

BLM uses cost accounting for budgeting and cost control, performance measurement, and to some extent for determining reimbursements and setting fees and prices. For cost recovery actions they have to identify what the costs are. It is also used for deciding who gets the money that is available. BLM employees use the MCA system to do their jobs. There are 150 subactivities with six or seven major appropriations. There is a huge level of accountability.

In using cost accounting for control and planning of their programmatic responsibilities, managers find it more useful to see the status of cost as far as obligations are concerned. Program Element (PE) codes are used. For time and attendance, travel etc., it is more useful to be tied to funding. For financial reporting and for the financial statements like Statement of Net Cost, the expense basis is more useful. The system tracks both.

The integral components of the management framework comprise the activity-based costing/management system (ABC/M) or cost management system—this provides

# IN THE FEDERAL GOVERNMENT

financial data that enables BLM to track actual costs by work activity—and the BLM performance management system, which facilitates the collection and reporting of performance information. ABC/M serves as the integrating factor for planning, program/mission, budget and financial activities by translating what is produced (outputs and/or outcomes) into dollars (cost). BLM has also linked (one-to-one) all of its cost management work activities to specific performance measures for each strategic outcome goal. The PE code gets matched up with the performance measures, rolling up from work activity to work programs and then to the goal it supports. They all also fit into the Department of Interior’s goals.

## Successes

One of the strengths of BLM’s system is that it supports an Integrated Management and Performance Framework. This provides a disciplined approach to resource management for improving performance, service quality and customer satisfaction. The level of work and outputs to be accomplished and the budget resources necessary to accomplish the specific activities that make up the outputs are all aggregated, enabling BLM to measure its performance in terms of strategic outcomes to results. With eight years of cost and performance data for approximately 200 output-producing work activities identified down to the most subordinate organizational level readily available in its cost management system, the BLM has the capability to evaluate

unit (marginal) costs and make reasoned determinations for outyear planned accomplishments based on current year funding levels and stated priorities of the president’s administration, the Department of the Interior and BLM’s executive leadership team.

Figure 4 provides an example of how the cost management system can provide useful program management information, showing two views of the cost of land use planning. With cost management, nothing is deleted, but a new dimension is added—the dimension of outputs (what is produced by the land use planning process) is added to the mix of cost elements. The lower portion of the figure illustrates the benefits of this dimension. Although both views are useful for different process, the activity-based costing view better informs the decision typically made by managers responsible for land use planning.<sup>5</sup>

## Challenges

The Department of the Interior is in the process of implementing a new integrated financial management system, Financial Business Management System (FBMS), based on SAP software. The department is doing this in phases. It began in April 2006 and will be completed during fiscal year 2011. The department and the bureaus are facing a number of challenges with FBMS implementation relating to interfaces with the existing MCA systems. BLM is in the process of migrating to FBMS.

## Advice

A prescriptive approach is useful at the beginning, but there has to be a fine balance so that it does not alienate people. You need a champion who can speak in a way that program people can understand. What you need is the cost of executing your mission. Be mindful of the fine balance between detail and ease of use. You cannot define your processes in a multiplicity of ways. You have to decide what you want to achieve, and you may have to give up some of the detail.

Employees enjoy using the cost management website. If it is easy, people will use it. Employees participate in training on how to use the system two or three times a year. They hold a cost forum (not in Washington, D.C. but in the West). They send out an instruction memo dictating who attends the forum. They make everyone stand up and talk about how they are using the system. People soon realize they have to show they are doing it too. There is also an online cost forum manual. The whole system was set up initially for about \$200,000 in programming costs (done in-house with contract support of one person).

Avoid a dogmatic approach if possible because that generates fear. One should be able to present analysis so that people see it as a tool. The approach used controls the level of acceptance. For a federal agency, expense data is not useful to a manager for running the bureau programs. Obligation data allows him or her to analyze the costs. For example, if it is all transportation cost, is there a better way to get the work done? Another would be, “What makes up the cost of an Application for Permit to Drill?” However, expense data can help inform such decisions.

**Figure 4: Two Views of Land Use Planning Cost**

Traditional Costing	
Salaries and benefit	11,693,664
Travel	793,878
Transportation of Things	140,291
Rents, Communication, Utilities	187,210
Printing and Reproduction	330,864
Contractual Services	10,912,984
Supplies and Materials	652,011
Equipment	921,824
Grants and Subsidies	362,491
<b>Total:</b>	<b>25,995,217</b>
Activity-Based Costing	
Evaluate Current Land Use (LUP) Plan	\$1,715,684
Develop LUP Strategy	6,615,783
Develop Scoping Report	6,392,224
Develop Draft LUP/EIS	3,795,302
Draft LUP amendment (EIS level)	4,738,928
Complete Proposed LUP/EIS	93,583
Prepare Final Record of Decision	369,132
Prepare Amendment (EA level)	1,432,336
Prepare Amendment (EIS level)	842,245
<b>Total:</b>	<b>25,995,217</b>

Source: The Bureau of Land Management’s Performance and Accountability Report for Fiscal Year 2007.

# MANAGERIAL COST ACCOUNTING

## 4. Fish and Wildlife Service, Department of the Interior

The Fish and Wildlife Service (FWS) is a bureau within the Department of the Interior. FWS has a \$2 billion budget and a mission to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people. FWS delivers this mission at each regional office through five core programs:

- Operation of the National Wildlife Refuge System
- Restoration of fisheries and conservation of habitat
- Recovery of threatened or endangered species
- Conservation of migratory birds and support of state fish and wildlife programs
- Conservation of international fish and wildlife species

The Fish and Wildlife Service (FWS) has had an MCA system since 2003. The Assistant Director for Planning, Budget and Human Resources has been the champion. The Division of Cost and Performance Management owns the system and is responsible for the implementation of the Service's robust strategic cost and performance management effort. It is an ABC/M system. They have tied it into the budget formulation process by using the full cost of performance as the basis for informing future budgetary decisions; Senior Executive Service (SES) performance planning and reporting; CFO annual performance report; the Statement of Net Cost; and, more recently, to local level geographic performance/cost models. The SES leadership team meets twice a year and make decisions that are informed by the cost and performance information derived from this system. In addition to using it for budget resource decision-making, FWS also uses the data for cost management, performance planning and measurement, and for leadership decision-making. They are starting to use it for determining shared services levels of reimbursements and setting fees and prices.

**The Activity-Based Cost and Performance Management System**—FWS implemented an ABC/M system based on a SAS platform (SAS ABM). The FWS Cost and Performance Management System automatically produces cost information for managers. FWS utilizes Cognos Business Intelligence Tools using a SQL server to integrate cost and performance data. The system is web-based and accessible to over 200 licensed users throughout nine regional offices and multiple programs. Financial data are extracted from FWS' general ledger and nonfinancial data are added to the MCA system from a FWS performance planning and reporting system called the Enterprise Planner. FWS' system is an activity-based cost/management system with direct tracking of labor and operations costs, allowing full cost of mission activities and programs, and visibility of support costs. Labor distribution reports are completed by employees and turned in biweekly via QuickTime (FWS time and attendance reporting system). One of the most critical aspects of the FWS Cost and Performance architecture is the alignment of activities in the field to a hierarchy of enterprise-wide performance metrics. This specific align-

ment allows for the translation of field level costs to enterprise-wide performance and the cost of that performance.

When the MCA system was being implemented quarterly meetings were held for leadership at the regional offices at the department level. As part of the change management effort, the Division of Cost and Performance Management, responsible for development and implementation of FWS-wide Cost and Performance Management initiative, developed a standing cost management training program that was originally offered to 200 licensed users. For the past four years, FWS has offered similar training at their National Training facility to facilitate understanding of managerial cost principles and the use of cost and performance business intelligence tools. In addition, FWS hosts web-based on-line training for all users as well as offering an on-line help-desk. The Division of Cost and Performance Management has also hosted a best practices workshop for federal agencies and often participates in federal conference to improve the use of performance and cost data in the public sector. FWS thinks that MCA has to be useful and has to fit in with the culture in the organization. FWS uses the budget to tie it to the culture, and gets the higher level managers (Senior Executive Service level personnel) involved through performance agreements. They try to make the MCA information relevant to the decision-makers, who then become champions for the system. As soon as you integrate cost with performance you get more buy-in from the leadership.

The FWS Cost and Performance System is able to trace all expenses and every hour of work back to individual programs and to hundreds of activities carried out in the various subcategories within each program. Then those program costs can be integrated as multiple contributions to products or services delivered to the public. FWS and other decision-makers can better understand the full cost of business operations and make better assessments about acceptable levels of cost for programs and activities. FWS does not use MCA to evaluate managers; because the system is relative new, an incentive-based system that recognizes managers' efforts to implement cost-effective approaches to problem-solving is only a goal at this point.

FWS has clearly stated objectives and uses of cost accounting:

- Ensure that the programs are achieving the desired results at an acceptable cost
- Understand the full cost of business operations, make investment in higher pay-off activities
- Streamline business processes opportunities to deliver mission more efficiently
- Develop a performance-based culture

The online General ABC/M Frequently Asked Questions (FAQs) describe the benefits of the system as follows:

- Provides greater visibility to manage costs of programs across regions and to improve efficiencies.
- Allows managers to manage by the work being performed rather than by budget and to refocus resources on activities that provide the "best bang for their buck."

# IN THE FEDERAL GOVERNMENT

- Provides a way to measure program performance.
- Justifies budget requests (OMB allocated funding based on performance) and assures budget supports the best value results.
- Supports the implementation of budget and performance integration and enhances the organization's ability to meet other external requirements such as GPRA, the CFO Act and the Clinger-Cohen Act by providing the full cost for activities and programs.
- Supports the development of Standard Operating Procedures (SOPs) across the seven FWS regions and the California/Nevada Operations Office (CNO).
- Is a necessary and significant step in the development of the performance management system.
- Provides a means to describe the effects of budget cuts on program performance.

ABC/M also provides benefits for field stations by:

- Helping to identify what their work efforts are really contributing to and what it really costs to provide your products and services
- Helping them make a business case to get adequate resources—money, people, equipment, and/or supplies—to do your job more effectively
- Showing a basis of comparison between similar stations across the Service and determining a baseline standard of performance so that stations can share ideas/technology to increase performance and efficiencies.

## *Successes*

- Senior level budget decision-making
- Field level streamlined cost and performance reporting preparation
- Full costing of mission work including outputs, critical success factors and performance outcomes

They are running a test model for automating the Statement of Net Cost, and time is being saved at the finance center and at audit review.

## *Challenges*

- Providing quarterly data on a more timely basis.
- Convincing FSW employees that the data is valid.
- Bringing a better understanding of how and when to use full cost data.

## *Advice*

The system has to be useful to be accepted. The organization's culture is critical. If the system relates to what the culture deems important it will be accepted easily. Because so much effort has been dedicated to the federal budget process, an important strategy for success would be the translation of costs of performance as an important element in out-year budget decision-making. The ABC data is used as one input into the budget formulation process for both the FY 07 and FY 08 budgets. Regionally, Program Assistant Regional Directors and their staff are using the data to obtain a better understanding of the work that their

employees are doing on a quarterly basis. ABC is used in the work process because it allows the directorate to understand how work activities are contributing to the goals of the FWS and the department. By understanding the approximate costs of the Service's operational plan goals, the directorate can allocate its limited funds to those programs making the greatest contribution to the FWS and department goals.

If the bureau's performance is a reflection of what is important in the agency, then it is critical to tie executive performance to the delivery of those performance promises. This makes the information very relevant to the higher level decision-makers who in turn make sure their people input data correctly. This will provide a focus not only for the executives but also all employees.

## **5. Minerals Management Services, Department of the Interior**

The Minerals Management Service (MMS), a bureau in the U.S. Department of the Interior (DOI), manages the nation's oil, natural gas, renewable energy, and mineral resources on the federal Outer Continental Shelf (OCS) as well as the mineral revenues generated from the OCS and from onshore federal and American Indian lands. Its mission is to manage the ocean energy and mineral resources on the OCS, and federal and Indian mineral revenues to enhance public and trust benefits, promote responsible use, and realize fair value. With approximately 1,600 employees, the Bureau is national in scope and is headquartered in Washington, D.C.

Within MMS, the Offshore Energy and Minerals Management (OEMM) program regulates OCS activities, including administering OCS leases, monitoring the safety of offshore facilities, and protecting our coastal and marine environments. Through the work of OEMM, MMS manages the oil and gas resources on the 1.7 billion acres of the nation's OCS. In addition, MMS is implementing a framework for leasing on the OCS for the development of renewable energy.

The Minerals Revenue Management (MRM) program collects, accounts for, and disburses revenues from mineral leases on the OCS and onshore federal and American Indian lands. The MRM has collected an average of more than \$13 billion annually over the past five years. Each month, approximately 2,100 companies report and pay royalties associated with more than 29,000 producing onshore and offshore federal leases. Furthermore, MMS collects annual rental revenues on about 37,000 non-producing leases. MMS's responsibility is to ensure that the federal government is realizing fair-market value for the minerals produced on federal lands and that companies comply with applicable laws, regulations, and lease terms. This includes ensuring that revenues are correctly reported and paid in a timely manner.

MMS implemented activity-based costing (ABC) in October 2002 in accordance with a DOI directive. Since then, the MCA application has undergone several updates and revi-

# MANAGERIAL COST ACCOUNTING

sions to refine the detail provided and expand the distribution of cost and performance information. In September 2007, the MMS implemented its Cost and Performance Management Tool (CPMT), which automatically links ABC data with performance measures. CPMT also significantly improved the timeliness in which results are provided as well as implemented stronger internal controls.

The fundamental purpose of the MMS MCA application is to achieve the primary objectives in the Statement of Federal Financial Accounting Standards No. 4: *Managerial Cost Accounting Standards and Concepts* (SFFAS 4). These objectives are:

- To provide program managers with relevant and reliable information relating costs to outputs and activities.
- To provide relevant and reliable cost information to assist Congress and executives in making decisions about allocating federal resources.
- To provide consistency between costs reported in general purpose financial reports and costs reported to program managers.

Specifically, MMS uses managerial cost accounting to support budget formulation, performance measurement, and program evaluation.

MMS' Policy and Management Improvement (PMI) Associate Director is the champion of the ABC initiative. Within PMI, the Planning and Management Division (PMD) is responsible for the accuracy and reliability of the cost data as well as the operations and maintenance of CPMT.

A cross-functional team of MMS cost and performance program managers and analysts provide technical and functional MCA guidance to their individual programs,

evaluate and communicate the relevance of key cost and performance data, and provide valuable feedback on areas for CPMT development. Together, the MMS MCA team strives to continuously improve the usefulness of MCA information to managers.

**The Cost Accounting Model**—The MCA application uses SAS Activity-Based Management (ABM) software to model the resource, activity, and output/outcome costs associated with the MMS performance measures. MMS employees and contractors manually derive the cost and cost driver data from the department's Financial and Business Management System (FBMS) and load it into the SAS ABM model on a quarterly basis. The majority of labor resource costs are assigned to activities based on the hours entered by MMS employees to work elements (or activities). Non-labor costs such as contractual services, print, postage, and supplies are assigned to the work elements that they support.

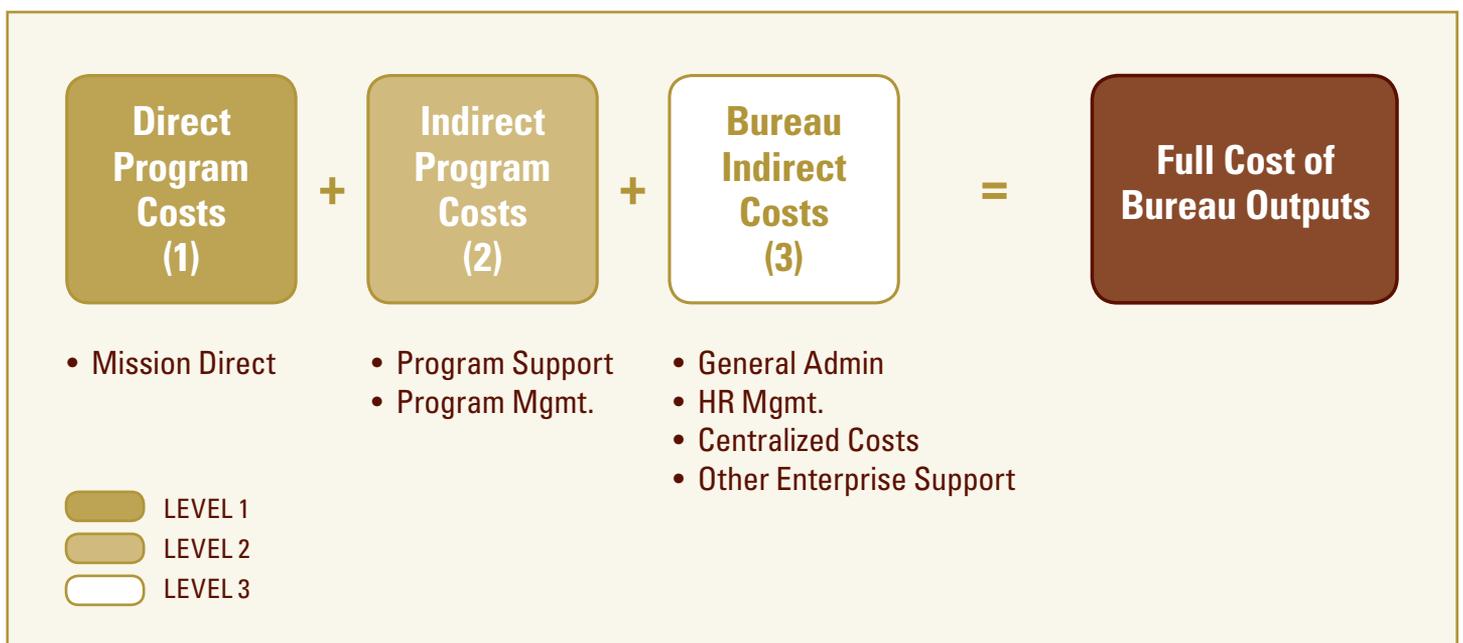
Activity costs are assigned to the MMS outputs in one of three ways:

- Level 1 (mission direct) activity costs are directly assigned to the one or more outputs that they support.
- Level 2 (program support) activity costs are assigned only to those respective program outputs that they support based on the direct (Level 1) labor hours collected under each of them.
- Level 3 (bureau support) activity costs are assigned to all MMS outputs based on the overall (Level 1) labor hours aggregated for each output.

Thus, the MMS bureau outputs are fully-costed based on the methodology shown in *Figure 5*.

After all three activity levels are applied, the output costs are then mapped into MMS performance measures

**Figure 5: MMS Cost Allocation Strategy**



# IN THE FEDERAL GOVERNMENT

and outcomes that feed into the DOI goals, ensuring full costing of performance measures. The overall cost assignment hierarchy is diagrammed in *Figure 6*.

**Agency Culture, Management Attitudes and Core Competencies**—MMS management is committed to achieving good financial management and supports the MCA application. At the end of each quarter, PMD distributes the MMS Management Quarterly, which reports on the year-to-date progress of key cost, performance, audit, and internal control review results. Within the report, managers can specifically see their operational division expenses, top 10 activity costs, and year-to-date unit costs segmented by Levels 1 through 3. In addition, CPMT provides custom reports that can drill down into the Level 1 direct costs that affect specific unit costs as well as standard quarterly burst reports displaying the hours employees have entered to individual activities. These reports can be generated on demand to meet specific manager needs.

**Project Implementation Practices**—Senior MMS management believes that defining the purposes, objectives, and

business needs have been critical factors to the success of the project. The strategy for achieving the goals and objectives was developed collaboratively by a team composed of all levels of staff throughout the organization during the application's development and subsequent upgrades. The use of teams or committees, pilot testing, and communication outreach have all been associated with the success in developing and implementing managerial cost accounting. Moreover, good project management, thorough documentation of data processes and procedures, periodic process reviews, and shared responsibility with the program managers in maintaining the activity and output definitions and attributes have all contributed to the successful implementation and maintenance of CPMT.

#### *Successes*

- Understanding the drivers behind the unit cost of outputs and how this information can be used to better manage resources and the planning of work.
- Being able to analyze cost and performance data from different perspectives and levels of detail.

**Figure 6: MMS/DOI Cost Assignment Hierarchy**



# MANAGERIAL COST ACCOUNTING

- Building a foundation for cost recovery analysis.
- Calculating the full cost of activities, outputs, and performance measures.

## *Challenges*

- Describing the different uses of budgetary and proprietary accounting.
- Achieving an understanding across the Bureau of the different uses of traditional financial accounting and MCA information.
- Achieving an understanding across the Bureau of how MCA supports business management decisions regarding the assignment of resources and planning of work.

## *Advice*

- Focus on the specific business purpose(s) for implementing MCA. Invest time to help management understand the need for and the power of a well-designed MCA application.
- Prototyping before investing and building large-scale systems mitigates mistakes and waste of resources while facilitating a more useful design of the MCA application.
- Establishing senior management approval and buy-in is critical to the success of the initiative and continued operations.
- Providing continuous communication of the principles behind and benefits of cost and performance information generates a greater interest in MCA data.

## 6. National Business Center, Department of the Interior

The National Business Center (NBC) is located within the Department of the Interior (DOI). NBC was established in 2000 as a consolidation of three existing service centers within the department: the Interior Service Center, the Washington Administrative Service Center (U.S. Geological Survey) and the Denver Administrative Service Center (Bureau of Reclamation). Since 2000, other components within the department have merged into the NBC. It is organized into lines of business: acquisition services, appraisal services, aviation management services, financial management and budget services, human resources services, information technology services, federal consulting services and administrative operations services. It provides cross-agency support through its working capital fund established pursuant to 43 USC 1467 (amended) and the Interior Franchise Fund. The Interior Franchise Fund was granted permanent operating authority under section 703 of the Financial Services and General Government Appropriations Act, 2008 (P.L. No. 110-161, div. D). The NBC is an OMB-authorized shared-services center and government-wide provider of payroll, human resources, financial management and information systems security services.

NBC has an enterprise-wide managerial cost accounting (MCA) system. It has been operating for four years. Its champion is the NBC Director and his support is a large reason for the MCA system's success. Statements defining the objectives and uses of cost accounting are included in

the NBC Strategic Plan. The Strategic Plan is available to all employees via the website.

NBC uses cost accounting information for budgeting and cost control; performance measurement; determining reimbursements and setting fees and prices; program evaluations; and making economic choice decisions. The NBC Aviation Management Directorate used it when they did their 2011 budget formulation. In the development phase, the strategy for achieving the desired objectives was shared with all levels of staff throughout the organization. Communications were effected through each directorate's employee all-hands meetings, through monthly meetings with the directorate business managers and through all-employee e-mails.

**Cost Accounting System**—NBC uses the SAS Activity Based Management system (SAS/ABM) as its MCA system. The MCA system automatically produces cost information for managers. Financial data is uploaded from the accounting system by the NBC Cost Accounting Team. Workload data is provided by each directorate and entered into SAS/ABM by the NBC Cost Accounting Team. The system is owned by the NBC Chief Financial Officer and managed through the NBC Budget Office. NBC budget analysts, Cost Accounting Team and directorate business managers collaboratively validate financial and workload data on a monthly basis.

The system does full costing. The costs of corporate leadership and oversight activities such as the NBC Director, quality management, budget and audit liaison are allocated to work activities using a standard algorithm. Administrative costs are collected utilizing individual indirect/administrative work activities. The costs for these activities are then prorated across direct work activities using a standard distribution algorithm based on each directorate's percentage of direct costs. NBC uses a direct trace methodology to ensure that every transaction within the accounting system is directly coded with a work activity. Costs coded to "indirect" work activities are then allocated to determine the full costs of a product or service as described above. Labor data reporting is completed by each employee and turned in biweekly.

The NBC cost accounting project has been embraced at the senior levels of the organization. NBC is working to improve core competencies in cost accounting through classroom and online training opportunities that are available to all employees of the organization.

**Project Implementation Practices**—The use of teams or committees, pilot testing, communication outreach, an interim period and auditor involvement have all been associated with success in developing and implementing managerial cost accounting. NBC used most of these except that NBC did not solicit OIG involvement when developing the cost accounting system. The teams included different levels of staff and user level staff, and the teams had clearly defined and understood objectives. The use of teams and committees provided a means to ensure buy-in/ownership of the work activities within each line of business. One challenge in the use of teams was to ensure that team members

did not get unduly sidetracked in detail-oriented conversations about individual work processes. A team approach was also used in vetting revisions to the NBC cost accounting policy. This provided greater levels of understanding and ownership within each line of business.

Pilot testing helped the implementation tremendously. NBC uncovered needs for refinements to the activities and related processes that would not have been clear without pilot testing. Pilot testing also provided the opportunity to refine the technical aspects of uploading financial data into the SAS/ABM application.

Communication outreach is critical. The NBC had clearly defined agency guidance, frequent outreach to support the promulgated guidance, training sessions to educate as many personnel as possible and asked for feedback to help identify potential needs of managers. NBC conducts training throughout the year.

NBC uses cost information to evaluate managers and rewards managers for cost-effective approaches to problem-solving. Cost reduction goals and productivity improvement goals are included in the annual performance plans for each associate/assistant director. The system is reviewed periodically to ensure that it is still responsive to current needs. Cost accounting data and processes are reviewed with the NBC Senior Leadership Team and Business Managers on a quarterly basis. New activity requests, which are ongoing throughout the year, and changes to existing activities are considered on an as-needed basis. Based on these processes, the NBC Data Dictionary and Cost Accounting Policies have been continually refined. The reviews have yielded evolutionary changes that confirm a greater understanding of the benefits of cost accounting within the organization.

#### *Successes*

- The NBC Director established productivity goals that will yield unit cost decreases and productivity improvements.
- The NBC has been able to adjust billing algorithms for shared services with its customers that equitably allocate costs of service based on workload levels reported in SAS/ABM.
- The NBC has vastly improved data quality and employee awareness of the types of costs incurred in providing services. Evidenced by a near zero error rate in coding of time to activities, NBC employees at all levels of the organization are developing increased understanding of the costs incurred to deliver services.

#### *Challenges*

- Data Quality—Ensuring that data entering SAS/ABM was accurate to avoid a continual cycle of “bad data providing bad results.”
- Incentive—Providing a reason or need for managers to embrace cost accounting as a useful analytical tool. The development of the director’s productivity goals helped overcome this challenge.
- Development of Reports—Ensuring that managers had reports available that provided useful information for decision-making.

#### *Advice*

- Executive sponsorship of the MCA will emphasize the need to create an effective and useful product.
- Collaboration across multiple levels of the organization will yield a dictionary of activities that is “owned” by the employees of the organization.
- Direct tracing of transactions (assignment of an activity identifier to every transaction instead of periodic surveys) will yield a deeper understanding of the interrelationships of an organization’s business processes.

## 7. Nuclear Regulatory Commission (NRC)

A large part of the NRC’s authorized budget is defrayed by the collection of license fees as required by law. NRC recovers 90 percent of its budget, less an appropriation from the Nuclear Waste Fund and other non-fee recoverable activities. The NRC has had its MCA system for seven years. The champion is the Controller. The NRC does have an organization-wide statement clearly defining the objectives and uses of cost accounting. The MCA system they have is used for budget formulation and execution, performance measurement and Exhibit 300 preparation. Exhibit 300 is the Capital Asset Plan and Business Case Summary, one of the requirements of OMB Circular No. A-11, Part 7.<sup>6</sup> They are required to use cost accounting under Section 15 of the Code of Federal Regulations (CFR).

The cost accounting system has three modules: a labor distribution module, an obligation module, and a labor and non-labor module. It uses financial data from the core financial system as well as labor data from the time and labor system and two project management systems. NRC is using the Cost Accounting System (CAS) to assign or allocate to sub-sub-programs. Sub-sub-programs are then summarized to programs. The system operator downloads data from the four other applications mentioned above. The CFO owns the system and the system operator and project officer are responsible for the accuracy and/or reliability of the data in the system. The system is updated biweekly and monthly by the operator. Because there is at this time no real-time interface with the core financial system, the time and labor system and other project management systems, manual intervention is required to download data (although once started it does not take much time to complete). The NRC uses full costing and allocates leaders’ time to programs as appropriate. Administrative costs are charged to a time activity code which is allocated to the major programs based on a cost driver. It is an Activity Based Costing system. Labor data reporting is completed by employees and turned in biweekly.

The NRC focuses on the analysis of financial management information to measure and improve performance. Cost accounting information is widely used throughout the organization. For example, cost accounting information is used to budget and track major programs and manage resources at the program office level. Reports are disseminated biweekly, monthly and quarterly in electronic format. NRC enjoys the support of top-level management for its cost accounting system.

# MANAGERIAL COST ACCOUNTING

As for the project implementation practices, they did everything that is cited as a best practice, utilized pilot testing, used communication as described in question 24 of the questionnaire we used (see Appendix C) and did a lot of training, during FY 2002 and early FY 2003. They used an interim period for experimentation. The OIG helped NRC in the development and implementation process. The OIG provided input to assure compliance with cost accounting standards. The OIG developed a special evaluation report, called *Best Practices in Implementing Managerial Cost Accounting*, which is cited in Appendix B under Helpful References. The report described the best practices asked about in the AGA CPAG Questionnaire shown in Appendix C.

NRC uses cost information to evaluate managers, and managers are rewarded for cost-effective approaches to problem-solving. Senior-level managers are held accountable or rewarded for cost-effective performance. The system is periodically reviewed to make sure it is responsive to the organization's current needs. The last review was in March 2007. NRC leadership learned that more managers and staff were using the data than they had expected.

## Successes

- NRC uses the cost accounting system to budget and track cost for the High Level Waste program.
- For the past seven years, the cost accounting system has provided data for the production of financial statements, upon which NRC has received a clean audit opinion.
- The cost accounting system allows the NRC to capture costs allocable to internal software development for capitalization purposes.
- A recent survey showed that 80 percent of managers are using cost accounting data, more than expected, so it is perceived as being useful.

## Challenges

Note that the challenges mentioned will be addressed by the new core financial system NRC is implementing by FY 2011. As a result of this effort, the NRC has restructured the budget for 2011 to improve consistency between budgeting and cost accounting.

- The greatest challenge is in having managers and all users understand how the data is compiled and how it should be used.
- Obtaining sufficient staff resources to provide more training and operate the system.
- Producing timely data that is useful to managers. Providing timely data is dependent on accurate updates from the time and labor system, the core financial system and the two project management systems discussed previously.

## Advice

- Educate managers on the importance of cost accounting to gain buy-in. Users are the best marketing agents. If you are able to recruit people who are enthusiastic about the system to be advocates for the system, it helps tremendously.

- Periodically examine current business process and make changes as necessary to keep the data relevant. Let users tell you what needs fixing.
- Tie performance goals more clearly to benefits as evidenced by the cost accounting system output.

## 8. Social Security Administration

The mission of the Social Security Administration (SSA) is to advance the economic security of the nation's people through shaping and managing America's Social Security programs. SSA delivers services through a nationwide network of over 1,400 offices that include regional offices, field offices, card centers, teleservice (800-Number) centers, processing centers, hearing offices, the Appeals Council, as well as presences in U.S. embassies around the globe. It has 62,000 employees, ten regional offices, six processing centers and approximately 1,300 field offices. Additionally, some 15,000 individuals, employed by state and territorial partners in Disability Determination Services, process SSA's disability workloads. Its major programs are Retirement and Survivors Insurance (RSI), Disability Insurance and Supplemental Security Income (SSI). Old-Age (Retirement), Survivors and Disability Insurance (OASDI) are collectively referred to as Social Security. SSA also does work to support other programs and entities, such as the Medicare program at HHS and, in some states, State Supplementation of SSI.

SSA has received unqualified financial statement audit opinions for the last fifteen years. In its latest Performance and Accountability Report, for FY 2008, the Chief Financial Officer noted that SSA received an unqualified opinion on its assertion that SSA's internal control over financial reporting was operating effectively during FY 2008, with no material weaknesses or significant deficiencies. SSA has also received the AGA Certificate of Excellence in Accountability Reporting for ten years, every year since inception of the program.<sup>7</sup>

SSA has implemented a managerial cost accounting system (MCA) with a unified structure for its focused line of programs that collects data from its nationwide network of offices. SSA has had an MCA system agency-wide for about 33 years. It is the most mature system reviewed for this research. Its MCA system, the Cost Analysis System (CAS) was first put in use in 1976. SSA developed it in-house and has continually upgraded it to meet changing needs. SSA routinely uses cost information to manage operations agency-wide. The system meets all legislative and regulatory requirements. The Office of Chief Financial Officer owns the system. A new system, the Managerial Cost Accountability System (MCAS) is in the process of being implemented.

**Cost Accounting System**—The MCA system was home-grown so it could grow as SSA's needs did. It is a mature system and quite complex, based on formulae and algorithms. The system uses a formula-driven method of allocating managers' time based on the workload of those under them, or, if applicable, their time can be assigned to one task. The system does all this automatically. The Cost Analysis System (CAS) is not an activity-based costing system, nor is it based on time and attendance records. Instead it is based on estimates that are adjusted to actual at the end of the year.

Estimates are based on an understanding of the workloads of employees and SSA uses a statistically valid random sampling of what workers are actually working on at a point in time. From the sampling, statistically valid inferences are made for the entire organization regarding workloads and on that basis, the system uses algorithms to allocate costs.

CAS measures costs on a full-cost basis from SSA's nationwide network of offices, even for top level leadership, with the exception of those expenses incurred by other agencies for SSA's benefit, such as certain postretirement costs paid by the Office of Personnel Management (OPM). These are not appropriated to SSA but to OPM (the imputed cost of retirees' benefits). The system integrates data from payroll, work measurement, accounting, and other management information systems, and assigns costs to the specific workloads and later to funding sources. SSA samples the states' disability and welfare services records also. SSA has tracked productivity improvement since 1987. SSA uses MCA information to allocate administrative expenses, as required by law, to SSA trust funds (OASDI); HHS administered funds (e.g. Medicare Health Insurance and Supplemental Medical Insurance); and general funds (e.g. SSI). SSA also uses MCA to facilitate recovery of the full cost for reimbursable activity such as earnings records requests from pension funds and individuals.

Cost accounting as a process is well ingrained into SSA's culture. As a GAO report<sup>8</sup> cited, this "has resulted in routine use of MCA information for management decision making...cost information [is] used for budgeting, resource allocation, and managing operations as well as SNC preparation...SSA uses MCA information to allocate administrative expenses to the Social Security and Medicare trust funds as required by law." MCA data from CAS are also routinely used to:

- Determine unit costs and production rates for various time periods;
- Track workload output, such as transaction processed and pending;
- Measure actual performance against planned and past performance; and
- Assist with budget formulation and execution and the development of the Service Delivery Budget which aligns costs and work years with overarching performance goals in SSA's Strategic Plan.

All staff are familiar with the objectives and uses of cost accounting in SSA. The system can produce cost information automatically for managers. Managers must use it for Cost Benefit Analysis (CBA) or Return on Investment Analysis (ROI). Using cost accounting data is second nature for them. The first question they typically have is, "What does it cost?"

SSA has excellent internal controls and enjoys top-level management support for its financial and cost systems. The tone at the top sets SSA values, philosophy and operating style. SSA MCA policies and procedures are fully documented. SSA ensures data quality through edit checks and variance analysis; routine monitoring and assessment of

performance and financial information; and regular review of financial and feeder systems. The Information Technology Advisory Board reviews financial management changes. Nothing gets done without the board's approval. Managers in various district offices test the assessment of people's workload for accuracy using a statistically valid sample. Field offices divide up people's work load, and then the workloads are weighted by pay grade. Once a week checks are made on what employees are doing. For people not doing case work, supervisory time is allocated based on the work done by the employees they supervise. If area directors do something specific related to a program, their time gets directly distributed to that program. Otherwise, it is distributed in the proportion of the work of the employees. The allocation is all formula-driven (and the formulae are tested and validated regularly). The formulas for allocation are based on the sampling. Sometimes they verify the data by doing a sample count for twelve weeks. The same approach is used on the regional level. If a particular work activity can be directly attributed, it is, otherwise it is allocated as above.

The information is used in preparing the Statement of Net Cost. The payroll numbers go to the accounting system. The workload system feeds into CAS. The accounting and cost analysis systems track the administrative costs of programs by workload and employee production rates.

### *Successes*

On a regular basis you could get a call: "The Senate is considering legislation on some part of an SSA program. How much does it cost?" SSA can tell them. SSA's cost comparisons have a tremendous amount of credibility both in Congress and the Administration. SSA regularly receives clean opinions on both its audited financial statements and on its internal control over financial reporting. It is the only Executive Branch agency to get a clean opinion on its internal control over financial reporting.

The MCA system is a huge labor savings in terms of preparation of testimony for congressional hearings, leadership briefings or auditors. If there is, say, a question concerning RSI, how much for additional claims, SSA can answer immediately.

### *Challenges*

The SSA is the most mature system of the case studies described in this report. The challenges it faces reflect that maturity. The organization has to be situated to be able to adapt to changes; it has to be prepared for political push and pull; and specifically in this environment, it has to be prepared for the additional accountability and transparency requirements such as are exemplified by the requirements of the American Recovery and Reinvestment Act of 2009 (ARRA).

### *Advice*

One must be able to answer the following questions:

- What do you want to measure? (Everything is measurable.)
- What is your business?

# MANAGERIAL COST ACCOUNTING

Figure 7: Cost of Service Report

		ENROUTE	OCEANIC	FLIGHT SERVICE	TERMINAL	TOTAL (same as FYTD TOTAL)	
Level 1 – Facility	ATC Direct Labor	\$1,136,207,225	\$35,680,507	\$17,708,210	\$1,256,278,919	\$2,445,874,861	
	ATC Indirect Labor	\$295,361,250	\$8,281,574	\$4,366,514	\$361,254,572	\$669,263,910	
	ATC Direct Non-Labor	\$7,611,551	\$313,498	\$1,163,090	\$8,803,310	\$17,891,449	
	ATC Indirect Non-Labor	\$1,734,228	-\$18,476	\$98,739	\$3,857,905	\$5,672,396	
	ATC Contract Training	\$37,976,882	\$1,366,605		\$21,659,680	\$61,003,167	
	ATC Academy Training	\$18,535,080	\$534,765		\$28,576,511	\$47,646,356	
	Tech Ops Direct Labor	\$157,504,541	\$2,296,720	\$8,038,403	\$220,957,755	\$388,797,419	
	Tech Ops Direct Non-Labor	\$51,978,066	\$2,686,825	\$3,029,312	\$69,264,651	\$126,958,854	
	Tech Ops DO Indirect	\$116,662,775	\$1,627,924	\$5,514,629	\$165,725,759	\$289,531,087	
	Tech Ops Academy Training	\$19,414,905	\$141,259	\$2,476,054	\$31,220,055	\$53,252,273	
	Telecommunications	\$105,590,688	\$29,821,321	\$40,532,147	\$42,780,050	\$218,724,206	
	Telecommunications Support	\$55,816,758	\$427,928	\$21,425,828	\$22,614,299	\$100,284,813	
	Flight Inspection Services	\$23,887,936	\$50,488	\$139,852	\$193,418,581	\$217,496,857	
	Logistics	\$50,374,654	\$239,182	\$3,118,433	\$40,514,562	\$94,246,831	
	Utilities	\$31,603,426	\$777,348	\$3,093,317	\$40,351,413	\$75,825,504	
	<b>Subtotal</b>	\$2,110,259,965	\$84,227,468	\$110,704,528	\$2,507,278,022	\$4,812,469,983	
Level 2 – Service Unit	ATC Workers' Compensation	\$31,353,290	\$984,296	\$488,816	\$34,656,205	\$67,482,607	
	Tech Ops Workers' Compensation	\$5,448,184	\$81,739	\$271,332	\$7,511,482	\$13,312,737	
	Direct Field Support	\$181,930,741	\$4,248,972	\$6,592,608	\$145,318,679	\$338,091,000	
	Contract Weather	\$9,598,341	\$286,277			\$9,884,618	
	Contract Weather Observations				\$44,168,946	\$44,168,946	
	Contract Tower				\$118,218,924	\$118,218,924	
	Contract Flight Service			\$250,178,135		\$250,178,135	
	DUATS			\$11,618,840		\$11,618,840	
	Contract Maintenance	\$9,604,678	\$134,564	\$2,180,744	\$41,010,681	\$52,930,667	
	Implementation	\$148,075,922	\$446,022	\$9,195,876	\$210,897,371	\$368,615,191	
	Acquisition (non ATO)	\$5,089,860		\$234,511	\$6,003,897	\$11,328,268	
	Acquisition (ATO)	\$606,408,421	\$35,141,267	\$29,870,264	\$659,056,599	\$1,330,476,551	
	Depreciation and Capital Leases	\$509,081,843	\$8,322,390	\$16,754,575	\$552,768,730	\$1,086,927,538	
		<b>Subtotal</b>	\$1,506,591,280	\$49,645,527	\$327,385,701	\$1,819,611,514	\$3,703,234,022
	Level 3 – ATO	ATC System Command Center	\$157,059,988	-\$14	\$7,967	\$91,087,783	\$248,155,724
Atlantic Operations Control Center		\$2,038,340	\$51,016	\$526,387	\$5,449,986	\$8,065,729	
Mid-States Operations Control Center		\$2,256,995	\$6,799	\$590,737	\$4,969,833	\$7,824,364	
Pacific Operations Control Center		\$2,235,817	\$57,661	\$796,619	\$4,608,284	\$7,698,381	
National Network Control Center		\$21,089,422	\$330,029		\$16,179,656	\$37,599,107	
Charting		\$26,715,925		-\$1,860	\$29,287,019	\$56,001,084	
Service Area Indirect		\$67,033,453	\$1,385,440	\$6,018,121	\$79,430,656	\$153,867,670	
Service Unit Indirect		\$122,974,506	\$3,077,507	\$7,346,780	\$110,054,738	\$243,453,531	
ATO Indirect		\$157,884,776	\$4,183,410	\$4,246,355	\$178,948,744	\$345,263,285	
		<b>Subtotal</b>	\$559,289,222	\$9,091,848	\$19,531,106	\$520,016,699	\$1,107,928,875
Level 4 – FAA	FAA Regional Indirect	\$25,035,113	\$530,550	\$1,037,479	\$26,781,188	\$53,384,330	
	FAA Headquarters Indirect	\$174,903,978	\$6,598,127	\$4,794,192	\$189,354,303	\$375,650,601	
	Medical	\$9,047,349	\$284,112		\$10,002,703	\$19,334,164	
	Gain/(Loss)	\$32,375,669		\$1,013,248	\$35,539,483	\$68,928,400	
	Accrued Liabilities	\$267,393,595	\$5,668,185	\$6,419,894	\$302,123,016	\$581,604,689	
		<b>Subtotal</b>	\$508,755,704	\$13,080,974	\$13,264,813	\$563,800,693	\$1,098,902,184
<b>GRAND TOTAL</b>		<b>\$4,684,896,170</b>	<b>\$156,045,817</b>	<b>\$470,886,148</b>	<b>\$5,410,706,928</b>	<b>\$10,722,535,064</b>	

- What service are you delivering?
- What measure can you be measuring to show that you are delivering the service?  
And remember that:
- Everyone can do it.
- There are methodologies to use.
- If you want measurable outcomes, put the requirements in the contract.

## 9. Federal Aviation Administration

The Federal Aviation Administration (FAA) is an operating administration within the Department of Transportation (DoT). FAA's mission, "...is to provide the safest, most efficient aerospace system in the world." With broad authority to enforce safety regulations and conduct oversight of the civil aviation industry, FAA maintains the system's integrity and reliability.

FAA began developing its cost accounting system in 1996, as directed by the Federal Aviation Reauthorization Act of 1996. AIR -21, also called the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, Public Law 106-181, required FAA to implement a cost accounting system. At that time the Departmental Accounting and Financial Information System (DAFIS), a legacy system, was FAA's corporate book of record and would eventually interface cost information to the planned cost accounting system. FAA replaced DAFIS with the implementation of Delphi (Oracle Federal Financials) in FY 2004. AIR-21 required five assessments of eight specific areas covering FAA's methods for calculating and assigning costs to specific users, including whether these methods are appropriate, reasonable and understandable. VISION-100, the Century of Aviation Reauthorization Act (Public Law 108-178, followed AIR-21, expired at the end of September 2007 and did not retain this specific provision. The Office of the Inspector General (OIG) conducted assessments of the FAA Cost Accounting System and Practices as required by AIR-21. The final report (as required under AIR-21) from the OIG was issued in March 2008.

During FY 2006 FAA completed the implementation of the cost accounting system for all its LOBs. In FY 2007, FAA completed the agency-wide implementation of the labor distribution reporting (LDR) system to improve the costing characteristics of approximately \$5.5 billion annual labor costs, FAA's single largest cost element. The CAS team comprises three senior staff in the professional series of system accountant and contracting resources for production and limited development activities. The CAS team is responsible for ensuring the correct and accurate operation of CAS and applying standards outline in SFFAS No. 4. Each LOB is responsible for their LOB's CAS data and reports and ensuring the CAS configuration accurately reflects their business process.

FAA has four LOBs: Air Traffic Organization (ATO); Aviation Safety (AVS); Airports (ARP); and Commercial Space Transportation (AST). FAA's cost accounting system (CAS) provides the Statement of Net Cost by program and goal

and "fully costed" reports for three LOBs and the Regions and Centers (ARC) administrative organization. Cost information from CAS is used as part of the analysis, findings, and recommendations when establishing overhead rates, reimbursable rates, and capitalization burdening. CAS provides more than 40 standard reports via a Business Objects reporting tool. The reports are provided quarterly and annually. Each LOB has ad hoc access to detail CAS information. ATO was the first to implement CAS and has fully implemented all four service areas: Enroute, Oceanic, Flight Services and Terminal. The primary fully allocated cost report ATO uses is the Cost of Service Report which shows how costs are allocated and assigned. One of the uses of the report is in the costing of overflight fees, which FAA is authorized to charge for commercial and general aviation aircraft traveling over US airspace (but not taking off or landing in the US). *Figure 7* shows a Cost of Service Report for ATO.

Since Fiscal Year (FY) 2005, the FAA has included a cost control target among the Flight Plan goals tracked each month. The alignment of the FAA's costs with its four strategic goal areas is captured in the Cost Accounting System (CAS). Projects entered into the CAS are linked to one or more goals and the percentage of funds that support each goal is identified. At the end of each fiscal year, the total net costs for FAA's four lines of business and for its combined staff offices and other programs are allocated among each of the agency's goals: Increased Safety; Greater Capacity; International Leadership; and Organizational Excellence.

**Cost Accounting System**—Is a repository of FAA's cost information and is reconciled quarterly to the agency accounting system (G/L) prior to initiating the cost allocation processing and report generation. CAS has three components: 1) Front End Control System (FECS), 2) PeopleSoft Project Accounting module (PS), and 3) Business Objects reporting tool known as Reporting and Analysis Distribution system (RADS). Corporate financial cost information interfaces to CAS by way of the FECS. FECS ensures the data is configured with the necessary attributes for allocations and formats non-financial or operational data from various sources such as Contract Labor Hours and Workers Compensation Information System. These non-financial and financial data provides the basis records for cost allocations. PS provides the core process where detail cost records are grouped into cost pools, basis records, and target for allocation steps. There are approximately 550 allocation steps run each quarter. As the allocation steps are executed costs are "driven" toward cost objects. Following the completion of the PS allocation process, cost data is moved to RADS, a data warehouse using the Business Objects reporting tool.

### Successes

- CAS produces an agency Statement of Net Cost by line of business and goal.
- CAS supports fee setting. Overflight fees are established and periodically revised.

# MANAGERIAL COST ACCOUNTING

- CAS information has been used to support congressional requests for additional fee setting authority.
- CAS information is used as a basis for business case analysis, repair or replace decisions in capital investments, and comparative information used when comparing FAA to similar international organizations.

## *Challenges*

One of the challenges with the cost accounting system is that users cannot easily drill down summary report data to detail source data in the financial system. After allocations are run, the data is moved to a data warehouse. Adding to the complexity is performing analysis with high volume of transactions.

Agency cost accounting requirements, gap analysis and process improvements. Identifying, developing, and documenting cost information needs within the agency and where CAS does/does not meet the needs. And the iterative outreach activities needed to keep abreast of changing needs. Inherent in this is agreement is an acceptance of cost standards, application, training, reporting, etc.

Ownership, acceptance, and use of cost information—cost information is critical to specialized areas within the agency, i.e., labor cost projections, reimbursables, capitalization, strategic and tactical concerns, etc., but is not an operational tool.

Tie agency cost information and use back to the areas outlined in SFFAS No. 4: 1) Budgeting and Cost Control, 2) Performance Measurement, 3) Determining Reimbursements and Setting Fees and Prices, 4) Program Evaluations, and 5) Economic Choice Decisions.

## **10. Federal Transit Administration, Department of Transportation**

FTA is one of the operating administrations within the U.S. Department of Transportation (DOT), with 517 employees located in Washington, D.C. and 10 regional offices across the nation. FTA provides stewardship of combined formula and discretionary programs totaling more than \$10 billion in annual funding to support a variety of locally planned, constructed and operated public transportation systems throughout the U.S., including buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways and people movers.

FTA's Managerial Cost Accounting (MCA) system has been fully operational for 2.5 years. Planning for the system began in 2004. The Office of Budget and Policy owns the MCA system. The champion for the system is the CFO who has provided continuous support. FTA uses, or intends to use, the MCA system for budgeting and cost control, performance measurement, program evaluations and making economic decisions for management challenges such as office resource allocations. It is tied to the Statement of Net Cost. FTA has a clear statement of objectives and uses of cost accounting that is available to everyone. The strategy for achieving the objectives was shared with all levels of staff throughout the organization in the initial development and the same strategy will be used in the next upgrade.

FTA uses the MCA system to support the financial statements and link the budget to the financial performance measures and the strategic goals. The two are highly correlated. Budgeting and cost analysis are two sides of the same coin. What are we spending time on? If processes are expanded will costs also expand proportionately? What are the labor implications of increasing funding for discretionary programs over formula programs? The MCA information helps answer questions like those. FTA wants to take this analysis further with performance-based management and tie agency costs to societal outcomes.

**Cost Accounting System**—FTA uses a system called "Metify" by Business Objects. The MCA system is all formula driven. If any activity can be directly attributed, it is, otherwise it is allocated using the formulas. They record their labor distribution reporting (LDR) in a timekeeping system called CASTLE. The individual inputs his/her hours by tasks (activities) and projects (agency program areas). Online help includes a task dictionary with definitions and online CASTLE/LDR Training. The MCA system interfaces with the financial system called Delphi. The MCA system information is provided to managers on request. They cannot get it automatically (number of licenses are a cost issue). The system draws data from employee entry of labor hours, expense reporting (Delphi) obligation reporting (TEAM). After the data is prepared in a database program, it is entered into a cost accounting software that fully cost-accounts all expenses and labor hours to DOT's strategic goals. Analysis of labor hours is provided upon request to various offices within the agency. They use full costing and allocate the time of the staff at the agency administrator level and other leadership positions to programs as needed. All FTA employees, including leadership, participate in the MCA system. They use direct costing (an ABC-based system). Online timesheets are completed by employees and turned in biweekly.

**Agency Culture, Management Attitudes and Core Competencies**—MCA is accepted but not fully embraced by the organization. The MCA does have support from most parts of senior management but not all.

FTA thinks of the MCA as meeting a compliance obligation, with the additional need of providing value-added solutions to managers. They use this as a selling point. In order to get people to embrace MCA you have to explain why you are doing it and how it can help the organization. FTA has focused on simplicity by keeping the task list to roughly 170 tasks. Users need simplicity. Managers need to understand what they are doing with the system. The FTA regions like the system and use it more than FTA head quarters offices.

**Staffing**—They have a small staff of one with two executive positions in advisory roles. It is felt strongly that the person responsible for the system cannot be someone with only accounting expertise, but also an understanding of budgetary, performance and strategic considerations. An additional person to analyze the data would be helpful. It is hard to balance analytical and administrative duties, not to speak of other assignments within the budget office.

# IN THE FEDERAL GOVERNMENT

**Use of Teams and Committees**—FTA used teams and individual interviews to make policy decisions, develop the details of the cost accounting process, and to obtain and disseminate information. The teams and interviews included different levels of staff. Essentially it comprised all the subject matter experts at the agency. They interviewed them all to use their input in developing the system. There was one person common to all the teams and the teams included user level staff. The teams had clearly defined objectives. One lesson learned is that follow-up with individuals should be thorough.

**Project Implementation Practices**—FTA found that pilot testing was valuable to get the “kinks” out before the system went live. Each step to a report has control procedures to ensure the overall reliability of the system. It does take much time and effort to make sure the data is accurate in the system. They want to go beyond compliance and integrate MCA into performance-based reporting and have participated in another AGA CPAG Research Project<sup>9</sup> to develop a performance-based statement that matches cost against performance.

Communication is critical. In developing the system, FTA interviewed system staff and asked for feedback to help identify user needs. They did one-on-one consultations to share agency guidance, and held training sessions. They did the training during the pilot testing period before going live. FTA will communicate through e-mail the importance of using the new ARRA program codes to track the investment of FTA labor hours into one of the president’s main priorities. The implementation did take some time and the interim period was useful for experimentation purposes. Results were somewhat mixed in changing the mindset of management, however.

The auditors were involved in development of the system. They helped the Office of Budget and Policy articulate process controls for the MCA system.

Cost information is not used to evaluate managers, but managers are rewarded for cost-effective approaches to problem-solving. The system periodically gets reviewed to ensure that it is responsive to current needs of the organization. Just recently FTA added program codes for the ARRA. They have and are still in the process of communicating the value of this to employees.

## **Successes**

- Providing labor data in minutes that would in the past have sometimes taken weeks. For example, the FTA legal office has reported information on the number of hours spent on Freedom of Information Act (FOIA) requests. Based on what we were told, this used to take as much as two weeks in the past to obtain by asking all of the lawyers to estimate their FOIA-related hours for the year. We can do a simple data run and respond in minutes (and the information is probably much more accurate since it comes from information they are providing every pay period rather than a year’s worth of estimation after the fact). The value of this example is tempered by the participation rate of the legal office at the time.

- Providing the finance office with the Statement of Net Cost by strategic goal.
- Satisfying all OST and GAO audits on FTA managerial cost accounting.

## **Challenges**

- Linking the value of MCA to managers’ day-to-day decision-making.
- Working with managers to help them understand that their employees’ participation rate greatly impacts the quality of the data from their own office.
- Linking task hours to outcomes. This is where the linkage to performance-based management helps.

## **Advice**

- Do not include so many tasks to report on to the point of overkill for the employee entering labor hours. Try to stick to several process areas and a reasonable number of task areas within each process area.
- Impress upon each office within the agency the importance of participation levels for MCA accuracy.
- Ensure employees that you are not “big brother” or trying to critique their individual job performance.

## **Characteristics of the Case Studies**

We looked for similar characteristics in the entities that participated in the study. In some cases, there are differences because the missions are different. For example, not all entities are required or even permitted to do cost recovery. And not all entities answered all the questions in the questionnaire. However, we developed a matrix that shows how they are using the information generated by the managerial cost accounting system. We also included for comparison purposes information about the type of MCA system used and the maturity of the system. *Figure 8* shows this matrix.

## **Findings**

A comparison of the case studies shows more similarities than differences. They have all to a greater or lesser degree allowed managers to use the system; have used the system for purposes other than labor distribution cost reporting; and enjoy the support of top management. Agencies with newer systems have concerns different than those of agencies with more mature systems, as they have had time to work out solutions to issues that have arisen.

Some have concerns about lower level management buy-in and the accuracy and reliability of the data input into the system. In some cases, the MCA team members spend much of their time reviewing the data input and making sure it is reliable. Some of the agencies avoided this problem and ensured data reliability by tying the performance assessments of higher level managers to the information produced by the system. The higher-level managers then have an incentive to make sure the people working for them input the data correctly.

# MANAGERIAL COST ACCOUNTING

Some agencies are unsure of how to get field managers to use the information. One of the reasons may be that they are not getting the information frequently enough. If managers get the information monthly or can access the information on demand, they use it. Some worry about the complexity of the system, the number of activities, for example, in that it affects ease of use. Everyone realizes that training and education are important motivators to get managers to use the system. Some have used online manuals to explain why the organization is using managerial cost accounting and what the benefits are. To increase managers' use of the information at BLM, for example, the agency requires staff to discuss how they use the system at an all-hands meeting. If they know they will be called upon to speak in front of everybody, they get on board and soon realize that there are benefits. Other agencies tap the enthusiasm of some managers and make them advocates for the system.

The uses of MCA are diverse and require a change in management attitudes and practices. MCA provides new measures of resource usage, where success can be measured by the ability to execute a project using the most cost-effective means. Quality cost information can inspire new users to question high costs and consider alternative ways to accomplish a goal, and this is especially true when managers are accountable for their use of resources. We asked questions about whether managers were evaluated based on cost information and whether managers are rewarded for cost-effective problem solving. This is a two-edged sword. If people think they are going to be evaluated they may not want to work with the team to get reliable information in the system. They then can question the reliability of the data. But unless they are held accountable, the data may not be properly input. One way out seems to be to get the leadership involved through performance agreements. Several entities had done this and it led to the directors and Senior Executive Service personnel making sure the people who worked for them got good information into the system.

Agencies with mature systems have a different set of concerns. User needs for managerial cost accounting change over time. Continual refinement of the system is necessary, and staff working with mature systems are well aware of this and accept changes on an ongoing basis. USPTO, for example, used a particularly well thought-out approach, with business teams coming up with the requests for changes and the Steering Committee approving or denying them.

How the cost information is used has a tremendous impact on the success of the system. Managers will use the information if they get it regularly and frequently. Many of the agencies included in this paper were originally mandated to set up an MCA system because of a legislative requirement. In such cases, the system will continue to be used for as long as the legislative requirement applies, but may not last afterward if it has not shown its usefulness to the organization. If managers get the information as frequently as monthly or can access the information on demand, they use it. The easier the access to the information, the more it is used.

In an article by Tom Pryor called "Improvement Keepers" on the ICMA website,<sup>10</sup> there is a quotation that is pertinent to any managerial cost accounting system. "Starting Activity Based Costing is easy. Stopping ABC is even easier. Keeping an ABC system running is apparently not easy but worthwhile." The writer went on to say that ABC is often abandoned if it is used solely to allocate cost. It should be used to both allocate and account for performance. Activities costing without accountability measures tend to fail. That is borne out by what this research found. Tom Pryor quoted Steve Porter of the Patent and Trademark Office, "I guess the single biggest success factor that I see is that ABC system data has to be used in the budgeting process. If it is not, the business lines will eventually ask themselves, why am I going to all this trouble? Migrating from ABC to ABB is an excellent way of increasing accountability in your organization."

**Figure 8: How the Case Studies are Using their MCA Information**

How the Case Studies are Using their MCA Information										
	USPTO	FSA	BLM	FWS	MMS	NBC	NRC	SSA	FAA	FTA
Kind of MCA system adopted	ABC	ABC	ABC	ABC	ABC	ABC	ABC	Other	ABC	ABC
Mature MCA System (ten or more years)	Yes	Yes	Yes					Yes		
Entity uses MCA information for:										
Budget formulation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cost control		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance measurement/reporting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Informing decisions about reimbursements and fee setting	Yes		Yes	starting	Yes	Yes	Yes	Yes	Yes	Yes
Program Evaluations					Yes	Yes	Yes	Yes	Yes	
Help with making economic choices/business decisions	Yes	Yes		Yes		Yes	Yes	Yes	Yes	
Improve contract negotiations and contract oversight		Yes							Yes	
Cost Recovery Analysis			Yes		Yes		Yes			
Reward Managers for cost effective approaches			Yes	Yes		Yes	Yes			Yes

# IN THE FEDERAL GOVERNMENT

For the continued success of an MCA implementation, the following are essential:

- Active top management support, not just passive support or acceptance.
- The system has to be easy for the manager to use.
- The data should be accessible to the managers who need it.
- The information needs to be used for more than just labor costs distribution.
- The more frequently the information can be made available to managers, the better.
- The best way to get buy-in and ensure success is to tie the cost data to program performance and budgetary data and get high-level managers involved through performance agreements.
- A good way to get buy-in is to use enthusiastic users as advocates for the system.
- Communication and training make the difference in the acceptance and use of the system.
- Use the data for budget justification, for performance agreements with SES-ers, and for field office comparisons, any way that works, but make it useful and have it seen to be useful.

## *Recommendations*

- Tie the cost information produced by the system to performance and budgetary information to make it useful.
- Make sure that you have top level support—active support—not just passive support.
- Make sure you have a champion, a leader who supports the concept and keeps employee enthusiasm high, for the day-to-day work both in development and in sustaining the application once it is up and running.
- Have a written, clear, organization-wide statement defining the objectives and uses of MCA and have it available to everyone. Make sure everyone knows about it.
- In the development phase, make sure the teams or committees have a charter or at least clearly written objectives to keep them on track.
- Communicate, communicate, communicate.
- Communication is a two-way process. Listen to program managers and other users and try to address their needs.
- Reach out to the field offices. Provide training. Give explanations about cost accounting and what it can do for them.
- Continually monitor for accuracy and reliability of the data input into the system.
- Try to ensure that leaders want the data input to be accurate. Then the managers will do what the leaders want.
- Good cost accountants require a slightly different skill set than financial accountants. Good quality cost accountants need: excellent analytical skills, outstanding communication skills, and a good understanding of the organization's activities and the processes used to accomplish

those activities. Make sure your team has the right skill set. You may need a mix of skills, such as system accountants and budget analysts as well as cost accountants. FTA staff felt strongly that the person responsible for the system cannot be someone with only accounting expertise, but also an understanding of budgetary, performance and strategic considerations.

- Provide the information or make the information accessible as frequently as possible. Monthly is better than quarterly. Once people have the information and are used to getting it regularly, they will use it.
- Make the system easy to use.

## *Pitfalls to Avoid*

Additional entities were contacted in the course of this research. Their experiences highlight pitfalls to avoid.

In one agency, a decision had been made at the highest level to implement a business transformation initiative, an enterprise-wide system that should include a project costing system. However, top management provided little support and managers could see no benefits in developing an MCA system. Their attitude was that if a decision or information was needed, if it was needed immediately, then one made an estimate; if, on the other hand, accuracy was needed, then it was a going to take a long time to get the information. This highlights one problem with an MCA implementation. A great deal of communication and training is needed at the beginning to explain to managers and everyone in the organization that an MCA system provides benefits. These benefits have to be spelled out for them in the initial stages. The FWS' online Frequently Asked Questions (FAQs) do a nice job of providing this kind of information. A good explanation of what is in it for them can act as an incentive for managers to provide good input to the system.

The other agency had used an MCA system for years, but all that it was accomplishing was labor distribution. In this case, top management support and management buy-in appeared to be missing. The MCA system did full costing. Its staffing was adequate. The system automatically produced cost information for managers. Activity codes were updated after an annual review each new fiscal year. The organization did not use the cost accounting information to evaluate managers or reward managers for cost-effective solutions to problems. It also lacked a clearly defined statement of objectives and uses of cost accounting.

Cost accounting was viewed as a liability rather than a management tool. The tone at the top was described as, "cost accounting is just something accountants want done." It was not viewed as providing management information for better decision-making. The champion saw the challenges as getting management buy-in, getting a better system, and having accountability for results. The champion's advice was "don't do it unless top management issues a statement supporting the concept and holds managers accountable for both the quality of the data and the use of the information for improving management."

# MANAGERIAL COST ACCOUNTING

## Conclusion

The nine case studies represent different stages of implementation of MCA. All have achieved success with implementing managerial cost accounting and the organizations are benefiting. The best advice for an organization considering setting up such a system comes from the Social Security Administration.

*Everything is measurable.*

*Everyone can do it.*

*There are methodologies to use.*

Answer the following questions before you start:

- What do you want to measure?
- What is your business?
- What service are you delivering?
- What measure can you use to show that you are delivering the service?

*Then just do it and start to reap the benefits.*

# APPENDICES A&B

## Appendix A: Glossary

<b>ABC</b>	Activity Based Costing
<b>ABC/M</b>	Activity Based Costing/Management
<b>ABIS</b>	Activity Based Information System
<b>ABMI</b>	Activity Based Management Information
<b>BIA</b>	Bureau of Indian Affairs
<b>BLM</b>	Bureau of Land Management
<b>BOC</b>	Budget Object Classification
<b>CFO Act</b>	Chief Financial Officers Act
<b>CNO</b>	California/Nevada Operations Office
<b>COTS</b>	Commercial Off The Shelf (software)
<b>DoD</b>	Department of Defense
<b>EA</b>	Environmental Assessment
<b>EDW</b>	Electronic Data Warehouse
<b>EEOC</b>	Equal Employment Opportunity Commission
<b>EIS</b>	Environmental Impact Statement
<b>FAA</b>	Federal Aviation Administration
<b>FAQ</b>	Frequently Asked Questions
<b>FASAB</b>	Federal Accounting Standards Advisory Board
<b>FOIA</b>	Freedom of Information Act
<b>FSA</b>	Federal Student Aid
<b>FTA</b>	Federal Transit Administration
<b>FWS</b>	Fish and Wildlife Service
<b>GAO</b>	Government Accountability Office
<b>GMRA</b>	Government Management and Reform Act
<b>GPRA</b>	Government Performance and Results Act
<b>HHS</b>	U.S. Department of Health and Human Services
<b>HQ</b>	Headquarters
<b>MCA</b>	Managerial Cost Accounting
<b>MMS</b>	Minerals Management Service
<b>NBC</b>	National Business Center
<b>NRC</b>	Nuclear Regulatory Commission
<b>OCFO</b>	Office of the Chief Financial Officer
<b>OIG</b>	Office of Inspector General
<b>OMB</b>	Office of Management and Budget
<b>PALM</b>	Patent Application Location and Monitoring
<b>SFFAS</b>	Statement of Federal Financial Accounting Standards
<b>SSA</b>	Social Security Administration
<b>TQM</b>	Total Quality Management
<b>TRAM</b>	Trademark Reporting and Monitoring
<b>USPTO</b>	U.S. Patent and Trademark Office

## Appendix B: Helpful References

### *Government Accountability Office Reports*

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices Implementation and Use Vary Widely across 10 Federal Agencies*, United States Government Accountability Office, July 2007, GAO-07-679

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices: Department of the Interior*, United States Government Accountability Office, May 24, 2007, GAO-07-298R

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices: Departments of Agriculture and Housing and Urban Development*, United States Government Accountability Office, September 2006, GAO-06-1002R

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices, Departments of Health and Human Services and Social Security Administration*, United States Government Accountability Office, April 18, 2006, GAO-06-599R

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices, Departments of Education, Transportation and the Treasury*, United States Government Accountability Office, December 19, 2005, GAO-06-301R

GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices, Leadership and Internal Controls are Key to Successful Implementation*, United States Government Accountability Office, December 19, 2005, GAO-05-1013R

### **Other**

Office of the Chief Financial Officer, *U.S. Department of Agriculture, Managerial Cost Accounting Survey Results*, May 15, 2008

Office of Inspector General, *Nuclear Regulatory Commission, Special Evaluation Report Best Practices in Implementing Managerial Cost Accounting*, OIG/OOE-06, April 24, 2000

# APPENDIX C

## Appendix C

### Cost Accounting System Questionnaire for AGA CPAG Research Project

#### Delivering Information that Program Managers Can Use Every Day! How Costing Information Can Help Program Managers in Program Planning, Control and Risk Assessment

AGA is conducting a research study on how managerial cost accounting systems can produce information that can be used for effective decision making. The study is sponsored by MIL Corp and the primary researcher is Anna D. Gowans Miller, AGA's Director of Research. There are existing federal requirements for federal agencies to prepare MCA information. Statement of Federal Financial Accounting Standards (SFFAS) No. 4 gives guidance on the kind of systems to develop and use. SFFAS #4 has been around for years but many agencies have still not fully utilized MCA. This research is intended to encourage those agencies to develop systems by highlighting the strategies and approaches used by agencies that have had success with setting up and using MCA systems. Sharing their successes and challenges and describing how cost information really helps them in their day-to-day activities, it is hoped, will go a long way towards encouraging other agencies to do the same. All responses remain confidential unless the entity specifically gives permission for comments to be included in the final research report.

#### DEMOGRAPHICS

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Office: \_\_\_\_\_

Organization: \_\_\_\_\_

Agency/Department: \_\_\_\_\_

Phone/Email address: \_\_\_\_\_

	YES	NO
1. a. Have you implemented managerial cost accounting (MCA) in any entity within your organization?	___	___
b. If yes, please describe the entity or entities.		
c. How many years have you had the system (or year you started)?	___	___
d. If, no, are you planning to implement it?	___	___
	YES	NO
2. a. Does your organization have a "champion" for MCA? (a leader who supports the concept and can keep employee enthusiasm high)?	___	___
b. If yes, what is his or her title and function?		
3. Has your organization developed an organization-wide statement? clearly defining the objectives and uses of cost accounting?	___	___
4. If yes, does it include the following? Please check all that apply. If any are not applicable, please explain why.	YES	NO
Budgeting and cost control;	___	___
Performance measurement;	___	___
Determining reimbursements and setting fees and prices;	___	___
Program evaluations; and	___	___
Making economic choice decisions.	___	___

# APPENDIX C

- |  | YES   | NO    |
|--|-------|-------|
| 5. Was the strategy for achieving the objectives shared with all levels of staff throughout the organization during the MCA system development or upgrade? | _____ | _____ |
| 6. If yes, please describe the communications process (during initial implementation or subsequent upgrade).   |       |       |

## Cost Accounting System

- |   |       |       |
|---|-------|-------|
| 7. a. Have you developed an MCA system that automatically produces cost information for managers? | _____ | _____ |
| b. Please describe the system you use.  |       |       |
| 8. If you answered yes to 7 a. above, please answer the following:                                |       |       |
| a. Who is responsible for the data being put into the system?                                     |       |       |
| b. Who owns the system?   |       |       |
| c. Who is responsible for the accuracy and/or reliability of the data in the system?              |       |       |
| 9. If you answered no to 7 a. above, please describe the system you have.                         |       |       |

## Cost Allocation

- |   | YES                      | NO    |
|---|--------------------------|-------|
| 10. Do you use full costing?  | _____                    | _____ |
| 11. If yes, is a certain portion of the time of the Office of the Secretary and other leadership positions allocated to programs?   | _____                    | _____ |
| 12. How do you calculate administrative costs for overhead?   |                          |       |
| 13. What kind of allocation method do you use?<br>(Examples could be: direct costing, standard costing, or activity based costing)  |                          |       |
| 14. In organizations where service delivery is important, a large part of the costs of programs may be labor and associated benefits costs. How do you ensure the accuracy of the costs associated with personnel time? Please check what you use. (Labor data reporting can be, for example, on paper timesheets and entered later or input directly into the automated system.) |                          |       |
| a. Labor data reporting (LDR) completed by employee and turned in weekly  | <input type="checkbox"/> |       |
| b. LDR completed by employee and turned in biweekly   | <input type="checkbox"/> |       |
| c. LDR completed by employee and turned in monthly  | <input type="checkbox"/> |       |
| d. Periodic estimates of time spent on multiple program activities completed by employee  | <input type="checkbox"/> |       |
| e. Periodic evaluations completed by someone other than the employee  | <input type="checkbox"/> |       |
| f. Other  | <input type="checkbox"/> |       |

# APPENDIX C

## AGENCY CULTURE, MANAGEMENT ATTITUDES AND CORE COMPETENCIES

An agency's culture plays an important role in ensuring success of any cost accounting project. Some agencies emphasize and practice good financial management, intending to set an example that other agencies can emulate. These agencies have taken the lead in implementing managerial cost accounting. A culture of practicing good financial management is influenced by senior management attitudes and staffing capabilities.

15. The tone at the top is very important in ensuring that new approaches become institutionalized and accepted. How would you describe the culture, management attitudes and core competencies relating to cost accounting in your organization?

- |   | YES                              | NO   |
|---|----------------------------------|------|
| 16. Do you enjoy support from senior management in your attempts to implement cost accounting in your organization?<br>Have not implemented cost accounting in the organization<br>(please check if applicable) | ____<br><input type="checkbox"/> | ____ |

### Please Evaluate Your Staffing

17. Good cost accountants require a slightly different skill set than financial accountants: Good quality cost accountants need: Excellent analytical skills, outstanding communication skills, and a good understanding of the organization's activities and the processes used to accomplish those activities. Please answer yes or no to the following questions:

- |  | YES  | NO   |
|--|------|------|
| a. We have enough excellent cost accountants to accomplish what we need to achieve | ____ | ____ |
| b. We do not have enough skilled cost accountants                                  | ____ | ____ |
| c. We have no cost accountants   | ____ | ____ |

## PROJECT IMPLEMENTATION PRACTICES

Certain practices have been associated with success in developing and implementing managerial cost accounting. These are the use of teams or committees, pilot testing, communication and an interim period and OIG involvement. Have you used any of the following? Please check all that apply.

### Teams/Committees

- |   | YES  | NO   |
|---|------|------|
| 18. Did you use a team or committee in developing and implementing your cost accounting system? | ____ | ____ |
| a. Did you use one to make policy decisions?  | ____ | ____ |
| b. Did you use one for developing the details of the cost accounting process?                   | ____ | ____ |
| c. Did you use one to obtain and disseminate information?                                       | ____ | ____ |
| 19. a. Did the teams include different levels of staff?   | ____ | ____ |
| b. Was one person common to all teams?  | ____ | ____ |
| c. Did the teams include user level staff like project managers?                                | ____ | ____ |

# APPENDIX C

20. Did the teams or committees have clearly defined objectives or a team charter? YES NO  
\_\_\_\_\_ \_\_\_\_\_

21. Please describe any lessons learned or challenges met in the use of teams/committees.

## Pilot Testing

22. Did you start with a pilot to test the concept? YES NO  
\_\_\_\_\_ \_\_\_\_\_

23. If yes, did it help in implementation or cause problems? Please describe.

## Communication

24. Communication is crucial and it should be two-way. Please answer the following:

- a. Did you have clearly defined agency guidance? \_\_\_\_\_ \_\_\_\_\_
- b. Did you have frequent outreach to support the promulgated guidance? \_\_\_\_\_ \_\_\_\_\_
- c. Did you have training sessions to educate as many personnel as possible? \_\_\_\_\_ \_\_\_\_\_
- d. Did you ask for feedback to help identify potential needs of managers? \_\_\_\_\_ \_\_\_\_\_
- e. When did you do the training?

## Interim Period

If the implementation takes a lot of time, some work can be done while the system is being developed. The process to change the mindset of management takes time and participation during the interim period helps make that transition.

25. a. Did you use an interim period for experimentation? YES NO  
b. Did it help change the mindset of management? \_\_\_\_\_ \_\_\_\_\_

## Auditor Involvement

Auditors if they are willing to, can make valuable contributions to the development of MCA systems. They can review methodologies to be used for cost accounting and give valuable advice. They can maintain their independence by making sure that auditors participating in the teams do not subsequently audit those processes developed.

26. Was your OIG or internal audit shop involved in the development and implementation process? YES NO  
\_\_\_\_\_ \_\_\_\_\_

27. If yes, please describe the benefits or drawbacks of the involvement.

# APPENDIX C

## COMMITMENT TO THE PROCESS

The uses of MCA are diverse and require a change in management attitudes and practices. MCA provides new measures of resource usage, where success can be measured by the ability to execute a project using the most cost-effective means. Quality cost information can inspire new users to question high costs and consider alternative ways to accomplish a goal. This is especially true when managers are accountable for their use of resources. User needs for managerial cost accounting change over time. For example, there may be a new need for improved MCA systems if new programs under the Recovery Act are to be evaluated as to their success.

- |  | YES   | NO    |
|--|-------|-------|
| 28. Please answer the following:   |       |       |
| a. Do you use cost information to evaluate managers?   | _____ | _____ |
| b. Do you reward managers for cost-effective approaches to problem solving?  | _____ | _____ |
| c. If yes, please describe:  |       |       |
| 29. a. Do you periodically review your system to make sure it is responsive to your organizations' current needs?  | _____ | _____ |
| b. When was the last time you did such a review and what was the result?   |       |       |
| 30. Please describe:   |       |       |
| a. Your three greatest success stories related to the use of MCA for effective decision making.                    |       |       |
| b. Your three greatest challenges in making MCA information useful to managers.                                    |       |       |
| c. The three most important lessons learned that you would share with an agency who is just starting out with MCA. |       |       |

# END NOTES

## End Notes

1. Clif Williams and Ward Melhuish, "Is ABC Destined for Success or Failure in the Federal Government?" *Public Budgeting and Finance*, Summer 1999, 22-36.
2. *Best Practices in Implementing Managerial Cost Accounting*, NRC OIG/00E-06, April 24, 2000.
3. Patent Application Location and Monitoring and Trademark Reporting and Monitoring, systems used by patent and trademark executives within PTO.
4. Amendments to the Higher Education Act of 1965 designated FSA a performance-based organization (PBO). PBOs were part of the effort to cut red-tape and improve performance, as envisioned by Vice President Gore in his National Performance Review initiative.
5. *The Bureau of Land Management's Performance and Accountability Report for Fiscal Year 2007*, pp. 19-20.
6. Capital Asset Plan and Business Case Summary, one of the requirements of OMB Circular No. A-11, Part 7, *Planning, Budgeting, Acquisition and Management of Capital Assets*, Executive Office of the President Office of Management and Budget, June 2008.
7. *SSA's FY 2008 Performance and Accountability Report*.
8. GAO Report to Congressional Requesters, *Managerial Cost Accounting Practices, Department of Health and Human Services and Social Security Administration*, United States Government Accountability Office, April 18, 2006, GAO-06-599R.
9. *Performance Based Management*, AGA CPAG Research Report No, 20, April 2008.
10. [www.icms.net](http://www.icms.net), and [www.icms.net/improvement\\_keepers.htm](http://www.icms.net/improvement_keepers.htm).





# AGA CPAG Research Reports Previously Published

- No. 1, March 2005:** *Audit Federal Financial Controls: Sooner Rather than Later?*
- No. 2, July 2005:** *Financial Management Shared Services: A Guide for Federal Users*
- No. 3, November 2005:** *Trends in Technology*
- No. 4, April 2006:** *The Federal Purchase Card: Use, Policy and Practice*
- No. 5, June 2006:** *Challenges in Performance Auditing: How a State Auditor with Intriguing New Performance Authority is Meeting Them*
- No. 6, June 2006:** *PAR—The Report We Hate to Love*
- No. 7, February 2007:** *The State Purchase Card: Uses, Policies and Best Practices*
- No. 8, March 2007:** *Federal Real Property Asset Management*
- No. 9, May 2007:** *Should State and Local Governments Strengthen Financial Controls by Applying SOX-Like Requirements?*
- No. 10, April 2007:** *Process-Based Financial Reporting*
- No. 11, May 2007:** *The State Travel Card —Uses, Policies and Best Practices*
- No. 12, June 2007:** *Trends in Technology —2007 Review*
- No. 13, June 2007:** *The Federal Travel Card —Uses, Policies and Best Practices*
- No. 14, January 2008:** *21st Century Financial Managers—A New Mix of Skills and Educational Levels?*
- No. 15, July 2008:** *SAS 70 Reports: Are they Useful and Can They Be Improved?*
- No. 16, Sept. 2008:** *XBRL and Public Sector Financial Reporting: Standardized Business Reporting: The Oregon CAFR Project*
- No. 17, Nov. 2008:** *Characteristics of Effective Audit Committees in Federal, State and Local Governments*
- No. 18, Jan. 2009:** *Grants Management: How XBRL Can Help*
- No. 19, Feb. 2009:** *Procuring Audit Services in Government: A Practical Guide to Making the Right Decision*
- No. 20, March 2009:** *Performance-Based Management*
- No. 21, June 2009:** *Trends in Technology —2009 Review*



*Advancing  
Government  
Accountability*

**Association  
of Government  
Accountants**

**2208 Mount Vernon Avenue  
Alexandria, VA 22301**

**PH: 703.684.6931  
TF: 800.AGA.7211  
FX: 703.548.9367**

**[www.agacgfm.org](http://www.agacgfm.org)  
[agamembers@agacgfm.org](mailto:agamembers@agacgfm.org)**