



*Meeting 21st  
Century  
Information  
Technology  
Challenges: An  
Intergovernmental  
Roadmap*

AGA Partnership for Intergovernmental  
Management and Accountability

February 2009

# Meeting 21<sup>st</sup> Century Information Technology Challenges: An Intergovernmental Roadmap

## Case Studies Relating to 2 CFR Part 225 Cost Principles for State, Local, and Indian Tribal Governments (2 CFR Part 225)

### Purpose Statement

State governments, in partnership with federal agencies, deliver and support a host of federally funded programs that enhance the quality of life for our citizens. All of these programs are enabled by state information technology (IT) solutions and services. For nearly a decade, states have been optimizing these IT investments through consolidation strategies and leveraging common services to be more efficient and cost effective. Currently, federal regulations on cost principles do not acknowledge this evolution in state IT business models. Clarity, consistent interpretation and flexibility in the use of federal funds for IT acquisition, operation and delivery of enterprise services is lacking. Through case study illustrations, the purpose of this report is to outline the challenges posed by current federal cost allocation regulations and policies and to recommend reforms and alternative approaches.

### Introduction

State and local governments rely heavily on the “digital infrastructure” (the critical information and communications technology infrastructure) to run government. This “invisible” infrastructure is now part of the fabric of government service delivery that supports state and local programs, enables effective and efficient services, and supports our economy. In addition, this infrastructure is the basis for our 21<sup>st</sup> century economy and allows states to deliver service 24 hours a day seven days a week.

This evolving and more sophisticated digital infrastructure supports the lifeblood of state government - the efficient and effective movement of information. An expanding portfolio of online services to meet the expectations of the public is now the norm in state government. State portals offer hundreds of online services for residents and businesses. Governors and other state leaders are now more interested in measuring, monitoring and managing performance – this requires new ways of collecting, sharing

and analyzing digital data. Information management - especially across organizational boundaries, the silos of agencies and other levels of government—is now a necessity.

The majority of state enterprise IT agencies are structured in a similar fashion and operate as internal service providers to state agencies and other public entities on a chargeback basis, user fee or comparable model of delivering services. The agencies are “customers” that purchase data center, network, e-mail or voice services under a published rate or pro-rated assessment method. These services are often purchased with federal funds by program agencies and must be allocated and accounted for under 2 CFR Part 225, Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87).<sup>1</sup> This complex IT business environment in state government presents a host of challenges that must be addressed by the enterprise IT organization and the various agencies delivering programs. An ongoing challenge is addressing the modernization of state IT legacy systems which has emerged as a significant financial, technical and programmatic challenge to the states’ ability to deliver effective and efficient services. The results of a recent survey of State CIOs classified more than half of their IT systems as “legacy” with the majority of this identified group considered mission or business critical.<sup>2</sup>

The response to these challenges has been a focus on the “enterprise view” of information technology investment and management. The introduction and evolution of new IT governance models, organizational structures, business disciplines and innovative solutions illustrate this enterprise perspective. Other related trends include the adoption of enterprise architecture as a framework for IT, the gradual migration from stovepipe, single purpose systems to enterprise class shared services and less reliance on custom developed software and solutions. A key trend is the move to enterprise IT consolidation and related services.

State CIOs have an obligation to ensure that state IT services are delivered in the most efficient and cost-effective manner possible. That work often leads to an examination of how the state’s “digital” infrastructure (primarily networks, data centers, telecommunication services and applications) are managed and whether IT services and business solutions are provided via consolidated, decentralized or shared service modes of delivery. Invariably, state CIOs find themselves exploring strategic IT consolidation and shared services offerings as ways to improve operational efficiency, optimize service delivery and lower costs. Enterprise consolidation focuses on how the state organizes delivery of IT services to agencies: combining existing organizations, services or applications into a single operation. Consolidation typically is mandated by law, executive order or state CIO directive. Shared services focus on the delivery of a

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<sup>1</sup> *Innovative Funding for State IT: Models, Trends, and Perspectives*, National Association of State Chief Information Officers (NASCIO), September 2008, <http://www.nascio.org/publications/documents/NASCIO-InnovativeFunding2008.pdf>

<sup>2</sup> *Digital States at Risk!: Modernizing Legacy Systems*, National Association of State Chief Information Officers (NASCIO), December 2008, [www.nascio.org/publications/documents/NASCIO-DigitalStatesAtRisk.pdf](http://www.nascio.org/publications/documents/NASCIO-DigitalStatesAtRisk.pdf)

particular service or services in the most efficient and effective way, as a way of gaining economies of scale and other benefits.

The trend is toward greater centralization of IT management and consolidation to exercise a greater degree of control over IT direction and investments while delivering more-efficient IT support to increasingly complex government organizations. Today, most of the states are in a middle ground of this movement, slowly maturing and adopting the characteristics of a more centralized approach with IT consolidation and shared application delivery initiatives. National surveys of state CIOs reveal a continued progression toward more IT consolidation in the future.<sup>3</sup> The direction of state government is clear – enterprise IT consolidation and shared services is the strategic direction and favored approach by elected state leaders.

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<sup>3</sup> *NASCIO's Survey on Enterprise Data Center Consolidation in the States: Strategies and Business Justification*, National Association of State Chief Information Officers, (NASCIO), August 2007 and *NASCIO's Survey on IT Consolidation and Shared Services in the States: A National Assessment* (May 2006)

## CASE STUDY ONE

### ERP IMPLEMENTATION

*This case study demonstrates the challenges that current federal cost allocation policies pose for a state that is seeking to develop and implement an Enterprise Resource Planning (ERP) system that serves multiple state agencies. An ERP system is an enterprise-wide information system designed to coordinate all the resources, information, and activities needed to complete business processes for multiple state agencies.*

#### **Background**

*The Office of Technology (OT) in the subject state operates as an internal service fund, which is a fund used to account for goods or services given to one department by another on a cost reimbursement bases. The OT has been asked by a number of state government agencies to consider providing an ERP system that would support most of the business system that maintains the data for a variety of business functions, such as financials, projects, human resources and customer relationship management in a single database.*

*An ERP system is based on a common database and a modular software design. The common database can allow every department of a state to store and retrieve information in real-time. Information in an ERP system should be reliable, accessible, and easily shared. The modular software design should enable a department to select the modules they need, mix and match modules from different vendors, and add new modules of their own to improve business performance.*

*Ideally, the data for the various business functions are integrated. In practice the ERP system may comprise a set of discrete applications, each maintaining a discrete data store within one physical database.*

*Implementation of such a system would require an up-front capital and operating investment for servers and other equipment, software purchase, custom development and installation, contractual charges, and deployment and operating costs. Once systems are developed and implemented, the state expects costs to be recovered by charging back shared services to individual state agencies using a per-transaction and personnel count model. While the legislature may initially appropriate dollars to the OT, any on-going operational or asset replacement costs would not be funded through a direct appropriation once systems are implemented.*

*The issues that the OT needs to address include: the lack of up-front money to fund an ERP system; which system costs can be capitalized; which costs are considered operating costs; and whether the cost of financing any capital outlays for both programming and equipment would be considered recoverable from agencies.*

## Issues with Current Policy:

**Issue #1:** *The OT is unclear on guidelines for chargebacks related to the development/acquisition costs of the intangible software asset. While Governmental Accounting Standards Board (GASB) Statement No. 51 provides guidance on accounting for intangible assets in the State CAFR, 2 CFR Part 225 and the HHS Implementation Guide (ASMB C-10) were written many years before GASB 51 was issued. Updating these Federal documents to reflect GASB 51 would provide more clarity for State governments in terms of Federal requirements.*

**Issue #2:** *The OT is unclear on the guidelines for inclusion of interest incurred on the development/acquisition of the intangible software assets in the chargeback rate. It appears that 2 CFR Part 225 allows interest incurred to develop or acquire land, buildings and equipment. However, the OT could not find any authoritative Federal guidance on the allowability of interest for intangible assets.*

**Issue #3:** *The OT will incur a significant cash deficit during the ERP system's early years because some of the costs will have to be capitalized and the amortization will be billed over the useful life of the assets, rather than when the expenditures are incurred. Considering that negative cash balances are not allowed by state governments, bonds will likely be required to finance the project, and interest costs may not be allowed in the Federal billings.*

**Issue #4:** *If the State legislature provides up-front appropriations to initially fund the project, the OT is unsure as to: 1) how its retained earnings and cash limitations calculations would be affected and 2) how future replacement of system components for normal re-conditioning will be funded given that replacement costs tend to be relatively high.*

## Recommendation Based on Case Study One: \_\_\_\_\_

This workgroup recommends that OMB issue an interpretation of 2 CFR Part 225 to clarify whether financing costs for software development projects are allowable or unallowable, and if allowable, that OMB specify the criteria necessary to establish cost allowance.

The state government participants of the workgroup recommend that OMB issue an interpretation to allow software financing costs (including interest) for state and local government grantees. The Federal DCA participant is neutral on whether OMB should allow or disallow these costs.

## Guidance that Supports the Recommendation:

The recommendation assumes that GASB statement # 51 is implemented and, therefore, that software-related costs are capitalized as intangible assets.

The following guidance supports group's recommendation:

- GASB Statement No. 51 provides guidance on recognizing computer software as an *intangible* asset .
- Appendix B, section 23(b) of 2 CFR Part 225 provides in part that financing costs (including interest) paid or incurred on or after September 1, 1995 associated with otherwise allowable costs of equipment is allowable, subject to the conditions in section 23.b.(1) through (4).
- Appendix B, section 15.a.(2) of 2 CFR Part 225 states that “Equipment” means an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals or exceeds the lesser of the capitalization level established by the governmental unit for financial statement purposes, or \$5000. This statement makes it clear that 2 CFR Part 225 does not cover intangible assets. However, it should be noted that 2 CFR Part 225 has not been revised for some years. As a result, new standards and directives, such as GASB Statement No. 51, should be considered by OMB when issuing an interpretation.
- ASMB C-10, question 3-3 regarding capitalization of ADP equipment specifically states that “At the time of this guide's publication no applicable industry-wide governmental accounting standards exist for the treatment of these costs. Governmental units are to treat these costs in accordance with their established capitalization policies. In the future should the Governmental Accounting Standards Board issue applicable pronouncements on this subject, governmental units will be required to follow them.”
- The DHHS Implementation Guide for 2 CFR Part 225 (ASMB C-10), Question 3-4 asks: “Where financing was obtained to develop an ADP system, are there any limitations with respect to claiming interest expense associated with these costs?” The answer states: “Interest is only allowable on capital expenditures where there is interest expense and depreciation (or use allowance) in the current period. If development costs are not amortized, i.e. written off as expenditures, then no interest is allocable or allowable under Federal programs. However, interest expense incurred in the first year of the expenditure is allowable.” For those software projects capitalized and amortized in accordance with GASB 51, allowing the associated interest costs may be consistent with the DHHS Implementation Guide.
- Appendix A, section A.1, states that “The principles are designed to provide that federal awards bear their fair share of cost recognized under these principles except where restricted or prohibited by law.” This further supports this group’s recommendation by stressing that the concept of fairness.

## Risks and Benefits of Recommendation to Allow Financing Costs for Software Projects

### Risks

1. Financing costs for software development projects may be significant. Allowing state and local governmental grantees to charge these types of costs to Federal programs will result in increased costs to Federal programs.

2. 2 CFR Part 225 currently disallows interest with the exceptions of interest incurred to acquire or construct land, buildings or equipment. Software development projects are intangible assets. Allowing financing costs for these types of projects would further broaden the exceptions to disallowance of interest costs.

### Benefits

1. GASB Statement No. 51 requires capitalization and amortization of software development projects as capital assets. Since the financial accounting requirements for software development projects are becoming similar to the accounting requirements for tangible assets (buildings and equipment), it may be equitable to broaden the interest allowability exceptions to encompass capitalized software development projects.
2. Many state governments are currently experiencing large general fund budget deficits. There may be a growing need for state governments to use debt to finance software development projects.
3. Successful software development projects may improve the efficiency of and accounting for Federal programs performed by the state and local governments. Disallowing interest costs for these projects may discourage these initiatives.
4. For those software projects capitalized and amortized in accordance with GASB Statement No. 51, allowing the associated interest costs may be consistent with the DHHS Implementation Guide (ASMB C-10).

## CASE STUDY TWO

### Shared Services Information Technology Assets and Staffing Model

*This case study identifies issues associated with the treatment of capitalized assets and staff when systems developed by multiple agencies are combined into a consolidated system.*

#### Background

*The legislature in the subject state approved an Information Technology (IT) consolidation with the understanding that the consolidation would be “self funding” (i.e., that the consolidation would pay for itself through a savings in spending on infrastructure and operations). This case study identifies several issues that surfaced as a result of the IT consolidation.*

#### Issues Dealing with Current Policy:

##### Issue #1: Capitalized Assets:

*Assets that once resided in various state departments were purchased with a mix of funds from different sources, including both federal funds and state general funds. Prior to system consolidation, these assets were capitalized and partially depreciated by the department that purchased them. As a result of the IT consolidation, these assets are now being used to provide services to all state departments, which is complicating billing and charging to departments that originally purchased the assets.*

*The newly-created IT department is unsure how to simplify accounting and billing for assets that were capitalized at various departments and purchased using a mix of funding sources. For example, the Department of Labor purchased a new server with \$750,000 in federal funds just prior to the consolidation. Now, as a result of the IT consolidation, this server will provide services to all state departments. It is unclear how the IT department should account and bill for the assets purchased by other departments or how the Department of Labor should treat assets that are capitalized on the Department’s books.*

##### Issue #2: Information Technology Staff:

*Pending a budget modification that will take place over the next five years, state information technology staff was placed in a new “hybrid” organization. The Department of Labor’s IT personnel are now employees of the newly-created IT department, but they will still be included in the Department of Labor’s budget for the next two years. Prior to IT consolidation, each position was funded through general, cash or federal funding and, based on the service /benefit they provided, charged directly to the grant or to the indirect cost pool in the Department of Labor.*

*These reassigned employees will continue to provide the service/benefit that they provided prior to consolidation, but, as a result of the consolidation’s efficiencies, they will serve additional departments by providing services such as email. It is unclear how the newly-created IT*

*Department should bill for these reassigned employees or how the Department of Labor should seek reimbursement for the billed services since these employees are still included in its budget.*

### **Issue #3: Shared services:**

*Under a shared services agreement, a state and a number of its local governments have agreed to collaboratively develop an IT system. Each party is providing certain capital assets needed to develop the system and are appropriately recording these assets in their own accounting system. The subject state and local governments have provided IT assets in an equal proportion. To minimize the administrative burden and cost, while maximizing the benefit to taxpayers, each government has signed a Memorandum of Understanding agreeing to forgo billing among any of the participating governments.*

*2 CFR Part 225 currently requires each grantee to account for and allocate the grantee's costs to all users. The state government currently must account for its costs and allocate its costs to all users, including local governments. The state government cannot claim the local governments' costs without adequate billing documentation from the local governments.*

### **Issue #4: Calculation of rates and adjustments at the service level:**

*It can be difficult for governments to calculate billing rates at the service level when a vendor fails to provide a detailed breakdown of costs. Without a detailed cost breakdown, costs cannot be tied to services rendered. For example, a vendor that delivers several services may only provide one invoice that includes lease payments for virtual servers, network implementation, and consulting fees for various services. If the vendor does not provide a detailed breakdown, the calculation of fees by service would be incorrect. In addition, a virtual server's cost may benefit several services, but if the services cannot be identified, it is easy to have an over- or under-recovery of costs. In the case of over recovery, a refund and/or a penalty may result.*

*2 CFR Part 225 does not clearly define a "service activity," but given the size of the IT budget, several services could easily exceed the \$5 million budget threshold specified in an Appendix C. 2 CFR Part 225 and ASMB C-10 require that the revenues and expenses be separately accounted for and monitored by individual service.*

## Recommendations Based on Case Study Two

**Recommendation #1 Relating to Capitalized Assets:** OMB should issue an interpretation as to how states should handle capitalized and partially depreciated assets when consolidating information technology systems. In the event that OMB interprets these expenses as being unallowable, the State members of the sub-work group recommend amending 2 CFR Part 225 to allow states to handle the consolidation of information technology on capitalized and partially depreciated assets during consolidation efforts in a manner consistent with 45 CFR 92.32 Equipment, as explained below. The DCA representative advised that depreciation on federally funded equipment is unallowable.

### Guidance Applying to Recommendation #1

The Department of Health and Human Services has issued Title 45 of the Code of Federal Regulations, which relates to public welfare. Part 92 of Title 45 establishes uniform administrative rules for Federal grants and cooperative agreements and subawards to State, local and Indian tribal governments.

- 45 CFR 92.32(c)(1) states that “Equipment shall be used by the grantee or sub grantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by federal funds. When no longer needed for the original program or project, the equipment may be used in other activities currently or previously supported by a federal agency.”
- 45 CFR 92.32(e) provides guidance on disposition of the equipment when original or replacement equipment acquired under a grant or sub grant is no longer needed for the original project or program or for other activities and how to treat them if fair market value is under \$5,000 or over \$5,000.

### Recommendation #2 Relating to Technology Staff:

The group recommends that OMB provide additional guidance on the use of excess staff capacity created by the consolidation of IT systems. If OMB does not issue additional guidance, the group recommends that 45 CFR 92.32 (c)(2), which applies to excess equipment capacity, be applied to excess staff capacity.

### Guidance Applying to Recommendation #2:

45 CFR 92.32(c)(2) provides guidance on excess capacity for equipment. It states that “The grantee or subgrantee shall also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use shall be given to other

programs or projects supported by the awarding agency. User fees should be considered if appropriate.”

## **Risks and Benefits of Recommendations #1 and #2:**

### **Benefits**

1. Squarely places responsibility for these assets with experts statutorily assigned to manage IT in state government.
2. Sharing underutilized assets creates efficiency in operational, licensing, facility (space) and power/cooling costs.
3. Architectural design and development can be better synchronized, improving operational efficiency and sharing of information.
4. Management of shared systems and assets are simplified and more consistent.
5. Extended flexibility will enhance efficiency and effectiveness and ultimately resulting in the cost savings to all programs as new organization creates shared services model among multiple agencies and applies cost allocation methodology individually to each prospective service with both direct and indirect costs identified.

### **Risks**

1. Inventory of assets and source of funding must be carefully investigated and managed to appropriately account for asset transfer and return on initial investment.

## Publication Acknowledgements

This document was developed by the Information Technology and Shared Services Sub-Work Group of the A-87 Work Group of AGA's Partnership for Intergovernmental Management and Accountability.

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The Partnership for Intergovernmental Management and Accountability (Partnership) was established by the Association of Government Accountants (AGA) in September 2007 to open the lines of communication among governments. The mission of the A-87 Work Group is to identify and prioritize issues or concerns relating to 2 CFR Part 225, *Cost Principles for State, Local and Indian Tribal Governments*, and provide

recommendations for alternative approaches that could benefit all levels of government. AGA is the premier Association in advancing government accountability. AGA supports the careers and professional development of government financial professionals working in federal, state and local governments, as well as the private sector and academia. Founded in 1950, AGA has a long history as a thought leader for the government accountability profession. Through education, research, publications, certification and conferences, AGA promotes transparency and accountability in government. [www.agacgfm.org](http://www.agacgfm.org)