

A Review

# **Information Technology Projects**

## **2007-2008 Joint Legislative Audit Committee Members**

Senate Members:

Jim Sullivan, Co-chairperson  
Julie Lassa  
Russell Decker  
Alan Lasee  
Robert Cowles

Assembly Members:

Suzanne Jeskewitz, Co-chairperson  
Samantha Kerkman  
Kitty Rhoades  
David Cullen  
Joe Parisi

---

## LEGISLATIVE AUDIT BUREAU

The Bureau is a nonpartisan legislative service agency responsible for conducting financial and program evaluation audits of state agencies. The Bureau's purpose is to provide assurance to the Legislature that financial transactions and management decisions are made effectively, efficiently, and in compliance with state law and that state agencies carry out the policies of the Legislature and the Governor. Audit Bureau reports typically contain reviews of financial transactions, analyses of agency performance or public policy issues, conclusions regarding the causes of problems found, and recommendations for improvement.

Reports are submitted to the Joint Legislative Audit Committee and made available to other committees of the Legislature and to the public. The Audit Committee may arrange public hearings on the issues identified in a report and may introduce legislation in response to the audit recommendations. However, the findings, conclusions, and recommendations in the report are those of the Legislative Audit Bureau. For more information, write the Bureau at 22 E. Mifflin Street, Suite 500, Madison, WI 53703, call (608) 266-2818, or send e-mail to [leg.audit.info@legis.wisconsin.gov](mailto:leg.audit.info@legis.wisconsin.gov). Electronic copies of current reports are available on line at [www.legis.wisconsin.gov/lab](http://www.legis.wisconsin.gov/lab).

---

State Auditor – Janice Mueller

### **Audit Prepared by**

Kate Wade, *Director and Contact Person*

Conor H. Smyth

Yvonne M. Onsager

Maureen Quinn

Scott Sager

Allison Schill

Natalie Walleser

Director of Publications – Jeanne Thieme  
Report Design and Production – Susan Skowronski

# CONTENTS

---

<b>Letter of Transmittal</b>	<b>1</b>
<b>Report Highlights</b>	<b>3</b>
<b>Introduction</b>	<b>9</b>
Expenditures and Staffing	10
Projects Reviewed	12
<b>Completed and Ongoing Projects</b>	<b>15</b>
Project Costs and Funding	15
Large, High-Risk Projects	17
Cost and Timeliness Standards	23
Other Best Practices	26
<b>Reviews of Selected IT Projects</b>	<b>29</b>
Registration and Titling System	30
Sales and Use Tax Software	34
Unemployment Insurance Systems	40
SUITES	42
EnABLES	46
Statewide DOA Initiatives	50
Server Consolidation	52
E-mail Consolidation	58
Integrated Business Information System	62
<b>Improving Project Oversight</b>	<b>67</b>
Identifying and Planning for Large, High-Risk Projects	68
Improving Project Specifications and Standards	69
Monitoring and Evaluating Progress	72
Legislative Oversight	73
Master Lease Program	75
UW System Projects	78

## **Appendices**

---

Appendix 1—Software Projects Completed in FY 2004-05 or FY 2005-06

Appendix 2—Software Projects Ongoing at the Beginning of FY 2006-07

Appendix 3—Agency IT Profiles

Appendix 4—IT Systems Financed under the State's Master Lease Program

## **Response**

---

From the Department of Administration



STATE OF WISCONSIN

## Legislative Audit Bureau

22 E. Mifflin St., Ste. 500  
Madison, Wisconsin 53703  
(608) 266-2818  
Fax (608) 267-0410  
Leg.Audit.Info@legis.wisconsin.gov

Janice Mueller  
State Auditor

April 17, 2007

Senator Jim Sullivan and  
Representative Suzanne Jeskewitz, Co-chairpersons  
Joint Legislative Audit Committee  
State Capitol  
Madison, Wisconsin 53702

Dear Senator Sullivan and Representative Jeskewitz:

We have completed a review of information technology (IT) projects that describes and provides cost and funding information for 184 projects in 28 executive branch agencies. We identified 103 projects that were completed in the past two fiscal years at an estimated cost of \$90.6 million, and 81 projects that were ongoing at the start of fiscal year 2006-07 and are expected to cost \$201.1 million upon completion.

Individual projects with costs of \$1.0 million or more represent 92.7 percent of the expected costs of ongoing projects. These large projects are typically complex and entail a significant risk of exceeding estimated costs and time lines. We note particular concerns with six ongoing projects that are expected to cost a total of \$122.7 million upon completion and have already experienced difficulties.

In a detailed review of selected large, high-risk projects, we found evidence of inadequate planning that increased costs and compromised timeliness. Estimated costs for one project to customize software for administering the Unemployment Insurance program increased by \$18.7 million, and another project was suspended after \$23.6 million had been spent. In addition, sales and use tax software with a cost of at least \$24.9 million is being replaced only five years after implementation. Two statewide IT consolidation projects have experienced significant delays and cost overruns. A third, intended to replace approximately 100 types of administrative software and projected to cost at least \$66.6 million upon completion, requires close monitoring.

The Department of Administration (DOA) has broad statutory authority to oversee and coordinate state IT projects. However, its oversight has been inadequate. We include recommendations to improve DOA's collaboration with other agencies in identifying high-risk projects and establishing planning standards, including quantifiable performance measures. We also include recommendations to enhance legislative oversight of high-risk IT projects.

We appreciate the courtesy and cooperation extended to us by officials and staff of DOA and other agencies. DOA's response follows the appendices.

Respectfully submitted,

Janice Mueller  
State Auditor

JM/KW/ss



---

## Report Highlights ■

---

***We identified and describe 184 IT projects that state agencies have recently begun or completed.***

***Most problems occurred in planning for complex, high-risk projects.***

***Oversight of high-risk projects has been inadequate.***

***Our report includes recommendations to improve project planning, monitoring, and oversight.***

Since the early 1990s, the State of Wisconsin has rapidly expanded its use of information technology (IT) to collect, store, process, and report information related to the programs and services it provides and the management of its operations. State agencies use IT systems when they establish eligibility for various public benefit programs, register motor vehicles, issue licenses to drivers and others, collect fees and payments, and manage administrative functions such as accounting and budgeting for state operations. We identified 184 IT projects completed in fiscal year (FY) 2004-05 and FY 2005-06 or ongoing at the beginning of FY 2006-07. At completion, their costs are currently expected to total \$291.7 million.

Some state agencies have experienced widely reported difficulties in completing complex and costly IT projects within budget and according to schedule. To address the resulting concerns of legislators and the public, and at the direction of the Joint Legislative Audit Committee, we:

- estimated IT-related expenditures and staffing for executive branch agencies in FY 2005-06;
- compiled an inventory that describes each of the 184 projects we identified and provides information on their costs and timeliness;
- identified large, high-risk IT projects and reviewed the development of 7 of these projects in some detail; and

- assessed the Department of Administration’s (DOA’s) initiatives to consolidate certain IT infrastructure and software, as well as structures in place to ensure appropriate oversight by both DOA and the Legislature.

### Inventory

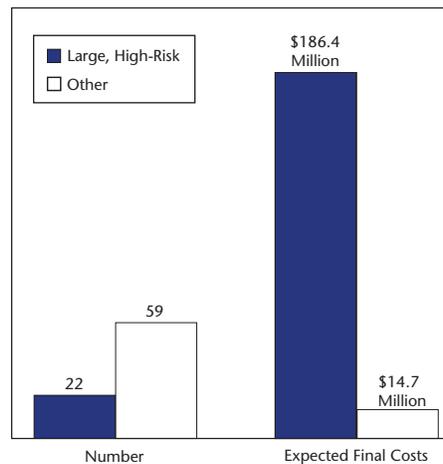
The IT projects we reviewed were undertaken by executive branch agencies, with their own IT staffs or with the aid of contractors. Statutes authorize DOA to ensure that these agencies develop and use clear standards for project development and that they employ sound project management practices. The legislative and judicial branches of state government generally operate IT systems independently from DOA, and statutes largely exempt the University of Wisconsin (UW) System from its oversight.

Each of the 184 projects in our inventory required at least 1,000 hours of effort. Many involved the customization or development of software, including modifying existing programs. The final costs of 103 projects that were completed in FY 2004-05 and FY 2005-06 totaled \$90.6 million. The final costs of 81 projects that were ongoing at the start of FY 2006-07 are expected to total \$201.1 million.

Ten agencies are responsible for more than three-quarters of the projects in our inventory. With 43 projects, the Department of Workforce Development (DWD) is responsible for the largest number of projects and the highest total costs: \$88.9 million. We identified 22 ongoing projects with costs of \$1.0 million or more as large, high-risk projects. The expected final costs of these projects totaled \$186.4 million as of February 2007, as shown in Figure 1.

Figure 1

#### Ongoing Projects



We noted particular concerns with six ongoing projects that have experienced difficulties and delays. The combined costs of these projects are currently estimated to be \$122.7 million at completion. A seventh large, high-risk project—DWD’s customization of software for its Enhanced Automated Benefits and Legal Enterprise System (EnABLES)—was suspended in February 2007, after five years of effort. Only one of six planned components has been implemented, at a cost of \$23.6 million. DWD is currently re-evaluating the project’s feasibility.

## Review of Selected Projects

Difficulties with agencies’ software customization or development projects typically involved:

- inadequate planning, including underestimating a project’s complexity and failing to adequately define its final functions;
- unanticipated costs; or
- delays in implementation.

For example, DWD did not clearly identify the functions to be included in the State Unemployment Insurance Tax Enterprise System (SUITES). That project is currently four years behind schedule and \$18.7 million over budget.

Similarly, a Department of Revenue (DOR) contractor underestimated the complexity of adapting the sales and use tax software component of DOR’s Integrated Tax System. Doing so contributed to significant programming errors, which increased costs by \$5.7 million and compromised the accuracy of sales and use tax distributions to counties and professional sports districts.

A separate letter report describes DOR’s efforts to address the sales and use tax distribution errors we identified in December 2005. The sales and use tax software, which was implemented in December 2002, is expected to be replaced in December 2007.

The Department of Transportation (DOT) initially estimated its Registration and Titling System (RaTS) would cost \$9.4 million. When project plans were significantly revised, it did not adjust this estimate. Further, DOT and a vendor underestimated the complexity of the customer database conversion and had problems with service delivery after the project was implemented.

Two of three DOA projects that involve statewide consolidation of IT resources have also been hindered by poor planning. DOA originally planned to complete a statewide consolidation of server hardware and software, which is dedicated to managing shared IT resources, by May 2006. However, as of April 2007, DOA had not fully consolidated servers for any agency, nor had it revised its project plan or re-estimated the project's costs.

Similarly, DOA originally planned to complete statewide e-mail consolidation in June 2005. However, as of September 2006, only four agencies were using new e-mail software. Furthermore, expenditures exceeded the project's expected five-year costs of \$2.6 million.

Early planning efforts have been effective for DOA's third consolidation project. The Integrated Business Information System (IBIS) is intended to replace approximately 100 types of existing administrative software. However, because DOA continues to significantly revise the project's expected costs and benefits, close monitoring will be important.

### **Enhancing Oversight of Large, High-Risk Projects**

DOA has broad responsibility for monitoring and controlling the IT projects of executive branch agencies. This responsibility includes establishing performance measurements for evaluating progress. However, since at least November 2003, DOA's IT management efforts have focused on its own troubled e-mail and server consolidation projects.

As a result, DOA has not adequately collaborated with agencies to identify and monitor large, high-risk projects. Our report includes recommendations to assist state agencies and DOA in project planning and management, and in better identifying and monitoring large, high-risk projects.

The State's master lease program has become a significant financing tool for IT systems. Since its inception, executive branch agencies have used the program to fund \$294.5 million in IT costs. We include a recommendation for the development of policies and procedures to guide its use for this purpose. We also identify options for increasing legislative oversight of large, high-risk projects, including those within UW System.

## Recommendations

To enhance legislative monitoring, our report includes recommendations that agencies responsible for the seven large, high-risk projects we reviewed report to the Joint Legislative Audit Committee by October 1, 2007, on:

- ☑ whether waiting times for Division of Motor Vehicles services have declined since June 2006 (DOT, *p. 34*);
- ☑ the status of the conversion to new sales and use tax software (DOR, *p. 40*);
- ☑ detailed plans, including cost information, for implementing SUITES and maintaining or customizing EnABLES or other software for administering unemployment insurance systems (DWD, *pp. 46 and 49*);
- ☑ revised time lines and cost information for the server and e-mail consolidation projects (DOA, *pp. 57 and 62*); and
- ☑ the status of the IBIS project, including costs to date, estimated completion, and the status of efforts to limit software customization (DOA, *p. 66*).

In addition, we include recommendations for DOA to report to the Joint Legislative Audit Committee by October 1, 2007, on its progress in:

- ☑ selecting, in collaboration with executive branch agencies, a prescribed format for agencies' annual strategic plans for IT and a methodology for identifying high-risk projects (*p. 69*);
- ☑ establishing, in collaboration with executive branch agencies and the IT Directors' Council, planning standards for large, high-risk projects (*p. 71*);
- ☑ enhancing project monitoring (*p. 72*); and
- ☑ establishing policies for the use and monitoring of the State's master lease program to fund IT systems costs (*pp. 77-78*).

Finally, we include recommendations for the Legislature to:

- ☑ consider reactivating the Joint Committee on Information Policy and Technology and the IT Management Board (*p. 74*); and
- ☑ consider requiring regular reports from UW System on its plans, budget, and schedule for implementing new IT systems for human resources and procurement (*p. 81*).



---

## Introduction ■

---

***Government IT systems include hardware and software and have become increasingly complex.***

Since the wide-scale introduction of personal computers in the 1990s, increasingly complex IT systems have been developed to automate government services. IT systems include both hardware, such as mainframe and personal computers and peripheral equipment, and software that directs computer functions. Systems software directs basic functions, such as printing documents or saving electronic files. Applications software directs functions related to the delivery of services, such as issuing a driver license or establishing eligibility for government program benefits.

***DOA has oversight responsibility, but agencies have considerable discretion in planning and executing IT projects.***

Except during the 2001-03 biennium, when there was a separate Department of Electronic Government, DOA has been responsible for ensuring that Wisconsin's executive branch agencies make effective and efficient use of the State's IT assets. Because these agencies finance many IT costs within their operating budgets, they have assumed broad discretion in planning and executing individual projects. The legislative and judicial branches generally operate IT systems independently from DOA, and the UW System is largely exempted from DOA oversight under s. 16.971, Wis. Stats.

Chapter 16, subchapter VII, Wis. Stats., provides DOA broad authority to oversee and coordinate agency IT spending and activities, including the power to:

- develop procedures for reviewing and approving IT acquisitions that will ensure timely and cost-effective purchases of IT goods and services;

- review and approve those purchases;
- ensure that agencies develop clear standards for IT systems development and employ good management practices and cost-benefit justifications;
- establish, in cooperation with agencies, statewide policies and procedures for IT administration;
- develop procedures to ensure IT resource planning and sharing among agencies;
- prescribe standards for data, application, and business process integration; and
- prepare a biennial strategic plan that details the use of IT to perform agency functions.

The Division of Enterprise Technology carries out DOA's IT duties, and the Division's administrator is considered the State's chief information officer. DOA's IT functions are primarily funded with program revenues generated through fees that other state agencies pay for IT-related services.

## **Expenditures and Staffing**

As shown in Table 1, based on our review of the State's accounting records and interviews with agency staff, we estimate that executive branch agencies spent \$274.9 million on IT-related goods and services in FY 2005-06. More than one-third of these expenditures were for staff salaries and fringe benefits. In FY 2005-06, executive branch agencies—as defined under ch. 15, Wis. Stats.—were authorized 1,535.6 permanent full-time equivalent (FTE) positions for the delivery of IT services, and agency officials estimate an additional 80.2 limited-term employment (LTE) staff and 42.3 FTE project staff also had IT-related duties. Agencies reported that in FY 2006-07, the number of authorized IT staff was reduced to 1,393.5 FTE positions.

Table 1

**Estimated IT Expenditures in Executive Branch Agencies<sup>1</sup>**  
 FY 2005-06

Type	Estimated Expenditures <i>(in millions)</i>	Percentage of Total
Salaries and Fringe Benefits	\$115.0	41.8%
Services	67.8	24.7
Equipment <sup>2</sup>	57.1	20.8
Off-the-Shelf Software	16.3	5.9
Agencies' Overhead	13.1	4.8
Facilities	5.6	2.0
<b>Total</b>	<b>\$274.9</b>	<b>100.0%</b>

<sup>1</sup> Excludes the legislative and judicial branches and UW System.

<sup>2</sup> Payments for purchased, rented, or leased IT equipment, as well as equipment maintenance and repair costs.

Payments for IT services, such as consulting or computer programming, and for the purchase and maintenance of equipment accounted for 45.5 percent of agencies' FY 2005-06 expenditures. These payments included \$11.9 million under the State's master lease program, a capital lease program created under 1991 Wisconsin Act 39 to finance the purchase of property or services. Since 1996, agencies have routinely used the master lease program to finance software customization or development projects.

Master lease funding requires formal approval from DOA, which pays project vendors upon invoice and is reimbursed through agencies' operating budgets over periods of three to seven years. Alternatively, agencies can request additional operating revenue to fund large IT projects as part of the biennial budget process, or through other funding requests submitted to the Legislature. Both the master lease program and funding mechanisms that require legislative approval are intended to limit agency discretion in planning and executing large IT projects.

Our 2001 report on IT consultants (report 01-6) was prompted by legislative concerns about the extent and cost of agencies' use of private-sector consultants. Subsequent concerns about agencies' difficulties in completing large IT projects within initial cost and scheduling estimates have served to renew legislative interest in IT projects and their oversight.

## Projects Reviewed

***The costs and time lines of projects that involve significant software customization or development can be difficult to control.***

Computer hardware and both systems and off-the-shelf software, such as word processing programs, are relatively easy to purchase because they are typically ready for use when sold. In contrast, some applications software can be complex and costly for state agencies to acquire because it must either be customized, which involves additional programming, or developed specifically to meet complex agency needs that must be accurately defined by program staff and understood by state and contracted IT staff. The time required to document these needs and secure financing can span one or more years, during which available technology may change. Furthermore, because computer programming is complex and expensive, it can be difficult to control costs and time lines for projects that involve significant software customization or development.

***We identified 184 projects that were completed in the past two fiscal years or that were ongoing at the start of FY 2006-07.***

Given the large number and variety of IT projects undertaken within all three branches of state government, it was impractical to identify and assess all hardware and software purchases. Therefore, we instead focused our review on:

- the 28 state agencies listed in Table 2, which includes all executive branch agencies as defined under ch. 15, Wis. Stats., except for UW System, which is largely exempted from DOA oversight, and the UW Hospital and Clinics Board, which operates independently;
- 184 projects that required a minimum of 1,000 hours of work by state or contracted IT staff and involved significant software customization or development, including modification of existing software; and
- DOA's oversight of the IT projects included in our review.

Table 2  
Executive Branch Agencies and IT Projects Reviewed

Agency	Abbreviation	Number of Projects
<b>Departments</b>		
Administration	DOA	18
Agriculture, Trade and Consumer Protection	DATCP	4
Commerce	Commerce	1
Corrections	DOC	7
Employee Trust Funds	ETF	1
Financial Institutions	DFI	16
Health and Family Services	DHFS	10
Justice	DOJ	4
Military Affairs	Military Affairs	1
Natural Resources	DNR	19
Public Instruction	DPI	10
Regulation and Licensing	DRL	1
Revenue	DOR	13
Tourism	Tourism	1
Transportation	DOT	19
Veterans Affairs	DVA	0
Workforce Development	DWD	43
<b>Independent Agencies</b>		
Educational Communications Board	ECB	0
Elections Board	Elections Board	2
Ethics Board	Ethics Board	0
Higher Educational Aids Board	HEAB	0
Historical Society	Historical Society	0
Office of Commissioner of Insurance	OCI	8
Public Service Commission	PSC	1
State of Wisconsin Investment Board	SWIB	5
State Public Defender Board	Public Defender	0
Wisconsin Employment Relations Commission	WERC	0
Wisconsin Technical College System Board	WTCSB	0
<b>Total</b>		<b>184</b>

Each agency's projects are named and described in the appendices, which also provide summary data on funding sources, project costs, and actual and projected completion dates. Appendix 1 summarizes 103 projects that were completed in FY 2004-05 or FY 2005-06. Appendix 2 includes similar information for 81 projects that were ongoing at the start of FY 2006-07. Appendix 3 summarizes the IT activities of all 28 executive branch agencies during the period we reviewed, and includes information reported by them on IT expenditures and authorized staffing. Routine IT projects, such as purchase of off-the-shelf software or software upgrades that required no programming, purchases of computer hardware or systems software, scheduled maintenance of existing software, and Web page design are not included in this review. We also excluded telecommunications projects.

It should be noted that we relied on agencies to provide us with accurate project cost information, which is typically not accounted for separately in the State's accounting system. In some cases, cost estimates were developed from the best available information. Because many agencies do not have detailed time accounting records, there were difficulties in estimating staffing costs, which were not available for all agency projects.

We examined seven large, high-risk projects in some detail. Each of these projects experienced difficulties related to planning, unanticipated costs, or delays in implementation. Two have nevertheless been completed, further work on one was suspended in February 2007, and four are ongoing.

■ ■ ■ ■

---

## Completed and Ongoing Projects ■

---

Of the 184 IT projects we reviewed, 103 were completed between July 1, 2004, and June 30, 2006. The rest were underway at the start of the current fiscal year. We reviewed costs and funding for these projects, focusing particularly on high-cost projects, which are typically complex and therefore entail greater risk of exceeding projected costs and time lines. We also measured completed projects against cost and timeliness standards the United States Government Accountability Office has used for federal IT projects and noted agencies' use of best practices for IT project planning and management that we had identified in a 2001 report.

### Project Costs and Funding

***Agencies reported final costs of \$90.6 million for completed projects and projected \$201.1 million in costs to complete ongoing projects.***

The 184 projects we reviewed were begun as recently as April 2006 and as long ago as June 1998. Upon completion, they are expected to cost a total of \$291.7 million. That amount includes final costs of \$90.6 million for 103 projects that were completed in FY 2004-05 or FY 2005-06, and agency projections of \$201.1 million in costs to complete ongoing projects.

Final costs for completed projects are shown in Table 3. Ongoing projects have not yet incurred all costs shown in the table. Through September 2006, agencies had incurred costs totaling \$132.2 million for ongoing projects.

Table 3

## Overview of Agency IT Projects

Agency	Completed Projects <sup>1</sup>		Ongoing Projects <sup>2</sup>		Agency Totals	
	Number of Projects	Final Costs <sup>3</sup> <i>(in millions)</i>	Number of Projects	Projected Costs <sup>3</sup> <i>(in millions)</i>	Number of Projects	All Costs <sup>3</sup> <i>(in millions)</i>
DWD	26	\$ 7.2	17	\$ 81.7	43	\$ 88.9
DHFS	7	36.9	3	37.1	10	74.0
DOT	14	24.9	5	1.5	19	26.4
Elections Board	0	0.0	2	24.5	2	24.5
DOR	9	11.3	4	10.4	13	21.7
DOC	4	0.6	3	15.1	7	15.7
DOA	8	2.2	10	5.4	18	7.6
DNR	9	0.7	10	6.5	19	7.2
ETF	0	0.0	1	6.4	1	6.4
DPI	4	1.6	6	4.3	10	5.9
Subtotal	81	85.4	61	192.9	142	278.3
Other Agencies	22	5.2	20	8.2	42	13.4
<b>Total</b>	<b>103</b>	<b>\$90.6</b>	<b>81</b>	<b>\$201.1</b>	<b>184</b>	<b>\$291.7</b>

<sup>1</sup> Projects completed in FY 2004-05 or FY 2005-06.

<sup>2</sup> Projects underway at the start of FY 2006-07.

<sup>3</sup> Based on agency estimates through September 2006 for completed projects, and February 2007 for ongoing projects.

As shown in Table 4, projects are funded with both federal and state revenues. For ongoing projects, agencies estimate that federal revenues—including federal Unemployment Insurance program taxes paid by Wisconsin employers and returned to the State—have funded 58.9 percent of costs, while program revenues and general purpose revenue (GPR) are each estimated to have funded significantly less. Completed projects were more equally funded from these three sources.

Table 4

**Funding Sources for Agency IT Projects**

	Completed Projects <sup>1</sup>		Ongoing Projects <sup>2</sup>	
	Final Costs <sup>3</sup>	Percentage	Incurred Costs <sup>3</sup>	Percentage
	<i>(in millions)</i>		<i>(in millions)</i>	
Federal Revenues	\$32.5	35.9%	\$ 77.9	58.9%
Segregated Revenues	27.1	29.9	25.7	19.4
GPR	23.3	25.7	18.3	13.9
Program Revenues	7.7	8.5	10.3	7.8
<b>Total</b>	<b>\$90.6</b>	<b>100.0%</b>	<b>\$132.2</b>	<b>100.0%</b>

<sup>1</sup> Projects completed in FY 2004-05 or FY 2005-06.

<sup>2</sup> Projects underway at the start of FY 2006-07.

<sup>3</sup> Through September 2006. Agencies project final costs of \$201.1 million upon completion.

**Large, High-Risk Projects**

DWD is responsible for both the largest number of projects—43, or nearly one-quarter of those in our inventory—and the highest project costs—\$88.9 million, or nearly one-third of the total shown in Table 3. DWD’s costs were incurred primarily for two projects to support the Unemployment Insurance program. Work on one of these projects, the Enhanced Automated Benefits and Legal Enterprise System (EnABLES), was suspended in February 2007 after \$23.6 million in costs had been incurred. DWD is currently re-evaluating that project’s feasibility. The Elections Board and the Department of Employee Trust Funds (ETF) have a relatively small number of projects, but each is large and represents significant costs.

***We categorized projects with costs of \$1.0 million or more as large, high-risk projects.***

High-cost projects are generally complex, and therefore entail greater risk of exceeding their projected costs and time lines. As shown in Table 5, 13 completed projects and 22 that were ongoing at the start of FY 2006-07 had final or projected costs of \$1.0 million or more. Section 13.58(5)(b), Wis. Stats., provides for legislative monitoring of such IT projects, and we used that amount as a benchmark for large, high-risk projects.

Table 5

## Agency IT Projects Classified by Final or Projected Costs

Cost	Completed Projects <sup>1</sup>	Ongoing Projects <sup>2</sup>	All Projects	Percentage of Total
\$250,000 or less	63	36	99	53.8%
\$250,001 to \$500,000	16	11	27	14.7
\$500,001 to \$999,999	11	12	23	12.5
\$1.0 million or more	13	22	35	19.0
<b>Total</b>	<b>103</b>	<b>81</b>	<b>184</b>	<b>100.0%</b>

<sup>1</sup> Based on agency estimates of final costs for projects completed in FY 2004-05 or FY 2005-06.

<sup>2</sup> Based on projected costs as of February 2007 for projects underway at the start of FY 2006-07.

Some aspects of every complex IT project are unique to each agency's function. However, a number of characteristics are common to agencies' difficulties in developing large, high-risk projects. For example, state IT projects must incorporate the ability to respond quickly and efficiently to changes in both law and policy, such as those governing voter registration and applications for various licenses or identification cards. Agencies may also receive and process data from many sources, including some whose supporting technology differs from that of the project or is no longer familiar to programmers. In addition, balancing ease of access with data security is a particular concern when projects aim to automate government services to the public, such as certain benefit programs or functions such as tax and fee collections, which require individuals to provide a social security number or other personal information. Finally, advancements in available technology supporting state agency systems may be made during the course of project development, necessitating project budget and time line modifications.

**Large, high-risk projects accounted for 77.5 percent of all completed project costs.**

As shown in Table 6, the 13 large, high-risk projects completed in FY 2004-05 or FY 2005-06 represented only 12.6 percent of all completed projects, but they accounted for 77.5 percent of all costs. The final cost of each completed large, high-risk project is shown in Table 7. Project numbers can be used to locate descriptions in Appendix 1.

Table 6

**Large, High-Risk Projects Completed in FY 2004-05 or FY 2005-06**

Project Costs	Number	Percentage	Final Costs <sup>1</sup>	Percentage of Total
			<i>(in millions)</i>	
\$1.0 million or more	13	12.6%	\$70.2	77.5%
Less than \$1.0 million	90	87.4	20.4	22.5
<b>Total</b>	<b>103</b>	<b>100.0%</b>	<b>\$90.6</b>	<b>100.0%</b>

<sup>1</sup> Based on agency estimates.

Table 7

**Final Costs of Completed Large, High-Risk Projects**

Project Number <sup>1</sup>	Description	Agency	Final Costs <sup>2</sup>
			<i>(in millions)</i>
33	Wisconsin Statewide Automated Child Welfare Information System (WiSACWIS), Final Phase	DHFS	\$24.0
69	Registration and Titling System (RaTS)	DOT	18.8
31	Web-Based CARES Enhancement	DHFS	6.7
55	Corporate Income and Franchise Tax System	DOR	5.9
58	Excise Tax Reporting and Auditing System	DOR	2.7
30	Web-Based CARES, Version 2.0	DHFS	2.4
60	Highway Patrol Arrest Redesign, Release 2	DOT	1.8
88	Child Support Certification System	DWD	1.6
32	WIC Administration Software	DHFS	1.5
9	Licensing and Regulation System	DATCP	1.4
99	Investment Data System	SWIB	1.2
35	Criminal Document Archive Imaging System	DOJ	1.1
63	Driver License and ID Card Issuance, Release 2	DOT	1.1
<b>Total</b>			<b>\$70.2</b>

<sup>1</sup> Corresponds with project identification numbers included in Appendix 1.

<sup>2</sup> Based on agency estimates.

**Large, high-risk projects account for 92.7 percent of projected costs for ongoing projects.**

Similarly, as shown in Table 8, 22 large, high-risk projects represented only 27.2 percent of ongoing projects at the start of the current fiscal year, but as of February 2007 they accounted for 92.7 percent of the costs that ongoing projects are expected to incur by the time they are completed. As noted, agencies' methods for accounting for and projecting costs are not uniform. Projected costs for each project are shown in Table 9. Project numbers can be used to locate descriptions in Appendix 2.

Table 8

**Large, High-Risk Projects Ongoing at the Start of FY 2006-07**

Project Costs	Number	Percentage	Projected Costs <i>(in millions)</i> <sup>1</sup>	Percentage of Total
\$1.0 million or more	22	27.2%	\$186.4	92.7%
Less than \$1.0 million	59	72.8	14.7	7.3
<b>Total</b>	<b>81</b>	<b>100.0%</b>	<b>\$201.1</b>	<b>100.0%</b>

<sup>1</sup> Based on agency estimates as of February 2007.

**Cost projections have increased for two ongoing large, high-risk projects.**

One of the large, high-risk projects shown in Table 9, DOR's \$6.5 million Income and Fiduciary Tax Software project, was completed on time and within budget in November 2006. However, as shown in Table 10, cost projections for two of what are now the six largest ongoing projects have increased. Legislators and others have expressed concern that final costs for these and other ongoing projects may considerably exceed projections or that, like DWD's \$23.6 million EnABLES project, some costly ongoing projects may fall far short of expectations.

Table 9

## Projected Costs of Ongoing Large, High-Risk Projects

Project Number <sup>1</sup>	Description	Agency	Projected Costs <sup>2</sup> (in millions)
66	SUITES	DWD	\$46.4
22	Medicaid Management Information System (MMIS)	DHFS	32.3
59	EnABLES <sup>3</sup>	DWD	23.6
72	Statewide Voter Registration System	Elections Board	22.7
14	Integrated Corrections System, Phase 1a	DOC	9.0
47	Income and Fiduciary Tax Software <sup>4</sup>	DOR	6.5
16	Annuity Payment System	ETF	6.4
15	Integrated Corrections System, Phase 2	DOC	5.9
25	Law Enforcement Records Management Software	DOJ	3.8
10	Justice Information Sharing Software	DOA	3.6
37	Student Data Management and Analysis System	DPI	3.0
46	Integrated Property Assessment System, Phase 1	DOR	2.9
27	Air Permitting System	DNR	2.7
54	Consolidated Case Management System	DWD	2.7
24	Disease Surveillance System	DHFS	2.6
61	Child Support Health Insurance Data Software	DWD	2.4
36	Forestry Inventory System	DNR	2.3
23	Vital Records Information System	DHFS	2.2
71	Campaign Finance Information System	Elections Board	1.8
62	Integrated Rehabilitation System 2	DWD	1.3
70	Document Management and Imaging System	DWD	1.2
75	Fund Management Software	OCI	1.1
<b>Total</b>			<b>\$186.4</b>

<sup>1</sup> Corresponds with project identification numbers included in Appendix 2.

<sup>2</sup> Based on agency estimates as of February 2007.

<sup>3</sup> Suspended in February 2007.

<sup>4</sup> Completed in November 2006.

Table 10

**Changes in Cost Projections for Large, High-Risk Projects  
Ongoing at the Start of FY 2006-07<sup>1</sup>**

Project Number <sup>2</sup>	Description	Agency	Cost Projections		Difference	
			Initial <i>(in millions)</i>	Revised <sup>3</sup> <i>(in millions)</i>	Amount <i>(in millions)</i>	Percentage
66	SUITES	DWD	\$ 27.7	\$ 46.4	\$18.7	67.5%
22	MMIS	DHFS	32.3	32.3	0.0	0.0
72	Statewide Voter Registration System	Elections Board	22.7	22.7	0.0	0.0
14	Integrated Corrections System, Phase 1a	DOC	9.0	9.0	0.0	0.0
16	Annuity Payment System	ETF	6.0	6.4	0.4	6.7
15	Integrated Corrections System, Phase 2	DOC	5.9	5.9	0.0	0.0
<b>Total</b>			<b>\$103.6</b>	<b>\$122.7</b>	<b>\$19.1</b>	<b>18.4%</b>

<sup>1</sup> Includes the six largest ongoing projects as of February 2007.

<sup>2</sup> Corresponds to project numbers include in Appendix 2.

<sup>3</sup> As of February 2007, when cost projections had not yet been revised for four of the six projects.

Costs are likely to increase when projects require more effort than anticipated. As shown in Table 11, we found:

- SUITES, which is DWD's project to develop software used in administering the Unemployment Insurance program, is expected to require four years' more effort than initially projected.
- The Annuity Payment System, which is the first phase in creating the Department of Employee Trust Funds' (ETF's) Benefit Payment System, is estimated to require 16 months' more effort than initially projected. ETF re-evaluated its approach to developing software for the Benefit Payment System after canceling two contracts in January 2004 and spending a reported \$3.9 million.
- The Medicaid Management Information System project of DHFS is expected to require 10 months' more effort than initially projected.

- The Statewide Voter Registration System that was required, by federal law, to be implemented by January 2006 has been delayed for at least two additional years. That project is the responsibility of the Elections Board, which contracted for its development.
- Phase 1a of the Integrated Corrections System of DOC has been delayed for just over one year, and this delay is likely to affect completion of the second phase, which nevertheless remains scheduled by the agency for completion next year.

Table 11

**Time Lines for Large, High-Risk Projects Ongoing at the Start of FY 2006-07**

Project Number <sup>1</sup>	Description	Agency	Start Date	Projected Completion Dates	
				Initial Date	As of February 2007
66	SUITES	DWD	06/1998	02/2004	03/2008
16	Annuity Payment System	ETF	02/2005	01/2006	05/2007
22	MMIS	DHFS	01/2005	05/2007	03/2008
72	Statewide Voter Registration System	Elections Board	04/2004	01/2006	02/2008
14	Integrated Corrections System, Phase 1a	DOC	10/2003	06/2006	07/2007
15	Integrated Corrections System, Phase 2	DOC	10/2003	05/2008	05/2008

<sup>1</sup> Corresponds to project numbers included in Appendix 2.

**Cost and Timeliness Standards**

Despite its statutory authority, DOA has not established benchmarks for evaluating either the cost-effectiveness or the timeliness of the IT projects for which it has oversight and monitoring authority. As a result, agencies do not have a standardized methodology for preparing an initial, detailed project cost estimate that could be used to determine whether the project is proceeding within a reasonable budget and if not, whether project plan changes should occur. In the absence of a standardized methodology, the reliability and reasonableness of agencies' initial cost estimates often vary widely based on the amount of specific project information available when the estimate was derived.

***We applied federal cost and timeliness standards to the completed large, high-risk projects included in our inventory.***

Given the lack of a state standard, we applied a standard developed by the federal Office of Management and Budget, and used by the United States Government Accountability Office to review federal IT projects, to the 13 large, high-risk IT projects completed by Wisconsin's executive branch agencies in FY 2004-05 or FY 2005-06. Under these standards, a project's final cost and completion date should be within 110.0 percent of initial projections.

***Only 6 of 13 completed large, high-risk projects were within 110.0 percent of initial cost projections.***

As shown in Table 12, six large, high-risk projects did not exceed initial cost projections by more than 10.0 percent. Those that did, exceeded their budgets by a total of \$14.0 million, or 61.4 percent. It should be noted, however, that we could not verify actual cost overruns for RaTS, DOT's registration and titling system, because an initial cost estimate was not revised when DOT changed the project plan significantly. DOT's Highway Patrol Arrest Redesign project is classified as not meeting the standard because costs were never projected.

We noted that on small projects, time delays often result from shifts in agency priorities and staffing resources, and do not necessarily result in increased costs. However, for large projects, delays can occur as agencies respond to frequent changes in technology or changes to the laws that govern state programs. Factors such as poor planning or the need to correct programming errors also increase project costs.

Of the 13 completed large, high-risk projects shown in Table 13, 8 met the timeliness standard because their completion dates were within 110.0 percent of initial projections. A significant reason that the remaining five projects were not completed in a timely manner is that agencies underestimated the complexity of new technologies and business requirements. For example, DOT's RaTS project was delayed because modifying an existing customer record database proved to be more complex than anticipated, and additional time was needed to complete the work. In contrast, an expansion of scope delayed DOR's Excise Tax Reporting and Auditing System project.

Table 12

**Changes in Cost Projections for Large, High-Risk Projects  
Completed in FY 2004-05 or FY 2005-06<sup>1</sup>**

Project Number <sup>2</sup>	Description	Agency	Costs		Difference	
			Projected <i>(in millions)</i>	Final <i>(in millions)</i>	Amount <i>(in millions)</i>	Percentage
<b>Met Cost Standard<sup>3</sup></b>						
9	Licensing and Regulation System	DATCP	\$ 1.3	\$ 1.4	\$ 0.1	7.7%
33	WiSACWIS, Final Phase	DHFS	22.6	24.0	1.4	6.2
99	Investment Data System	SWIB	1.2	1.2	0	0.0
35	Criminal Document Archive Imaging System	DOJ	1.1	1.1	0	0.0
32	WIC Administration Software	DHFS	1.7	1.5	(0.2)	(11.8)
30	Web-Based CARES, Version 2.0	DHFS	2.8	2.4	(0.4)	(14.3)
Subtotal			30.7	31.6	0.9	2.9
<b>Did Not Meet Cost Standard<sup>3</sup></b>						
69	RaTS <sup>4</sup>	DOT	9.4	18.8	9.4	100.0
88	Child Support Certification System	DWD	0.9	1.6	0.7	77.8
31	Web-Based CARES Enhancement	DHFS	4.5	6.7	2.2	48.9
58	Excise Tax Reporting and Auditing System	DOR	1.9	2.7	0.8	42.1
55	Corporate Income and Franchise Tax System	DOR	5.1	5.9	0.8	15.7
63	Driver License and ID Card Issuance, Release 2	DOT	1.0	1.1	0.1	10.1
60	Highway Patrol Arrest Redesign, Release 2	DOT	Not Reported	–	–	–
Subtotal			22.8	36.8	14.0	61.4
<b>Total</b>			<b>\$53.5</b>	<b>\$68.4</b>	<b>\$14.9</b>	<b>27.9</b>

<sup>1</sup> Based on agency estimates.

<sup>2</sup> Corresponds with project identification numbers included in Appendix 1.

<sup>3</sup> Standard developed by the federal Office of Management and Budget and used by the United States Government Accountability Office that requires a project's final cost and completion date to be within 110.0 percent of initial projections.

<sup>4</sup> DOT did not revise its project cost estimate when it significantly changed the project plan.

Table 13

**Timeliness of Large, High-Risk Projects  
Completed in FY 2004-05 or FY 2005-06**

Project Number <sup>1</sup>	Description	Agency	Estimated Completion Date	Actual Completion Date
<b>Met Timeliness Standard<sup>2</sup></b>				
33	WiSACWIS, Final Phase	DHFS	07/2004	07/2004
31	Web-Based CARES Enhancement	DHFS	11/2005	12/2005
30	Web-Based CARES, Version 2.0	DHFS	06/2006	06/2006
88	Child Support Certification System	DWD	11/2004	11/2004
63	Driver License and ID Card Issuance, Release 2	DOT	01/2006	01/2006
55	Corporate Income and Franchise Tax System	DOR	12/2005	12/2005
32	WIC Administration Software	DHFS	10/2005	10/2005
9	Licensing and Regulation System	DATCP	12/2005	09/2005
<b>Did Not Meet Timeliness Standard<sup>2</sup></b>				
69	RaTS	DOT	10/2003	12/2004
58	Excise Tax Reporting and Auditing System	DOR	06/2003	11/2004
60	Highway Patrol Arrest Redesign, Release 2	DOT	10/2005	03/2006
99	Investment Data System	SWIB	12/2005	06/2006
35	Criminal Document Archive Imaging System	DOJ	10/2004	03/2005

<sup>1</sup> Corresponds with project identification numbers included in Appendix 1.

<sup>2</sup> Standard developed by the federal Office of Management and Budget and used by the United States Government Accountability Office that requires a project's final cost and completion date to be within 110.0 percent of initial projections.

## Other Best Practices

Our 2001 report on state agencies' use of computer consultants (report 01-6) identified a number of best practices for IT project planning and management, such as involving end-users in defining project requirements and including performance incentives and penalties in vendor contracts.

While we did not systematically evaluate end-user involvement in project planning, we noted that agencies had involved end-users in planning for a number of completed projects. For example, for DOT's Highway Patrol Arrest Redesign project, business program experts worked with IT staff to define project requirements, approved a system prototype before programming began, tested the system before it was implemented, and trained other program staff.

Agencies have also involved the public in developing some public-access software that supports social services, allows on-line payment of taxes or fees, or provides agency or program information. For example, DHFS conducted 15 focus groups with low-income Wisconsin residents, 12 focus groups with service providers, and 12 focus groups with local agency representatives as part of its efforts to develop software for public assistance programs, and it encouraged feedback on software design from these groups.

Payments based on performance are another best practice for IT management. We reviewed 19 IT vendor contracts to determine the extent to which agencies included penalties to discourage inadequate contractor performance or incentives to motivate contractors to meet specific benchmarks. The Federal Acquisition Regulation manual, which includes purchasing policies for federal executive branch agencies, defines three types of contract incentives:

- cost incentives, which are paid if the contractor maintains the project's budget within a specified range;
- delivery incentives, which are paid if the contractor maintains the project's schedule within a specified range; and
- performance incentives, which are bonus payments that are often linked to the technical performance of an IT system.

***None of 19 contracts for completed projects included incentives, but 9 included penalties.***

None of the 19 contracts we reviewed included incentives. Nine of the contracts included penalties, although they were rarely used. For example:

- DHFS included a penalty in a contract for software development that would have assessed a fee of \$3,000 for each day a particular milestone was not reached;
- DHFS also included a penalty in a contract for software customization that would have assessed a daily fee of \$500 if the contractor missed a project milestone;
- DOA required a contractor to provide unpaid support if the developed software did not perform adequately when completed; and
- DPI included a liquidated damages clause in contracts for two separate software development projects that would have resulted in a daily charge of four times the total hourly rate if the projects were not completed on time, which would have been imposed until the projects were successfully completed.

The penalty in one contract was imposed when DOA required the contractor on a software development project for giving district attorneys electronic access to offender information to complete five months of follow-up work for the project at no cost to DOA.

In addition to incentives and penalties, contracts may include holdback provisions, which typically allow an agency to withhold a portion of the contracted amount until it determines the contractor has met all requirements. Of the 19 contracts for completed projects, 4 included holdback provisions. For example:

- DHFS withheld 10.0 percent of the contracted amount until the final phase of WiSACWIS was completed to the agency's satisfaction;
- DPI withheld 5.0 percent of the contracted amount on two projects—the Wisconsin Student Locator System and the Individual Student Enrollment System—until the projects were completed to the agency's satisfaction; and
- a State of Wisconsin Investment Board contract provided that SWIB would withhold 10.0 percent of quarterly payments for its investment data system project if milestones were not reached on time.

DHFS and DPI paid the withheld amounts at the end of the projects, while SWIB reported that on at least one occasion, 10.0 percent of its quarterly payments to the contractor were withheld because a milestone was not reached on time.

■ ■ ■ ■

## Reviews of Selected IT Projects ■

---

We conducted detailed reviews of seven large, high-risk projects:

- DOT's development of RaTS, a registration and titling system that was completed in December 2004 as part of the agency's broader redesign of the Division of Motor Vehicles' IT systems;
- DOR's customization of sales and use tax software, which was completed in December 2002 as part of the agency's broader development of its Integrated Tax System;
- DWD's ongoing development of SUITES software for use in collecting required wage information and unemployment insurance tax contributions from employers;
- DWD's customization of EnABLES software to generate benefit payments for temporarily unemployed workers, which is being re-evaluated following the suspension of further work in February 2007; and
- three statewide DOA projects—server consolidation, e-mail consolidation, and IBIS—that were included in an initiative by the Governor to reduce the State's costs for IT staffing, hardware, and software.

For all seven projects, increased costs and compromised time lines have been a concern.

## **Registration and Titling System**

DOT's Division of Motor Vehicles provides services such as vehicle registration and titling, driver examination and licensing, automobile dealer regulation and licensing, and services to motor carrier operators and commercial driving schools. Its IT systems have historically been organized according to whether they support vehicle services or driver services. In 1987, when it began planning a redesign of dated IT systems used for these purposes, DOT considered four options:

- developing software in a joint effort with other states;
- contracting with a vendor to develop software, with assistance from DOT staff;
- developing software internally, with assistance from contracted staff; and
- customizing commercially available software.

After determining that both commercially available software and a joint effort with other states would require extensive customization before they could be implemented, and that having a vendor take the lead in software development would be too costly, DOT proceeded by developing software internally, with assistance from contractors. Division of Motor Vehicles staff were included in system planning, development, and testing.

***DOT's RaTS project replaced 30-year-old software used for vehicle registration and titling services.***

The broader redesign of the Division of Motor Vehicles' IT systems was divided into two parts. The first part focused on driver services. It has been largely completed and was not a focus of our review. The second part, the Registration and Titling System (RaTS), focused on vehicle services. It was completed in December 2004 and replaced 30-year-old software. DOT officials believe it will:

- improve the agency's efficiency in responding to changes in state and federal law that affect motor vehicle programs;
- improve customer service and records management by allowing driver and vehicle records to be associated, rather than organized separately; and

- reduce software maintenance costs, because the technology adopted is understood by a large number of programmers.

***RaTS implementation was delayed, and costs and customer waiting times increased.***

While implementation of RaTS was initially scheduled for October 2003, it was delayed by more than one year, as shown in Table 14. In addition, while available projections estimated software development for vehicle services would cost approximately \$9.4 million, DOT spent at least twice that amount on RaTS. Costs increased after DOT determined that its initial project plan would not fully meet its needs, and some software functions that had been planned for later phases of the project—such as verification of title information using the Internet and automating the collection of unpaid parking citations or forfeitures by law enforcement agencies and the courts—were moved forward under a revised project plan.

Table 14

**RaTS Time Line**

Date	DOT Action
May 2001	Began project planning; planned project completion for October 2003
June 2002	Finalized agreement with a software firm, Miosoft, to complete a critical conversion of DMV’s customer database by October 2003
October 2003	Extended project time line to January 2004
November 2003	Extended project time line to June 2004
February 2004	Extended project time line to October 2004
March 2004	Amended Miosoft agreement extending database conversion to October 2004
August 2004	Extended project time line to November 2004
November 2004	Extended project time line to December 2004
December 2004	Implemented RaTS

As shown in Table 15, since RaTS was implemented in December 2004, the average waiting times for Division of Motor Vehicle services—including registration and titling services delivered both at customer service centers and by standard mail—have increased considerably.

Table 15

## Average Waiting Times for Division of Motor Vehicles Services

Quarter	Minutes to Serve 80 Percent of Customers at DMV Service Centers	Days to Process and Mail 90 Percent of Mail-In Titles
January through March 2004	28	27
April through June 2004	33	32
July through September 2004	30	37
October through December 2004	32	21
<b>RaTS Implementation</b>		
January through March 2005	45	64
April through June 2005	50	63
July through September 2005	47	81
October through December 2005	38	74
January through March 2006	38	63
April through June 2006	48	39

DOT attributes some delays in mail-in title service delivery to staffing reductions, and some increases in service center waiting times to changes in federal driver licensing requirements and increased residency fraud prevention. Nevertheless, by underestimating the complexity of the RaTS project, both DOT staff who were responsible for its planning, development, and implementation and some contractors also contributed to service problems. For example, DOT and Miosoft, Inc., a Madison software firm responsible for consolidating customer files, underestimated the complexity of their respective tasks: DOT's update of the technology supporting 8.0 million electronic Division of Motor Vehicle customer records, and Miosoft's consolidation of these records by customer name.

As a result of difficulties with these and other technical tasks, a limited number of customer records either were not consolidated or were inaccurate from December 2004 through January 2005. That, in turn, affected the efforts of DOT staff who rely on system data to determine whether vehicle registrations had been suspended or revoked. Furthermore, the identification of programming inaccuracies was delayed because DOT's specialized testing equipment was being used for other purposes. As a result, software

problems and instability noted during final testing were not fully resolved before implementation.

Finally, both an internal review by DOT and our interviews indicate that training was inadequate for the DOT staff who use RaTS. Users indicated to us that other workload pressures prevented them from taking full advantage of the training offered before implementation, and in April 2006, DOT found that staff were generally not satisfied with their RaTS proficiency or with DOT’s training, support, or communication of RaTS updates.

Table 16 summarizes DOT’s reported RaTS expenditures, which were fully funded with segregated revenues, including \$9.6 million for salaries and fringe benefits for state staff working on the project and the cost of providing computer resources for contracted staff, and \$9.3 million for software development consultants, including \$4.1 million paid to Canam Software Labs, Inc., the primary vendor providing programming services for the RaTS project.

Table 16

**RaTS Expenditures**

	Amount	Percentage of Total
<b>Internal Costs</b>		
DOT IT Staffing Costs <sup>1</sup>	\$ 6,125,400	32.5%
Computer Resources for Contracted Staff	3,455,000	18.3
<b>Subtotal</b>	<b>9,580,400</b>	<b>50.8</b>
<b>Contractor Costs</b>		
Canam Software Labs, Inc.	4,136,400	21.9
Active Development Group, Inc.	980,800	5.2
Everware, Inc.	663,700	3.5
Miosoft Corp.	500,000	2.7
Contracts with Other Firms <sup>2</sup>	2,987,800	15.9
<b>Subtotal</b>	<b>9,268,700</b>	<b>49.2</b>
<b>Total</b>	<b>\$18,849,100</b>	<b>100.0%</b>

<sup>1</sup> Excludes staffing costs for IT supervisors and Division of Motor Vehicles staff, which were not accounted for separately by DOT.

<sup>2</sup> Includes 14 firms that each received less than \$500,000 for RaTS development work.

We note that these reported costs do not include any portion of the \$4.3 million or more in costs that DOT incurred from 1998 through 2001 in support of the broader redesign of Division of Motor Vehicles IT systems, including the software that supports driver services. DOT did not assign a specific portion of those costs to RaTS development and did not specifically account for staffing costs related to IT supervisors' work on the RaTS project or the efforts of Division of Motor Vehicles staff who assisted in various phases of development.

It should be noted that some increases in RaTS development costs occurred because DOT was required to expand the system's functions to accommodate numerous changes in law that were enacted during the course of software development. For example, system modifications were required as a result of 2003 Wisconsin Act 71, which authorized a specialized license plate for Purple Heart recipients, and again after 2003 Wisconsin Act 220 revised the period during which initial vehicle emission tests are performed.

DOT believes that the most serious RaTS implementation issues have been resolved, and it found in an April 2006 internal survey that staff are generally satisfied with the system. DOT also indicated the waiting times at its service centers are declining, although whether they have returned to previous levels has not been documented.

#### Recommendation

---

*We recommend the Department of Transportation report to the Joint Legislative Audit Committee by October 1, 2007, on whether customer waiting times for Division of Motor Vehicles services have declined since June 2006.*

## Sales and Use Tax Software

***Sales and use tax software is one component of DOR's Integrated Tax System.***

In December 2002, DOR implemented sales and use tax software as one component of its Integrated Tax System, which is intended to replace 30 tax and revenue systems developed beginning in the 1960s. The Integrated Tax System is expected to coordinate the administration, collection, and distribution processes for more than 30 different types of taxes.

DOR chose to develop the Integrated Tax System—including sales and use tax software—to improve its ability to respond to changes in tax law, which is subject to frequent modification. In the past, DOR had difficulty updating some software, which was decades old.

DOR also expected the system to help staff better coordinate their tax collection efforts, and thereby increase tax revenues. Finally, DOR expected that the system would allow it to more efficiently process and store tax data, resulting in improved services for taxpayers and taxing districts.

DOR collects most sales and use taxes from businesses, although some are paid directly by individuals who report certain out-of-state, Internet, and catalogue purchases on their income tax returns. DOR’s sales and use tax software processes data and generates monthly distributions of sales and use tax revenues to counties and other taxing districts.

***DOR’s sales and use tax software was adapted and customized by a vendor.***

As a result of a 1997 request for proposals, DOR purchased sales and use tax software from American Management Systems (AMS), Inc., an IT consulting firm later acquired by CGI Group, Inc., and renamed CGI-AMS. Because CGI-AMS had originally developed similar software for the Kansas Department of Revenue, DOR’s initial contract with CGI-AMS required the vendor to customize the software for use in Wisconsin. The contract also required CGI-AMS to adapt its software for use with DOR’s systems software. DOR contracted with an independent IT consultant to prepare and monitor technical requirements for the project and assigned a full-time DOR project manager to work with CGI-AMS.

As shown in Table 17, DOR spent at least \$24.9 million to develop its sales and use tax software. Of this amount, \$18.6 million, or 74.7 percent, was funded with GPR, while the remainder was funded with program revenues generated from administrative fees DOR charges to taxing districts.

Table 17

**Funding for Sales and Use Tax Software<sup>1</sup>**  
Through September 2006

Source	Amount <i>(in millions)</i>	Percentage of Total
GPR	\$18.6	74.7%
Program Revenues	6.3	25.3
<b>Total</b>	<b>\$24.9</b>	<b>100.0%</b>

<sup>1</sup> Excludes salary and fringe benefit costs for DOR staff.

When it completed detailed project planning for sales and use tax software development in November 2001, DOR estimated the software would be implemented in October 2002 at a cost of \$19.2 million, excluding DOR staffing costs. However, implementation was delayed until December 2002 because additional time was needed to adapt and customize the software. In February 2007, as a result of concerns about the software, DOR amended an existing contract with a different vendor to replace it by December 2007. The project time line is summarized in Table 18.

Table 18

**Sales and Use Tax Software Time Line**

Date	DOR Action
April 2000	Used a 1997 request for proposals to contract for sales and use tax software development
June 2000	Contracted with CGI-AMS for purchase and customization of software
June 2001	CGI-AMS released a key subcontractor for performance failure
November 2001	Modified CGI-AMS contract to allow for additional customization; planned project completion for October 2002, at a cost of \$19.2 million
December 2002	Implemented software
October 2003	Entered an additional contract with CGI-AMS to resolve software problems
June 2004	Entered an additional contract with CGI-AMS to resolve software problems
November 2005	Entered a no-cost contract with CGI-AMS to resolve software problems
October 2006	Reported final resolution of software problems to the Joint Legislative Audit Committee
February 2007	Amended an existing contract with a different vendor to replace its sales and use tax software by December 2007 at an estimated cost of \$3.3 million

As shown in Table 19, of the \$24.9 million DOR spent on sales and use tax software development, \$23.1 million, or 92.7 percent, was paid to CGI-AMS. The remainder was paid primarily to other contractors for assistance in converting data to a format that would be compatible with the sales and use tax software.

Table 19

**Sales and Use Tax Software Expenditures  
Through September 2006<sup>1</sup>**

	Amount	Percentage of Total
<b>Contractor Costs</b>		
CGI-AMS	\$23,104,900	92.7%
Other Contractors <sup>2</sup>	1,785,900	7.2
Subtotal	24,890,800	99.9
<b>Internal Costs<sup>3</sup></b>		
Equipment Maintenance	38,800	<0.1
Other Project Costs	3,000	<0.1
Equipment Purchases	1,200	<0.1
Subtotal	43,000	0.1
<b>Total</b>	<b>\$24,933,800</b>	<b>100.0%</b>

<sup>1</sup> Includes costs DOR incurred for resolving software problems after the December 2002 implementation of its sales and use tax software.

<sup>2</sup> Primarily for assistance with data conversion supporting sales and use tax software.

<sup>3</sup> Excludes salary and fringe benefit costs for DOR staff.

***DOR's reported sales and use tax software expenditures have been understated.***

We note that the \$24.9 million DOR reported spending for sales and use tax software implementation understates its project costs. For example, DOR spent at least \$10.7 million for salaries, fringe benefits, and overhead costs associated with DOR staff who worked on the project. In addition, a portion of \$10.0 million that DOR spent from FY 1997-98 through September 2006 for Integrated Tax System planning efforts, equipment, and administrative costs benefited sales and use tax software development. However, DOR did not account for these costs in a way that allowed a specific amount to be assigned to each project. Finally, we note that reported expenditures exclude an estimated \$4.1 million in principal and interest that DOR must pay for sales and use tax software under the State's master lease program, regardless of its anticipated December 2007 replacement with alternative software.

***Programming errors were discovered after implementation of the sales and use tax software.***

Following implementation in December 2002, DOR believed that its sales and use tax software was functioning as intended. However, it began discovering problems with the software throughout 2003 and in early 2004. For example, in March 2004, DOR discovered that the

software had erroneously excluded from distribution calculations the taxes collected for vehicles that were purchased out of state but registered in Wisconsin. As a result, although the software was initially delivered within budget, DOR spent an additional \$5.7 million for the project when it paid CGI-AMS to resolve significant programming errors that were discovered after the software had been implemented.

CGI-AMS corrected programming errors from January 2003 through October 2003 under its original contract with DOR. However, because concerns about the software persisted, DOR entered into a series of additional contracts from October 2003 through May 2005 that required CGI-AMS to resolve specific programming errors and to provide its services at cost.

In a December 2005 letter report, we noted several inaccurate payments to taxing districts because of processing errors involving the sales and use tax software. Errors in the software that DOR had identified but not yet corrected, and a new error we identified, resulted in DOR having underpaid 33 taxing districts a total of \$1.8 million, and having overpaid 27 taxing districts a total of \$2.8 million. From November 2005 through September 2006, CGI-AMS worked to resolve additional programming errors at no cost to DOR under a subsequent agreement. In addition, and in response to our recommendation, DOR provides monthly reports to the Joint Legislative Audit Committee detailing additional work performed on the sales and use tax software. In its October 2006 report, DOR indicated that CGI-AMS had completed testing to ensure the software was functioning properly. Our analysis of DOR's efforts to address sales and use tax distribution errors is included in an April 2007 letter report published with this review.

To better understand the reason for programming errors that caused final project costs to significantly exceed estimates, we analyzed DOR's management of the software development process, and specifically how it entered into and structured contracts with project vendors.

We note that DOR took a number of positive steps in managing the development of its sales and use tax software, including:

- initially contracting with an independent IT consultant to act on its behalf in preparing and monitoring technical requirements for the project, although it was unable to replace the consultant when the individual could not continue in that capacity as of January 2001;

- attempting to limit project costs by customizing purchased software, rather than having a vendor develop software specifically for Wisconsin; and
- discontinuing its work with CGI-AMS in June 2004 because of its dissatisfaction with sales and use tax software development, and because CGI-AMS increased its initial cost estimate for individual income tax software—which at that time, DOR intended to purchase from CGI-AMS as the next component of the Integrated Tax System—from \$16.2 million to approximately \$46 million.

***A key subcontractor failed to perform critical work on the project.***

Despite these positive steps, DOR experienced significant difficulties. For example, a key CGI-AMS subcontractor failed to perform critical work on the sales and use tax project, which resulted in serious programming errors and added pressure for CGI-AMS to complete the project as scheduled in order to process 2003 tax returns. To prepare its software for DOR, CGI-AMS was required to complete two complex tasks: conversion of its software for use with DOR's systems software, and customization of the software to accommodate differences in Wisconsin and Kansas tax law and business processes. Although CGI-AMS staff customized the software to reflect Wisconsin tax law, it hired a subcontractor to perform the critical conversion work.

However, in June 2001, CGI-AMS terminated its subcontract because the subcontractor had failed to successfully convert the software. CGI-AMS subsequently assumed direct responsibility for completing the complex work. In November 2001, DOR amended its contract with CGI-AMS to allow additional time to complete the conversion, as well as the remaining customization necessary to meet DOR's business requirements. The delays caused by the subcontractor's failure:

- increased programming errors, because CGI-AMS was compelled to complete complex work in a short amount of time with staff who were unfamiliar with the software;
- resulted in inadequate software testing, which was needed to identify and resolve programming errors; and
- provided insufficient opportunity for DOR staff to receive the training necessary to assume responsibility for maintaining the software when CGI-AMS completed its work, which was further hindered when CGI-AMS completed the software development in Virginia rather than Madison, as initially planned.

***We found no evidence of DOR responding in a timely manner to reports that work was not progressing as planned.***

Early reports from CGI-AMS suggested the subcontractor's conversion work was not progressing as planned, but we could find no evidence these reports were acted upon in a timely manner. More effective monitoring may have allowed DOR to identify concerns with the feasibility and cost of the project sooner. Moreover, DOR could have re-evaluated the costs and benefits of proceeding with the project despite its concerns, and explored the availability of emerging products that might better meet its needs for the Integrated Tax System.

The complex conversion and customization of the existing sales and use tax software also would have made modifications difficult. For example, DOR officials estimated the cost of modifying the software to accommodate the Streamlined Sales Tax Project included in Senate Bill 40 to be at least \$2.9 million.

***DOR plans to abandon its sales and use tax software in December 2007.***

In February 2007, DOR amended its contract with FAST Enterprises, a software development firm that specializes in providing products and services to revenue agencies, and from which DOR has previously purchased off-the-shelf software for use with its Integrated Tax System. Under the amendment, DOR plans to abandon its sales and use tax software in December 2007 and pay FAST \$3.3 million to purchase and customize off-the-shelf FAST software to replace it. The cost of the FAST software includes one year of software maintenance, and DOR will pay \$500,000 for software maintenance and enhancements through May 2008 for all of its FAST products, including sales and use tax software.

DOR has placed limits on the extent to which it has customized other FAST software, such as the software used to administer individual income taxes. Similar efforts to limit customization will be important for the success of FAST sales and use tax software. Moreover, DOR should ensure that its own staffing costs are included in the total cost of FAST software implementation.

#### **Recommendation**

---

*We recommend the Department of Revenue report to the Joint Legislative Audit Committee by October 1, 2007, on the status of conversion to FAST sales and use tax software, and its plans to include its own staffing costs when determining the software's total cost.*

## **Unemployment Insurance Systems**

***DWD is customizing and developing software to support the Unemployment Insurance program.***

DWD administers the federal Unemployment Insurance program that requires most employers to pay specific amounts into the Unemployment Reserve Fund in support of unemployment benefits earned by their employees. DWD is developing SUITES, the State Unemployment Insurance Tax Enterprise System, to collect required

wage information and tax contributions from employers. It is also customizing software to generate benefit payments for temporarily unemployed workers. However, further work on EnABLES, the Enhanced Automated Benefits and Legal Enterprise System under development for that purpose, was suspended in February 2007, and DWD is re-evaluating the project's feasibility.

DWD's IT projects were intended to replace existing systems and databases that are based on dated technology. Program officials believed that software supported by new technology would be more easily and cost-effectively modified in response to future changes in unemployment insurance law. They also believed SUITES and EnABLES would be easier for staff to use, and that the software projects would allow DWD to improve service delivery to employers and program applicants.

As shown in Table 20, DWD spent \$63.9 million on the two projects through September 2006: \$42.2 million for SUITES, and \$21.7 million for EnABLES. Both projects have been funded primarily through federal block grants, which are funded from federal taxes on employers, and distributions under the Reed Act, which requires distribution of excess unemployment taxes to the states. In addition, \$20.0 million was from administrative fees paid by Wisconsin employers specifically to fund program automation improvements, and \$1.9 million was from interest and penalties assessed on those who make late unemployment insurance tax payments.

Table 20

**Funding for SUITES and EnABLES Expenditures<sup>1</sup>**  
(in millions)

Source	SUITES	EnABLES	Total
<b>Federal<sup>2</sup></b>	\$21.3	\$20.7	\$42.0
<b>Employers</b>			
Administrative Fees	19.9	0.1	20.0
Interest and Penalties	1.0	0.9	1.9
Subtotal	20.9	1.0	21.9
<b>Total</b>	<b>\$42.2</b>	<b>\$21.7</b>	<b>\$63.9</b>

<sup>1</sup> Through September 2006.

<sup>2</sup> Includes federal block grant funds, which return federal unemployment insurance taxes paid by employers to states, and distributions under the federal Reed Act.

***DWD has significantly revised its cost projections for SUITES and suspended work on EnABLES in February 2007.***

DWD has significantly revised its cost estimates and time lines for both SUITES and EnABLES. In June 2002, DWD estimated that SUITES would cost \$27.7 million—including costs already incurred—and be completed in February 2004. However, as of January 2007, DWD estimated the project would cost \$46.4 million, or \$18.7 million more than planned, but it did not revise the project's estimated completion date of March 2008. DWD initially estimated EnABLES would cost \$24.0 million and be completed in June 2006. However, work on the project was suspended in February 2007 after DWD spent \$23.6 million on it.

## **SUITES**

Three consulting firms assisted DWD with planning SUITES:

- Arthur Andersen, LLP, an international accounting firm that reviewed and documented unemployment insurance tax processes and conducted stakeholder analyses using focus groups and surveys from April 1998 to January 1999;
- CSC Consulting, Inc., a technology consulting firm currently headquartered in California, which analyzed various options for replacing existing tax and wage software from October 1999 through April 2000; and
- TRW, Inc., a consulting firm acquired by Northrop Grumman in 2002, with which DWD contracted to prepare design specifications for the software from November 2000 through November 2001.

***DWD contracted with Accenture, Inc., to design, develop, and implement SUITES.***

However, DWD's primary contractor was Accenture, Inc., an international consulting, technology services, and outsourcing firm. DWD contracted with Accenture to complete SUITES design specifications and develop and implement the software. The contract required DWD staff to work closely with the vendor during SUITES development and to complete a portion of development work.

As shown in Table 21, \$23.4 million in SUITES development costs through September 2006, or 55.5 percent, was DWD's internal costs, including salaries and fringe benefits for its own IT staff and others working on the project. In addition, DWD paid \$18.8 million to project consultants, including \$14.3 million to Accenture and \$3.5 million to TRW.

Table 21

**SUITES Expenditures**  
Through September 2006

	Amount	Percentage of Total
<b>Internal Costs</b>		
Staffing Costs <sup>1</sup>	\$19,968,100	47.3%
Supplies and Services	1,205,900	2.9
Rent	759,600	1.8
Equipment	642,600	1.5
Other <sup>2</sup>	836,400	2.0
Subtotal	23,412,600	55.5
<b>Contractor Costs</b>		
Accenture	14,281,400	33.8
TRW	3,504,300	8.3
CSC Consulting	903,800	2.1
Arthur Andersen	102,500	0.3
Subtotal	18,792,000	44.5
<b>Total</b>	<b>\$42,204,600</b>	<b>100.0%</b>

<sup>1</sup> Includes \$15.3 million for Bureau of Information Technology staffing and overhead costs and \$4.7 million for salaries and fringe benefits for Unemployment Insurance program staff.

<sup>2</sup> Includes additional project supplies and services costs not charged to specific DWD organizational units.

DWD implemented the first of three SUITES components in September 2004. As of February 2007, it expected to implement the second in September 2007 and the third in March 2008. However, since SUITES development began, DWD has revised project cost estimates five times and extended the project time line on three separate occasions, as shown in Table 22.

Table 22

**SUITES Time Line**

Date	DWD Action
May 1998	Began project planning
June 2002	Contracted with Accenture as principal vendor for SUITES implementation; planned project completion for February 2004 at a cost of \$27.7 million
June 2003	Extended project time line to May 2004; increased cost estimate to \$29.5 million
August 2004	Extended project time line to June 2005; increased cost estimate to \$35.5 million
January 2005	Extended project time line to March 2008
February 2005	Extended Accenture contract through September 2005
July 2005	Increased cost estimate to \$41.6 million
August 2005	Released Accenture and assumed responsibility for remaining work
July 2006	Increased cost estimate to \$44.3 million
January 2007	Increased cost estimate to \$46.4 million

***Project planning  
deficiencies affected  
SUITES development  
costs.***

We identified several project planning deficiencies that negatively affected DWD's ability to control SUITES costs. First, before the start of SUITES development, DWD did not modify or simplify its automated steps for collecting wage information and accounting for unemployment insurance tax revenue. Modifying or streamlining these business processes could have reduced the amount of complex and costly programming required for SUITES development. DWD paid Arthur Andersen \$102,500 to document the existing business processes, but did not determine whether they could be simplified.

Second, although it paid TRW \$3.5 million under a \$4.6 million contract to complete detailed design specifications for SUITES software, DWD was dissatisfied with the vendor's progress. As a result, when DWD conducted its request-for-proposals process and contracted with Accenture for SUITES development, it lacked detailed design specifications. Without these specifications, DWD and Accenture had no basis for reasonably estimating the project's costs and time line.

In addition, DWD staff indicated that Accenture underestimated the complexity and volume of business processes that DWD sought to be included in SUITES, and DWD and Accenture consistently disagreed on the scope of SUITES development. For example:

- In June 2003, DWD and Accenture executed a contract amendment that expanded the project's scope and extended its time line from February 2004 to May 2004, and that increased its cost estimate by \$1.8 million.
- In December 2003, DWD would not agree to scope reductions when notified by Accenture that the contract period was insufficient to complete the project.
- In February 2005, one year after SUITES was initially expected to have been implemented, DWD extended the Accenture contract through September 2005 but began gradually decreasing Accenture's involvement in the project.
- In August 2005, DWD assumed full responsibility for the remaining SUITES development and implementation.

Although DWD paid Accenture \$14.3 million—or \$2.4 million more than the amount agreed upon for implementation—and received an additional 26,000 hours of work from Accenture at no additional cost, SUITES was not close to being implemented when DWD assumed full responsibility for remaining work on the project in August 2005.

Third, DWD did not adequately analyze the costs and benefits associated with SUITES development. Although it paid CSC Consulting \$903,800 to analyze options and make a recommendation for replacing existing tax and wage software, the usefulness of the recommendation was limited because DWD had not adequately examined its business processes for the Unemployment Insurance program or determined what would be required of new software. As a result, DWD's ability to determine whether it was necessary and cost-effective to develop software, rather than pursue a less costly approach of purchase or customization of off-the-shelf software, was hindered.

***The SUITES project is at risk for continued delays and cost increases.***

In January 2007, DWD increased projected costs for SUITES by \$2.0 million, to \$46.4 million. We believe the SUITES project is at risk for continued delays and cost increases. For example, DWD initially

contracted with Accenture for SUITES software development because department officials did not believe DWD had adequate staff resources or expertise to complete the work. They have since indicated that DWD's IT staff has gained the necessary expertise to complete SUITES software development. However, a significant amount of work on the project remains and DWD does not anticipate fully implementing SUITES until March 2008. As a result, DWD's cost estimate for remaining work may be understated.

### Recommendation

---

*We recommend the Department of Workforce Development report to the Joint Legislative Audit Committee by October 1, 2007 with:*

- *specific milestones necessary for completing SUITES software development;*
- *methods for limiting further addition of functions not required to meet Unemployment Insurance program requirements in remaining SUITES development; and*
- *revised, detailed project cost and time line estimates.*

### **EnABLES**

EnABLES was initially intended to replace existing software that processes unemployment insurance payments for workers and the scheduling of legal proceedings and inquiries related to appeals, hearings, and adjudication. Because of significant concerns about the project's scope, cost, and time line, DWD suspended further work in February 2007, at which point it had implemented only one of six planned components. DWD is currently re-evaluating the project's feasibility.

***DWD had primary responsibility for customizing EnABLES, but it contracted for assistance.***

To implement EnABLES, DWD had been customizing software it purchased from IBM, although the software was developed by Cúram Software, Ltd., a business and technology consulting firm in Ireland. DWD had primary responsibility for customizing the software but contracted with Tier Technologies, a national consulting firm specializing in financial transaction processing, for assistance.

As shown in Table 23, \$9.4 million of the \$21.7 million DWD spent on EnABLES through September 2006, or 43.4 percent, consisted of payments to Tier Technologies. DWD spent an additional \$9.8 million for internal costs, including salaries and fringe benefits for its staff.

Table 23

**EnABLES Expenditures  
Through September 2006**

	Amount	Percentage of Total
<b>Contractor Costs</b>		
Tier Technologies	\$ 9,394,200	43.4%
IBM <sup>1</sup>	2,502,200	11.5
Subtotal	11,896,400	54.9
<b>Internal Costs</b>		
Staffing Costs <sup>2</sup>	7,594,300	35.1
Equipment	809,600	3.7
Supplies and Services	476,700	2.2
Rent	317,800	1.5
Other <sup>3</sup>	564,100	2.6
Subtotal	9,762,500	45.1
<b>Total</b>	<b>\$21,658,900</b>	<b>100.0%</b>

<sup>1</sup> Cúram Software vendor.

<sup>2</sup> Includes \$4.9 million for Bureau of Information Technology staffing and overhead costs and \$2.7 million for salaries and fringe benefits for Unemployment Insurance program staff.

<sup>3</sup> Includes additional project supplies and services costs not charged to specific DWD organizational units.

Although DWD initially estimated the project would be completed in June 2006, it extended the time line three times and made significant revisions to project cost estimates since the software customization began in July 2003. A project time line is shown in Table 24.

Table 24

**EnABLES Time Line**

Date	DWD Action
June 2002	Began project planning
May 2003	Planned project completion for June 2006 at a cost of \$24.0 million
July 2003	Finalized initial Tier Technologies contract to assist with customizing software
September 2003	Finalized contract with Cúram for base software
March 2004	Extended project time line to December 2006
March 2005	Extended project time line to March 2007; increased cost estimate to \$26.1 million
October 2005	Extended project time line to fall 2010
July 2006	Finalized new contract with Tier Technologies
February 2007	Suspended further work on the project pending re-evaluation

***DWD did not adequately plan for EnABLES.***

As with SUITES, we found that DWD did not adequately plan for the EnABLES project. Business processes were not first reviewed to determine whether modifications could be made, which may have reduced the amount of complex and costly customization required, and we noted three additional factors that had significant negative effects on project costs.

***DWD significantly underestimated the project's complexity.***

First, when the Cúram software was purchased, DWD officials underestimated the complexity of the unique programming upon which it is based and the time and expense required to customize it. Agency officials note that it has taken DWD staff a minimum of two years to become proficient in programming the software, and they have expressed concerns about recruiting and retaining qualified staff to work with the software in the future. Through September 2006, DWD was unable to fill two project positions for EnABLES with qualified candidates.

Moreover, given the specialized training required to work with the software, DWD had difficulty obtaining competitive proposals for assistance with customization. In November 2002, when it issued a request for proposals for both software and customization, DWD did not accept any customization proposals because it was not satisfied that the vendors submitting them were qualified. In May 2003, DWD used the statewide IT contract, which allows

agencies to obtain services from a list of vendors who have already contracted with the State at a pre-negotiated hourly rate, to hire the only firm it determined was qualified to assist with customization, Tier Technologies. DWD also determined that Tier Technologies was the only qualified firm to respond to a request for proposals it issued in December 2005.

***The extent of software customization contributed significantly to project delays and increased costs.***

Second, although it opted to customize existing software to limit project costs, the extent of DWD's customization—rather than adjusting its business processes, when possible, to fit the software's functions—actually increased costs. In addition, because software maintenance and other costs increase proportionately with customization, higher future costs should also be anticipated.

***DWD made ineffective use of consultants on the EnABLES project.***

Third, because DWD did not have detailed project specifications, its contracts with Tier Technologies did not link payments with specific deliverables. Instead, Tier Technologies consultants worked under the general direction of DWD staff. As a result, although DWD paid Tier Technologies \$8.3 million from July 2003 through June 2006, customization was still not close to being completed as of July 2006. DWD issued a request for proposals and again contracted with Tier Technologies through June 2009 to work under the general direction of DWD staff, although this time at lower hourly rates and with a reduced number of vendor staff.

In February 2007, despite having paid Tier Technologies an additional \$1.1 million under its new contract, DWD suspended its work on EnABLES because the project's scope, costs, and time line had significantly exceeded projections. DWD's contract with Tier Technologies has not been terminated, but the vendor's staff were removed from the project in March 2007. DWD is currently re-evaluating the feasibility of the EnABLES project, including assessing which elements may be recovered or completed in the future and determining how best to proceed with completing the update of unemployment insurance systems.

#### **Recommendation**

---

*We recommend the Department of Workforce Development report to the Joint Legislative Audit Committee by October 1, 2007, on its progress in:*

- *completing a detailed assessment of the costs and benefits of continuing to maintain or customize Cúram software for use in EnABLES or other unemployment insurance systems; and*
- *modifying or streamlining its business processes before pursuing any further software development for EnABLES or other unemployment insurance systems.*

## Statewide DOA Initiatives

***DOA is currently implementing three projects aimed at statewide consolidation of IT resources.***

In March 2005, the Governor announced his Accountability, Consolidation, and Efficiency (ACE) Initiative to pursue savings in procurement, state facilities management, human resources, and IT. For IT, the goal is to reduce costs for staffing, computer hardware, and fees for software licensing and maintenance through consolidation and improved management of the State's IT resources. The IT component of the ACE initiative includes:

- the Shared Information Services (SIS) initiative, which is more typically referred to as server consolidation and is intended to reduce the number of servers the State owns and consolidate servers for most executive branch agencies within a centralized data center managed by DOA;
- e-mail consolidation, which is intended to allow most executive branch agencies, which have historically used a variety of e-mail software, to have e-mail software in common; and
- IBIS, an integrated system that is expected to replace most of the accounting, budgeting, human resources, payroll, and procurement software of executive branch agencies.

All three projects have been managed by DOA, but staff from other agencies have provided assistance as needed. In addition, DOA contracted with vendors for key aspects of the projects, including:

- Crowe Chizek and Company, LLC, a national accounting and consulting firm, with which DOA contracted for server consolidation planning and implementation assistance;
- DLT Solutions, Inc., an authorized vendor with which DOA initially contracted for Oracle e-mail software and implementation services;
- Microsoft Corporation, with which DOA entered a subsequent agreement related to e-mail consolidation;
- Salvaggio, Teal & Associates, a national IT consulting firm that analyzed the feasibility of implementing integrated software for IBIS and

facilitated meetings of DOA and agency staff to standardize business processes and develop a request for proposals for IBIS software; and

- Oracle Corporation, from which DOA purchased the primary software for IBIS implementation.

As shown in Table 25, DOA spent \$20.2 million on its server consolidation efforts, \$6.4 million on e-mail consolidation, and \$700,000 for preliminary work on IBIS through September 2006.

Table 25

**IT Consolidation Project Expenditures  
Through September 2006**

	Expenditures <i>(in millions)</i>
Server Consolidation	\$20.2
E-mail Consolidation	6.4
IBIS	0.7
<b>Total</b>	<b>\$27.3</b>

***DOA has experienced significant difficulties with two of its three IT consolidation projects.***

DOA has experienced significant difficulties with two of the three projects:

- Server consolidation was expected to be completed by May 2006 but is not near completion in April 2007.
- E-mail consolidation was expected to be completed in June 2005, but only four agencies—DOA, Tourism, Wisconsin Historical Society, and DNR—were using the new software as of September 2006, and the project has continued to experience delays since that time.

In contrast, DOA’s initial planning and project management efforts for IBIS appear to have been managed appropriately, and DOA has taken steps to control costs for this project that were not taken with the other two.

## Server Consolidation

***In November 2004, DOA estimated the State owned 2,239 servers, excluding those used solely for e-mail.***

Servers are computers or other devices specifically dedicated to managing applications and other IT resources that are used by a large number of individuals. Historically, most state agencies have purchased and maintained servers independently. DOA has provided servers for a limited number of small agencies, or for particularly large applications when agency resources were insufficient. In November 2004, DOA estimated that the State owned 2,239 servers, excluding servers dedicated solely to e-mail.

A Crowe Chizek report commissioned by DOA indicated that the server consolidation initiative could lower the State's costs by reducing the number of its servers by as much as 20 percent, although neither Crowe Chizek nor DOA identified a specific number of servers to be eliminated from each agency. The number of servers was also expected to be reduced by making better use of existing server capacity or using fewer, larger servers, and by increasing buying power and reducing maintenance costs through centralized control of servers in a single DOA data center. In addition to achieving cost savings, DOA officials believed that server consolidation would allow agency IT departments to better focus on projects related directly to agencies' programmatic functions and would improve the functioning and security of state IT resources by standardizing server management.

Server consolidation planning included 18 executive branch agencies—14 departments and 4 independent agencies—and the State Treasurer's Office. Because of confidentiality or other concerns, two departments and one independent agency—DOJ, DVA, and the State Public Defender Board—were exempted by the Legislature from consolidation, and a fourth, the Department of Military Affairs, was excluded because of restrictions on the use of its federal funding. Three independent agencies—the Elections Board, HEAB, and the Wisconsin Employment Relations Commission—were excluded because DOA already manages their servers under the Small Agency Support Infrastructure initiative.

In April 2004, DOA entered into a \$7.0 million contract with Crowe Chizek to provide a number of services related to server consolidation, including:

- a feasibility assessment and cost-benefit analysis for server consolidation, which included e-mail consolidation;
- the development of recommended steps for proceeding with server consolidation; and

- technical assistance with implementing server consolidation.

***DOA’s vendor estimated server consolidation savings would be primarily derived from staffing reductions.***

In November 2004, Crowe Chizek completed its cost-benefit analysis, which indicated that server consolidation would result in cost savings for the State of \$15.6 million over five years, derived primarily through the reduction of 35.0 FTE staff positions. In addition, Crowe Chizek concluded the State would need fewer servers in the future, and the use of certain server technology would make eventual replacement of servers less expensive. Crowe Chizek’s November 2004 analysis also included projected savings from the consolidation of e-mail, which it estimated would reduce staffing levels by an additional 8.0 FTE positions.

***The server consolidation project was not completed in May 2006, as planned.***

The State’s chief information officer is responsible for implementing server consolidation. While DOA reported in May 2004 it would complete the project by May 2006, it did not do so, and Crowe Chizek’s consultants ceased work on the project in April 2006. DOA continues to rely on its own staff and staff from other agencies to complete the project. Table 26 provides a project time line.

Table 26

**Server Consolidation Time Line**

Date	DOA Action
November 2003	Issued a request for proposals for server consolidation
April 2004	Entered into a contract with Crowe Chizek to identify and implement server consolidation strategies
May 2004	Finalized initial server consolidation plan; estimated project completion date of May 2006
August 2004	Agencies first raised concerns that the project time line was unrealistic
November 2004	Crowe Chizek released its cost-benefit analysis
August 2005	Signed agreement for data center construction to house consolidated servers
April 2006	DOA staff occupied new data center; Crowe Chizek staff ceased work on server consolidation
May 2006	Initial estimated completion date for server consolidation
June 2006	Revised project time line; position reductions in state agencies became effective

**DOA reported spending \$20.2 million on server consolidation through September 2006.**

DOA has funded its server consolidation efforts with program revenues it receives from charging agencies for printing, mail, communication, and IT services. As shown in Table 27, DOA reported spending \$20.2 million for costs directly related to server consolidation through September 2006, including \$5.2 million paid to Crowe Chizek.

Table 27

**Server Consolidation Expenditures  
Through September 2006**

	Amount	Percentage of Total
<b>Contractor Costs</b>		
Crowe Chizek	\$ 5,165,000	25.6%
<b>Internal Costs</b>		
IT Supplies and Services	6,055,200	29.9
Salary and Fringe Benefits <sup>1</sup>	5,509,700	27.3
Other Supplies and Services	3,475,500	17.2
Subtotal	15,040,400	74.4
<b>Total</b>	<b>\$20,205,400</b>	<b>100.0%</b>

<sup>1</sup> Includes costs for DOA staffing and interchange agreements for a limited number of agency staff temporarily assigned to DOA.

We note that server consolidation costs will be higher than shown in Table 27. For example, DOA has incurred additional costs for its new data center, and at least a portion of these costs are attributable to server consolidation.

**DOA entered a \$35.2 million, 17-year lease for its new data center.**

Through September 2006, DOA had spent \$8.3 million on the 56,900 square-foot data center located in Madison, including \$6.9 million paid to Lokre Data Center, LLC, from which it is leasing the facility. According to its agreement with Lokre, DOA’s lease payments will total \$35.2 million over the term of the 17-year lease, which expires in March 2023. The lease provides DOA the sole right to purchase the facility at any time after the sixth year. While DOA officials have stated that the plan to construct a new data center preceded plans for server consolidation, at a minimum, server consolidation necessitated a larger data center than otherwise would have been required. DOA has not accounted for data center costs in a way that allowed us to assign a specific amount to the server consolidation project.

***Other state agencies have incurred significant staffing costs to support server consolidation.***

In addition to data center costs, DOA has not accounted for staffing costs incurred by executive branch agencies that have provided temporary assistance to the project or have helped plan their agencies' needs in moving servers or applications. Although not all agencies maintain detailed time accounting records for IT staff, the estimated staffing costs of those that have done so are significant. For example, DOT officials estimated \$531,100 in staffing costs for server consolidation activities, including e-mail consolidation, while DWD officials estimated at least \$439,900 in staffing costs for server consolidation alone.

***DOA has yet to adequately demonstrate that projected server consolidation savings will occur.***

We identified a number of contributing factors to DOA's unsuccessful server consolidation effort. First, DOA did not adequately demonstrate the need for server consolidation. It indicated the primary purpose was to achieve savings, but DOA has not demonstrated that savings will occur. Other state agencies' IT directors have consistently asserted that Crowe Chizek's November 2004 analysis underestimated project costs and overestimated project benefits. Some IT directors have also asserted that server consolidation may result in a level of complexity that requires more staff rather than fewer. In addition, IT directors question whether the proposed server technology will allow certain applications to be placed on the same server, as DOA planned. Crowe Chizek did not address these issues.

Regardless of the reasonableness of Crowe Chizek's initial cost savings estimates, the State has not achieved cost savings in the time period presented by Crowe Chizek because server consolidation has experienced significant delays. The analysis assumed the State would experience savings beginning in FY 2006-07. However, through September 2006, DOA had not fully assumed server and network support duties for any agency.

***Server consolidation may take as many as five additional years to complete.***

DOA has not formally revised its project time line, but other state agencies' IT directors have estimated that server consolidation may take as many as five additional years to complete. Although such an extended project time line will increase project costs and delay possible savings, DOA has not recalculated the project's costs and benefits.

Second, DOA did not adequately account for the complexity of the project. For example, it did not review technical details of agencies' servers before proceeding with consolidation, as would be expected for such a large project. In addition, during the same period it was undertaking server consolidation, DOA expected to commit significant staffing resources to completing two other major projects: e-mail consolidation and data center planning. Agency IT directors consistently questioned the reasonableness of DOA's time line and project plan, suggesting that DOA allow more time for the project and consider a more incremental approach to implementation.

**DOA eliminated 96.05 FTE staff from agencies before server consolidation was implemented.**

Third, DOA inadequately planned for staffing the transfer of hardware and software from agencies to DOA, which was a central and time-consuming task related to server consolidation. As shown in Table 28, 2005 Wisconsin Act 25, the 2005-07 Biennial Budget Act, eliminated 96.05 FTE positions from 20 agencies effective June 2006, based on DOA’s plan to complete server consolidation by May 2006. Although all of the position reductions were made, DOA had not fully consolidated servers for any agency as of September 2006, and agencies remained responsible for maintaining their own servers.

Table 28

**FTE Positions Eliminated as a Result of Server Consolidation<sup>1</sup>**

Agency	Number Eliminated
DHFS	21.55
DWD	15.41
DNR	12.00
DOC	8.80
DOT	6.95
DOR	6.30
DOA	5.00
DFI	3.46
DATCP	2.75
PSC	2.50
Commerce	2.45
ETF	1.65
ECB	1.52
OCI	1.20
Tourism	0.90
DPI	0.88
Military Affairs <sup>2</sup>	0.85
DRL	0.83
Historical Society	0.75
State Treasurer	0.30
<b>Total</b>	<b>96.05</b>

<sup>1</sup> Because 52.0 FTE positions were created in DOA, the net effect of server consolidation on state staffing levels was a reduction of 44.05 FTE staff.

<sup>2</sup> Military Affairs did not participate in server consolidation but had its position authority reduced under 2005 Wisconsin Act 25.

Finally, we noted that DOA did not provide agencies with complete or timely information necessary to plan for consolidation. For example, DOA did not provide technical specifications on how to prepare for server consolidation to agencies until October 2006, five months after all consolidation was to have been completed. Moreover, at that time, officials in the State Budget Office indicated that options existed for agencies to retain server maintenance staff despite server-related staffing reductions. However, DOA did not formally communicate these options to agencies, and DOA could not quantify the extent to which agencies are exercising these options or using contractors to maintain their servers.

***DOA has not reached an agreement on payment or forfeiture of \$1.8 million remaining under the server consolidation contract.***

In April 2006, after DOA paid Crowe Chizek almost \$5.2 million of the \$7.0 million it had agreed upon, DOA ceased work with the vendor because it was dissatisfied with the vendor's progress. DOA and Crowe Chizek have not reached an agreement on payment or forfeiture of the \$1.8 million remaining under the server consolidation contract. As a result of contract termination, DOA staff assumed work that had previously been completed by Crowe Chizek consultants. DOA's increased reliance on its own and agency IT staff will likely conflict with other IT projects and priorities and may cause additional delays. DOA officials estimated that other agencies' IT staff will be required to spend up to 80 percent of their time on server consolidation when it is being actively implemented.

Before Crowe Chizek's departure, DOA had been planning to consolidate servers for nine agencies simultaneously. With the loss of participation by Crowe Chizek consultants, which had fluctuated between 4 and 15 part-time consultants on site, DOA focused its consolidation efforts on two agencies, DNR and DOC, for which completion was initially planned for December 2006. However, as of April 2007, DOA has not completed consolidation for either agency. Such delays will negatively affect the time line for consolidation of all servers.

While the Governor's 2007-09 Biennial Budget Proposal includes \$4.8 million in program revenues for operating the new data center, specific information on the expected completion date for server consolidation is not included.

#### **Recommendation**

---

*We recommend the Department of Administration report to the Joint Legislative Audit Committee by October 1, 2007, with:*

- *a revised time line for server consolidation; and*
- *a revised analysis of server consolidation to include all implementation costs, as well as anticipated revenues to be generated from agency charges.*

## E-mail Consolidation

***Agencies have historically used a variety of e-mail software.***

Executive branch agencies have historically relied on a variety of e-mail software packages from vendors such as IBM, Novell, and Microsoft. DOA initiated the e-mail consolidation project at the same time it initiated server consolidation in order to reduce the number of servers supporting e-mail software and to improve electronic communication among agencies. Although it is being managed as a separate project, e-mail consolidation directly relates to server consolidation because successful implementation will consolidate e-mail servers. The positions eliminated from agencies in 2005 Wisconsin Act 25, the Biennial Budget Act, and those provided to DOA as part of server consolidation included e-mail server staff. Agencies will continue to manage users' e-mail accounts, however, and have retained some positions to fulfill this responsibility.

In November 2004, Crowe Chizek included a five-year cost-benefit analysis for e-mail consolidation within its broader analysis of the costs and benefits of server consolidation. The consultants concluded that after the first year, e-mail consolidation would save the State \$1.7 million annually over the next four years, or a total of \$6.8 million.

***DOA switched vendors and software products for e-mail consolidation in February 2006.***

In August 2004, DOA contracted with DLT Solutions for the implementation of Oracle e-mail software and software maintenance for an additional four years, at a total cost of \$2.6 million. This total included \$2.2 million for hardware and software licensing and support, and \$423,000 to be paid to DLT Solutions for consulting services. It was expected that the project would be completed within 12 months of the contract's execution. However, when DOA implemented the Oracle software for its own staff in November 2005, staff reported unstable performance, features not working as planned, and problems coordinating calendars with wireless devices. As a result, DOA canceled implementation of the Oracle software in February 2006 and announced it would instead proceed by implementing Microsoft software. Oracle subsequently agreed to provide DOA \$900,000 in credits to be used for license payments related to other Oracle software used by the State, and \$376,900 in similar credits for technical support services.

However, DLT Solutions was paid \$1.3 million for its consulting services, or about three times the contracted amount, despite the fact it neither completed software implementation within one year nor provided four years of support services, as required. In addition, while the original contract required DLT Solutions to meet certain milestones before receiving payments, DOA agreed through two contract addenda signed in January and June 2005 to relax the payment schedule so that DLT Solutions could be paid sooner. Table 29 shows a time line of the e-mail consolidation project.

Table 29

**E-mail Consolidation Time Line**

Date	DOA Action
August 2004	Signed contract with DLT Solutions, Inc., to implement Oracle e-mail software; projected costs of \$2.6 million over five years
November 2004	Estimated completion date of June 2005
January 2005	Amended DLT contract to advance payment schedule for consulting services
June 2005	Delayed Oracle implementation; amended DLT contract to further advance payment schedule for consulting services
November 2005	Implemented Oracle software for DOA only; staff reported problems
February 2006	Canceled implementation of Oracle e-mail software
March 2006	Signed first work order with Microsoft for consulting services
August 2006	Reached agreement with Oracle to provide credit for future Oracle costs; signed second work order with Microsoft
November 2006	Completed consolidation for five agencies in critical need (DOA, Tourism, Historical Society, DNR, DOC)

***DOA reported spending \$6.4 million for e-mail consolidation through September 2006.***

As with its other IT projects, DOA is funding e-mail consolidation with program revenues it receives from agencies for printing, mail, communication, and IT services. As shown in Table 30, DOA reported spending \$6.4 million for e-mail consolidation through September 2006, including \$2.7 million paid to DLT Solutions and \$1.1 million paid to Hewlett Packard for hardware, software, and maintenance.

Table 30

**E-mail Consolidation Expenditures<sup>1</sup>**  
Through September 2006

	Amount	Percentage of Total
<b>Contractor Costs</b>		
DLT Solutions, Inc. <sup>2</sup>	\$2,661,200	41.8%
Hewlett Packard	1,112,800	17.5
Oracle Corporation	151,900	2.4
Insight Public Sector	46,600	0.7
Subtotal	3,972,500	62.4
<b>Internal Costs</b>		
IT Supplies and Services	1,137,900	17.9
Other Supplies and Services	783,000	12.3
Salary and Fringe Benefits	475,000	7.4
Subtotal	2,395,900	37.6
<b>Total</b>	<b>\$6,368,400</b>	<b>100.0%</b>

<sup>1</sup> Does not reflect DOA-negotiated credits of \$900,000 for license fees and \$376,900 for technical support services.

<sup>2</sup> Includes \$1.3 million for software purchases and \$1.3 million for consulting services.

E-mail consolidation expenditures reflected in the State's accounting system do not represent all project costs because they exclude the time other agency staff have spent planning for e-mail consolidation and providing assistance to DOA. For example, DWD estimates that it incurred staffing costs of \$103,400 related to e-mail consolidation. However, because not all agencies have recorded staff time spent on specific projects, we were unable to quantify the costs of consolidation for agencies other than DOA.

We note concerns with the procurement processes DOA used for e-mail consolidation. Section 16.75(6)(am), Wis. Stats., exempts DOA from standard procurement procedures when making IT purchases, yet DOA officials asserted that when expedited procurement authority was used for the e-mail consolidation project, DOA was required to accept the lowest bid that satisfied the project's requirements. They believe that as a result, DOA did not have the same flexibility to choose a vendor had it used a standard request-for-proposals process, and it was ultimately dissatisfied with the vendor selected.

***DOA did not heed potential concerns in its original vendor selection for e-mail consolidation.***

Nevertheless, DOA did have the flexibility to determine whether vendors could be considered responsible bidders, and it could have used this flexibility to avoid selecting DLT Solutions for Oracle implementation based on two potential concerns. First, it was not clear that the bid submitted by DLT Solutions was reasonable. While DLT Solutions proposed a five-year cost of \$2.6 million to implement and maintain the Oracle software, another vendor's five-year cost proposal to implement Microsoft was \$9.4 million, and Microsoft's proposal to implement its own software was \$14.0 million. Second, the DLT Solutions proposal indicated that Oracle's share of the e-mail market was less than 5.0 percent, which may have been insufficient to demonstrate that it met the needs of a significant and varied customer base.

After canceling implementation of Oracle software, DOA chose to switch to Microsoft e-mail software, at least in part under the terms of existing licensing agreements. These agreements apply to state-owned personal computers for which other Microsoft software products are already licensed. DOA divided the implementation of Microsoft software into two components:

- implementation of Microsoft e-mail software for five agencies—DOA, Tourism, the Wisconsin Historical Society, DNR, and DOC—that indicated they had a critical need for new e-mail; and
- development of a long-term plan for using Microsoft e-mail for the statewide e-mail system.

We note concerns with DOA's procurement of Microsoft's services. While DOA relied to some extent on existing licensing agreements to obtain the Microsoft e-mail software, it entered into an agreement with Microsoft for consulting services for both immediate implementation of the software for the five agencies and development of its long-term plan. DOA and Microsoft entered into an agreement in March 2006 for 1,560 hours of planning services by a senior Microsoft consultant. Because Microsoft agreed to provide these services at no cost to the State as a result of the selection of Microsoft software, DOA IT staff did not request procurement authority before obtaining the services. However, Microsoft project documents indicate that DOA continued to obtain consulting services from Microsoft after DOA had exhausted the allotted hours of no-cost services prior to July 2006.

**DOA entered a \$1.3 million contract with Microsoft for consulting services related to e-mail consolidation.**

In July 2006, DOA's Division of Enterprise Technology requested authority from the DOA Bureau of Procurement to contract with Microsoft and entered into a contract with Microsoft effective September 1, 2006, for an estimated 5,880 hours of service at a cost of \$1.3 million. An addendum to the contract prepared by Microsoft indicates that the consulting hours for which DOA would be charged included services provided before the contract's effective date. Although DOA obtained services from Microsoft in excess of the 1,560 hours allotted at no cost without having a contract in place to do so, a lack of documentation prevented us from determining the specific number of hours worked or the cost of the services.

The changes to the e-mail consolidation project have not produced immediate savings. A specific time line for project completion and the extent to which DOA will be required to pay for additional e-mail software licenses are unknown.

#### Recommendation

---

*We recommend the Department of Administration report to the Joint Legislative Audit Committee by October 1, 2007, on the status of e-mail consolidation, including costs to date and the estimated completion date of the project.*

### **Integrated Business Information System**

**IBIS is expected to replace approximately 100 types of existing administrative software in use by agencies.**

The third major consolidation project underway is IBIS. This system is intended to replace approximately 100 types of existing administrative software used by executive branch agencies for accounting, budgeting, human resources, payroll, and procurement functions. While all executive branch agencies will eventually use IBIS software, the extent of each agency's use will vary based on its administrative processes. DOA anticipates the project will save money by reducing the number of administrative software packages to be maintained and the need for future development of such software. In addition, DOA believes it can decrease staffing and supply costs by increasing efficiency, including reducing duplicate data entries and the use of paper forms.

In October 2004, DOA hired Salvaggio, Teal & Associates to analyze the feasibility of implementing this software. In addition, the firm facilitated meetings of DOA and other agencies' staff with expertise in administrative areas such as accounting and human resources, in order to standardize business processes and develop a request for proposals through which DOA would select the primary software for IBIS implementation.

***In May 2006, DOA entered into a contract for the software it intends to use as the basis for IBIS.***

In March 2005, Salvaggio, Teal & Associates recommended that the State consider proceeding with statewide implementation of administrative software and estimated its cost to be \$135.3 million. In May 2006, DOA finalized a contract with Oracle to purchase PeopleSoft Enterprise Solution software for IBIS. An independent consultant also reviewed the vendor selection process and reported that DOA had effectively planned and managed the request-for-proposals process. Table 31 shows a project time line.

Table 31

**IBIS Time Line**

Date	DOA Action
October 2004	Contracted with Salvaggio, Teal & Associates to conduct a feasibility study
March 2005	Feasibility study recommended consideration of IBIS software; estimated costs of \$135.3 million over 10 years
August 2005	Contracted with Salvaggio, Teal & Associates for assistance in documenting agencies' business processes and developing a request for proposals
October 2005	Issued a request for proposals for off-the-shelf software
March 2006	Released an independent evaluation of the vendor-selection process
May 2006	Finalized contract with Oracle for software purchase and related services
September 2006	Issued request for bids to establish a list of qualified vendors to deliver software services

***DOA intends to use the State's master lease program to finance the full costs of IBIS.***

DOA intends to finance the full costs of IBIS using the State's master lease program, which it will repay using revenues from charges that participating agencies will be assessed. The Governor has proposed funding of \$19.7 million for IBIS in his 2007-09 Biennial Budget Proposal.

***As of September 2006, DOA had financed \$3.8 million of IBIS costs through the master lease program.***

As shown in Table 32, DOA had already spent \$709,000 on the IBIS project as of September 2006, excluding the costs of staff in other agencies who provided their expertise during system planning. These staffing costs have not been accounted for separately by the other agencies or DOA. The total shown in Table 32 also excludes \$3.8 million—the cost of the off-the-shelf Oracle/PeopleSoft software and related support services—financed through the State's master lease program.

Table 32

**IBIS Expenditures<sup>1</sup>**  
Through September 2006

Type	Amount
<b>Contractor Services</b>	
Salvaggio, Teal & Associates	\$288,600
<b>Internal Costs</b>	
Salary and Fringe Benefits	364,800
Other Supplies and Services	47,900
Software and IT Services	7,700
Subtotal	420,400
<b>Total</b>	<b>\$709,000</b>

<sup>1</sup> Excludes DOA's FY 2004-05 staffing costs, for which DOA did not account until the following year, and other agencies' staffing costs, for which neither DOA nor the other agencies have accounted.

***DOA has taken positive steps to manage IBIS in the project's early stages.***

The IBIS project is in its early stages, but we note several positive steps taken by DOA to plan it effectively and control its costs. First, DOA officials have implemented a process intended to limit customization of the Oracle/PeopleSoft software by developing standardized practices that all agencies will be required to follow. In addition, DOA has implemented a formal resolution process that must be followed if an agency insists on a specific software function that would require customization.

Second, in addition to evaluating vendors' written responses to the request for proposals, the evaluation team also required vendors to deliver software demonstrations to state staff with expertise in accounting, budgeting, human resources, payroll, and procurement. Requiring vendors to demonstrate their software and soliciting detailed feedback from these staff will increase the likelihood that the selected software will meet agency needs.

Third, DOA has identified specific indicators it intends to use to monitor project progress. For example, it plans to recalculate project costs and savings at specific milestones, which will be important in evaluating whether interim project adjustments are necessary. In addition, DOA is accounting for time spent by other agencies' staff on the customization and implementation of IBIS software, which will help it more accurately calculate project costs.

***In early 2007, DOA estimated that IBIS would cost at least \$66.6 million.***

Despite these steps, we identified a number of concerns. For example, given the scope of the project, DOA has had difficulty estimating its potential costs and benefits. As a result, DOA's cost estimates have varied widely, and projected savings have steadily and significantly declined. In early 2007, DOA reported the cost of IBIS would depend upon the mix of state IT staff and consultants used to implement the project. For example, DOA estimated that between FY 2005-06 and FY 2010-11, IBIS implementation could cost:

- \$66.6 million if DOA establishes a statewide contract from which it selects individual contractors to provide specific services;
- \$71.5 million if it hires two contractors to serve as project managers and additional contractors to provide specific services; or
- \$116.3 million if it contracts with a single vendor to provide a team to manage and implement the entire project.

***Savings estimates were initially \$513.8 million over ten years, but are now between \$35.4 million and \$90.9 million.***

Similarly, estimates of potential savings resulting from IBIS implementation have varied widely. In March 2005, Salvaggio, Teal & Associates estimated the State could realize potential savings of \$513.8 million over ten years. However, DOA estimated in March 2006 that IBIS implementation could result in savings of \$300.1 million over ten years, and its December 2006 estimate of potential savings declined still further. DOA now estimates that savings over ten years could range from \$35.4 million to \$90.9 million, depending on the extent of its use of consultants for IBIS implementation and the number of staff reductions that may occur as a result of IBIS implementation.

***DOA will face significant concerns during IBIS implementation.***

Other concerns include:

- expected pressure to customize IBIS software to meet particular agencies' requests, which could significantly increase the project's cost and time line, as well as the risk of project failure;
- the potential for problems with agencies' existing administrative software if software maintenance or modifications are delayed in anticipation of IBIS implementation; and
- the need for significant coordination if DOA uses multiple vendors to assist with IBIS implementation, and for adequate monitoring by staff with the required technical expertise.

**Recommendation**

---

*We recommend the Department of Administration report to the Joint Legislative Audit Committee by October 1, 2007, on the status of IBIS implementation, including costs to date, the project's estimated completion date, and the status of its effort to limit agency customization of the software.*

■ ■ ■ ■

## Improving Project Oversight ■

---

Given the complexity of IT projects and rapidly changing technology, state agencies will likely continue to experience difficulties completing large, high-risk projects. However, the likelihood of projects significantly exceeding cost estimates or failing to perform required functions could be reduced if DOA more effectively exercised its statutory responsibilities to provide oversight by:

- systematically reviewing agencies' annual strategic plans for IT projects;
- ensuring that clear project development standards are in place; and
- developing methods for monitoring, controlling, and evaluating the progress of IT projects.

We have also identified options for the Legislature to consider for enhancing monitoring of large, high-risk projects and improving oversight of the IT projects of UW System, which is exempted by statutes from DOA oversight.

## Identifying and Planning for Large, High-Risk Projects

***DOA has not established methods for identifying or understanding large, high-risk projects.***

Section 16.976, Wis. Stats., requires DOA to review and approve agencies' annual strategic plans for IT. Those plans are required to identify all IT projects in the coming year that will be funded through agency operating budgets, as well as those that require additional revenue. However, we found that several projects have been excluded from agencies' strategic plans. For example, DNR excluded two ongoing projects—the Air Permitting System Improvement Initiative and the Wisconsin Forestry Inventory Recon System—from its FY 2006-07 strategic plan, and OCI excluded the ongoing Injured Patients and Families Compensation Fund project from its strategic plan. Each of these projects is expected to cost \$1.0 million or more. Furthermore, because DOA has not prescribed a format for the plans, as also required by statutes, it has not received comparable or consistently detailed information from all agencies. As a result, DOA has had difficulty:

- developing a thorough, consistent understanding of agencies' IT development plans;
- identifying large, high-risk projects; and
- assisting agencies in managing the significant challenges that complex IT projects can present.

To improve its oversight, DOA should establish methods for identifying large, high-risk projects. For example, the federal Office of Management and Budget has developed four criteria to identify projects in federal agencies that are in need of strong oversight:

- projects undertaken by an agency that has not consistently demonstrated the ability to manage complex projects;
- projects with exceptionally high costs;
- projects that are related to an agency's essential mission or function; and
- projects in which delay or failure would negatively affect the agency's essential mission or function.

Some states have also taken steps to establish criteria for identifying high-risk IT projects. For example, the State of Virginia calculates a risk score for all software development projects, based on criteria similar to those used by the Office of Management and Budget, and identifies projects that require monitoring based on their risk scores.

**☑ Recommendation**

---

*We recommend the Department of Administration, in collaboration with executive branch agencies:*

- *prescribe a standardized format for agencies' annual strategic plans for IT and require inclusion of all ongoing or planned projects;*
- *develop a methodology for identifying large, high-risk IT projects; and*
- *report to the Joint Legislative Audit Committee by October 1, 2007, on its progress in selecting both a format and a methodology.*

### **Improving Project Specifications and Standards**

***Statutes require DOA to ensure that agencies develop and use clear standards for project development.***

Although agencies have had primary responsibility for preparing IT project plans, DOA is required by s. 16.971(2)(j), Wis. Stats., to ensure that executive branch agencies have adopted clear project development standards. Most agencies have some planning processes in place, but plans have not been effective for large, high-risk projects because they do not include:

- clear project specifications detailing the functions required or sought;
- realistic cost estimates and time lines that adequately reflect planned work and are regularly updated to reflect necessary changes; and
- accurate estimates of project complexity.

DOA's ability to assist agencies in preparing more effective project plans for large, high-risk projects has been negatively affected by its own problems in planning and controlling project costs, most notably for its server and e-mail consolidation projects. Its credibility with some agencies has also been compromised because from March 2004 to December 2005, DOA spent at least \$832,800 and required significant effort from other agencies to establish an IT asset inventory that has been neither fully completed nor maintained.

***DOA's focus on server and e-mail consolidation projects has hindered IT planning efforts.***

DOA's focus on server and e-mail consolidation since November 2003 has also hindered its ability to collaborate with other agencies in planning large IT projects. Given limited resources and significant other IT responsibilities, it is important for DOA to carefully prioritize IT work and focus on those agency projects that are at greatest risk of failure.

***DOA has not worked with agencies to ensure the adequacy of project planning standards.***

While DOA may not currently be well-positioned to provide direct project planning support, it could offer indirect support by collaborating with other agencies to develop planning standards. DOA has not actively done so in the past, but the IT Directors' Council, an independent advisory group that consists of IT managers representing each agency, is currently doing so. While improving and standardizing project planning will not eliminate all difficulties, it may improve the reliability and consistency of initial cost estimates and project time lines.

A particular concern in project planning has been the extent to which agencies customize or develop software. Off-the-shelf software that is sold as a finished and commercially tested product can be readily implemented if it meets project needs, and more readily maintained because the vendor employs staff to make upgrades, resolve problems, and address users' questions or concerns. In contrast, both the initial and the ongoing costs of software that is customized or developed to unique specifications are difficult to control: additional programming increases short-term costs, while the difficulties inherent in maintaining specialized software increase costs in the long-term.

Because off-the-shelf software may not include all functions needed to fulfill program requirements, some customization may be needed, or there may be no options other than new software development. However, to better control costs, agencies' project planning could seek to limit both practices by:

- reviewing business processes to ensure that only software functions necessary to meet the essential program requirements are developed; and
- routinely determining whether off-the-shelf software that will meet the agency's needs is available or under development.

Industry best practices suggest that agencies involve users in the development of project specifications to ensure that finished systems projects meet the needs of those who will use them. However, a rigorous process is necessary both to ensure that functions sought by program staff are truly necessary to meet essential program

requirements, rather than costly enhancements that will minimally improve performance, and to ensure that IT managers and technical staff, who best understand the cost and complexity of delivering various functions, fully understand and take into account the needs of end users so that productivity is not hampered.

DWD's experience with SUITES and EnABLES suggests some agency efforts to limit software development or customization have been inadequate. On these projects, program staff sought increased customization, which DWD and its contractors worked to deliver without DWD fully recognizing the short- and long-term costs. Some agencies have established procedures to limit customization. For example, DOA has implemented a formal process to limit customization of the Oracle/PeopleSoft software for its IBIS project. In addition, for its Wisconsin Income Processing and Audit System (WINPAS) project, DOR limited customization of off-the-shelf software by forming a team of management and staff that met every two weeks to approve or reject requests for customization. Considering these factors, we believe agency leaders must establish an active presence in the planning process for large, high-risk projects.

#### Recommendation

---

*We recommend the Department of Administration, in collaboration with executive branch agencies and the IT Directors' Council, establish planning standards for large, high-risk projects and report to the Joint Legislative Audit Committee by October 1, 2007, on progress in developing standards that require:*

- *a consistent, formal, documented review of business processes that allows an assessment of the adequacy of available off-the-shelf software and measures the costs and benefits of software customization before development is initiated;*
- *complete project specifications before software customization or development is initiated;*
- *project costs and time lines that are documented as part of the planning process, linked to specific deliverables, and updated when changes to the project plan occur; and*
- *adequate review of complex deliverables, such as database conversions or programming changes required for software to function within an agency's current operating system.*

## Monitoring and Evaluating Progress

Although it is required by s. 16.977, Wis. Stats., to develop methods for monitoring, controlling, and evaluating progress on IT projects, including performance measurements, DOA has neither established criteria to identify the projects most in need of monitoring nor established quantifiable measures for use in evaluating progress toward well-defined project goals. Consequently, DOA's oversight—particularly of large, high-risk projects—has not been effective.

***DOA has not established monitoring criteria or quantifiable methods for measuring project progress.***

As noted, the federal Office of Management and Budget has developed monitoring and performance criteria for federal IT projects. They include establishing clear project expectations and accurate scheduling estimates, and maintaining both project costs and project schedules within 110.0 percent of those estimates. DOA should consider these standards when establishing its own.

We also believe DOA should give more consideration to how it can best identify and help agencies experiencing difficulties with large, high-risk projects. Options could include developing a specialized response team, but routine monitoring may also help agencies avoid situations in which significant expenditures and delays are incurred before a project is canceled.

### Recommendation

---

*We recommend the Department of Administration report to the Joint Legislative Audit Committee by October 1, 2007, on its progress in developing a plan to enhance IT project monitoring by:*

- *establishing standardized, quantifiable project performance measures for large, high-risk projects;*
- *implementing policies and procedures for routine monitoring of these projects;*
- *developing a formal process for modifying project specifications when doing so is necessary because of changes in program requirements; and*
- *developing methods for recovering or discontinuing projects that are failing to meet established performance measures.*

## Legislative Oversight

***Legislative oversight has occurred primarily during the biennial budget process or through the Joint Committee on Finance.***

Historically, legislative involvement in the IT projects of executive branch agencies has primarily occurred during the biennial budget process. For example, funding for DOR's Integrated Tax System was approved in 1997 Wisconsin Act 27, the 1997-99 Biennial Budget Act. Given that project's size and complexity, the Legislature also required DOR to provide status reports to the Joint Committee on Finance in FY 1997-98 and FY 2000-01. In June 1998 and July 2000 meetings held under s. 13.10, Wis. Stats., the Committee unanimously approved releasing project funds.

However, two other legislative oversight mechanisms have been established in statutes but are not in use at this time:

- The Joint Committee on Information Policy and Technology was created by 1991 Wisconsin Act 317 and is authorized, with the concurrence of the Joint Committee on Finance, to require semiannual reports from DOA on IT projects with anticipated total costs of \$1.0 million or more, including estimated and actual completion dates, budgeted and actual expenditures, and difficulties or delays encountered by agencies. The Joint Committee on Information Policy and Technology has been inactive since the 2003-04 legislative session.
- The IT Management Board was created by 2001 Wisconsin Act 16, the 2001-03 Biennial Budget Act, and is authorized to advise DOA in the management of the State's IT assets and monitor progress on IT activities undertaken by DOA or executive branch agencies. Its membership includes the co-chairs of the Joint Committee on Information Policy and Technology and the Governor, who serves as chair, or their designees. The IT Management Board was inactive during the 2005-06 legislative session and remains inactive.

Other state's legislatures receive information about IT projects and provide some level of monitoring and oversight. However, the extent of legislative involvement varies widely. For example:

- The Kansas Joint Committee on Information Technology may annually review budgets for all IT projects that cost \$250,000 or more; review cost overruns that exceed 10.0 percent of budget or \$1.0 million, whichever is less; and advise legislative committees on funding for IT projects.

- The Arizona Information Technology Authorization Committee includes legislators and representatives of state agencies, local and federal government, and the private sector. It may review and approve all proposed IT projects for which total costs to the State of Arizona exceed \$1.0 million, periodically review ongoing IT projects, and suspend funding if it determines a state IT project is at risk of failing.
- The Florida Technology Review Workgroup, a legislative service agency, is authorized to provide direct oversight of high-cost, high-risk, or complex IT projects identified by the Florida Legislature in its budget bill. It may also analyze and make recommendations regarding agency funding requests for IT projects, including assessing the accuracy of estimated costs, need, and ability to successfully implement the project.

We cannot conclude that increased oversight by the Wisconsin Legislature would have prevented or reduced the severity of recent project failures detailed in this report. However, given the scope of recent problems, it may be appropriate to revisit the level of oversight and public accountability that would be available if the Joint Committee on Information Policy and Technology and the IT Management Board were provided regularly scheduled reports on major systems under development, or on those systems experiencing cost overruns or significant delays.

#### Recommendation

---

*We recommend the Legislature consider reactivating the Joint Committee on Information Policy and Technology and the IT Management Board to enhance oversight of large, high-risk executive branch projects.*

## Master Lease Program

Formal requests for master lease financing, including those for IT projects, are approved by three DOA offices: the Capital Finance Office, the State Budget Office, and the Secretary's Office. DOA agrees to pay project vendors upon invoice and agencies make semiannual payments from their operating budgets to reimburse DOA's debt service costs, generally over a period from three to seven years.

Few, if any, requests for master lease financing of IT projects are denied, because DOA staff meet with agency officials and make an initial determination about whether projects are appropriate for master lease funding before agencies submit the required detailed written request. DOA IT, capital finance, and budget staff then review projects further to determine whether they comply with technical master lease requirements and whether they can be funded within agencies' operating budgets.

***Widespread use of the master lease program to finance software projects began in March 1996.***

The first IT project financed under the master lease program was DOA's purchase of mainframe computer equipment, which began in September 1992. Beginning in January 1993, DOA used the master lease program to finance development of WiSMART, the State's accounting software. However, widespread use of the master lease program to finance software projects did not occur until March 1996, when DOT used it to finance a portion of the redesign of the Division of Motor Vehicles' computer systems, including RaTS development.

***Since the master lease program's inception, executive branch agencies have used it to finance \$294.5 million in IT costs.***

Since the master lease program's inception in 1992, executive branch agencies have used it to finance \$294.5 million in IT equipment and systems costs, as shown in Table 33. Five agencies represent 91.0 percent of all master lease program activity.

Table 33

**IT Costs Financed under the State's Master Lease Program  
Through September 2006**

Agency	Equipment <sup>1</sup>	Systems <sup>2</sup>	Total Costs Financed	Percentage of Costs Financed
DOA <sup>3</sup>	\$140,113,100	\$ 15,158,400	\$155,271,500	52.7%
DHFS	2,332,700	38,101,600	40,434,400	13.7
DOR	12,199,200	28,022,800	40,222,000	13.7
DOT	3,187,400	16,965,400	20,152,800	6.8
DNR	10,313,500	1,870,600	12,184,000	4.1
DOC	2,286,800	6,067,300	8,354,100	2.8
DOJ	5,760,200	–	5,760,200	2.0
DWD	4,904,500	–	4,904,500	1.7
DFI	2,855,000	–	2,855,000	1.0
DPI	2,229,300	–	2,229,300	0.8
SWIB	1,000,000	–	1,000,000	0.3
Commerce	413,300	–	413,300	0.1
PSC	372,500	–	372,500	0.1
OCI	236,100	–	236,100	0.1
Tourism	68,800	–	68,800	<0.1
DATCP	43,500	–	43,500	<0.1
WTCSB	38,300	–	38,300	<0.1
<b>Total</b>	<b>\$188,354,200</b>	<b>\$106,186,100</b>	<b>\$294,540,300</b>	<b>100.0%</b>

<sup>1</sup> Includes personal computers, servers, and other hardware, as well as off-the-shelf software.

<sup>2</sup> Includes projects that were primarily for software customization or development but that also may have included some equipment purchases.

<sup>3</sup> DOA's IT equipment costs include \$51.4 million it spent for BadgerNet implementation.

***DOA has not developed formal policies and procedures for financing IT systems projects.***

As shown in Table 34, the master lease program has financed 19 separate systems projects, including 11 projects for which six agencies owe \$27.4 million in principal. However, because DOA has not developed formal policies and procedures for financing IT systems projects under the master lease program, and no formal reporting requirements currently exist, it is difficult to determine which projects have been financed, the amounts approved for financing and repaid to date, and which vendors have received payments. This information is maintained separately by DOA's Capital Finance Office, the Division of Enterprise Technology, and agencies that are managing projects financed under the master lease

program. A complete list of IT projects financed under the master lease program is included as Appendix 4.

Given both the number and the costs of large software customization or development projects financed under the master lease program, and the program’s importance to agencies in need of a capital financing mechanism for large IT projects, we believe it is important for DOA to establish clear guidelines governing program use, to improve monitoring and increase the likelihood that financed projects will be successfully completed.

Table 34

**Systems Projects Financed under the Master Lease Program**

Agency	Projects Financed	Debt Service Costs Repaid in Full	Debt Service Costs Repaid in Part	Principal Owed <sup>1</sup>
DOR	5	1	4	\$11,611,600
DHFS	3	0	3	6,307,000
DOT	2	1	1	3,865,300
DOA	6	5	1	3,825,000
DOC	1	0	1	1,808,600
DNR	2	1	1	4,500
<b>Total</b>	<b>19</b>	<b>8</b>	<b>11</b>	<b>\$27,422,000</b>

<sup>1</sup> Through September 2006.

**Recommendation**

*We recommend the Department of Administration report to the Joint Legislative Audit Committee by October 1, 2007, on its progress in:*

- *establishing policies and procedures for use of the master lease program to finance IT system costs, as well as for monitoring IT systems projects financed under the program; and*
- *creating an annual report on IT systems projects financed under the program that, at a minimum, includes:*
  - *the amount of financing approved during the previous fiscal year;*

- *specific projects for which financing has been approved, and amounts approved;*
- *principal and interest paid by agencies on projects for which debt is outstanding, compared to total financing originally approved; and*
- *projects for which all debt has been repaid during the previous fiscal year.*

### **UW System Projects**

UW System was excluded from our review, which focused on enhancing DOA's oversight of executive branch agencies' IT projects. UW System is largely exempt from such oversight under s. 16.971, Wis. Stats. However, legislative oversight of UW System is authorized in s. 13.58(5)(b)(3), Wis. Stats. Therefore, to address legislative concerns about UW System's management of one large IT project, we reviewed its unsuccessful efforts to replace software for managing human resources.

In June 1999, UW System completed a study to determine best practices for replacing its human resources system, which was expensive to maintain and no longer met the needs of individual institutions. A request for proposals was issued in January 2000, and Lawson Software, Inc., an international software and consulting firm, was selected to provide software for the new Appointment, Payroll, and Benefits System (APBS).

***UW System canceled APBS in July 2006, after spending at least \$28.4 million.***

As shown in Table 35, UW System had estimated that APBS would be implemented in January 2005 at a cost of \$19.7 million. Instead, the project was canceled in July 2006, after at least \$28.4 million had been spent. However, this amount excludes significant staffing costs incurred by individual UW institutions, for which neither the institutions nor UW System has separately accounted.

***The inability of UW institutions to standardize business processes contributed significantly to APBS implementation difficulties.***

A UW System best practices study had recommended several important steps for ensuring the project's success, including modifying institutions' business processes before developing the new system, purchasing off-the-shelf software, and limiting customization. However, UW institutions could not agree on modified and standardized business processes, and the Lawson software was customized to such an extent that it resembled the system that was being replaced.

Table 35

**APBS Development Time Line**

Date	UW System Action
June 1999	Completed a study outlining best practices for APBS software implementation and determined it would proceed with the project
January 2000	Issued a request for proposals for the purchase of software for APBS
May 2001	Signed contract with Lawson Software, Inc., for software purchase and consulting services
July 2002	Estimated the APBS project would be completed in January 2005, at a cost of \$19.7 million
May 2003	Released internal assessment identifying initial problems with APBS functions
November 2004	Released external assessment identifying significant problems with APBS
January 2005	APBS did not meet testing criteria
February 2005	Report commissioned by UW System estimated the total cost to implement APBS to be between \$55.6 million and \$62.6 million; placed APBS project on hold, but retained some project consultants
September 2005	Completed assessment estimating additional costs of between \$4.9 million and \$6.3 million to resolve APBS deficiencies for UW-Madison alone
October 2005	Completed assessment to determine if implementation of Oracle/PeopleSoft software would be a viable alternative to continuing APBS project
July 2006	Canceled APBS implementation after spending at least \$28.4 million on the project; signed licensing and service agreement for Oracle/PeopleSoft human resources and procurement software

Two project management consultants commissioned by UW System identified several additional difficulties with the project:

- the project plan was incomplete;
- the budget was not linked with the project plan;
- the project manager did not have adequate experience;
- communication among project managers and UW System leadership was inadequate; and
- human resources and payroll and benefits experts were placed in project positions that required IT expertise.

By the time UW System released the first external review of APBS in November 2004, it had already spent an estimated \$20.2 million, or 2.5 percent more than its original cost estimate, although the project was not close to being completed. A February 2005 review estimated the final cost to implement APBS could exceed \$60.0 million.

At that time, UW System suspended work on the APBS project, and the UW System President, in consultation with the chancellors, commissioned a study to determine whether Oracle/PeopleSoft software could be a viable alternative. Implementation of APBS was canceled in July 2006, and UW System announced it would proceed with the purchase and implementation of Oracle/PeopleSoft software to support both its human resources and procurement functions. UW System currently uses Oracle software products for its financial and student data systems.

***UW System has not finalized its plans to modify and standardize UW institutions' business processes.***

We note that UW System has not finalized its plans to modify and standardize UW institutions' business processes, which will be an important step in limiting the customization of the Oracle/PeopleSoft software and avoiding the significant difficulties experienced with the APBS project. In addition, because DOA has purchased and is customizing Oracle/PeopleSoft for use with IBIS, it will be important for DOA and UW System to coordinate the two projects to ensure that the resulting systems are capable of producing consistent management information on staffing, procurement, and expenditures that can be readily coordinated, analyzed, or compared.

***The Legislature could require additional reporting to improve coordination of the UW System and IBIS projects.***

In March 2007, an internal UW System audit report recommended providing the Board of Regents with an inventory of IT projects under development, as well as regular status reports on these projects. In light of the significant costs, complexity, and importance of both the UW System project and DOA's IBIS project, additional legislative oversight may also be appropriate. Section 13.58(5)(b)(3), Wis. Stats., authorizes the Joint Committee on Information Policy and Technology to require reports from the Board of Regents on IT systems issues.

**☑ Recommendation**

---

*We recommend the Legislature consider requiring regular reports from UW System on its plan, budget, and schedule for implementing new human resources and procurement IT systems, including its plans to:*

- *modify and standardize its business processes before beginning to customize Oracle/PeopleSoft software;*
- *establish procedures to limit subsequent software customization; and*
- *coordinate its project with the Department of Administration's development of the Integrated Business Information System (IBIS) project.*

■ ■ ■ ■



## Appendix 1

**Software Projects Completed in FY 2004-05 or FY 2005-06****Department of Administration (DOA)**

Project	Description	Funding Source(s)	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
1	Asset Inventory Management, Information Technology (AIM-IT)	PR	03/2004	08/2004	12/2005	\$455,000	\$832,800	Yes	Yes
2	Recreational Vehicle License Renewal	PR	11/2004	12/2005	06/2006	234,000	255,700	Yes	No
3	e-Citation	PR, FED	10/2004	09/2005	12/2005	154,800	144,600	Yes	No
4	e-Grants	FED	12/2004	04/2005	08/2005	330,000	330,000	Yes	No
5	e-Referral	PR, FED	12/2003	06/2005	12/2005	190,300	166,600	Yes	No
6	Identity and Access Management (IAM)	PR	12/2004	04/2005	05/2005	123,500	140,500	Yes	Yes
7	Inter-County Query (XCQ)	PR, FED	07/2005	12/2005	12/2005	314,300	284,500	No	No
8	Prosecutor Technology for Case Tracking (PROTECT), Version 2.0	PR, FED	01/2004	07/2005	07/2005	72,800	72,800	No	No

**Department of Agriculture, Trade and Consumer Protection (DATCP)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
9	Amanda	GPR, FED	01/2001	12/2005	09/2005	\$1,316,900	\$1,373,000	No	No
10	GIS Infrastructure Planning and Development	FED	07/2005	12/2005	12/2005	170,000	170,000	No	No
11	Premises Registration Number to Enterprise Licensing	FED	01/2005	10/2006	10/2006	42,000	42,000	No	No

**Department of Corrections (DOC)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
12	LOCATOR, Phase 2	GPR, PR	02/2004	Not Reported	08/2005	Not Reported	\$318,300	Not Reported	Not Reported
13	Sex Offender Registration Fee Payment System	GPR, PR	10/2005	Not Reported	06/2006	Not Reported	74,200	Not Reported	Not Reported
14	Stores Inventory Replacement	GPR, PR	09/2003	Not Reported	12/2004	Not Reported	170,400	Not Reported	Not Reported
15	Vestica Health Care Information	GPR, PR	12/2004	Not Reported	06/2005	Not Reported	68,300	Not Reported	Not Reported

**Department of Financial Institutions (DFI)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
16	Administrative Information System (AIS) Database Conversion	PR	12/2003	05/2005	06/2005	Not Reported	\$61,700	No	Not Reported

**DFI (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
17	Corporate Annual Reports, Version 3.0	PR	05/2005	07/2005	07/2005	Not Reported	\$129,800	No	Not Reported
18	Corporation Annual Reports Framework	PR	05/2004	Not Reported	06/2005	Not Reported	59,700	Not Reported	Not Reported
19	Corporation Annual Reports Queue Administration	PR	09/2004	Not Reported	07/2005	Not Reported	130,500	Not Reported	Not Reported
20	Corporation Formations	PR	12/2004	11/2005	12/2005	Not Reported	129,500	No	Not Reported
21	Foreign Annual Reports Online Form	PR	09/2004	Not Reported	02/2005	Not Reported	58,400	Not Reported	Not Reported
22	LLC Annual Reports, Version 2.0	PR	12/2003	Not Reported	12/2004	Not Reported	135,400	Not Reported	Not Reported
23	Online Order System	PR	01/2005	07/2005	09/2005	Not Reported	209,100	Yes	Not Reported
24	Online Order System, Version 2.0	PR	09/2005	12/2005	12/2005	Not Reported	65,800	No	Not Reported
25	UCC Instant Amendments Secured Party Autofill	PR	11/2003	Not Reported	04/2005	Not Reported	49,100	Not Reported	Not Reported
26	Work Queue Enhancements	PR	09/2005	02/2006	03/2006	Not Reported	85,100	Yes	Not Reported

**Department of Health and Family Services (DHFS)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
27	ACCESS, Version 1.0 (Initial Development)	GPR, FED	01/2004	08/2004	08/2004	\$1,400,000	\$ 973,500	No	No
28	ACCESS, Version 2.0	GPR, FED	08/2004	12/2004	12/2004	400,000	394,600	No	No
29	ACCESS, Version 3.0	GPR, FED	04/2005	09/2005	09/2005	900,000	916,200	No	No
30	CARES Worker-Web, Version 2.0 and ACCESS, Version 4.0	GPR, FED	07/2005	06/2006	06/2006	2,750,000	2,432,500	No	No
31	CARES Worker Web, Phase 1	GPR, FED	08/2003	11/2005	12/2005	4,500,000	6,677,500	No	Yes
32	WIC-ROSIE	FED	06/2001	10/2005	10/2005	1,698,500	1,460,000	No	No
33	Wisconsin Statewide Automated Child Welfare Information System (WiSACWIS), Final Phase	GPR, PR, FED	09/2000	07/2004	07/2004	22,577,400	24,053,100	No	No

**Department of Justice (DOJ)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
34	CCH/PROTECT Interface	GPR, FED	04/2004	08/2004	02/2005	\$ 110,000	\$ 70,200	Yes	No
35	Criminal Document Archive Imaging System (CDARIS)	PR, FED	10/2003	10/2004	03/2005	1,148,300	1,137,200	Yes	No
36	Electronic Applicant Fingerprint Cards	PR, FED	10/2003	08/2004	01/2005	96,000	101,300	Yes	No

**Department of Natural Resources (DNR)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
37	Accounts Receivable	GPR, SEG, FED	01/2003	12/2004	04/2006	Not Reported	\$ 81,700	Yes	Not Reported
38	Application Catalog	GPR, FED	02/2005	06/2005	11/2005	Not Reported	31,700	Yes	Not Reported
39	Tracking System (BRRTS)	SEG	12/2004	03/2005	06/2006	\$ 64,400	64,400	Yes	No
40	Forestry GIS	SEG	06/2003	05/2006	05/2006	Not Reported	31,200	No	Not Reported
41	Forestry Tools for ArcGIS	SEG	12/2005	04/2006	04/2006	Not Reported	17,300	No	Not Reported

**DNR (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
42	Individual Forest Fire Reporting System (IFFRS)	FED	12/2004	05/2005	09/2005	\$ 84,000	\$109,000	Yes	Yes
43	System for Wastewater Applications, Monitoring and Permits (SWAMP) Compliance	GPR, FED	01/2004	09/2005	09/2005	Not Reported	120,100	No	Not Reported
44	SWAMP Compliance Maintenance Annual Report (CMAR)	FED	02/2002	09/2006	04/2006	150,000	78,000	No	No
45	Waterbody Assessment Display and Reporting System (WADRS)	FED	03/2003	01/2006	04/2006	135,000	135,000	No	No

**Department of Public Instruction (DPI)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
46	Aid Certification Wizard	GPR	03/2004	07/2004	07/2004	\$ 65,000	\$ 65,000	No	No
47	Individual Student Enrollment System (ISES)	PR, FED	04/2004	08/2005	09/2005	705,700	705,700	No	No
48	School Aids Financial Reporting	GPR, FED	09/2000	08/2004	08/2004	162,300	162,000	No	No
49	Wisconsin Student Locator System (WSLS)	PR, FED	11/2003	03/2004	12/2004	528,000	617,900	Yes	Yes

**Department of Revenue (DOR)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
50	Enterprise Timekeeping System	GPR	09/2003	07/2005	10/2005	\$ 39,700	\$ 349,400	Yes	Yes
51	Online Forms Order System Replacement Programming and Implementation	GPR	07/2004	11/2005	02/2006	25,400	89,200	Yes	Yes
52	Online Registration and Address File Maintenance	GPR	02/2003	06/2004	08/2004	291,600	388,700	Yes	Yes
53	Posting Delinquent Accounts on the Internet	GPR	09/2005	04/2006	04/2006	55,100	71,800	No	Yes
54	Real Estate Transfer System	GPR	04/2004	11/2004	05/2006	296,600	642,000	Yes	Yes
55	Wisconsin Income Processing and Audit System (WINPAS), Corporate Income and Franchise Tax	GPR	05/2005	12/2005	12/2005	5,147,700	5,899,800	No	Yes
56	WINPAS, Premier Resort Tax	GPR	01/2006	04/2006	04/2006	438,200	441,300	No	No
57	WINPAS, Expo and Vehicle System Replacement Tax	GPR	04/2006	11/2006	06/2006	703,500	732,700	No	No
58	Wisconsin Excise Tax Reporting and Auditing System (WIXTRAS)	GPR, PR, SEG	06/1999	06/2003	11/2004	1,939,700	2,677,800	Yes	Yes

**Department of Transportation (DOT)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
59	72-Hour Trip Permits	SEG	01/2005	Not Reported	03/2006	Not Reported	\$112,300	Not Reported	Not Reported
60	Arrest Redesign, Release 2	SEG, FED	05/2003	10/2005	03/2006	Not Reported	1,790,000	Yes	Not Reported
61	Disadvantaged Business Enterprise (DBE) RFP, Phase 2	SEG	02/2004	08/2004	03/2005	\$74,900	93,300	Yes	Yes
62	Driver License/ID Card Issuance, Release 1	SEG, FED	06/2004	04/2005	04/2005	774,100	770,700	No	No
63	Driver License/ID Card Issuance, Release 2	SEG, FED	04/2005	01/2006	01/2006	965,800	1,070,200	No	Yes
64	Highway Access Management System (HAMS), Phase 1	SEG, FED	05/2003	09/2004	01/2006	368,000	547,000	Yes	Yes
65	Highway Performance Monitoring System, Phase 3	SEG, FED	03/2002	01/2003	03/2005	31,700	192,400	Yes	Yes
66	HR Certification to TEAMS Interface	SEG	06/2005	04/2006	04/2006	90,900	89,100	No	No
67	Operational Information System, Oracle Interface	SEG	10/2003	03/2004	03/2005	154,100	176,900	Yes	Yes
68	Project Management Plan (PMP), Phase 2, Version 1	SEG, FED	04/2004	Not Reported	12/2004	298,000	284,000	Not Reported	No

**DOT** (continued)

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
69	Registration and Titling System (RaTS)	SEG	05/2001	10/2003	12/2004	\$9,362,300	\$18,849,100	Yes	Yes
70	Road Conditions Reporting System	SEG	07/2004	10/2004	03/2005	Not Reported	43,800	Yes	Not Reported
71	Time, Expenses, Activities, and Leave (TEAL), Phase 4	SEG	05/2004	12/2004	02/2005	Not Reported	408,400	Yes	Not Reported
72	TEAL, Phase 5	SEG	07/2005	03/2006	05/2006	Not Reported	458,700	Yes	Not Reported

**Department of Workforce Development (DWD)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
73	12-Month Child Care Review	FED	02/2005	09/2005	09/2005	\$235,100	\$154,300	No	No
74	America's Labor Market Information System (ALMIS) Worknet, Phase 2	FED	01/2003	07/2004	11/2004	68,000	149,500	Yes	Yes
75	ALMIS Worknet, Phase 3	FED	07/2004	10/2005	10/2005	98,000	103,500	No	No
76	Backdating for Performance	GPR, FED	10/2004	03/2005	03/2005	175,000	157,000	No	No
77	Child Care Authorization Simplification	FED	07/2003	07/2004	10/2004	258,500	345,200	Yes	Yes

**DWD (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>	
78	Child Care Provider Screens	Developed software to automate collection of child care provider information.	FED	07/2003	06/2004	08/2004	\$ 214,500	\$109,900	Yes	No
79	Child Support Data Warehouse	Developed software to allow DWD staff to better analyze child support information, including the effect of work programs on child support payments.	FED	11/2004	03/2005	12/2005	1,181,000	873,700	Yes	No
80	Child Support Online Services, Phase 2	Enhanced Web-based software to allow non-custodial parents to view and print payment, receipt, and disbursement fee coupons, and to allow custodial and non-custodial parents to view their balance information in the Kids Information Data System (KIDS).	GPR, FED	02/2004	01/2006	03/2006	123,400	189,800	No	Yes
81	Child Support Online Services, Phase 3	Enhanced software to make participants' payment information accessible to appropriate program staff at the state and county levels.	GPR, FED	09/2004	07/2005	06/2005	121,600	139,800	No	Yes
82	CMC Treat as Noncash Placement	Enhanced KIDS software to comply with federal regulations requiring program staff to determine if a child support payment should be assigned to the state or passed through to the custodial parent.	GPR, FED	11/2005	04/2006	05/2006	94,100	81,800	Yes	No
83	Common Measures/MCI	Developed software to add Workforce Investment Act common performance measures to required reports and update DWD's ASSET software to use a standardized identifier for public assistance recipients.	FED	10/2003	11/2005	08/2006	308,800	328,100	Yes	No
84	Contact Center Solutions	Customized software to replace the Automatic Call Distribution (ACD) and call queuing telephone functions used in DWD call centers that respond to public assistance program inquiries.	SEG, FED	08/2004	06/2005	06/2006	150,100	100,300	Yes	No
85	Correspondence Tracking System	Developed software to replace a dated system, automate additional functions, and improve and increase usability and security.	SEG	02/2005	03/2006	06/2006	231,800	245,200	Yes	No

**DWD (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
86	DWD Letterhead Rewrite	SEG	08/2004	12/2004	03/2005	\$ 100,800	\$ 90,000	Yes	No
87	Enterprise PTA	SEG	10/2003	06/2004	07/2004	501,300	404,200	Yes	No
88	Federal Test Deck	GPR, FED	06/2004	11/2004	11/2004	900,000	1,601,900	No	Yes
89	JobNet Re-engineering	PR, FED	08/2004	10/2005	11/2005	537,700	579,100	No	No
90	KIDS Electronic Library System (KELS)	GPR, FED	01/2003	03/2005	03/2005	70,700	70,700	No	No
91	Lien Expiration	GPR, FED	09/2004	08/2005	09/2005	153,600	155,600	No	No
92	Merged Child Care Provider Data	FED	07/2003	10/2004	10/2004	240,500	376,600	No	Yes
93	PS69 Data Mart	FED	05/2005	01/2006	01/2006	130,000	73,700	No	No

**DWD (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
94	UI Law Change, Work Search	FED	11/2003	03/2005	03/2005	\$ 66,200	\$136,100	No	Yes
95	W-2 Move Placements	FED	05/2005	06/2006	06/2006	254,600	411,500	No	Yes
96	Workforce Investment Act (WIA) State List Eligible Providers, Phase 1	FED	05/2004	04/2005	09/2005	150,000	98,400	Yes	No
97	WiSACWIS Interface Changes	GPR, FED	02/2005	03/2006	03/2006	103,900	103,900	No	No
98	WiSACWIS Subsidized Guardianship	GPR, FED	06/2005	10/2005	10/2005	81,000	81,000	No	No

**Investment Board (SWIB)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>
99	Eagle Pace, Phase 1	SEG	06/2003	12/2005	06/2006	\$1,187,400	\$1,187,400	Yes	No
100	In-House Data Hub, PADR Reports	Not Reported	06/2003	07/2004	12/2004	Not Reported	Not Reported	Yes	Not Reported

**SWIB** (continued)

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>	
101	Total Cost	Developed software to automate investment cost management and reporting.	Not Reported	08/2002	09/2003	04/2005	Not Reported	Not Reported	Yes	Not Reported
102	Travel, Expense	Developed software to automate employee travel and expense reporting and management.	Not Reported	01/2003	12/2004	06/2005	Not Reported	Not Reported	Yes	Not Reported

**Public Service Commission (PSC)**

Project	Description	Funding Source	Start Date	Projected Completion Date	Actual Completion Date	Projected Costs	Final Costs	Exceeded Time Line <sup>1</sup>	Exceeded Projected Costs <sup>1</sup>	
103	Investor-owned Utility Annual Report Project	Developed software to automate the collection of annual reports of investor-owned utility service providers in the State.	PR	07/2004	03/2006	03/2006	\$96,000	\$72,000	No	No

<sup>1</sup>Indicates whether final project costs or time line exceeded original projections by more than 10.0 percent.

Note: When projected and final costs are equal, it typically indicates full payment of a vendor contract for a particular project.



Appendix 2

**Software Projects Ongoing at the Beginning of FY 2006-07**

**Department of Administration (DOA)**

Project	Description	Funding Source(s)	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
7	Protection Order Interface in Milwaukee and Dane Counties	FED	10/2005	09/2007	\$272,700	No	\$ 67,100
2	Redesign of Capital Projects Accounting	PR	12/2004	05/2007	400,000	Yes	276,900
3	Redesign of Gaming Device Inventory System (GDIS)	PR	04/2005	02/2007	162,500	No	139,800
4	Redesign of WI.gov Portal, Phase 1	PR	01/2006	09/2006 (Completed)	150,200	No	150,200
5	Temporary Restraining Order Project in Kenosha County	FED	10/2005	09/2007	254,000	No	21,300
6	Uniform Crime Reporting (UCR) Web Application	FED	12/2004	03/2007	61,700	Yes	74,500
7	Warrant Interface for Milwaukee, Dane, and Waukesha Counties	FED	10/2005	09/2007	99,700	No	22,700
8	Web Services for Incident Based Reporting (IBR) Data	FED	10/2003	09/2007	90,000	No	62,000
9	WiscJobs Improvement Project	PR	04/2005	03/2008	308,300	No	210,500
10	Wisconsin Justice Information Sharing (WIJIS) Gateway	FED	08/2004	09/2007	3,587,000	Yes	1,657,600

**Department of Agriculture, Trade and Consumer Protection (DATCP)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
11	Laboratory Information Management System (LIMS) Enhancement	FED	05/2004	12/2006 (Completed)	\$125,400	No	\$125,400

**Department of Commerce (Commerce)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
12	District Inspector Electronic Data Interchange	PR	11/2005	06/2007	\$123,700	No	\$84,600

**Department of Corrections (DOC)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
13	General Public Offender Search	GPR, PR	02/2004	09/2006 (Completed)	\$ 287,500	No	\$ 287,500
14	Integrated Corrections System, Phase 1a	GPR	10/2003	07/2007	8,989,500	No	4,603,800
15	Integrated Corrections System, Phase 2	GPR	10/2003	05/2008	5,862,400	No	None

**Department of Employee Trust Funds (ETF)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
16	Annuity Payment System (Benefit Payment System, Phase 1)	SEG	02/2005	05/2007	\$6,434,800	Yes	\$6,015,600
	Development of Web-based software, replacing the existing Annuity Payment System, to process Wisconsin Retirement System benefit payments.						

**Department of Financial Institutions (DFI)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
17	Banking Call Reports	PR	03/2006	01/2007 (Completed)	\$130,300	No	\$122,800
18	Corporation Formations, Version 2.0	PR	03/2006	06/2007	200,600	No	135,500
19	Registered Agent Name	PR	02/2006	02/2007	131,000	Yes	89,700
20	Securities Tracking And Registration (STAR)	PR	03/2003	11/2006 (Completed)	369,100	No	369,100
21	Unified Commercial Code (UCC) Notifications	PR	11/2005	07/2006 (Completed)	69,600		69,600
	Development of Web-based software to allow customers to receive electronic notifications related to particular UCC filings.						

**Department of Health and Family Services (DHFS)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
22	Medicaid Management Information System (MMIS)	GPR, FED	01/2005	03/2008	\$32,317,200	No	\$9,191,700
	Customization of software to replace current system supporting the administrative and operational needs of managing Medical Assistance and other DHFS health programs.						

**DHFS (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
23	Vital Records Information System	PR	01/2002	09/2008	\$2,175,000	No	\$ 82,000
	Customization of software to manage the filing, registration, amendment, and copying of vital records for state and local offices and their business partners.						
24	Wisconsin Disease Surveillance System (WEDSS)	FED	05/2005	12/2007	2,561,000	No	1,586,000
	Customization of software to allow standardized, statewide surveillance and case management of certain diseases.						

**Department of Justice (DOJ)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
25	eTIME, Phase 1	GPR, PR, SEG	05/2003	02/2007	\$3,816,200	Yes	\$3,198,900
	Development of software to replace an outdated law enforcement database and expand services to law enforcement agency subscribers.						

**Department of Military Affairs**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
26	e-Sponder	FED	06/2005	08/2007	\$500,000	No	\$500,000
	Customization of software to allow coordination and evaluation of federal, state, local, and private sector entities in response to emergency events and incidents.						

**Department of Natural Resources (DNR)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
27	Air Permitting System Improvement Initiative	PR	01/2005	06/2008	\$2,720,400	No	\$672,500
	Development of software to enhance DNR's ability to receive and review air permit applications, make determinations, and communicate with applicants and the public within mandated time frames.						

**DNR (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
28	Continuous Forest Inventory (CFI) Project	SEG	07/2005	07/2007	\$282,000	No	\$239,300
29	Forestry IT Tracking System	SEG	11/2004	08/2007	Not Reported	No	15,000
30	IFFRS Enhancements	SEG, FED	04/2005	06/2007	44,000	Yes	24,000
31	Spills EDM	SEG	11/2005	07/2007	101,000	No	71,100
32	SWAMP Electronic Discharge Monitoring Reports (EDMR)	GPR, FED	11/2002	02/2007	192,900	Yes	189,300
33	SWAMP Permit Application 2	FED	10/2003	02/2007	155,300	Yes	144,900
34	SWAMP Pretreatment	GPR, FED	03/2005	12/2006 (Completed)	165,000	No	159,900
35	Wisconsin Aerometric Retrieval Data System (Wisards)	FED	03/2004	06/2007	606,000	Yes	502,500
36	Wisconsin Forestry Inventory Recon System (WisFIRS)	SEG	02/2006	06/2010	2,250,000	No	165,300

**Department of Public Instruction (DPI)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
37	Longitudinal Data System	FED	02/2006	01/2009	\$3,000,000	No	\$250,000

**DPI (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
38	Nutritional Commodity System	GPR	08/2004	09/2007	\$505,000	Yes	\$356,300
39	Online Teacher Licensing	Not Reported	05/2006	01/2008	Not Reported	No	Not Reported
40	Redesign of General Aid Calculation	GPR	06/2005	10/2007	101,000	No	1,000
41	Redesign of Special Education Claim Form	GPR	03/2006	09/2008	78,000	No	3,300
42	Wisconsin Resource Sharing and Information Access	FED	07/2004	11/2006 (Completed)	641,200	No	Not Reported

**Department of Regulation and Licensing (DRL)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
43	Integrated Credentialing and Enforcement System	PR	04/2005	06/2007	\$520,000	No	\$218,600

**Department of Revenue (DOR)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
44	Agency Set-off System Replacement	GPR, PR	04/2004	10/2006 (Completed)	\$ 802,400	Yes	\$ 802,400
45	Cigarette, Tobacco, and Liquor Tax Database	GPR	06/2005	08/2007	184,000	Yes	137,200

**DOR (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
46	Integrated Property Assessment System (IPAS), Phase 1	GPR	01/2005	06/2007	\$2,893,500	Yes	\$ 492,100
47	Wisconsin Income Processing and Audit System (WINPAS), Income and Fiduciary Tax	GPR	02/2006	11/2006 (Completed)	6,537,500	No	6,537,500

**Department of Tourism**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
48	travelwisconsin.com (Web site) Redesign	PR	07/2006	01/2007 (Completed)	\$ 500,000	No	\$ 32,200

**Department of Transportation (DOT)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
49	Automation of Local Entitlements	SEG, FED	01/2006	10/2007	Not Reported	No	\$ 337,000
50	Driver Inquiry Redesign, Employer Notification and Driver Abstract	SEG	01/2006	04/2007	Not Reported	No	143,000
51	Management Information Improvement, Phase 2	SEG, FED	11/2002	07/2006 (Completed)	\$816,200	No	816,200
52	Project Management Plan (PMP), Phase 2, Version 2	SEG	07/2005	03/2007	659,200	Yes	486,800
53	Reinstatement Redesign, Release 1	SEG	01/2006	05/2007	Not Reported	No	378,500

**Department of Workforce Development (DWD)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
54	ASSET, Version 3.0	SEG, FED	12/2003	07/2008	\$ 2,700,000	No	\$307,500
55	Child Support Online Services, Phase 4	GPR, FED	02/2006	07/2007	Not Reported	No	41,900
56	Child Support Pass Through	GPR, FED	05/2005	12/2006 (Completed)	707,300	No	705,700
57	Central Recoveries Enhanced System (CRES) Redesign	GPR, SEG	03/2002	11/2006 (Completed)	754,400	No	709,300
58	Federal Department of Labor (DOL) Demonstration Grant	FED	04/2002	07/2006 (Completed)	118,900	No	118,900
59	EnABLES	PR, FED	06/2002	02/2007 (Suspended)	\$26,100,000	Yes	21,658,900
60	Field Audit Interface	FED	01/2002	09/2007	68,700	No	78,800
61	Health Insurance Data Match Software	GPR, FED	03/2004	09/2007	2,420,900	Yes	1,110,200
62	Rehabilitation Integration System 2	FED	10/2001	06/2009	1,300,000	No	215,500
63	OCSE 157 Line Processing	GPR, FED	06/2005	10/2006 (Completed)	272,200	No	272,200
64	QTWRS Rewrite	FED	05/2005	05/2008	931,500	No	43,000

**DWD (continued)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
65	Stop Case Reopening	GPR, FED	07/2005	09/2006 (Completed)	\$ 85,800	No	\$ 85,800
66	SUITES	PR, FED	05/1998	03/2008	46,441,100	Yes	42,204,600
67	SUITES/Benefits Interface	FED	11/2003	09/2007	539,200	Yes	510,100
68	UI Data Warehouse	FED	12/2005	11/2007	325,000	No	68,000
69	UI Distribution	GPR, FED	10/2005	10/2006 (Completed)	155,500	No	151,200
70	WDMI	FED	04/2003	09/2007	1,236,900	No	956,700

**Elections Board**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
71	Campaign Finance Information System	GPR	04/2006	04/2008	\$1,800,000	No	\$ 32,000
72	Statewide Voter Registration System	GPR	04/2004	02/2008	22,686,100	No	19,945,900

**Investment Board (SWIB)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
73	Eagle Pace, Phase 2	SEG	05/2006	03/2007	\$ 529,400	Yes	\$480,600
	Customization of software to automate SWIB's administration of fixed-income and private-market investment data.						

**Office of the Commissioner of Insurance (OCI)**

Project	Description	Funding Source	Start Date	Projected Completion Date as of 02/2007	Projected Cost as of 02/2007 <sup>1</sup>	Projected Costs Revised	Costs Through 09/2006
74	Financial Database	Not Reported	10/2002	On Hold	Not Reported	No	Not Reported
75	Injured Patients and Families Compensation Fund Application	SEG	11/2005	05/2008	\$ 1,092,300	No	\$ 153,400
76	Internet Filing	Not Reported	08/2005	12/2007	Not Reported	No	Not Reported
77	Premium Tax Enhancements	Not Reported	08/2006	Not Reported	Not Reported	No	Not Reported
78	Service of Process Application Conversion	PR	10/2003	02/2007 (Completed)	90,700	No	89,500
79	OCI Applications Integration	PR	05/2006	08/2007	370,000	Not Reported	140,000
80	Staff Application Management System, Phase 1	Not Reported	10/2005	03/2007	Not Reported	No	Not Reported
81	Web Rates and Forms Lookup	Not Reported	06/2005	03/2007	Not Reported	No	Not Reported
	Development of Web-based software to replace existing software and provide staff and the public with access to documents for approved insurance rate and policy form filing.						

<sup>1</sup> For projects completed during FY 2006-07, costs included under Projected Cost category are final.

## Appendix 3

### Agency IT Profiles

**FY 2006-07 IT Strategic Plan** indicates whether the agency submitted to DOA an annual IT strategic plan for FY 2006-07, as required under s. 16.971(2)(L), Wis. Stats., that details the agency's plans to utilize IT to carry out its functions.

**FY 2005-06 Reported IT Expenditures** reflects estimated FY 2005-06 IT expenditures, excluding agency payments to DOA for IT-related services, but including those for:

- salaries and fringe benefits costs for permanent, limited-term employment (LTE), and project IT staff, but not for contracted IT staff;
- IT services, which typically includes charges by private vendors that provide professional and technical services such as consulting, programming, and computer testing, but which may not include large maintenance contracts;
- computer equipment, such as mainframes, personal computers, printers, monitors, and other types of tangible computer hardware or equipment;
- off-the-shelf software, including both purchases and leases;
- estimated overhead costs, based on overall IT expenditures; and
- facilities costs, if any, that agencies assigned specifically to IT.

**FY 2005-06 Reported IT Staffing** includes the reported number of permanent IT staff authorized for FY 2005-06, as well as the FTE equivalent—based on hours worked during that fiscal year—for limited-term employment (LTE), project, and contracted staff assigned to IT activities. Also includes whether the agency:

- currently employs a chief information officer (CIO) or IT Director;
- is a member of the Technology Leadership Council, which is attached to DOA to provide direction, policies, and strategies for managing statewide IT functions and includes the CIOs and IT Directors from large state agencies, counties, and professional associations; and
- is a member of the IT Directors' Council, which is an independent group that meets a minimum of eight times annually to advise the State on matters of IT planning and utilization and to study questions of concern to agencies' CIOs or IT Directors.

**IT Projects Completed in FY 2004-05 or FY 2005-06** includes the number and cost of completed IT projects, if any, we identified for each agency.

**IT Projects Ongoing at the Beginning of FY 2006-07** includes the number and projected cost of ongoing IT projects, if any, we identified for each agency. Projected costs reflect estimates as of February 2007.

**Department of Administration (DOA)**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$19,070,400
	Services	10,946,300
	Equipment	31,140,200
	Off-the-Shelf Software	3,060,800
	Overhead	3,491,800
	Facilities	5,619,300
	<b>Total</b>	<b>\$73,328,800</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	247.8
	Limited Term Employment (LTE) Staff	47.0
	Contracted IT Staff	34.7
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	8 Small	\$2,227,500
---------------------------------------------------------	---------	-------------

<b>IT Projects Ongoing in FY 2006-07</b>	1 Large	\$3,587,000
	9 Small	1,799,100
	<b>10 Total</b>	<b>\$5,386,100</b>

*Department of Agriculture, Trade and Consumer Protection (DATCP)*

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$2,351,400
	Services	153,800
	Equipment	191,700
	Off-the-Shelf Software	520,800
	Overhead	160,900
	Facilities	0
	<b>Total</b>	<b>\$3,378,600</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	30.0
	Limited Term Employment (LTE) Staff	4.0
	<hr/>	
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FY 2004-05 and 2005-06</b>	1 Large	\$1,373,000
	2 Small	212,000
	<b>3 Total</b>	<b>\$1,585,000</b>

<b>IT Projects Ongoing in FY 2006-07</b>	1 Small	\$125,400
------------------------------------------	---------	-----------

---

**Department of Commerce**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$1,419,500
	Services	183,400
	Equipment	19,300
	Off-the-Shelf Software	55,300
	Overhead	83,900
	Facilities	0
	<b>Total</b>	<b>\$1,761,400</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	21.8
----------------------------------------------	----------------------------	------

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

<b>IT Projects Ongoing in FY 2006-07</b>	1 Small	\$123,700
------------------------------------------	---------	-----------

---

*Department of Corrections (DOC)*

Profile Item
--------------

FY 2006-07 IT Strategic Plan Yes

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 5,347,800
	Services	3,846,300
	Equipment	3,960,800
	Off-the-Shelf Software	1,395,100
	Overhead	727,800
	Facilities	5,400
	<b>Total</b>	<b>\$15,283,200</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	61.0
	Limited Term Employment (LTE) Staff	0.3
	Contracted IT Staff	29.0
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	4 Small	\$631,200
---------------------------------------------------------	---------	-----------

<b>IT Projects Ongoing in FY 2006-07</b>	2 Large	\$14,851,900
	1 Small	287,600
	<b>3 Total</b>	<b>\$15,139,500</b>

**Department of Employee Trust Funds (ETF)**

Profile Item		
<b>FY 2006-07 IT Strategic Plan</b>		Yes
<hr/>		
<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$2,193,300
	Services	63,900
	Equipment	291,200
	Off-the-Shelf Software	32,700
	Overhead	129,100
	Facilities	0
	<b>Total</b>	<b>\$2,710,200</b>
<hr/>		
<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	26.0
	Limited Term Employment (LTE) Staff	1.0
	Contracted IT Staff	3.0
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes
<hr/>		
<b>IT Projects Ongoing in FY 2006-07</b>	1 Large	\$6,434,800

**Department of Financial Institutions (DFI)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	<b>Yes</b>
-------------------------------------	------------

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$1,464,900
	Services	1,349,900
	Equipment	10,800
	Off-the-Shelf Software	34,800
	Overhead	143,000
	Facilities	0
	<b>Total</b>	<b>\$3,003,400</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>		
	Authorized Permanent Staff	13.0
	Contracted IT Staff	13.5
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	11 Small	\$1,114,100
---------------------------------------------------------	----------	-------------

<b>IT Projects Ongoing in FY 2006-07</b>	5 Small	\$900,600
------------------------------------------	---------	-----------

---

**Department of Health and Family Services (DHFS)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 7,526,700
	Services	9,281,200
	Equipment	2,027,700
	Off-the-Shelf Software	6,733,200
	Overhead	1,278,400
	Facilities	0
	<b>Total</b>	<b>\$26,847,200</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	176.4
	Limited Term Employment (LTE) Staff	1.0
	Project Positions	5.0
	Contracted IT Staff	23.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	4 Large	\$34,623,100
	3 Small	2,284,300
	<b>7 Total</b>	<b>\$36,907,400</b>

---

<b>IT Projects Ongoing in FY 2006-07</b>	3 Large	\$37,053,200
------------------------------------------	---------	--------------

---

**Department of Justice (DOJ)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	<b>Yes</b>
-------------------------------------	------------

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$3,267,800
	Services	707,900
	Equipment	2,643,500
	Off-the-Shelf Software	281,300
	Overhead	345,000
	Facilities	0
	<b>Total</b>	<b>\$7,245,500</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>		
	Authorized Permanent Staff	40.6
	Limited Term Employment (LTE) Staff	1.5
	Contracted IT Staff	3.0
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>		
	1 Large	\$1,137,200
	2 Small	171,500
	<b>3 Total</b>	<b>\$1,308,700</b>

<b>IT Projects Ongoing in FY 2006-07</b>	1 Large	\$3,816,200
------------------------------------------	---------	-------------

---

**Department of Military Affairs**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** Yes

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 428,200
	Services	0
	Equipment	69,300
	Off-the-Shelf Software	488,600
	Overhead	49,300
	Facilities	0
	<b>Total</b>	<b>\$1,035,400</b>

---

**FY 2005-06 Reported IT Staffing (FTE)** 5.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

**IT Projects Ongoing in FY 2006-07** \$500,000

---

*Department of Natural Resources (DNR)*

Profile Item
--------------

FY 2006-07 IT Strategic Plan	Yes
------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 7,718,900
	Services	7,192,400
	Equipment	459,500
	Off-the-Shelf Software	197,100
	Overhead	778,400
	Facilities	0
	<b>Total</b>	<b>\$16,346,300</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	97.3
	Limited Term Employment (LTE Staff)	0.6
	Contracted IT Staff	22.0
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	9 Small	\$668,400
---------------------------------------------------------	---------	-----------

<b>IT Projects Ongoing in FY 2006-07</b>	2 Large	\$4,970,400
	8 Small	1,546,200
	<b>10 Total</b>	<b>\$6,516,600</b>

*Department of Public Instruction (DPI)*

Profile Item		
<b>FY 2006-07 IT Strategic Plan</b>		Yes
<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$2,476,700
	Services	3,065,500
	Equipment	475,100
	Off-the-Shelf Software	59,200
	Overhead	303,800
	Facilities	0
	<b>Total</b>	<b>\$6,380,300</b>
<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	29.0
	Contracted IT Staff	5.0
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes
<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	4 Small	\$1,550,600
<b>IT Projects Ongoing in FY 2006-07</b>	1 Large	\$3,000,000
	5 Small	1,325,200
	<b>6 Total</b>	<b>\$4,325,200</b>

---

**Department of Regulation and Licensing (DRL)**

Profile Item		
<b>FY 2006-07 IT Strategic Plan</b>		Yes
<hr/>		
<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 533,700
	Services	128,000
	Equipment	201,300
	Off-the-Shelf Software	117,300
	Overhead	49,000
	Facilities	0
	<b>Total</b>	<b>\$1,029,300</b>
<hr/>		
<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	7.0
	Limited Term Employment (LTE) Staff	1.4
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes
<hr/>		
<b>IT Projects Ongoing in FY 2006-07</b>	1 Small	\$520,000

---

**Department of Revenue (DOR)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$10,920,600
	Services	4,521,400
	Equipment	5,074,600
	Off-the-Shelf Software	712,600
	Overhead	1,061,500
	Facilities	200
	<b>Total</b>	<b>\$22,290,900</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>		
	Authorized Permanent Staff	114.8
	Limited Term Employment (LTE) Staff	0.4
	Contracted IT Staff	Unavailable
	CIO or IT Director	Yes
	Technology Leadership Council Member	Yes
	IT Directors' Council Member	Yes

<b>IT Projects Completed in FY 2004-05 and 2005-06</b>		
	2 Large	\$ 8,577,600
	7 Small	2,715,100
	<b>9 Total</b>	<b>\$11,292,700</b>

<b>IT Projects Ongoing in FY 2006-07</b>		
	2 Large	\$9,431,000
	2 Small	986,400
	<b>4 Total</b>	<b>\$10,417,400</b>

---

**Department of Tourism**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 252,500
	Services	705,100
	Equipment	73,700
	Off-the-Shelf Software	1,500
	Overhead	51,600
	Facilities	0
	<b>Total</b>	<b>\$1,084,400</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	6.0
	Contracted IT Staff	4.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

<b>IT Projects Ongoing in FY 2006-07</b>	1 Small	\$500,000
------------------------------------------	---------	-----------

---

**Department of Transportation (DOT)**

Profile Item
--------------

FY 2006-07 IT Strategic Plan	Yes
------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$13,783,100
	Services	6,191,100
	Equipment	6,824,300
	Off-the-Shelf Software	1,327,000
	Overhead	1,406,300
	Facilities	0
	<b>Total</b>	<b>\$29,531,800</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>		
	Authorized Permanent Staff	260.3
	Limited Term Employment (LTE) Staff	5.0
	Project Positions	2.0
	Contracted IT Staff	63.2

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>		
	3 Large	\$21,709,100
	11 Small	3,176,600
	<b>14 Total</b>	<b>\$24,885,700</b>

<b>IT Projects Ongoing in FY 2006-07</b>	5 Small	\$1,475,400
------------------------------------------	---------	-------------

---

**Department of Veterans Affairs (DVA)**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** Yes

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$1,728,500
	Services	17,600
	Equipment	275,200
	Off-the-Shelf Software	186,100
	Overhead	110,400
	Facilities	0
<b>Total</b>		<b>\$2,317,800</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	27.0
	Limited Term Employment (LTE) Staff	1.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

*Department of Workforce Development (DWD)*

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	<b>Yes</b>
-------------------------------------	------------

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$29,126,500
	Services	9,549,800
	Equipment	2,147,000
	Off-the-Shelf Software	210,300
	Overhead	2,051,700
	Facilities	0
	<b>Total</b>	<b>\$43,085,300</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>		
	Authorized Permanent Staff	316.5
	Limited Term Employment (LTE) Staff	3.0
	Project Positions	8.0
	Contracted IT Staff	101.4

	Yes
CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

<b>IT Projects Completed in FY 2004-05 and 2005-06</b>		
	1 Large	\$1,601,900
	25 Small	5,558,900
	<b>26 Total</b>	<b>\$7,160,800</b>

<b>IT Projects Ongoing in FY 2006-07</b>		
	6 Large	\$77,725,200
	11 Small	3,958,500
	<b>17 Total</b>	<b>\$81,683,700</b>

---

**Educational Communications Board (ECB)**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$273,000
	Services	0
	Equipment	41,500
	Off-the-Shelf Software	4,600
	Overhead	16,000
	Facilities	0
	<b>Total</b>	<b>\$335,100</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	5.0
	Limited Term Employment (LTE) Staff	0.5

---

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

---

---

***Elections Board***

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** Yes

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 1,066,600
	Services	9,015,800
	Equipment	37,200
	Off-the-Shelf Software	388,200
	Overhead	525,400
	Facilities	0
	<b>Total</b>	<b>\$11,033,200</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Limited Term Employment (LTE) Staff	9.0
	Project Positions	3.3

---

CIO or IT Director	No
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

---

<b>IT Projects Ongoing in FY 2006-07</b>	2 Large	\$24,486,100
------------------------------------------	---------	--------------

---

---

**Ethics Board**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 0
	Services	90,100
	Equipment	10,900
	Off-the-Shelf Software	2,800
	Overhead	5,200
	Facilities	0
	<b>Total</b>	<b>\$109,000</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	CIO or IT Director	No
	Technology Leadership Council Member	No
	IT Directors' Council Member	No

---

---

**Higher Educational Aids Board (HEAB)**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 72,000
	Services	22,800
	Equipment	800
	Off-the-Shelf Software	1,000
	Overhead	4,800
	Facilities	0
	<b>Total</b>	<b>\$101,400</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	1.5
	Project Positions	2.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	No

---

---

***Historical Society***

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$222,600
	Services	14,800
	Equipment	89,300
	Off-the-Shelf Software	56,400
	Overhead	19,200
	Facilities	0
	<b>Total</b>	<b>\$402,300</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	4.0
	Limited Term Employment (LTE) Staff	2.5

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

---

**Office of Commissioner of Insurance (OCI)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 768,800
	Services	511,100
	Equipment	285,400
	Off-the-Shelf Software	212,600
	Overhead	88,900
	Facilities	0
	<b>Total</b>	<b>\$1,866,800</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	9.5
	Limited Term Employment (LTE) Staff	1.0
	Contracted IT Staff	5.0

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

<b>IT Projects Ongoing in FY 2006-07</b>	1 Large	\$1,092,300
	7 Small	460,700
	<b>8 Total</b>	<b>\$1,553,000</b>

---

---

**Public Service Commission (PSC)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	<b>Yes</b>
-------------------------------------	------------

<b>FY 2005-06 Reported IT Expenditures</b>		
	Salaries and Fringe Benefits	\$ 712,700
	Services	40,900
	Equipment	260,600
	Off-the-Shelf Software	60,000
	Overhead	53,700
	Facilities	0
	<b>Total</b>	<b>\$1,127,900</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	11.0
----------------------------------------------	----------------------------	------

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

<b>IT Projects Completed in FY 2004-05 and 2005-06</b>	1 Small	\$72,000
--------------------------------------------------------	---------	----------

---

**State of Wisconsin Investment Board (SWIB)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$1,241,700
	Services	68,200
	Equipment	261,300
	Off-the-Shelf Software	86,800
	Overhead	82,900
	Facilities	0
	<b>Total</b>	<b>\$1,740,900</b>

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	11.0
	Limited Term Employment (LTE) Staff	1.0
	Contracted IT Staff	0.5

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

<b>IT Projects Completed in FYs 2004-05 and 2005-06</b>	1 Large	\$1,187,400
	3 Small	Unavailable
	<b>4 Total</b>	<b>\$1,187,400</b>

<b>IT Projects Ongoing in FY 2006-07</b>	1 Small	\$529,400
------------------------------------------	---------	-----------

---

**State Public Defender Board**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$430,200
	Services	118,300
	Equipment	163,300
	Off-the-Shelf Software	9,200
	Overhead	36,100
	Facilities	0
	<b>Total</b>	<b>\$757,100</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	7.0
	Contracted IT Staff	1.0

---

CIO or IT Director	Yes
Technology Leadership Council Member	Yes
IT Directors' Council Member	Yes

---

---

**Wisconsin Employment Relations Commission (WERC)**

Profile Item
--------------

**FY 2006-07 IT Strategic Plan** No

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$ 0
	Services	600
	Equipment	1,900
	Off-the-Shelf Software	0
	Overhead	100
	Facilities	0
	<b>Total</b>	<b>\$2,600</b>

---

CIO or IT Director No

Technology Leadership Council Member No

IT Directors' Council Member No

---

---

**Wisconsin Technical College System Board (WTCSB)**

Profile Item
--------------

<b>FY 2006-07 IT Strategic Plan</b>	Yes
-------------------------------------	-----

---

<b>FY 2005-06 Reported IT Expenditures</b>	Salaries and Fringe Benefits	\$578,300
	Services	0
	Equipment	36,300
	Off-the-Shelf Software	52,200
	Overhead	33,300
	Facilities	0
	<b>Total</b>	<b>\$700,100</b>

---

<b>FY 2005-06 Reported IT Staffing (FTE)</b>	Authorized Permanent Staff	7.2
----------------------------------------------	----------------------------	-----

---

CIO or IT Director	Yes
Technology Leadership Council Member	No
IT Directors' Council Member	Yes

---

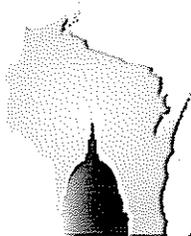


## Appendix 4

**IT Systems Financed under the State's Master Lease Program**

System	Financed	Principal Owed as of September 2006
<b>DOR</b>		
Integrated Tax System	\$27,289,800	\$11,205,800
Data Warehouse	388,800	213,800
IPAS	144,200	139,200
E-filing Estate Transfer	100,000	52,800
Excise Tax Reporting	100,000	0
Subtotal	28,022,800	11,611,600
<b>DHFS</b>		
WISACWIS	29,963,500	2,908,600
CARES Upgrade	3,979,000	2,543,400
e-WISACWIS	4,159,100	855,000
Subtotal	38,101,600	6,307,000
<b>DOT</b>		
DMV Redesign	13,752,300	3,865,300
Y2K Upgrades for DMV	3,213,100	0
Subtotal	16,965,400	3,865,300
<b>DOA</b>		
IBIS	3,825,000	3,825,000
WiSMART Accounting System	9,750,400	0
WiSMART Upgrades	1,244,500	0
SHRS	252,100	0
Y2K Upgrades-Payroll System	61,600	0
Small Agency Support Initiative	24,800	0
Subtotal	15,158,400	3,825,000
<b>Corrections</b>		
Integrated Corrections System	6,067,300	1,808,600
<b>DNR</b>		
Wisconsin Water Initiative	1,089,800	4,500
Wastewater Permitting Upgrade	780,800	0
Subtotal	1,870,600	4,500
<b>Total</b>	<b>\$106,186,100</b>	<b>\$27,422,000</b>





**WISCONSIN DEPARTMENT OF  
ADMINISTRATION**

**JIM DOYLE**  
GOVERNOR

**MICHAEL L. MORGAN**  
SECRETARY

Office of the Secretary  
Post Office Box 7864  
Madison, WI 53707-7864  
Voice (608) 266-1741  
Fax (608) 267-3842

---

April 9, 2007

Ms. Janice Mueller  
State Auditor  
Legislative Audit Bureau  
22 E. Mifflin Street, Suite 500  
Madison, WI 53703

Dear Ms. Mueller:

On behalf of the Department of Administration (DOA), I thank the Legislative Audit Bureau (LAB) for its thorough evaluation of the State's information technology (IT) initiatives. The department's and other agencies' work with the LAB on this report signifies our commitment to being responsive to legislators and others regarding IT management within the executive branch. As a steward of public funds, DOA must improve the efficiency, effectiveness and success rates of state-agency IT initiatives. The LAB's report is an important first step in improving accountability for IT initiatives.

In its evaluation, the LAB makes a series of recommendations that DOA generally views as reasonable and appropriate. DOA will comply with the recommendations as outlined in the report. We believe the LAB's recommendations will strengthen the State's management of IT initiatives, and DOA will produce the requested plans and reports by October 1, 2007, for consideration by the Joint Committee on Audit.

In the IT profession, it is common to hear concerned management discussions about the high failure rates of projects; in fact, these are some of the most-quoted numbers in the industry. Less discussed is the fact that many projects are very successful, and most businesses could not function without the systems that automate many tasks and operate continuously with little attention. Although we know we must improve our management of IT initiatives, we resolve always to investigate thoroughly and responsibly any opportunities technology provides to better serve Wisconsin residents.

It should be noted that major system initiatives require a large commitment of calendar time and resources. Given this passage of time and the dynamics of the information technology (IT) environment, mid-course project corrections are a critical part of managing these programs. The Department of Administration will work with agencies to define a standard process for evaluating progress of major programs and applying corrections. However, we must ensure an environment throughout state government, including in the Legislature that not only allows but encourages mid-course corrections within a project. The information technology business is a dynamic and constantly changing field that demands flexibility in order to be successful. However, the state budget process requires that agencies request funding almost two years in advance. Incorporating shorter projects within the overall IT program will reduce the exposure between peer reviews, and therefore mid-course corrections

associated with scheduled reviews will be less likely to be viewed negatively and as a risk to program continuation. The impact of new laws and technology, as well as the effectiveness of the approach being applied to the current and future projects, will be evaluated at project reviews.

The audit correctly points out that we need to improve accountability for IT initiatives. DOA will work to establish and implement clearly defined and practical IT governance processes. These processes must recognize the varying business requirements and resources of executive-branch agencies and identify action steps, roles, responsibilities and necessary outcomes.

DOA will create a bureau within the Division of Enterprise Technology (DET) to help support and monitor key programs being managed within DOA and the other executive-branch agencies. This bureau will provide project management and technical resources to monitor key programs identified in agency IT plans, and also collaborate with other agencies to address any project issues. We will work with agencies through the Information Technology Directors' Council (ITDC) to adopt project management standards that create quantifiable project performance measures. DOA will utilize methods that agencies have in place for assuring linkage between the fiscal note process, business plans and the project plan. DOA will also utilize the defined methods for regular reporting on all key programs.

Industry research shows that identifying the most effective method of costing an IT project is a difficult but essential task. The demand for complex IT project work will only increase, and cost management will be a critical success factor. We will carefully consider criteria developed by the U.S. Government Accountability Office, the federal Office of Management and Budget, and other proven frameworks when developing guidelines and methodologies to standardize IT cost management among state agencies. It should also be noted that as part of Governor Doyle's 2007-2009 biennial budget he has proposed to consolidate the State's attorneys. This proposal will provide the state with a team of attorneys that would concentrate solely on contracts and procurement which in turn will help ensure that the taxpayers of the state receive the benefits of every state contract.

The supply of technical support workers in Wisconsin is limited, and the number of people being trained to support systems has dropped dramatically during the past several years. Due to this situation it is imperative that Wisconsin take the necessary steps to become more efficient. Server consolidation will promote standardizing the base software required to support state applications. This software standardization will help the state deal with the shortage of skilled resources, and allow agencies to concentrate staff on developing and supporting business applications that run on the base system software. In conjunction with the interagency Executive Steering Team for server consolidation, DOA is currently evaluating additional approaches for consolidating the application environment. When this analysis is complete, a revised cost and cost recovery model will be constructed.

The ITDC last year launched several initiatives to promote commonality in systems development among agencies. The group established teams to address application best practices, shareable software and contract administration. Presentations of different system development methodologies used in agencies, comparison of project management techniques, and demonstrations of vendor products and agency systems are all part of the program to communicate standardization and sharing. DOA will

April 9, 2007

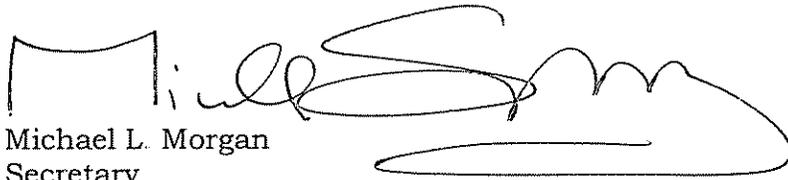
Page 3 of 3

continue to work with these teams in defining standard methods to manage and control projects, as well as to share software and system architecture. A shared software team will also promote a common method for evaluating software packages that can be purchased rather than developed. Standard methods for analyzing the gaps identified with packaged software, with a view toward limiting customization, will help control project size and maintenance burden. These ongoing ITDC efforts will provide essential support for all of the State's major IT programs.

Finally, the method for creating a state strategic information technology plan has not been satisfactory to DOA or the other agencies, although it has been through several iterations. DOA has been working with the ITDC this year to define a new method for reporting IT tactical and strategic plans. A draft for this new format and method was developed by a sub-team of the ITDC and will be discussed by the full council at its April meeting. This new method will adopt a procedure for ongoing updates in recognition of the dynamic nature of the plan. The new planning process will play a major role in standardizing application platforms and identifying major programs that will benefit from peer monitoring and support.

I know that it took considerable time and staff resources over many months to produce this audit. I commend and thank your staff for conducting this review in a thorough and professional manner. I appreciate this opportunity to comment on the LAB's findings and recommendations, and I am confident we can take our management of IT initiatives to a high level of effectiveness and accountability.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Morgan". The signature is fluid and cursive, with a large, sweeping underline that extends across the width of the signature.

Michael L. Morgan  
Secretary

cc: Dan Schooff  
Pat Henderson  
Oskar Anderson