

A Review:

Information Technology Projects

April 2007

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.

Key Facts and Findings

Our review focused on the software customization and development projects of executive branch agencies and DOA's efforts to consolidate the State's IT resources.

Each of the 184 projects in our inventory involved at least 1,000 hours of effort by state staff or contractors.

103 projects completed in FY 2004-05 and FY 2005-06 had estimated final costs of \$90.6 million.

At completion, 81 projects that were ongoing at the start of FY 2006-07 are expected to cost \$201.1 million.

We identified 22 ongoing projects with costs of \$1.0 million or more as large, high-risk projects.

Large, high-risk projects represent 92.7 percent of expected final costs for all ongoing projects.

DOA has not adequately collaborated with agencies to identify and monitor large, high-risk projects.

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.

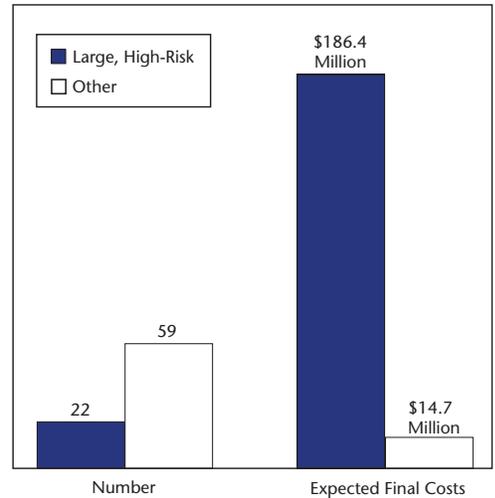
Each of the 184 projects in our inventory required at least 1,000 hours of effort. Many involved the customization or development of software, including modifying existing programs.

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.

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*).

Additional Information

For a copy of report 07-5, which includes a response from the Department of Administration, call (608) 266-2818 or visit our Web site:



www.legis.wisconsin.gov/lab

Address questions regarding this report to:

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