

An Evaluation:

Major Highway Program

Department of Transportation

November 2003

Report Highlights ■

The cost of some major highway projects has increased considerably after enumeration.

Better financial record-keeping is needed for the major highway program.

DOT's FY 2001-02 environmental expenditures were \$29.1 million.

The State's increasing reliance on bond proceeds to fund highway projects raises concerns.

Maintaining and expanding the State's highway system involves many challenges.

The Department of Transportation (DOT) is responsible for building and maintaining Wisconsin's transportation infrastructure and, under the major highway program, constructs new or expanded state highways. The 15-member Transportation Projects Commission reviews DOT's proposals for major highway projects and recommends projects for enumeration by the Legislature and the Governor.

In fiscal year (FY) 2002-03, the major highway program's budget was \$241.6 million. In September 2003, 32 major highway projects were being planned or were under construction. However, in December 2002, DOT had indicated that four of these projects could not be enumerated because the program's increasing costs had reduced the amount of funding available for additional projects. Legislators raised concerns about this disclosure, as well as about the availability of funds to reconstruct the aging southeast Wisconsin freeway system and the extent to which bonds have been used to fund highway projects. Therefore, at the direction of the Joint Legislative Audit Committee, we evaluated:

- project selection, program expenditures, and cost increases related to the program;
- the effects of state and federal environmental laws on highway construction costs and practices;
- financing for transportation projects; and
- how Wisconsin's highways, transportation funding, and transportation spending compare to other midwestern states', and future financial demands on the Transportation Fund.

Key Facts and Findings

In September 2003, 32 major highway projects were being planned or were under construction.

Real estate expenditures for the major highway program nearly quadrupled in ten years and reached \$43.8 million in FY 2002-03.

It will take more than 12 years, on average, from enumeration to construction completion for current projects.

From FY 1993-94 to FY 2002-03, transportation revenue increased 49.6 percent.

Wisconsin's state fuel tax is the highest in the nation, and DOT's largest revenue source.

Bond debt service costs totaled \$101.1 million in FY 2002-03 and are increasing.

Wisconsin's state highways are funded at levels comparable to six other midwestern states'.

Project Cost Increases

DOT's expenditures for the major highway program increased 69.5 percent in the past ten years and totaled \$284.2 million in FY 2002-03. Construction contract costs, which accounted for nearly three-quarters of FY 2002-03 expenditures, increased 67.9 percent since FY 1993-94. In contrast, real estate expenditures nearly quadrupled, reaching \$43.8 million in FY 2002-03.

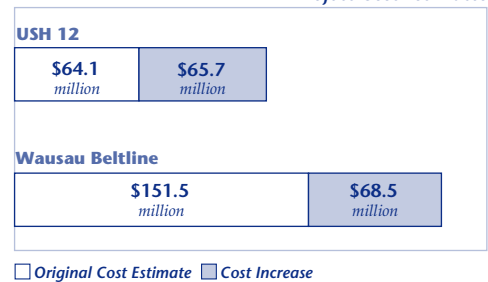
It will take more than 12 years, on average, to complete the projects that were underway in June 2003. DOT has considerable discretion in scheduling and designing major highway projects and may change a project's design to accommodate local officials, concerned citizens, and others the project will affect. Such changes can increase project costs significantly.

To help determine the reasons for cost increases in major highway projects, we reviewed seven current projects for which costs increased by at least \$20.0 million each. We found:

- The cost estimate for the United States Highway (USH) 12 (Sauk City to Middleton) project increased from \$64.1 million when it was enumerated in 1993 to \$129.8 million in June 2003. The increase is attributable to \$23.0 million in higher real estate costs that occurred because of project delays, and to upgrading a portion of the Middleton bypass.

- The cost estimate for the Interstate 39/USH 51 (Wausau beltline) project increased from \$151.5 million when it was enumerated in 2001 to \$220.0 million in June 2003. Approximately \$30.0 million of the increase resulted from a decision to upgrade the design speed of an interchange to 60 miles per hour, which resulted in five bridges being added to the project and several other bridges being lengthened to accommodate the higher traffic speed.

Project Cost Estimates



In 2002, DOT commissioned a value engineering study to identify potential cost savings on 21 major highway projects without altering their purpose or lowering safety, quality, or environmental standards. The study cost \$247,000.

In its November 2002 report, the engineering firm DOT hired identified \$382.0 million in potential savings. For example, it recommended that DOT construct two lanes, instead of four, on highways with low traffic volume. The firm also recommended scaling back several projects to their original planned scope. As of November 2003, DOT is continuing to analyze

how much of the \$382.0 million in proposed savings measures it will implement.

Financial Reporting

DOT's financial record-keeping system makes it difficult to analyze expenditures for individual major highway projects. While DOT produces a monthly report that shows per project expenditures, the report excludes design and construction engineering expenditures, even though they can account for more than one-quarter of all project costs.

Tracking changes to major highway projects is also made difficult by DOT's practice of separating portions of projects and combining them with other projects.

Environmental Expenditures

State and federal laws require DOT to avoid, minimize, and mitigate harmful environmental effects caused by transportation projects. DOT estimates its FY 2001-02 environmental expenditures for all state highway projects were \$29.1 million. These expenditures include the costs of construction work, consultant contracts, payments to the Department of Natural Resources and the State Historical Society, and DOT's own staffing costs.

Construction contractors believe their total costs to comply with all environmental regulations are significantly higher than DOT's estimates, but neither DOT nor the

contractors provided supporting documentation to independently verify their estimates.

Revenue Sources

DOT is funded primarily by federal, state, and local revenue, as well as by proceeds from bonds. However, its largest revenue source is state fuel taxes. Transportation revenue for all DOT programs increased 49.6 percent from FY 1993-94 to FY 2002-03, when it totaled \$2.3 billion.

The major highway program has long been funded, in part, by transportation revenue bonds, which are repaid with proceeds from vehicle registration, title transfer, and related fees. The issuance of revenue bonds has allowed DOT to construct major highway projects without heavy reliance on other funding sources, but the resulting debt service leaves fewer funds available for projects.

Debt service totaled \$101.1 million in FY 2002-03. The proportion of registration fee revenue required to cover debt service costs has been increasing and reached 27.4 percent in FY 2002-03. DOT estimates that annual debt service payments will exceed revenue bond proceeds from FY 2008-09 onward.

2003 Wisconsin Act 33, the 2003-05 Biennial Budget Act, expanded the issuance of bonds. It stipulated that \$565.5 million in general obligation bonds will be issued to fund, for the first time, rehabilitation projects and the southeast Wisconsin free-

ways program. Debt service costs for these bonds issued in the 2003-05 biennium will total \$767.6 million through FY 2024-25.

As a result of recent legislation, the Transportation Fund will cover debt service costs during the 2003-05 biennium, but the General Fund will cover the costs thereafter.

Future Considerations

We compared Wisconsin's transportation funding sources, spending, and state highway conditions with other midwestern states'.

Wisconsin ranks in the middle of seven midwestern states on state highway spending and conditions, but it relies on fewer sources of transportation revenue. It has the nation's highest gasoline tax rate, at 31.5 cents per gallon, but its \$55 annual vehicle registration fee is among the lowest in the Midwest. In 2001, 79.9 percent of Wisconsin state highways had low levels of traffic congestion, and 57.5 percent had good or excellent pavement conditions.

The State's investments to date have resulted in a highway system that is generally in good condition, but policy-makers face many challenges as they seek to maintain existing highways and expand the system to meet future needs. These include:

- a \$5.2 billion shortfall identified in DOT's long-range state highway plan;

- reconstruction of the aging southeast Wisconsin freeway system, which has not yet been fully funded;
 - increasing reliance on bonding;
 - commitments to complete the 32 major highway projects currently enumerated; and
 - the needs of other transportation programs that DOT manages.
- ☑ report to the Joint Audit Committee by February 2, 2004, on the amount of savings it expects to achieve as a result of its 2002 value engineering study ([p. 31](#));
 - ☑ report complete expenditure information for all major highway projects to the Transportation Projects Commission semiannually ([p. 32](#));
 - ☑ develop policies specifying that all project costs be included in the project cost estimates that are presented in the environmental documents it prepares ([p. 43](#)); and
 - ☑ provide comprehensive and consistent project cost information, and communicate changes in the scope of projects ([p. 70](#)).

Recommendations

Our recommendations address the need for DOT to:

- ☑ improve financial reporting by tracking:
 - the amount and cost of all real estate it purchases for each major highway project ([p. 26](#)); and
 - its environmental expenditures, and reporting its plan for doing so to the Joint Audit Committee by June 1, 2004 ([p. 42](#));

Additional Information

For a copy of [report 03-13](#), call (608) 266-2818.



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