



PB² Performance Report

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Transportation Maintenance Program Meets Standards; Its Accountability System in Need of Strengthening

This report assesses the performance of the Florida Department of Transportation's (FDOT) Transportation System Maintenance Program based on its 1997-98 performance-based program budgeting (PB²) measures and comments on the measures proposed by the department for 1999-2000.

Summary

- The Transportation System Maintenance Program exceeded its performance standard but needs to improve its performance measures.
- The program needs additional PB² measures to provide greater accountability for its use of resources (unit cost output and outcome measures, as well as customer satisfaction measures). These additional measures would improve accountability as to how well the program is preserving the investment in transportation systems by maintaining roadways at a uniform condition.
- The program's accountability system meets OPPAGA's expectations in three of four areas (*program purpose or goals, data reliability, and reporting of information and its use by management*). Some modifications are needed in the area of *performance measures*.
- We provided a draft copy of our report to the Secretary of the Florida Department of Transportation, who did not concur with our recommendations. In some cases we made changes to address the department's concerns. (See Appendix C.)

Background

The Transportation System Maintenance Program provides routine and uniform maintenance of the State Highway System. Through scheduled routine maintenance, department staff and contractors fill potholes, mow the grass, clean out ditches, make bridge repairs, and perform preventive maintenance. Staff also clean rest stops, plant wildflowers along roadsides, install or replace signs, and perform other jobs as needed to make highway travel easier and safer. The department allotted the program an estimated \$377 million and 3,179 positions in Fiscal Year 1998-99.¹ The program is funded primarily from state fuel taxes, motor vehicle fees, and federal appropriations/ grants that are deposited into the State Transportation Trust Fund.

The Transportation System Maintenance Program uses an automated management system to plan, organize, direct, and control maintenance of the State Highway System. Maintenance requirements are identified through needs surveys and inventoried using an automated scheduling system supplemented by additional procedures to accommodate maintenance requests of an immediate nature. Through a process to ensure uniform and accurate cost accounting, the program aggregates the costs of labor, equipment, and material related to maintenance activities. The department assesses its performance through the Maintenance Rating Program (MRP) which annually evaluates the condition of the State Highway System. The MRP provides the performance ratings presented in the department's Legislative Budget Request.

In 1991, the Routine Highway Maintenance component of the Transportation System Maintenance Program developed an annual budgeting process tied to a single agency strategic plan measure. The department has a policy to maintain the State Highway System at a uniform maintenance condition rating of 80 on a scale of 1 to 100. This policy is a key component of the department's budgeting process. Each year the department develops the maintenance program budget by applying pro-rated actual costs for both contract and in-house maintenance activities to the workloads necessary to maintain a uniform rating. The department's resource allocation method is intended to achieve this specific measure and is close to meeting the type of unit-cost budgeting envisioned by the performance-based program budgeting process.

The program is organized into a central office located in Tallahassee that provides overall policy and procedures for the program and eight districts. The district headquarters that schedule and perform routine maintenance on the State Highway System are located in Broward, Columbia, Dade, Hillsborough, Leon, Polk, Volusia, and Washington counties.

The department's performance is monitored through various reporting requirements. The Florida Transportation Commission, an independent commission composed of private business people, evaluates the department's performance quarterly and reports to the Legislature annually. The department reports annually to the Governor on its progress in achieving program objectives in its agency strategic plan. The department also reports

¹ The Florida Department of Transportation's funds are not appropriated in the PB² program budget format.

annually to the Legislature on its progress in achieving program objectives defined in law. Some of the measures reported in the commission's performance and production review and in the department's strategic plan and program objectives and accomplishment report are also used for performance-based program budgeting.

Performance

The Department of Transportation has exceeded its performance-based program budgeting maintenance performance standard for the past several years. The performance standard is a uniform maintenance condition rating for five maintenance categories that are assessed annually. The uniform maintenance condition rating is to meet a state standard of 80 on a point scale of 1 to 100. The five maintenance categories rated for acceptable condition are roadway, roadside, vegetation/aesthetics, drainage, and traffic services (roadway striping, signage, and lighting). For the past five years, average ratings for these categories ranged from 76 for roadside condition to 93 for roadway surface condition. However, the uniform maintenance condition rating has typically exceeded the standard of 80 over the past several years.

Appendix A contains a detailed discussion of the past two years' performance for each of the program measures.

Proposed Performance Measures

OPPAGA recommends that the Legislature adopt new performance measures. These include efficiency and public satisfaction measures. Specific performance measures are not established for bridge maintenance and inspection. This issue will be addressed in the subsequent justification review of the program. To avoid burdening decision-makers with unnecessary details, some of these measures could be maintained in the performance ledger or by the department and made available for legislative review, rather than placed in the General Appropriations Act. Performance information maintained internally by the department should be the same quality standard as other information reported by the department. OPPAGA will continue to assist the department in developing and refining performance measures.

See Appendix B for more detailed discussion of proposed program performance measures.

Rating of Program Accountability

A key factor in PB² is that agencies need to develop strong accountability systems that enable the Legislature and the public to assess program performance. An *accountability system* consists of these key elements: program purpose or goals, performance measures, a process for collecting valid and reliable data, and credible reports of performance that can be used to manage the program. OPPAGA's rating tells decision-makers whether they can rely on the program's performance information. We compared the components of the Maintenance Program's accountability system against our established criteria to determine its rating.

Accountability System Component	Meets Expectations	Needs Some Modifications	Needs Major Modifications
Program Purpose or Goals	X		
Performance Measures		X	
Data Reliability	X		
Reporting Information and Use by Management	X		

Source: OPPAGA analysis

The Maintenance Program's accountability system meets OPPAGA's expectations for program purpose or goals, data reliability, and use of data and reporting. The program's purpose statement and objective cover its major functional areas, are clearly stated, and are understandable. The program has procedures in place to verify data reliability and make corrections in performance data. Performance data are used by management to regularly assess maintenance quality and are reported internally and to the public. However, the program's performance measures need modifications.

The program has established a single outcome measure as the measure of performance. Although the measure covers most of the program's activities, the measure does not provide performance linkages with major core activities and is not linked with outputs or unit cost output measures. As a result, the outcome measure is too broad-based to be useful to measure accountability for specific functional activities. The program needs to develop outcome measures for each major functional activity conducted to assess roadway and other facility conditions, including rest areas. The program needs a customer satisfaction measure. The program also needs to develop output measures for each major maintenance activity, such as lane miles of roadway maintained, as well as unit cost output measures for these activities.

For More Information

Additional information about the Transportation System Maintenance Program is available on the Internet. The program profile is in OPPAGA's Florida Government Accountability Report (FGAR) at <http://www.oppaga.state.fl.us/profiles/6096>. OPPAGA's staff contact for this program is Darwin Gamble (850) 487-9247. Also through the Internet, you may access the Department of Transportation at <http://www.dot.state.fl.us> or by calling (850) 488-8814.

Appendix A

Analysis of Program Performance for Each of Its Performance Measures

Outcome Measures

Performance		1997-98		
1996-97	1997-98	Standard	Met Standard?	Comments
Maintenance condition of State Highway System as measured against the department's maintenance manual standards				
83	84	80	Yes	In Fiscal Year 1997-98 the program exceeded its performance standard.
<i>Maintenance condition of roadway surface</i>				
95	96			The program has consistently exceeded its performance standard over the past several years.
<i>Maintenance condition of roadside</i>				
74	77			According to program administrators, the higher ratings for roadway surface condition are due in part to highway resurfacing and improved asphalt repair techniques.
<i>Maintenance condition of vegetation and aesthetics</i>				
82	81			The program has not formally established outcome standards to address lower-level major core activities.
<i>Maintenance condition of drainage</i>				
86	86			Lower-level maintenance ratings range from 74 to 96 over a two-year period, indicating performance for roadway surface maintenance consistently exceeds performance for all other maintenance categories.
<i>Maintenance condition of traffic services</i>				
80	81			

Source: Department of Transportation Maintenance Rating Program ratings for Fiscal Years 1996-1998

Other Performance Measures

These measures are not a part of the program's PB² measures, but provide useful information about program performance.

Performance		Comments
1996-97	1997-98	
State highway system maintenance cost		
\$221 million (\$5,677 cost per lane mile) ²	Unknown	The program has not formally established any output measures. In order to assess performance, the table presents cost-per-lane-mile unit costs developed from Fiscal Year 1996-97 budget data available within the program. Cost per lane mile is based on 39,066 lane miles in the State Highway System. Cost includes both direct and indirect costs. Indirect costs were allocated to major core activities based on the levels of direct costs for each major core activity.
Roadway surface maintenance cost		
\$11.4 million (\$293 cost per lane mile)	Unknown	
Roadside maintenance cost		
\$28 million (\$707 cost per lane mile)	Unknown	
Vegetation/aesthetics maintenance cost		
\$76 million (\$1,948 per lane mile)	Unknown	
Drainage maintenance cost		
\$34.1 million (\$873 cost per lane mile)	Unknown	
Traffic services maintenance cost		
\$72.3 million (\$1,854 cost per lane mile)	Unknown	

² Lane miles are the total number of multi-directional miles within the State Highway System. The State Highway System comprises 11,932 centerline miles. Lane miles (39,066) are the multi-directional lanes within this centerline system.

Source: OPPAGA summary of Legislative Budget Requests for Fiscal Years 1997-98 and 1998-99

Appendix B

OPPAGA Recommendations for the Transportation System Maintenance Program's Fiscal Year 1999-2000 Measures

Outcome Measures, Fiscal Year 1999-2000

Measures Proposed by FDOT	Proposed Standards	OPPAGA Recommendations/Comments
Maintenance condition of the State Highway System as measured against the department's maintenance manual standards	80	We recommend adoption of this measure. Although the measure covers the program activities related to roadway maintenance, it is not useful by itself for accountability purposes because it does not show the public benefit of the program's specific major activities to maintain the state's roadway system in a condition acceptable to DOT standards. The measure also does not address other major program activities with important safety implications, such as rest areas and bridge inspection.

Output Measures, Fiscal Year 1999-2000

Measures Proposed by FDOT	Proposed Standards	OPPAGA Recommendations/Comments
The program proposes no output measures for Fiscal Year 1999-2000	None	The program dropped the "tons of asphalt placed" measure. We concur with this decision. This measure does not indicate the program's degree of success in maintaining the roadway in a condition acceptable to FDOT standards. However, the department is proposing no alternative output measures. The lack of output measures prevents a meaningful assessment of program performance. A potential measure would be number of lane miles maintained.

**OPPAGA Recommendations for Additional Measures,
Fiscal Year 1999-2000**

<i>Measures</i>	<i>Comments</i>
<p>Maintenance condition of State Highway System as measured against the department's maintenance manual standards</p> <p>State Highway System as a whole:</p> <ul style="list-style-type: none"> • Roadway condition • Roadside condition • Vegetation condition • Drainage condition • Traffic services condition 	<p>This outcome measure covers the major activities, funding, and mission of the program and comprises the same data and analysis process for determining program performance as in years before. However, the measure should be modified to show performance for the five components that indicate the condition of the State Highway System. By showing the MRP rate for each component, decision-makers can better identify components of the State Highway System that need improvement and can direct funds to these components.</p> <p>Decision-makers can demonstrate public accountability when particular components are of higher public importance.</p> <p>The program has consistently exceeded its performance standard of 80 over the past several years. Average MRP rates for the individual maintenance categories range from 76 to 93 over the past five years.</p>
<p>Customer satisfaction</p>	<p>This is an outcome measure on how well the program is meeting public satisfaction with the services purchased with public dollars to maintain a statewide highway system. The department should have an objective to incrementally increase satisfaction over time.</p> <p>Specific performance measures are not established for rest area maintenance. Security and cleanliness are important for the public traveling on state-maintained roadways. The department budgeted \$13 million in Fiscal Year 1996-97 for maintenance and security at rest areas and welcome centers. The department currently collects customer satisfaction cards at these facilities. The information should be tabulated to include complaints, compliments, and security incidences. These areas can have significant safety implications and satisfaction implications for the traveling public and the program's performance in these areas should be routinely measured for accountability to the public. The department anticipates including a customer survey as part of its Sterling Quality Challenge efforts.</p>

OPPAGA Recommendations for Additional Measures, Fiscal Year 1999-2000

<i>Measures</i>	<i>Comments</i>
Cost per lane mile for the State Highway System of 39,066 lane miles	Reporting costs per lane mile provides a basis for comparing costs from year to year on a per unit basis and taking action to identify and contain costs. Changes in maintenance cost factors (labor, materials, equipment charges) and changes in the number of lane miles can be expected to influence the unit cost from year to year. Also, coverage of lane miles by a maintenance activity may also change as work assignments diminish or increase for a variety of reasons.
Cost per lane mile to maintain acceptable condition of <ul style="list-style-type: none">• roadway surface• roadside• drainage• traffic services• vegetation	<p>Parameters of expected unit costs should be planned annually and, as unit costs are found to vary from expectations, determinations should be made as to the reasons for fluctuations.</p> <p>Results should be included in annual accountability performance reports to explain and control cost fluctuations outside of expected parameters. Results should be reported on a full cost basis for accountability of both direct and indirect costs of preserving the investment in transportation systems.</p>

Source: OPPAGA analysis of program performance measures and activities

Appendix C

Response from the Florida Department of Transportation

The Secretary of the Florida Department of Transportation provided a detailed response to our report. The Secretary generally did not agree with our comments and recommendations as noted below.

- Maintenance Office management believes that one outcome measure is sufficient to measure program performance until the department completes a comprehensive review and redevelopment of performance measures as part of its Sterling Quality Challenge. They also believe that our recommendations were developed informally and circumvent their Sterling effort.

OPPAGA Director's Comments

The Maintenance Program has developed only one outcome measure (MRP 80) that essentially rates the results of maintenance activities performed by the program to preserve state roads such as patching potholes, mowing, and litter removal. However, the program has not developed any outcome measures that reflect other major activities performed by the program such as bridge safety inspections. In addition, a comprehensive set of measures includes output measures. The program does not propose any such measures. At a minimum, an output measure would be the number of lane miles maintained at department standards.

The department notes that its work in the Sterling Quality Challenge should result in a comprehensive review and redevelopment of its performance measures. As these measures become available the department should use them to supplement its current PB² measures for the maintenance program.

- Maintenance Office management opposes the use of unit cost information.

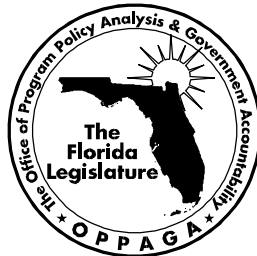
OPPAGA Director's Comments

While program management uses unit cost information at an operational level, it does not currently report this information to the Legislature. We believe that reporting this information as part of PB² would assist the Legislature in its oversight of the maintenance program. We recognize that the program scope will change because of factors outside the control of the program, such as new regulatory requirements and response to public expectations. However, these factors should not preclude the program from reporting this information. We believe that a year-to-year trend line of lane mile costs is useful and meaningful and the department is provided an opportunity in its budget documents to explain circumstances that affected costs.

A complete copy of the department's response is available upon request.

The Florida Legislature

Office of Program Policy Analysis and Government Accountability



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- Florida Government Accountability Report (FGAR) is an Internet encyclopedia of Florida state government. FGAR offers concise information about state programs, policy issues, and performance. Check out the ratings of the accountability systems of 13 state programs.
- Best Financial Management Practice Reviews for Florida School Districts. OPPAGA and the Auditor General jointly conduct reviews to determine if a school district is using best financial management practices to help school districts meet the challenge of educating their students in a cost-efficient manner.

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