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Progress Report

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FDOT Adopts Some OPPAGA Recommendations to Improve Construction and Maintenance Programs

at a glance

The Florida Department of Transportation has implemented several of our 1999 report's recommendations for improving the Highway Construction and Engineering and Transportation System Maintenance Programs. The department has

- expanded its use of alternative construction contracting techniques, which has helped to reduce time and cost overruns, and
- begun to phase out its central warehouse and implemented a "just-in-time" system for obtaining supplies. The department reports it eliminated four central warehouse positions to date. The salaries and benefits associated with these positions totaled \$150,000. The department plans to fully close the central warehouse by December 2002.

However, some of our recommendations have not been implemented. The department has not changed its annual goal for resurfacing roads to prevent further growth in the backlog of deficient lane miles. It also did not revise its standard construction specifications to discourage contractors from unbalanced bidding. Also, the Legislature has not amended the law to allow revenue-producing projects to be advanced as part of the department's Local Government Advance-Reimbursement Program.

Purpose

In accordance with state law, this progress report informs the Legislature of actions taken by the Florida Department of Transportation (FDOT) in response to a 2000 OPPAGA report.^{1,2} This report presents our assessment of the extent to which the department has addressed the findings and recommendations included in our prior report.

Background

The Highway Construction and Engineering Program is responsible for planning, designing, and constructing roads and bridges on the state highway system. As part of the program, department staff and consultants design the construction projects included in the department's work program. In a project's development phase, department staff develop and review environmental studies, determine a project's location, complete a preliminary project design, and solicit public comment on the project. In the engineering design phase, a project's final design plans are prepared and all required

¹ Section 11.45(7)(f), *F.S.*

² *Justification Review of the Highway Construction and Engineering and Transportation System Maintenance Programs within the Florida Department of Transportation, OPPAGA Report No. 99-29*, January 2000. We combined our reviews into a single report because the studies addressed similar issues for both programs.

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permits are obtained. Department staff also let contracts for transportation construction projects while private contractors perform actual construction tasks.

In Fiscal Year 2001-02, the Highway Construction and Engineering Program was allocated \$3.6 billion and 3,294 full-time equivalent (FTE) positions.

The Transportation System Maintenance Program is responsible for maintaining the state highway system. Program staff perform routine maintenance work including filling potholes, repairing road shoulders, mowing grass, removing litter, planting wildflowers, and clearing drainage systems. They also perform bridge maintenance activities to identify and correct bridge deficiencies and help ensure that all bridges meet federal safety standards. The program also provides warehousing activities support for its other functions and furnished supplies for the entire department, including managing 38 facilities that warehouse vehicle parts and maintenance supplies, and manufacturing highway signs and sign support structures.

In Fiscal Year 2001-02, the Transportation System Maintenance Program was allocated \$431 million for program operations and had 3,046 positions.

Prior Findings _____

Highway Construction and Engineering Program

In our prior review, we identified several changes that could improve the Highway Construction and Engineering Program's performance and reduce costs.

- One of the department's primary responsibilities is to preserve the state's investment in existing roads and bridges. Costs to repair roads that are allowed to deteriorate are significantly higher than the costs of providing routine maintenance when needed. Accordingly, it is critical that the department repair and resurface roads in a timely manner and avoid creating large backlogs.

- We determined that the department had allowed its backlog of deficient lane miles of pavement on the State Highway System to increase over time. To illustrate, the number of deficient lane miles on the State Highway System increased from 2,758 in 1986 to 8,655 miles in 1999. This increase indicates that the State Highway System's infrastructure is deteriorating. The major cause for the increase in deficient lane miles appeared to be department decisions to not allocate sufficient resources to resurfacing efforts.
- To keep the backlog from increasing, the department needs to resurface enough lane miles to offset the number of new lane miles becoming deficient during a period of time. However, the department had scheduled and resurfaced enough lane miles to offset new deficiencies in only 4 of the last 13 years. We also noted that the department's goal of annually resurfacing 2,200 lane miles was not sufficient to preserve the system and that it was likely that the annual goal needed to be raised to 2,450 miles per year.
- To address this problem, we recommended that the department establish minimum annual targets to prevent further growth in the backlog of deficient lane miles needing resurfacing. In establishing its annual targets, the department needed to reassess how fast the road types become deficient and how soon roads should be scheduled for resurfacing after becoming deficient.
- To improve the project construction bid and contract administration process, we recommended that the department revise its standard contract specifications to allow its staff to make price adjustments to minor work items with unreasonably high unit prices whose quantities increase significantly above original bid estimates. We estimated this could save up to \$1.35 million. We also recommended that the department revise its standard contract specifications to allow it to retain payment for certain front-end-loaded items of work that contractors priced substantially above average bid prices in their original bids. We estimated this would help the department avoid making advance payments for front-end-loaded work and save up to \$444,000.

- To help further reduce construction project time and cost overruns, we recommended that the department expand the use of alternative construction contracting techniques. Projects completed using alternative contracting techniques experienced fewer time and cost overrun problems than projects completed using traditional contracting practices.
- To help the department complete projects at an earlier date and reduce the severity of congestion on a timelier basis, we recommended that it better inform local governments about the Local Government Advance-Reimbursement Program. If more local governments used this program, projects that could address congestion problems could be initiated earlier than planned by the department.
- We also recommended that the Legislature amend s. 339.12, *Florida Statutes*, to allow revenue-producing projects to be advanced by local governments through the Local Government Advance-Reimbursement Program. A factor that limited use of the program was that revenue-producing projects were excluded by law from being advanced by local governments. Department and legislative committee staff were not aware of the basis or rationale for excluding revenue-generating projects from advancement. They believed that the prohibition may have been based on past department funding and project management practices, and may no longer be needed.
- To help ameliorate traffic congestion problems in Florida's urban areas and maximize the use of state resources, we recommended that the department pro-actively seek to establish more public-private partnerships with developers to design, plan, build, operate, and maintain roads and toll plazas on the State Highway System. We also recommend that the department pro-actively solicit private developers to participate in the Private Transportation Facilities Program, which allows the developers to fully build, operate, own, and finance transportation facilities. The department had received only two proposals to construct private

transportation facilities since this option was authorized by the Legislature in 1991.

Transportation System Maintenance Program

Our prior review also identified changes for improving the Transportation System Maintenance Program. We recommended that the department close the program's central warehouse and contract with private vendors to provide a just-in-time distribution system capable of providing needed supplies to local staff while reducing the need for warehouse facilities. We also recommended that the department develop a business plan for closing its local warehouses.

We also recommended that the Legislature work with Florida's congressional delegation to amend the federal law to allow the department to pursue franchising interstate rest areas. Federal law prohibits states from franchising rest areas on the interstate highway. Program officials believe that if the federal law were amended to allow rest area franchising, it would be feasible for the department to franchise some rest areas and recover a portion of its costs to maintain and provide security at these sites. The program spends \$15 million annually to provide security and maintenance services at 73 rest areas.

Current Status ---

Highway Construction and Engineering Program

Recommendations implemented. The department has taken steps to implement several of our prior report's recommendations.

- The department expanded its use of alternative contracting techniques. Department managers report that the department currently uses alternative contracting techniques in three-quarters of the projects in its work program.
- The department also increased advances of projects through the Local Government Advance-Reimbursement Program. Since Fiscal Year 1999-00, the department advanced or has scheduled to advance 47 project phases, compared to 29 project phases advanced between Fiscal Years 1995-96 and 1998-99.

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- The department also reported that it was promoting public-private partnerships. Department managers report the use of public private-partnerships has increased. For example, the department's District 5 reported that it had 11 public-private partnerships in the last two years compared to a total of 6 partnerships in the five-year period from 1994 and 1999. However, the department has received only one new application for private transportation facilities since our prior report.

Recommendations not implemented. The department did not implement our recommendation that it establish minimum annual targets to prevent further growth in the backlog of deficient lane miles needing resurfacing. We noted that to keep the backlog from increasing, the department would need to increase its resurfacing goal from 2,200 lane miles per year to 2,450 lanes miles. However, the department kept the goal of annually resurfacing 2,200 lane miles. Consequently, the backlog of deficient lane miles continued to grow from 8,380 lane miles in Fiscal Year 1999-00 to 8,433 in Fiscal Year 2000-01. We continue to believe the department should set its resurfacing program targets at levels to prevent further growth in the backlog of deficient lane miles needing resurfacing.

The department did not implement our recommendation that it revise its standard contract specifications to discourage contractors from unbalanced bidding. We continue to recommend that the department revise its specifications to remove the incentive contractors have to unbalance their bids.

Also, the Legislature did not amend the law to allow revenue-producing projects to be advanced as part of the Local Government Advance-Reimbursement Program. Our prior report noted that a factor that limited use of the program was that revenue-producing projects were excluded by law from being advanced by local governments. Department and legislative committee staff were not aware of the basis or rationale for excluding revenue-generating projects from advancement, and they believed that the prohibition may no longer be needed. We continue to believe that the Legislature should consider amending s. 339.12, *Florida Statutes*, to remove the restriction on advancing revenue-producing projects.

Transportation System Maintenance Program

Recommendations implemented. The department is in the process of implementing our recommendation for closing its central warehouse and using a just-in-time delivery method. The department reports it eliminated four central warehouse positions to date. The salaries and benefits associated with these positions totaled \$150,000. The department plans to fully close the central warehouse by December 2002. The department also reports that office supplies are now obtained by a just-in-time delivery method.

The department reports that it is working with the American Association of State Highway Transportation Officials and other states to pursue changes to the federal law that prohibits franchised rest areas on the interstate system.

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