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REVIEW OF THE QUALITY ASSURANCE REVIEW PROCESS USED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION

PURPOSE OF REVIEW

This review evaluates the Quality Assurance Review (QAR) process used by the Florida Department of Transportation (FDOT) to monitor its district operations. Our review was requested by the Joint Legislative Auditing Committee and addressed the following question:

- Are FDOT's Quality Assurance Reviews effective in ensuring reasonable consistency among its district offices?

Our review was limited to FDOT's Offices of Contractual Services, Roadway Design, Structures Design, Contracts Administration, and Construction. We engaged a consultant to assist us in technical areas of our study; his detailed findings are contained in a separate report, which is available upon request.

BACKGROUND

Chapter 20, F.S., provides that FDOT is to operate on a decentralized basis, with primary responsibility for implementing transportation programs vested in its eight districts. In conducting their operations, the districts are to follow statewide policies, procedures, and standards developed by FDOT's Central Office.

Statewide consistency is an important goal for FDOT. Significant differences among districts in implementing construction standards could increase road building and maintenance costs as well as cause quality and safety problems. Differences in district operating methods could also be confusing for private consultants and contractors who design and construct Florida's roads and bridges.

FDOT's Central Office is charged with monitoring its district operations to ensure compliance with statewide policies, procedures, and standards. FDOT has developed the QAR process as its primary oversight method. In these reviews, Central Office staff typically conduct site visits in the districts to review documents and interview district employees; staff may also observe field operations. At the end of the review, an exit meeting is held where the results and recommendations are discussed with the district secretary and staff. The Central Office then issues a written report. The district being evaluated must respond to any instances of noncompliance cited in the report.

QARs are conducted by each Central Office unit with oversight responsibility. Central Office managers prepare monitoring plans and schedules for their QARs. Most Central Office units review each district annually, but do not check all district activities during each visit. In 1994, the five FDOT offices we reviewed conducted 42 QARs of district operations.

The Quality Management Office within the Office of the Secretary is responsible for establishing general procedures for QAR reviews. This Office also maintains a data base that lists summaries of all QAR reports. FDOT does not maintain separate expenditure data on the QAR process. Instead, each Central Office unit funds its QAR activities out of its administration costs. FDOT was appropriated \$3.1 billion and authorized 10,623 positions for fiscal year 1995-96.

FINDINGS

QARs Are Assessing Significant Functions. FDOT's Quality Assurance Reviews appear to be covering the appropriate and most critical district functions. FDOT's Central Office has developed monitoring plans that specify the areas that are to be examined in QARs, such as issues of compliance with state laws, federal regulations, and FDOT procedures. QARs are conducted on important functions such as project engineering and design, bid letting, consultant contracting, and road and bridge construction. We therefore concluded that the scope of QARs should be sufficient to detect any significant patterns of district noncompliance with statewide program requirements.

Districts Do Not Appear to Have a Significant Number of Noncompliance Problems. To determine if QARs find numerous instances of district noncompliance with statewide standards, we examined a sample of 78 QAR reports issued by the Central Office during calendar years 1993 and 1994. Our consultant estimated that FDOT had checked about 10,000 items during these QARs. These reports cited a total of 174 noncompliance items. Thus, noncompliance problems were found in less than 2% of the items checked.

Private Companies Reported Some Inconsistency Problems Among Districts. To determine if consultant engineering firms and

construction contractors have encountered inconsistency problems when working with FDOT districts, we interviewed officials from 34 companies. Less than half (15) of these company officials reported that they had experienced significant inconsistency problems. Difficulties cited by these persons included differences in how districts interpret design and construction standards. Also, some of the company officials noted variances in the methods used by districts to negotiate contract prices and to process supplemental agreements that modify contract prices and time schedules. They said that some of these problems had increased company costs or caused delays in projects.

We noted that FDOT has mechanisms to identify and address such problems. For example, FDOT holds statewide meetings with district staff to clarify procedural requirements. Representatives of two industry associations we contacted said that they periodically meet with FDOT to discuss problems encountered by their members. The industry association representatives told us that FDOT has taken prompt action to resolve inconsistency problems their members had reported and that district inconsistency is not currently a significant problem.

Some degree of variability is to be expected in a decentralized agency. One of the objectives in delegating program control to the districts was to enable them to adapt their operations to meet local needs. We concluded that although some inconsistencies among FDOT's districts may occur, this does not appear to be a significant problem and FDOT has mechanisms in place to resolve such problems when identified.

IMPROVEMENTS TO QAR PROCESS

Although we concluded that the FDOT's QAR process is providing reasonable oversight of the districts, we identified several areas where improvements could be made.

Greater Standardization Needed. The QAR process would benefit from greater standardization. While FDOT has developed some general procedures for QARs, the process still relies heavily on the judgment and experience of the individual staff who perform the reviews. For example, each of the FDOT offices we reviewed has developed checklists that are to be used during QARs. These checklists include functional areas that staff are to examine during the reviews and specify the criteria to be used in determining compliance with FDOT standards. However, with the exception of the Contractual Services Office, staff are not required to complete the checklists during their reviews. As a result, it can be difficult to determine whether the reviewers examined all required items or to identify the results of those checks.

Similarly, the format of QAR reports should be modified to provide better information to managers. FDOT has established a general format for these reports that includes standard subject headings (e.g., functional areas reviewed, areas of noncompliance, procedures needing to be improved, and training). However, many of these subject headings are used only if the subject is discussed in the report. As a result, managers cannot readily identify whether a subject was considered during a review. For example, if a QAR report does not include a section dealing with district training needs, it cannot be readily determined whether this issue was considered but no training deficiencies were identified or whether the subject was not considered during the review.

Standardizing the report formats and using checklists to document reviews would enable FDOT to quantify QAR results and measure performance over time. This would also provide more consistency to the process and more assurance that all required areas of district operations were assessed regardless of which staff conducted the reviews.

Follow-Up Activities Should Be Documented. A second weakness in the QAR process is that FDOT frequently does not document that problems cited in QAR reports are rechecked at a future time. This follow-up is important to ensure that cited cases of district noncompliance with statewide procedures are resolved.

Our review of QAR reports indicated that this follow-up frequently is not being conducted, or if conducted, is not being documented. Managers in the Construction Office reported that this unit generally had not rechecked previously cited areas, although the Office planned to begin such follow-up in the future. Managers in the remaining offices we examined indicated that their policy was to recheck areas previously cited for noncompliance. However, FDOT records documented that such follow-up was done for only 9 out of 36 cases of noncompliance cited in the reports issued for 1993 by these offices. Only one office, Contractual Services, had documented that it had reexamined each area of noncompliance cited in its QAR reports for 1993.

FDOT managers indicated that in some cases staff may have followed up on problems cited in QAR reports but had either not documented their findings or had reported this through internal memoranda. However, this follow-up method does not enable FDOT senior managers, who receive copies of QAR reports that cite the problems, to readily determine whether noncompliance issues are reexamined and resolved.

QAR Data Base Should Be Improved. The third weakness we identified in the QAR process is that FDOT's current data base system does not allow for ready analysis of report findings. The Department's Quality Management Office maintains a computer system that includes annual site visit schedules and narrative summaries of QAR reports. The data base is intended to provide FDOT senior managers with quick access to QAR results and

to enable the Department to respond to outside enquiries.

We concluded that the QAR data base is of limited usefulness in tracking district compliance. Because the data base contains only narrative information, it is not possible to readily identify compliance trends. For example, managers cannot use the data base to easily determine the number of times that a particular problem has been identified in the past, or the number of districts that were not in compliance with a particular state standard. Instead, managers would have to print out and examine the entire narrative text of the "noncompliance" section of every QAR report to determine if specific issues had been cited by an office. None of the administrators of the five offices we examined indicated that they used the data base for this purpose.

The data base would be improved if the checklists used in the QAR process were input into the system. This would enable managers to readily determine what specific areas of operations were examined in each district, what problem areas were found, and whether these problems had been cited in other districts. This could help managers identify systemic problem areas that FDOT could address through training or procedural changes.

CONCLUSIONS AND RECOMMENDATIONS

FDOT's Quality Assurance efforts appear to be generally effective in ensuring reasonable compliance and consistency in its statewide operations. The reviews cover the most critical district functions and typically have not found a significant number of noncompliance problems. QARs also benefit the Central

Office by promoting feedback from the districts on procedures that are considered to be confusing or unclear and by identifying training needs. However, the QAR process could be improved in several ways.

Specifically, we recommend that FDOT:

- Revise its procedures to require that QAR checklists be completed during each review.
- Revise its procedures to require that QAR reports include and address all of the standard report subject headings that describe areas considered in the review.
- Require that all items of district noncompliance cited during QARs be reassessed within a reasonable period of time. This follow-up should either be documented in subsequent QAR reports or in separate follow-up reports that are routed to FDOT's senior managers.
- Revise its QAR data base to incorporate information from its review checklists. This would enhance FDOT's ability to assess compliance trends and identify areas of district operations that are problematic; these areas could then be addressed through training and/or procedural changes.
- Continue to work with industry groups to identify and resolve instances where districts may not be operating in a reasonably consistent manner.

AGENCY RESPONSE

The Department agreed with our findings and agreed to implement our recommendations made to improve the QAR process.

This review was conducted in accordance with generally accepted government auditing standards and included appropriate performance auditing and evaluation methods. Copies of this report in alternate accessible format may be obtained by contacting Report Production at (904) 488-0021 or FAX (904) 487-3804.

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