

EXECUTIVE DIGEST

CONSTRUCTION AND TECHNOLOGY DIVISION

INTRODUCTION

This report, issued in April 2002, contains the results of our performance audit* of the Construction and Technology Division, Bureau of Highway Technical Services, Michigan Department of Transportation (MDOT).

AUDIT PURPOSE

This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency* .

BACKGROUND

MDOT was organized under Sections 16.450 - 16.458 of the *Michigan Compiled Laws* (sections of the Executive Organization Act of 1965). MDOT was established to provide the people of Michigan with a safe, efficient, and environmentally sound total transportation system in the most cost-effective manner.

The Construction and Technology Division is 1 of 5 divisions within the Bureau of Highway Technical Services that provides services to MDOT staff at its 7 regional offices and 26 transportation service centers (TSCs). The Division is organized into three sections: Construction Section, Bridge and Pavement Operations Section, and Testing and Research Section. The first two Sections are responsible for providing technical and administrative support to MDOT's construction program, including road

and bridge construction and related activities on the interstate and trunkline systems. The Testing and Research Section provides Statewide consulting services in support of all of MDOT's programs through expert staff and applied research and development. This includes conducting technical investigations and evaluating new materials and construction/maintenance methods in response to requests or identified needs. The Division is also responsible for publishing MDOT's *Standard Specifications for Construction* and all testing and materials procedure handbooks.

Division expenditures totaled approximately \$11.7 million for the fiscal year ended September 30, 2000. As of December 31, 2000, the Division had 158 full-time employees.

AUDIT OBJECTIVES
AND CONCLUSIONS

Audit Objective: To assess the effectiveness of MDOT's policies and procedures in ensuring that construction projects are properly supervised and that tests of materials used in construction projects are in accordance with industry standards and/or MDOT specifications.

Conclusion: We concluded that MDOT's policies and procedures were generally effective in ensuring that construction projects were properly supervised and that tests of materials used in construction projects were in accordance with industry standards and/or MDOT specifications. However, we noted two reportable conditions* involving final estimate reviews and consultant monitoring (Findings 1 and 2).

Audit Objective: To assess the effectiveness and efficiency of MDOT's project payment and finalization processes.

Conclusion: We concluded that MDOT's project payment and finalization processes were generally effective and efficient. However, we noted reportable conditions involving bonus performance program monitoring, timely finalization of construction projects, and contractor and consultant evaluation monitoring (Findings 3 through 5).

AUDIT SCOPE AND
METHODOLOGY

Our audit scope was to examine the program and other records of the Construction and Technology Division for the period October 1, 1997 through December 31, 2000. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our audit methodology included conducting a preliminary survey of the Construction and Technology Division to develop an understanding of its responsibilities and the methods that it uses to monitor the accomplishment of these responsibilities. We reviewed prior audit reports and working papers of audits conducted by MDOT's Office of Commission Audits. We also reviewed a report on the Division's bridge inspection program conducted by the Federal Highway Administration. We obtained Division construction and testing manuals for use as reference materials during our audit.

We obtained a download of MDOT's construction project database to allow us to identify projects on which construction had begun on or after October 1, 1997. We used this data for selecting projects for review for various audit tests. We obtained project and expenditure information from the Division for follow up during our field visits. We reviewed MDOT's bonus performance program to determine the propriety of payments to or assessments

against contractors as a result of their completing projects ahead of or behind schedule.

We conducted field visits to perform various tests of construction project records at MDOT regional offices and transportation service centers and at the offices of consultants that MDOT hired to perform construction engineering and testing services.

AGENCY RESPONSES

Our audit report contains 5 findings and 7 corresponding recommendations. The agency preliminary responses indicated that MDOT concurs with all 7 recommendations. In addition, MDOT informed us that it has initiated or will initiate corrective action for all of the recommendations.