



# MICHIGAN

OFFICE OF THE AUDITOR GENERAL

## AUDIT REPORT



THOMAS H. MCTAVISH, C.P.A.  
AUDITOR GENERAL

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

– Article IV, Section 53 of the Michigan Constitution

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Michigan  
*Office of the Auditor General*  
**REPORT SUMMARY**

*Performance Audit*  
*Real Estate Division*  
*Bureau of Highway Development*  
*Michigan Department of Transportation*

Report Number:  
591-0172-10

Released:  
March 2011

*The Michigan Department of Transportation's (MDOT's) mission is to provide the highest quality integrated transportation services for economic benefit and improved quality of life. The Real Estate Division (RED) is one of two areas within the Bureau of Highway Development. It provides real estate services and right-of-way management, along with a variety of permit services, for all areas of MDOT, including 7 regional offices and 26 transportation service centers.*

***Audit Objective:***

To assess the effectiveness and efficiency of MDOT's efforts to ensure that the fee and permit processes result in safety and financial related outcomes that are in the best interest of the State.

***Audit Conclusion:***

We concluded that MDOT's efforts to ensure that the fee and permit processes result in safety and financial related outcomes that are in the best interest of the State were moderately effective and efficient. We noted three reportable conditions (Findings 1 through 3).

***Reportable Conditions:***

MDOT should review its fee structure for issuing transport permits to help ensure that fee revenues are sufficient to cover all related costs (Finding 1).

MDOT needs to improve its process for issuing transport permits for operating oversize and overweight vehicles and loads to minimize the safety and financial

risks related to Michigan trunklines (Finding 2).

MDOT did not ensure that staff entered complete and accurate information into the Construction Permit System, which is essential for timely billing, collection, and deposit of customer fees and monitoring of permit activity (Finding 3).

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***Audit Objective:***

To assess the effectiveness and efficiency of MDOT's real estate management activities.

***Audit Conclusion:***

We concluded that MDOT's real estate management activities were effective and efficient. However, we noted two reportable conditions (Findings 4 and 5).

***Reportable Conditions:***

MDOT needs to improve its process for managing property that may no longer be needed for transportation projects (Finding 4).

MDOT did not ensure that it entered complete and accurate property acquisition information into the Real Estate Management Information System (Finding 5).

***Noteworthy Accomplishments:***

RED informed us that, because of limited resources, the Federal Highway Administration stopped conducting quality assurance reviews and asked RED whether it was interested in conducting its own reviews. After visiting another state's quality assurance section, RED developed and implemented the Quality Assurance and Quality Control (QA/QC) Program in 2002. The QA/QC Program reviews the various functions of the real estate process, which include right-of-way plans, appraisals, property acquisition, relocation, property management, right-of-way certification, and condemnations. A quality assurance

review field team, consisting of both RED and MDOT region staff, conducts on-site reviews in each of MDOT's seven regions, concentrating on the critical requirements of the various functions. After a site visit, RED staff prepare a written report, which is distributed to all of the other regions, identifying best practices that are observed and measuring continuous improvement of processes and procedures. The strength of the QA/QC Program is to share best practices and allow for continuous improvement of real estate processes.

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***Agency Response:***

Our audit report includes 5 findings and 5 corresponding recommendations. MDOT's preliminary response indicates that it agrees with all of the recommendations and has complied or will comply with them.

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A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: <http://audgen.michigan.gov>



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March 31, 2011

Mr. Jerrold M. Jung, Chair  
State Transportation Commission  
and  
Kirk T. Steudle, P.E., Director  
Michigan Department of Transportation  
Murray Van Wagoner Transportation Building  
Lansing, Michigan

Dear Mr. Jung and Mr. Steudle:

This is our report on the performance audit of the Real Estate Division, Bureau of Highway Development, Michigan Department of Transportation.

This report contains our report summary; description of agency; audit objectives, scope, and methodology and agency responses and prior audit follow-up; comments, findings, recommendations, and agency preliminary responses; two exhibits, presented as supplemental information; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a plan to address the audit recommendations and submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We appreciate the courtesy and cooperation extended to us during this audit.

AUDITOR GENERAL



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## Description of Agency

The Michigan Department of Transportation (MDOT) was organized under Act 380, P.A. 1965 (Sections 16.450 - 16.458 of the *Michigan Compiled Laws*). MDOT is governed by the State Transportation Commission, which is made up of six members who are appointed by the Governor with the advice and consent of the Senate. The Commission is responsible for establishing policies. MDOT is managed by a director, appointed by the Governor, who is responsible for administering MDOT and implementing the policies established by the Commission. MDOT's mission\* is to provide the highest quality integrated transportation services for economic benefit and improved quality of life.

The Real Estate Division (RED) is one of two areas within the Bureau of Highway Development. It provides real estate services and right-of-way (ROW) management, along with a variety of permit services, for all areas of MDOT, including 7 regional offices and 26 transportation service centers (TSCs). RED is divided into four sections: Administrative Section, Project Development Section, Project Delivery Section, and Utilities Coordination and Permits Section. Staff within each section are responsible for developing, revising, and maintaining policies and procedures related to their area of responsibilities along with evaluating staff training needs and providing training to staff within RED, regional offices, and TSCs when necessary. Staff also provide technical expertise to regional offices and TSCs. Responsibilities of the RED sections include:

- The Administrative Section is responsible for directing and controlling the functions of RED; ensuring that all RED procedures are written and established in accordance with laws, rules, and regulations; and administering all contractual services for all RED sections.
- The Project Development Section comprises the Program and Property Management and Real Estate Technical Units. The section manager is responsible for approving ROW certification. The Program and Property Management Unit is responsible for developing and maintaining automated systems and equipment to support RED's business processes; assisting in the real estate process by monitoring, preparing, and coordinating ROW project

\* See glossary at end of report for definition.

notifications, certifications, and the advanced acquisition program; and coordinating with MDOT's Design, Finance, and Planning areas and the Federal Highway Administration. This Unit is also responsible for preparing and disseminating RED financial information and managing real estate records and excess property. The Real Estate Technical Unit is responsible for performing research for ROW inquiries; providing legal descriptions, services, and sketches for court proceedings; and updating ROW maps.

- The Project Delivery Section comprises the Acquisition Support and Condemnation and Special Projects Units. The Acquisition Support Unit is responsible for providing support to regional offices, TSCs, and local public agencies through various real estate services, which include appraisals, acquisitions, business and residential relocation, environmental site clearance, ROW clearance, abstracting, title research, and property taxes. The Condemnation and Special Projects Unit is responsible for providing technical assistance and legal expertise to the Department of Attorney General and consultation to regional offices, TSCs, and local public agencies related to transportation projects.
- The Utilities Coordination and Permits Section comprises the Construction and Billboard Permits and Transport Permits Units. The Transport Permits Unit is responsible for issuing permits for the movement of oversize and overweight non-divisible loads on State and federal highways in Michigan. The Construction and Billboard Permits Unit is responsible for renewing all billboard permits and maintaining the billboard inventory, issuing annual Statewide permits for trunkline ROW occupancy, and utility coordination.

RED has a Quality Assurance and Quality Control Program used to create Statewide uniformity by establishing real estate standards, improving business processes, developing procedures and best practices, and identifying training needs.

RED expenditures were \$3.4 million for the fiscal year ended September 30, 2009. As of August 31, 2010, RED expenditures and encumbrances totaled \$3 million for fiscal year 2009-10 and RED had 45 full-time equated employees.

## Audit Objectives, Scope, and Methodology and Agency Responses and Prior Audit Follow-Up

### Audit Objectives

Our performance audit\* of the Real Estate Division (RED), Bureau of Highway Development, Michigan Department of Transportation (MDOT), had the following objectives:

1. To assess the effectiveness\* and efficiency\* of MDOT's efforts to ensure that the fee and permit processes result in safety and financial related outcomes\* that are in the best interest of the State.
2. To assess the effectiveness and efficiency of MDOT's real estate management activities.

### Audit Scope

Our audit scope was to examine the operations and responsibilities and related records of the Real Estate Division, Bureau of Highway Development, Michigan Department of Transportation. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Our preliminary review and audit procedures, conducted from May 3, 2010 through September 10, 2010, generally covered the period October 1, 2007 through August 31, 2010.

As part of our audit, we compiled supplemental information that relates to our first audit objective. Our audit was not directed toward expressing an opinion on this information and, accordingly, we express no opinion on it.

### Audit Methodology

We conducted a preliminary review of RED's operations to formulate a basis for establishing our audit objectives and defining our audit scope and methodology. This included interviewing MDOT personnel, observing processes, reviewing applicable

\* See glossary at end of report for definition.

State laws and MDOT policies and procedures, and analyzing and testing available data and statistics. We reviewed reports from prior Office of the Auditor General audits and those from other states that have functions similar to RED. We reviewed information technology systems and obtained data file downloads and records used to document and record real estate activities and various permit activities. We used this data for analyzing real estate and permit activities performed during our audit period.

To assess the effectiveness and efficiency of MDOT's efforts to ensure that the fee and permit processes resulted in safety and financial related outcomes that were in the best interest of the State, we interviewed MDOT staff and reviewed laws, policies, and procedures related to the transport, construction, and billboard permit processes. Also, we reviewed MDOT's analysis of its transport, construction, and billboard permit fees to determine whether MDOT had included all applicable costs in its analyses. In addition, we observed MDOT's process for, and reviewed weight class D bridge limitation information related to, issuing transport permits. Further, we assessed the effectiveness of the Construction Permit System information that is used to timely bill, collect, and deposit billboard customer fees by reviewing the completeness and accuracy of Construction Permit System information. Also, to ensure that billboards were not allowed to remain in use without payment of required fees, we examined MDOT's efforts to issue billboard notices, to timely revoke permits, and to remove illegal signs.

To assess the effectiveness and efficiency of MDOT's real estate management activities, we reviewed MDOT's policies and procedures, the completeness of the Real Estate Management Information System (REMIS) and the Real Estate Sale and Lease system (ReSaLe), the valuation of property acquisition, and the RED quality assurance process related to the real estate management activities. We obtained ReSaLe reports to determine that the information related to area and costs of property from ReSaLe was traceable and existed in REMIS. We also traced the area and costs from these ReSaLe reports back to ReSaLe to determine the accuracy of the reports. We reviewed parcel information from selected projects in REMIS and assessed whether the area and dollar value of parcels were complete. We obtained reports from FileNET and identified the number of times and the average/range of times when region staff did not make a timely decision on the clearance of remainder property. We observed the quality assurance review process during one regional office visit and assessed the scope of the review, the issues discovered, and the communication of results to region staff. We also made inquiries of RED staff regarding the market value and appraisal methods to value

property and reviewed files during the regional quality assurance visit to determine if appropriate documentation existed to support the valuation method used for the acquisition. We surveyed staff in the regional offices to obtain their opinion on the effectiveness of the quality assurance process and on concerns or improvements that could be made to the process.

When selecting activities or programs for audit, we use an approach based on assessment of risk and opportunity for improvement. Accordingly, we focus our audit efforts on activities or programs having the greatest probability for needing improvement as identified through a preliminary review. Our limited audit resources are used, by design, to identify where and how improvements can be made. Consequently, we prepare our performance audit reports on an exception basis. To the extent practical, we add balance to our audit reports by presenting noteworthy accomplishments for exemplary achievements identified during our audits.

#### Agency Responses and Prior Audit Follow-Up

Our audit report includes 5 findings and 5 corresponding recommendations. MDOT's preliminary response indicates that it agrees with all of the recommendations and has complied or will comply with them.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require MDOT to develop a plan to address the audit recommendations and submit it within 60 days after release of the audit report to the Office of Internal Audit Services, State Budget Office. Within 30 days of receipt, the Office of Internal Audit Services is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We released our prior performance audit of the Real Estate Support Area, Michigan Department of Transportation (59-172-02), in August 2003. Within the scope of this audit, we followed up 4 of the 5 prior audit recommendations. MDOT complied with 2 of the 4 prior audit recommendations. We repeated the other 2 prior audit recommendations in Findings 3 and 5 in this report.

COMMENTS, FINDINGS, RECOMMENDATIONS,  
AND AGENCY PRELIMINARY RESPONSES

## SAFETY AND FINANCIAL RELATED OUTCOMES

### COMMENT

**Background:** The Michigan Department of Transportation (MDOT) uses the Michigan Permitting and Routing System (MiPARS) to analyze transport permit applications and to issue permits, the Internet Highway Advertising Program (IHAP) to track and monitor outdoor advertising activities, and the Construction Permit System (CPS) database to track construction permit activity. MDOT's Real Estate Division (RED) issues all transport permits for operation on State trunklines.

RED and MDOT's regional offices issue permits for and monitor outdoor advertising, but the responsibility for regulating, controlling, and prohibiting outdoor advertising ultimately rests with RED. RED, regional offices, and transportation service centers permit and manage construction activities, but the overall responsibility for managing construction activity ultimately rests with RED.

**Audit Objective:** To assess the effectiveness and efficiency of MDOT's efforts to ensure that the fee and permit processes result in safety and financial related outcomes that are in the best interest of the State.

**Audit Conclusion:** We concluded that MDOT's efforts to ensure that the fee and permit processes result in safety and financial related outcomes that are in the best interest of the State were moderately effective and efficient. Our assessment disclosed three reportable conditions\* related to transport permit fees, bridge height and weight limitations, and the Construction Permit System (CPS) (Findings 1 through 3).

### FINDING

#### 1. Transport Permit Fees

MDOT should review its fee structure for issuing transport permits to help ensure that fee revenues are sufficient to cover all related costs.

Considering all applicable costs when establishing transport permit fees would help MDOT identify opportunities for maximizing State funding for road and bridge

\* See glossary at end of report for definition.

projects. Any resulting transport fee increases would also enable MDOT to increase State revenues used to match and earn additional federal funding for road and bridge projects.

Section 257.725 of the *Michigan Compiled Laws* (a section of the Michigan Vehicle Code) authorizes MDOT to issue permits to operate oversize, overweight, or oversize and overweight vehicles and loads on Michigan trunklines. This section also specifies the fees MDOT shall charge applicants for the oversize, overweight, or oversize and overweight vehicles and loads.

MDOT issued approximately 90,000 and 115,000 transport permits and recorded \$3.3 million and \$3.8 million in revenue for fiscal years 2008-09 and 2007-08, respectively. MDOT has not increased its transport permit fees since October 1998.

In August 2008, RED proposed a transport permit fee increase to MDOT management based on an analysis of the transport permit fee revenues for oversized vehicles and loads and recommended that legislation be pursued to allow overweight permit fees to be increased. Section 257.725(5) of the *Michigan Compiled Laws* allows MDOT to increase its permit fees for oversize vehicles and loads once per year based on consumer price index increases. Using only the consumer price index as a basis, RED could have received an increase in permit fee revenue in fiscal year 2006-07 from approximately \$1.3 million to \$1.8 million. However, MDOT decided not to pursue any increase.

Our review disclosed:

- a. RED's transport permit fee analysis did not include the dollar amount of damage to Michigan trunkline road and bridge system caused by overweight vehicles and loads.

RED stated that its current transport permit fee structure was intended to cover only the administrative costs for issuing the permits, as allowed by the boilerplate of the annual appropriations act for MDOT. However, the House Legislative Analysis of Senate Bill 613 of 1998, which amended Section 257.725 of the *Michigan Compiled Laws*, stated that the rationale for establishing the permit fees was a way to offset costly road damage caused by

overweight vehicles. Also, we contacted the agencies responsible for issuing related fees in three other states. These agencies informed us that one of the purposes of their transport permit fees was to help offset road damage caused by overweight vehicles.

We estimated that, for fiscal year 2008-09, overweight vehicles caused \$135.0 million in Michigan trunkline damage (see Exhibit 1). We also estimated that MDOT received \$2.3 million in overweight or overweight and oversize transport permit revenue, which, according to MDOT, was used to generate up to \$12.8 million in matching federal revenue. Therefore, we estimated that MDOT received \$15.1 million of revenue to cover the estimated \$135.0 million of Michigan trunkline damage caused by overweight vehicles and loads, leaving \$119.9 million of damage not recovered by the permit fees.

- b. RED's transport permit fee analysis did not calculate and include all related administrative costs associated with issuing transport permits. Specifically, the analysis did not include approximately \$612,000 for the salaries, wages, and supplies of RED's Transport Permits Unit incurred in fiscal year 2008-09. Administrative costs should also include other RED and MDOT overhead costs, such as rent, utilities, information system related costs, etc. Including all administrative related costs would allow MDOT to make a more informed decision when reviewing the fee structure for issuing transport permits.

While State statute authorizes MDOT to increase transport permit fees for oversize vehicles and loads, the decision to increase fees for overweight vehicles and loads ultimately rests with the Legislature and the Governor. However, MDOT has access to the necessary revenue and expenditure information to develop an objective analysis and recommend a fee structure that considers all appropriate costs incurred from oversize, overweight, or oversize and overweight vehicles and loads traveling Michigan trunklines.

## **RECOMMENDATION**

We recommend that MDOT review its fee structure for issuing transport permits to help ensure that fee revenues are sufficient to cover all related costs.

## **AGENCY PRELIMINARY RESPONSE**

MDOT agrees with the recommendation and informed us that it will comply. MDOT stated that it agrees that transport permit fees should cover administrative costs to issue permits and will again consider increasing permit fees in accordance with the provisions of the State statute. MDOT also stated that it agrees that costs for damage to roads and bridges caused by overweight trucks should be considered as part of an overall strategy for funding transportation in Michigan. MDOT stated that by July 1, 2011, it will review the existing permit fee cost structure and make an assessment with respect to an increase in permit fees.

## **FINDING**

### **2. Bridge Height and Weight Limitations**

MDOT needs to improve its process for issuing transport permits for operating oversize and overweight vehicles and loads to minimize the safety and financial risks related to Michigan trunklines.

Section 257.725 of the *Michigan Compiled Laws* states that MDOT may authorize applicants to operate upon Michigan trunklines vehicles that are of a size, weight, or load exceeding the maximum specified by law. The purpose of this section is to help protect the safety of the public by allowing MDOT to restrict or prescribe conditions of operations of vehicles.

MDOT staff issued approximately 90,000 transport permits to applicants during fiscal year 2008-09 authorizing applicants to operate oversize and/or overweight vehicles and loads upon Michigan trunklines. Our review of MDOT's transport permit process disclosed:

- a. MDOT did not use the capability within MiPARS to compare applicants' combined vehicle and load heights to bridge heights. Instead, MDOT required applicants to certify on their applications that their combined vehicle and load heights would clear all overhead obstructions, including bridges. As a result, MDOT was susceptible to repair costs associated with damages to bridges caused by vehicles exceeding bridge height limitations.

For example, MDOT issued a transport permit during fiscal year 2006-07 to an applicant whose combined vehicle and load height did not vertically clear a

bridge located within the applicant's route. According to the Michigan Department of State Police traffic crash report, the load struck the bridge and caused part of the load to fall off the vehicle and strike another vehicle. MDOT informed us that the bridge was hit at least six times during fiscal years 2006-07 and 2005-06, which cost MDOT approximately \$10,000 to repair.

- b. MDOT did not ensure that all transport permit staff used current bridge weight information when staff reviewed transport permit applications.

According to MDOT, there are 24 bridges within Michigan trunklines that are weight class D bridges, which are bridges that either hold the least amount of axle weight or will not hold any overweight vehicles and loads. There are six transport permit staff available to process applications. When an applicant's requested route includes a weight class D bridge, transport permit staff will manually compare the applicant's load weights to MDOT's table of bridges. MDOT informed us that it could not be certain that all transport permit staff were using the most current table, which MDOT updates periodically based on information received from MDOT's Bridge Operations.

During our review, we observed RED staff using an outdated table. We compared MDOT's most current table, as of August 2010, to the outdated table. Although both tables contained 24 bridges, we noted that MDOT had added 3 bridges that did not allow overweight loads to its most current list and removed 3 bridges from the previous table. MDOT informed us that because of limitations on how MiPARS captures and stores transportation permit information, MDOT could not efficiently identify the number of transportation permits that it may have improperly issued for routes that included the 3 added bridges.

Although we are not aware of any injuries caused by the weaknesses we noted during our review and observation of MDOT's transportation permit process, these weaknesses increase the potential for injuries to occur and might result in a liability to the State.

## **RECOMMENDATION**

We recommend that MDOT improve its process for issuing transport permits for operating oversize and overweight vehicles and loads to minimize the safety and financial risks related to Michigan trunklines.

## **AGENCY PRELIMINARY RESPONSE**

MDOT agrees with the recommendation and informed us that it has complied. MDOT stated that it has determined that the least liability to the State comes from requiring the permit applicant, as a condition of a permit, to verify bridge heights, signal heights, wire heights, and all other vertical obstructions for clearance prior to the movement of the load. However, MDOT stated that it will be implementing a new Web-based computer application system called Michigan Transport Routing and Internet Permitting (MiTRIP) during the second quarter of calendar year 2011 (tentatively scheduled for April 11, 2011). This new system will replace MiPARS. Although this was not the originally intended purpose of the new system, within six months of MiTRIP being put into production, MDOT stated that it will conduct a review of the new system capabilities for storing and reporting bridge height data and the accuracy and reliability of bridge height data available. MDOT stated that it will also discuss with the Department of Attorney General the legal ramifications and any potential increases in liability to determine if the comparison of applicants' combined vehicle and load heights to bridge heights should become part of the permit issuance process. MDOT stated that on November 1, 2010, it implemented regular checks on the maps and data being utilized in the permit issuance process to ensure that the most current data is utilized.

## **FINDING**

### **3. Construction Permit System (CPS)**

MDOT did not ensure that staff entered complete and accurate information into CPS, which is essential for timely billing, collection, and deposit of customer fees and monitoring of permit activity.

MDOT issues construction permits to companies and individuals requesting authorization to work inside the State highway right-of-way. Examples of the type of work that would require a construction permit include installing or replacing a commercial or residential driveway, trimming trees, and performing utility work.

MDOT uses CPS to monitor construction permit activity and revenues and to bill companies that obtain construction permits.

According to CPS, MDOT issued 2,751 construction permits from October 1, 2009 through June 30, 2010. Our review of CPS disclosed:

- a. MDOT did not enter complete and accurate type of work codes into CPS for 449 (16.3%) of the 2,751 construction permits issued. For the 449 permits, CPS either contained a type of work code that was not listed in MDOT's construction permit desk manual or did not include the type of work code. As a result, MDOT did not include these permits in its analysis of construction activity throughout Michigan.
- b. MDOT did not document within CPS the basis for the fees assessed for 203 (7.4%) of 2,751 construction permits.

MDOT established a construction permit fee schedule in an attempt to ensure that it assesses proper construction permit fees. MDOT informed us that this fee schedule is not all-inclusive because the construction activities covered by these permits are too varied to be included on one schedule. Therefore, MDOT needs to document within CPS the basis for any construction permit fees that are not assessed in accordance with the fee schedule.

For example, we noted that MDOT recorded 5 construction permits in CPS with fees of \$1.00, \$2.00, and \$5.25. However, these fee amounts were not listed on the construction permit fee schedule and MDOT staff had not documented in CPS the explanations for the fees. Subsequent to our review, RED staff determined that 4 of the 5 permits were related to cleanup of vegetation around billboards, which requires a minimum fee of \$450 each. The fifth permit was for a regional annual permit, which requires a fee of \$525. MDOT assessed and collected the correct fees but did not correctly enter the fees into CPS.

We reported a similar condition in our prior audit. MDOT concurred with the recommendation and stated that it would distribute a memorandum to staff that emphasized the importance of CPS and the requirement that staff enter all applicable information in a complete and timely fashion.

## **RECOMMENDATION**

WE AGAIN RECOMMEND THAT MDOT ENSURE THAT STAFF ENTER COMPLETE AND ACCURATE INFORMATION INTO CPS, WHICH IS ESSENTIAL FOR TIMELY BILLING, COLLECTION, AND DEPOSIT OF CUSTOMER FEES AND MONITORING OF PERMIT ACTIVITY.

## **AGENCY PRELIMINARY RESPONSE**

MDOT agrees with the recommendation and informed us that it has complied. MDOT stated that on January 3, 2011, it implemented a new CPS. MDOT also stated that the new system is designed to provide enhanced data integrity and usability. In addition, MDOT stated that system training and support programs were designed and implemented to minimize data irregularities.

## **REAL ESTATE MANAGEMENT ACTIVITIES**

### **COMMENT**

**Background:** MDOT regions are responsible for the right-of-way (ROW) property acquisition and RED is responsible for certification. Once the final ROW plans are set, regions have up to 24 months to secure the property for the project through property acquisitions. Most property acquisitions involve purchasing the property by deed or obtaining an easement\* or a permit. RED staff work with the real estate staff in the regional offices to secure property for the transportation project. Region staff identify the property owners and conduct preliminary interviews with the owners to explain the plans, appraisal methods, and acquisition process. If necessary, staff negotiate with the property owner to acquire the property or a portion of the property for the transportation project. After staff have completed the acquisition process, RED will certify that all property within the ROW has been obtained for the transportation project. RED then obtains Federal Highway Administration (FHWA) approval on the certification. MDOT acquired 818 parcels of property for 65 projects in fiscal year 2007-08 and 808 parcels of property for 67 transportation projects in fiscal year 2008-09.

**Audit Objective:** To assess the effectiveness and efficiency of MDOT's real estate management activities.

\* See glossary at end of report for definition.

**Audit Conclusion:** We concluded that MDOT's real estate management activities were effective and efficient. However, we noted two reportable conditions related to property management and property acquisition information (Findings 4 and 5).

**Noteworthy Accomplishments:** RED informed us that, because of limited resources, FHWA stopped conducting quality assurance reviews and asked RED whether it was interested in conducting its own reviews. After visiting another state's quality assurance section, RED developed and implemented the Quality Assurance and Quality Control (QA/QC) Program in 2002. The QA/QC Program reviews the various functions of the real estate process, which include ROW plans, appraisals, property acquisition, relocation, property management, ROW certification, and condemnations. A quality assurance review field team, consisting of both RED and MDOT region staff, conducts on-site reviews in each of MDOT's seven regions, concentrating on the critical requirements of the various functions. After a site visit, RED staff prepare a written report, which is distributed to all of the other regions, identifying best practices that were observed and measuring continuous improvement of processes and procedures. The strength of the QA/QC Program is to share best practices and allow for continuous improvement of real estate processes.

## **FINDING**

### **4. Property Management**

MDOT needs to improve its process for managing property that may no longer be needed for transportation projects. Improving this process would allow MDOT to more effectively identify the amount and value of property within its inventory that may be available for sale or lease. MDOT could then use this information to make more informed decisions regarding the benefits of holding on to or disposing of property.

MDOT regularly acquires property for use in transportation projects. MDOT uses the Real Estate Management Information System (REMIS) to record transactions involving the purchase and acquisition of property for transportation projects. MDOT also uses REMIS to identify any property that is not currently needed for a project. MDOT then uses the Real Estate Sale and Lease system (ReSaLe) to inventory and track all property that is not needed. MDOT periodically reviews whether the property in ReSaLe can be used for any future transportation projects. If MDOT does not identify any future need, MDOT considers this property excess and available for resale or lease back to the general public.

During our audit period (October 1, 2007 through August 31, 2010), MDOT reported revenues of approximately \$17.1 million related to the sale of 169 properties and 81 lease agreements, which is approximately 9.9% of MDOT's total unsold inventory. As of August 16, 2010, MDOT reported that it had 2,525 unsold parcels of property on hand.

We reviewed property acquisition information in REMIS and unsold property inventory reports from ReSaLe and noted:

- a. MDOT had not determined, in a timely manner, whether property acquired for transportation projects included any property that was not needed for 52 (55.3%) of 94 parcels of property. MDOT informed us that it should be able to identify whether property is not needed by the letting date, which is the date the transportation project for which the property was acquired is bid out for construction. However, our review disclosed that MDOT had not yet made a determination on the 52 parcels of property for an average of 382 days after the letting date. Identifying property that is not needed in a more timely manner would ensure that the property inventory is more complete and would allow MDOT to make more informed decisions regarding the disposition of its inventory.
- b. MDOT had not recorded the acreage or the value in ReSaLe for 404 (16.0%) and 861 (34.1%) of 2,525 parcels of property, respectively. Consequently, MDOT cannot make sound management decisions regarding the proper disposal or disposition of these parcels of property.
- c. MDOT had not reviewed 1,638 (64.9%) of 2,525 parcels of property in ReSaLe to determine whether these parcels would be considered excess and available for disposal. These reviews help ensure that MDOT does not dispose of property prematurely and then later have to reacquire it. MDOT stated that not all property is valuable enough to warrant a review. However, there is nothing in ReSaLe that reflects whether or not a review is necessary.

### **RECOMMENDATION**

We recommend that MDOT improve its process for managing property that may no longer be needed for transportation projects.

## **AGENCY PRELIMINARY RESPONSE**

MDOT agrees with the recommendation and informed us that it will comply. MDOT stated that by March 31, 2011, an instructional memorandum will be issued to all region agents regarding the necessity of data input into REMIS. MDOT also stated that data input and excess property instructions will be added as a quality assurance review item during the region quality assurance meetings and that periodic instructional e-mail communications will be issued for system users emphasizing the importance of timely, complete, and accurate data entry and information and the need to identify properties that are candidates for disposal.

## **FINDING**

### **5. Property Acquisition Information**

MDOT did not ensure that it entered complete and accurate property acquisition information into REMIS. Incomplete property acquisition information reduces the effectiveness and reliability of REMIS as a property management tool, may require MDOT to expend more time and resources when inquiring about the status of projects, and may also result in MDOT relying on inaccurate information when making property management decisions.

MDOT developed user manuals to provide staff with guidance on how to enter, update, and retrieve data from REMIS. These manuals require staff to enter property acquisition information, such as property description, purchase price, and name of owner.

We reviewed 580 property acquisitions recorded in REMIS for active projects from October 1, 2007 through March 31, 2010, including purchases by deed and by obtaining easements and permits. Our review disclosed:

- a. MDOT did not enter a purchase price into REMIS for 241 (41.6%) of 580 property acquisitions. The purchase price for acquisitions, in general, has ranged from no cost, when MDOT and the owner agree that the project would be mutually beneficial, to as much as \$18.8 million for the purchase of a property that occurred in December 2008.
- b. MDOT did not record acreage information in REMIS for 11 (11.7%) of 94 properties acquired by the purchase of property by deed. The total acreage

obtained for acquisitions, in general, has ranged from a fraction of an acre to as much as 63 acres.

- c. MDOT did not record accurate acreage information into REMIS for 30 (31.9%) of 94 properties acquired by the purchase of property. When MDOT purchases property, staff record the acreage for the total parcel ownership and the total amount of property acquired by the purchase. When the amount of property is less than an acre, staff may record the amount in terms of square feet. We noted various errors in recording acreage information in REMIS. For example, MDOT recorded the total amount acquired for the purchase of one property as 12,863 acres when it should have been recorded as 12,863 square feet.
- d. MDOT did not record any property information in REMIS for 16 property acquisitions, including a description of the property, the amount of acreage acquired, and the purchase price.

We reported a similar condition in our prior audit. MDOT concurred with the recommendation and stated that it had conducted training sessions on REMIS, would provide periodic instruction through e-mail, and would examine the use of automated forms in REMIS.

### **RECOMMENDATION**

WE AGAIN RECOMMEND THAT MDOT ENSURE THAT IT ENTERS COMPLETE AND ACCURATE PROPERTY ACQUISITION INFORMATION INTO REMIS.

### **AGENCY PRELIMINARY RESPONSE**

MDOT agrees with the recommendation and informed us that it will comply. MDOT stated that by March 31, 2011, an instructional memorandum will be issued to all region agents regarding the necessity of data input into REMIS. MDOT also stated that data input instructions will be added as a quality assurance review item during the region quality assurance meetings and that periodic instructional e-mail communications will be issued for system users emphasizing the importance of timely, complete, and accurate data entry and information.

## SUPPLEMENTAL INFORMATION



## Description of Supplemental Information

The Office of the Auditor General prepared the following exhibits related to Real Estate Division (RED) operations:

Exhibit 1 - Estimate of Road and Bridge Damage Caused by Overweight Vehicles:

This exhibit displays the methodology we used to estimate the damage to the State's roads and bridges by overweight vehicles for the period October 1, 2008 through September 30, 2009.

Exhibit 2 - Permit Statistics: This exhibit shows the number of RED permits issued and related revenue for fiscal years 2008-09 and 2007-08.

REAL ESTATE DIVISION  
Bureau of Highway Development  
Michigan Department of Transportation  
Estimate of Road and Bridge Damage Caused by Overweight Vehicles  
For the Period October 1, 2008 through September 30, 2009

The U.S. Department of Transportation's (USDOT's) Comprehensive Truck Size and Weight Study issued in August 2000 indicated that states spend billions of dollars each year to maintain their highway systems. The study noted that the condition and performance of highway pavement depends on many factors: pavement structure; construction quality; weather; subbase characteristics; magnitude, spacing, and frequency of axle loads; and interaction between pavement conditions and vehicle speed, number of tires per axle, tire pressures, and suspension characteristics. The study also noted that pavements are stressed by loads on individual axles and axle groups in contact with the pavement. Pavement deterioration increases sharply as the axle load increases. The study also noted that, if the roads are not routinely maintained, the axle loads in combination with the environmental factors will accelerate pavement cracking and deformation.

We estimated the amount of road and bridge damage caused by overweight vehicles using a methodology similar to the one used in 2006 by the Arizona Department of Transportation ([http://www.azdot.gov/TPD/ATRC/publications/project\\_reports/PDF/AZ528.pdf](http://www.azdot.gov/TPD/ATRC/publications/project_reports/PDF/AZ528.pdf)). Our estimate involved several variables: the estimated costs to repair roads and bridges, vehicle miles traveled, highway and bridge repair costs allocated by type of vehicles, the percentage of overweight vehicles, and the estimated amount that vehicles were overweight.

MDOT's weigh-in-motion scales reported that approximately 1.5 million (4.2%) of 37.0 million commercial motor vehicles (CMVs) weighed for the period October 1, 2008 through September 30, 2009 were overweight. Also, our analysis of 50 transport permits issued for overweight vehicles and loads indicated that those overweight CMVs were over the Michigan weight limits by an average of 43.5%. Using USDOT information regarding costs to repair

Michigan roads and bridges, we estimated that damage from overweight vehicles for the period resulted in an additional \$135.0 million in Michigan road and bridge repair costs:

Estimated Amounts Based on Information From USDOT (1)

Annual costs to sustain Michigan roads and bridges:

Road costs	\$ 1.2 billion
Bridge costs	\$304.0 million

Annual road and bridge costs attributed to large combination trucks (2) \$757.9 million

Annual estimated damage to roads and bridges by overweight vehicles (3) \$135.0 million

- (1) The USDOT estimate of annual costs to maintain roads and bridges was determined from the USDOT's Report to Congress entitled "2008 Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance." The USDOT's Sustain Conditions and Performance Scenario estimates that it will cost the United States \$54.6 billion per year from 2007 through 2026 to sustain roads and bridges at their current levels. We based our estimate of Michigan's share of road and bridge costs on the pro-rata share of miles driven in Michigan as reported by the USDOT Highway Statistics 2008.
- (2) The Federal Highway Cost Allocation Study indicated that the share of road and bridge costs attributed to large combination trucks was 58% and 22%, respectively. Therefore, the annual road and bridge costs attributed to large combination trucks equals (approximately \$1.2 billion x 58%) + (\$304.0 million x 22%) = \$757.9 million.
- (3) The annual estimated damage to roads and bridges by overweight vehicles equals the annual road and bridge costs attributed to large combination trucks multiplied by 4.2% (estimate of overweight CMVs) multiplied by 4.24 (axles overweight by 43.5% to the 4th power). The 4th power is used because if the weight of the vehicle is doubled, then the damage it does also gets doubled four times. This means that a vehicle with twice as much weight can cause 16 times as much damage.

REAL ESTATE DIVISION  
Bureau of Highway Development  
Michigan Department of Transportation (MDOT)  
Permit Statistics  
For Fiscal Years 2008-09 and 2007-08

Permit Type	Permit Revenue		Number of Permits Issued	
	Fiscal Year 2008-09	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2007-08
Transport permits (1)	\$ 3,302,977	\$ 3,849,578	90,198	114,635
Construction permits (2)	474,451	773,822	3,963	4,104
Billboard permits (3)	911,605	1,130,398	12,000	13,000
Total	<u>\$ 4,689,033</u>	<u>\$ 5,753,798</u>	<u>106,161</u>	<u>131,739</u>

- (1) Includes overweight and oversize permits, including non-divisible for annual and single trips.  
(2) Includes utilities and annual and individual permits.  
(3) Renewal of billboard permit signs.

Source: The Office of the Auditor General prepared this exhibit based on information obtained from MDOT Finance, Real Estate Division permit staff, and MDOT Bureau of Highway Development annual report for fiscal years 2008-09 and 2007-08.

# GLOSSARY

## Glossary of Acronyms and Terms

<b>CMV</b>	commercial motor vehicle.
<b>CPS</b>	Construction Permit System.
<b>easement</b>	A permanent interest in real property, granted by the owner, which conveys the right to use the property for a specific purpose, such as construction, operation, and maintenance of roadways, ditches, and other transportation projects.
<b>effectiveness</b>	Success in achieving mission and goals.
<b>efficiency</b>	Achieving the most outputs and outcomes practical with the minimum amount of resources.
<b>FHWA</b>	Federal Highway Administration.
<b>MDOT</b>	Michigan Department of Transportation.
<b>MiPARS</b>	Michigan Permitting and Routing System.
<b>mission</b>	The main purpose of a program or an agency or the reason that the program or the agency was established.
<b>MiTRIP</b>	Michigan Transport Rating and Internet Permitting.
<b>outcome</b>	An actual impact of a program or an agency.
<b>performance audit</b>	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve program operations, to facilitate decision making by parties responsible for overseeing or

initiating corrective action, and to improve public accountability.

QA/QC

Quality Assurance and Quality Control.

RED

Real Estate Division.

REMIS

Real Estate Management Information System.

reportable condition

A matter that, in the auditor's judgment, falls within any of the following categories: an opportunity for improvement within the context of the audit objectives; a deficiency in internal control that is significant within the context of the objectives of the audit; all instances of fraud; illegal acts unless they are inconsequential within the context of the audit objectives; significant violations of provisions of contracts or grant agreements; and significant abuse that has occurred or is likely to have occurred.

ReSaLe

Real Estate Sale and Lease system.

ROW

right-of-way.

TSC

transportation service center.

USDOT

U.S. Department of Transportation.









