

# Michigan Access Management Program Evaluation

Prepared for



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## **DISCLAIMER**

This project was performed in cooperation with the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA). The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of MDOT or FHWA. This report does not constitute a standard, specification, or regulation.

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## EXECUTIVE SUMMARY

### Background

The Michigan Department of Transportation (MDOT) has conducted an Access Management Program since 2002. Over 35 studies have been completed to date using numerous consultants. The studies that have been completed are intended to guide MDOT, local municipalities, and developers in locating future access points and to provide local municipalities with direction for new (or updated) ordinances.

Prior to this review, the completed studies had not been evaluated. MDOT contracted with the Texas Transportation Institute (TTI), headquartered on the campus of Texas A&M University in College Station, Texas, to evaluate the studies, study implementation, and to provide general recommendations for adjustments to Michigan's Access Management Program.

### Scope of Work

The evaluation began in December 2008 and concluded in May 2010. The TTI project team investigated 14 elements to assess Michigan's Access Management Program and implementation within MDOT's seven regions. The following are the 14 elements evaluated by the TTI project team.

- *Element #1: Review Past Requests for Proposals (RFPs) for Consistency*
- *Element #2: Study Costs*
- *Element #3: Study Length and Time*
- *Element #4: MDOT Study Corridor Criteria*
- *Element #5: Data Collection Format*
- *Element #6: Access Management Report Format*
- *Element #7: Study Management*
- *Element #8: Local Agency Memorandum of Understanding (MOU), and Ordinances*
- *Element #9: Coordinated Site Plan Reviews*
- *Element #10: Local Government and Business Perspectives about MDOT's Access Management Program*
- *Element #11: Maintaining Viability*
- *Element #12: Study Linkage to MDOT Construction Projects*
- *Element #13: Asset Management Links*
- *Element #14: Traffic and Safety Notes*

## Key Recommendations

Evaluation findings indicate several positive elements of the program during the period 2002 to 2008. To evaluate the program, TTI conducted interviews and surveys of local officials, MDOT staff, and private property owners. TTI conducted a comprehensive review of each access management plan completed during this period and investigated implementation of plan recommendations.

Because access management is not a “quick fix,” successful implementation of access management studies can take many years to come to fruition. Since there has not been sufficient time to make a scientific and quantitative assessment of all the program benefits along all impacted roadways, it was not the intent nor the scope of this evaluation to do so. It was beneficial to provide a “snapshot” of MDOT’s program to determine if the program is heading in the right direction. The evaluation determined that the proper program steps are being taken to experience additional future benefits statewide, including evidence in specific locations such as Bay Region, where plan recommendations are being implemented through individual negotiations with property owners. In addition, local ordinances and plans are being adopted or modified, local coordination is occurring, and access management committees are being formed. There will be more opportunities in the future for statewide benefits when rehabilitation and reconstruction (R&R), or capacity improvement projects are constructed and/or as land redevelops along areas with adopted access management plans and/or ordinances. While a quantitative assessment is difficult in this, the near term, the TTI project team investigated the presence of key policies, guidance documents, training, and personnel resources to put MDOT in the best position for long-term and continued program success. Based upon the evaluation and to ensure future program success, TTI recommends the following:

1. ***Continue Support of the MDOT Access Management Program by Department Management:*** The bottom line is safety. It is a fact that access management limits vehicular conflicts and reduces crashes over time. Because of the tremendous opportunity for continued long-term benefits to the motoring public, and even with the current fiscal crisis, MDOT should prepare studies “in house” by utilizing both central and region office staff. Once funding levels become stabilized, the program should seek a balance between the use of MDOT staff and private-sector consultants. This will ensure that a high level of technical expertise is maintained within the department and that the Access Management Program is advocated industry-wide. TTI noted that the use of private-sector consultants can create a higher degree of credibility by the public in cities and townships, especially through the plan/ordinance adoption phases because consultants can provide objectivity as a “non-governmental” entity. (See pages 14 and 29 for additional discussion.)



2. ***Establish and Promote an MDOT Policy Requiring Access Management Inclusion in R&R and Capacity Projects:*** Such a policy would require inclusion of an access management component in proposed rehabilitation and reconstruction (R&R) and capacity improvement projects that are entered into the Five-Year Program for non-freeway state trunklines. For these projects, the policy would ensure that access issues, if they exist, are thoroughly addressed with a request for proposal (RPF) for an access management study. Access management should also be included in the MDOT and metropolitan planning organization (MPO) long-range plans as a safety and congestion management component. These plans should indicate that near-term attention be given to corridors when enhancement, safety or local funding programs are being pursued. This Five-Year/Long-Range Plan policy would trigger those circumstances when a study is initiated and should establish consistency as to when and where the access management process is promoted by the central and regional offices of MDOT. (See page 31 for additional discussion.)
3. ***Recognize and Replicate Beneficial Practices Throughout the State to Improve Local Coordination:*** Based on positive experiences in numerous locations, especially throughout the Superior Region, TTI recommends that MDOT's practice of forming and nurturing corridor committees after an access management study be replicated statewide. The benefits of these committees extend well beyond access management studies, plans and implementation. Almost, if not all, of the positive implementation stories are founded on an MDOT understanding of the local situation, including challenges and long-range plans, as well as a cooperative attitude from MDOT and the local governments involved. Consistent with this idea, it is vital that MDOT, municipality staff, and consultants (when used) understand the importance to take the access management plan and ordinance through to adoption as part of the process. This is important because plan/ordinance adoption and the establishment of on-going access management site review committees are primarily how access management is implemented. (See pages 22, 23, 24, 41, and 42 for additional discussion.)
4. ***Continue Support for Access Management Training and Awareness:*** There is a need to include an access management component into the internal department training program to ensure junior and mid-level staff are knowledgeable of the purpose, need and elements of the Access Management Program. A public informational outreach program should continue to highlight the program to outside professional organizations, local communities and business groups. This could be accomplished through meetings, training seminars and conference workshops. (See pages 36, 49, and 50 for additional discussion.)

5. ***Improve Coordination between MDOT's Asset Management Section and the Access Management Program Staff:*** MDOT's asset management data depository can provide key data elements for prioritizing where an access management study should be performed. For example, if crash information (rates, frequencies, and types) show access-related patterns, then the corridor may be a candidate for a future access management study. MDOT's asset management data depository also provides valuable data elements for inclusion in the access management study, and to inform corridor committees and property owners. Incorporating the number of driveways or median type in asset inventories would be valuable. Including access management activities into the Asset Management Section's Congestion Management Program (CMP) is also important because implementing access management provides a proven operational and safety improvement for a relatively modest investment. (See pages 37 and 52 for additional discussion.)
6. ***Review, Update, and Promote Traffic and Safety Notes (TSN's):*** Review TSN's as they relate to Access Management to ensure they address changes in safety and operational guidance pertaining to access along state trunklines and assure the TSN's are consistently understood and applied at all levels within the department. This can be accomplished through an annual Planning/Operations review and appraisal of issues or concerns relating to their application. This review can take place as part of the annual Operations Conference. (See pages 31 and 50 for additional discussion.)
7. ***Continue Access Management Program and Corridor Evaluations into the Future:*** Identifying the quantitative and qualitative benefits of access management implementation takes time. Quantifying successful implementation, to the extent possible, will provide objective evidence of program benefits. Therefore, there is a need to perform future evaluations of the program to identify what is working well and where refinements can be made. Specific corridors where access changes have been implemented can also be evaluated to identify crash impacts over time. (See page 53 for additional discussion.)

Throughout this document, many of the findings and recommendations can be traced back to the needs identified in these key recommendations that give MDOT the best chance of future success for the Access Management Program.

### **Specific Chapter Recommendations**

The body of the report is organized around the specific chapter recommendations provided in this section. Discussion of each of these specific chapter recommendations is provided in the body of the report.

## **What Should MDOT Do for Continued Success Now and in the Future? (Chapter 2)**

The following recommendations are provided to ensure continued success into the future:

1. *Continue the Program and support thereof despite the current fiscal crisis by preparing studies “in house” utilizing both MDOT Central Office and Region staff. When funding becomes available, strike a balance between the use of MDOT staff and the private sector. (See page 14 for additional information.)*
2. *As identified in several locations throughout the state, continually seek opportunities to partner with municipalities on access management and other issues as well. (See page 22 for additional information.)*
3. *Build consistency statewide on identified successes to identify, understand, and listen to local agency and community cares and concerns. (See page 23 for additional information.)*
4. *Ensure that access management plan recommendations reflect that access management implementation is not “one-size-fits-all,” or a “quick fix.” In some cases, implementation is long term, and in others it can be short term. (See page 24 for additional information.)*
5. *Based on successes observed in numerous locations throughout the state, develop on-going access management committees after the conclusion of an access management study to facilitate consistent implementation of the plan recommendations. (See page 26 for additional information.)*
6. *Encourage municipalities that have not yet done so to identify objective criteria defining a land use change that requires site review, which includes access review. (See page 28 for additional information.)*
7. *Recognize consultants as a valuable resource and vital third party participant in the access management study, plan development, fostering, and adoption, and take advantage of their skills and what they do well (complementing local agency capabilities). (See page 29 for additional information.)*

## **How Can Initial Corridor Selection and the Study Planning Process be Improved Before Contract Signing? (Chapter 3)**

The following recommendations are provided to improve corridor selection and the study process:

1. *Establish a statewide access management policy that is identifiable in appropriate documents requiring an access management component within all rehabilitation and reconstruction (R&R) and capacity improvement projects. The component should include study location criteria/guidance with an emphasis on corridors of significance identified in the Five-Year Plan and State Long-Range Transportation Plan, and requirements for preparing RFPs and/or basing study need on objective indicators (e.g., increasing safety, volumes and/or future changes in land use). (See page 31 for additional information.)*

2. *Perform educational outreach meetings with local municipalities and the business community before the project starts, and obtain local support through the use of memos of understanding (MOUs) and/or resolutions of support. (See page 36 for additional information.)*
3. *Improve coordination between MDOT's Asset Management Section and the Access Management Program in refining the use of data resources to select study locations, inform corridor committees and property owners, meet consultant needs at the start of the study, and to incorporate access management activities into Congestion Management Program (CMP) functions. (See page 37 for additional information.)*

#### ***How Can the RFP and Contracting Process be Improved to Help Ensure Success? (Chapter 4)***

The following recommendations are provided to improve the RFP and contracting process:

1. *In the RFP development stages, determine if any of the municipalities involved desire to have the consultant assist or lead in taking the plan and ordinance to elected officials for adoption. (See page 41 for additional information.)*
2. *Provide consistent local agency (municipal) input to the RFP and contractor selection. (See page 42 for additional information.)*
3. *Recognize advantages and disadvantages of contracting with State Planning and Development Regions (SPDRs). (See page 42 for additional information.)*
4. *Emphasize to prospective consultants that plan/ordinance adoption is the key task in ensuring successful implementation. To this end, incorporate additional items into the study RFP related to plan/ordinance adoption, timely delivery of data elements to the contractor, study length, presentation of results, and encouragement to develop corridor access management committees. (See page 43 for additional information.)*
5. *Continue the use of a checklist for evaluating proposals and include input from municipalities. Consider inclusion of proposal evaluation checklist items provided in this report. (See page 47 for additional information.)*

#### ***What are the Needs after the Study? (Chapter 5)***

The following recommendations are provided to address needs after a study is performed:

1. *MDOT should develop and sponsor a statewide peer exchange with MDOT and municipality staff along with the business community and developers. (See page 49 for additional information.)*
2. *Provide on-going training to municipality and MDOT staff. (See page 50 for additional information.)*
3. *Promote an understanding of MDOT Traffic and Safety Notes and their application, and ensure they remain updated. (See page 50 for additional information.)*

4. *Update key asset management database information when there are changes if access management-related data are collected in the future. (See page 52 for additional information.)*
5. *Continue to keep an updated inventory of each access management study for future program evaluations. (See page 53 for additional information.)*



## **CHAPTER 1 INTRODUCTION**

### **Background**

The Michigan Department of Transportation has conducted an Access Management Program since 2002. This program provides access management training to consultants, county road commissions, township officers, MDOT personnel, developers, and other interested parties. The program also pays for consultant contracts to develop formal access management plans and sample ordinances for cities, villages, counties and townships along state trunkline corridors.

Over 35 studies have been completed, or are in progress, to date in Michigan using numerous consultants. These studies typically cost between \$25,000 and \$100,000 and take about one year to complete. The studies that have been completed are intended to guide MDOT, local transportation agencies, and developers in locating future access points and to provide the local transportation agencies with direction for new (or updated) ordinances.

Prior to this review, the completed studies had not been evaluated. MDOT contracted with the Texas Transportation Institute (TTI), headquartered on the campus of Texas A&M University in College Station, Texas, to evaluate the studies and their implementation, and to provide general recommendations for adjustments to Michigan's Access Management Program.

### **Scope of Work**

The evaluation began in December 2008 and concluded in May 2010. The TTI project team investigated 14 elements to assess Michigan's Access Management Program and implementation within MDOT's seven regions. The project was performed in five phases, each containing several of the elements below. To efficiently use project resources, the TTI project team performed data collection (survey) activities for different phases or elements while traveling to study sites and/or meeting with MDOT and local agency representatives. The following are the 14 elements evaluated by the TTI project team.

- *Element #1: Review Past Requests for Proposals (RFPs) for Consistency*
- *Element #2: Study Costs*
- *Element #3: Study Length and Time*
- *Element #4: MDOT Study Corridor Criteria*
- *Element #5: Data Collection Format*
- *Element #6: Access Management Report Format*
- *Element #7: Study Management*
- *Element #8: Local Agency Memorandum of Understanding (MOU), and Ordinances*
- *Element #9: Coordinated Site Plan Reviews*

- *Element #10: Local Government and Business Perspectives about MDOT's Access Management Program*
- *Element #11: Maintaining Viability*
- *Element #12: Study Linkage to MDOT Construction Projects*
- *Element #13: Asset Management Links*
- *Element #14: Traffic and Safety Notes*

Appendix A provides a short explanation of each of the bulleted items above, and what the project team investigated as part of each element.

### *Survey Instruments and Field Inspections*

Survey instruments were developed by the TTI project team to obtain in-person and/or email responses to obtain insights for many of the elements listed above. Appendix B provides a summary of the survey characteristics and how they relate to the elements above. All survey instruments are contained in Appendix B.

Through the course of the project, two individuals from the TTI project team traveled to Michigan on several occasions. These trips served as opportunities for meetings with the MDOT Project Advisory Team, interviews using the survey instruments shown in Appendix B, and for field investigations. Field inspections involved driving on the highways, looking for and identifying recommendation implementation (e.g., driveway closures and median installations), making field observation notes, and photographing roadway elements. Field inspections allowed the TTI project team to compare report elements, including recommendations, to what is physically present. The TTI project team efficiently scheduled the trips to coordinate and schedule meetings, interviews, and field investigations throughout MDOT's seven regions when traveling. Appendix C summarizes the study corridors visited and the associated MDOT regions.

## **Report Organization**

This report is organized into six chapters and five appendices. Chapters begin with the highlighted recommendations associated with the chapter title followed by findings that support the recommendations. The following are the main sections of the report:

- Executive Summary,
- Chapter 1: Introduction,
- Chapter 2: What Should MDOT Do for Continued Success Now and in the Future?,
- Chapter 3: How Can Initial Site Selection and the Study Planning Process Be Improved Before Contract Signing?,
- Chapter 4: How Can the RFP and Contracting Process Be Improved to Help Ensure Success?,
- Chapter 5: What Are the Needs after the Study?,
- Chapter 6: Conclusions and Recommendations,
- Appendix A: Work Element Activities,



- Appendix B: Survey Instruments,
- Appendix C: Site Visits and Personal Interviews,
- Appendix D: Sample RFP Including Proposed Changes, and
- Appendix E: Checklist to Evaluate Proposals for Access Management Studies.



## CHAPTER 2

### WHAT SHOULD MDOT DO FOR CONTINUED SUCCESS NOW AND IN THE FUTURE?

#### *Recommendations:*

1. *Continue the Program and support thereof despite the current fiscal crisis by preparing studies “in house” utilizing both MDOT Central Office and Region staff. When funding becomes available, strike a balance between the use of MDOT staff and the private sector. (See page 14 for additional information.)*
2. *As identified in several locations throughout the state, continually seek opportunities to partner with municipalities on access management and other issues as well. (See page 22 for additional information.)*
3. *Build consistency statewide on identified successes to identify, understand, and listen to local agency and community cares and concerns. (See page 23 for additional information.)*
4. *Ensure that access management plan recommendations reflect that access management implementation is not “one-size-fits-all,” or a “quick fix.” In some cases, implementation is long term, and in others it can be short term. (See page 24 for additional information.)*
5. *Based on successes observed in numerous locations throughout the state, develop on-going access management committees after the conclusion of an access management study to facilitate consistent implementation of the plan recommendations. (See page 26 for additional information.)*
6. *Encourage municipalities that have not yet done so to identify objective criteria defining a land use change that requires site review, which includes access review. (See page 28 for additional information.)*
7. *Recognize consultants as a valuable resource and vital third party participant in the access management study, plan development, fostering, and adoption, and take advantage of their skills and what they do well (complementing local agency capabilities). (See page 29 for additional information.)*

The following key findings and observations support the recommendations on the previous page.

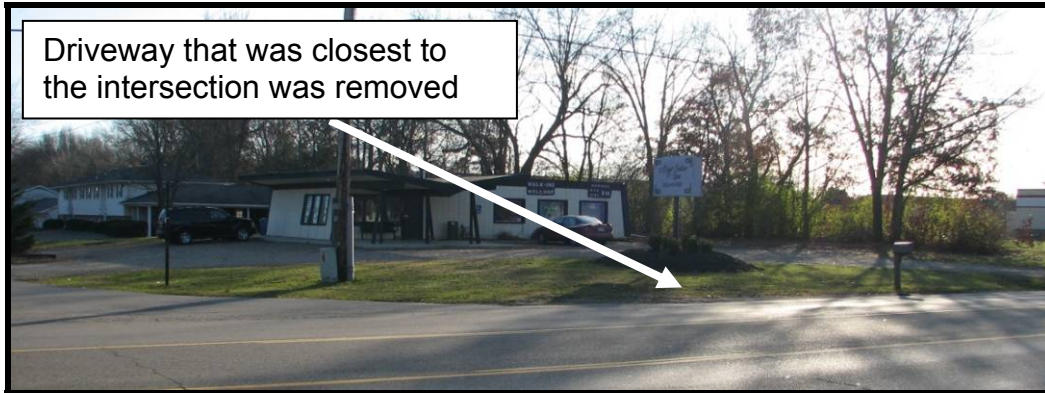
- 1. Continue the Program and support thereof despite the current fiscal crisis by preparing studies “in house” utilizing both MDOT Central Office and Region staff. When funding becomes available, strike a balance between the use of MDOT staff and the private sector.**

*General finding leading to recommendation #1: MDOT is receiving what they ask for in access management studies, and access improvements are being made as a result of the studies. The studies should continue.*

The discussion below describes specific successes that MDOT has experienced by performing the access management studies. It is important to note that MDOT is currently facing a funding crisis which could result in its inability to fund private consultants to prepare studies and local ordinances. In the interim, MDOT can use “in house” Central Office and Region staff to perform the studies, and when funding becomes available in the future a balance between the use of MDOT staff and the private sector can be used. The benefits of consultants are discussed in more detail on page 29.

In general, the access management studies can all be identified as successful in terms of completion because they generally produced all of the deliverable elements identified. Typically, the future land use maps and corresponding zoning ordinance maps are produced, access management plans are presented on aerial photography, zoning ordinances related to access management elements are developed, site plan coordination flowcharts are developed, and deliverables are produced. More specifics related to the RFP content are included in Chapter 4 of this report.

It appears that in more than half of the locations where studies have been conducted and plans prepared—and there has been enough time to implement recommendations—there has been at least one access modification made. Often these access modifications are the result of plan and/or ordinance adoption at the local municipality level, and the coordination between MDOT and the local municipality. In most cases where access has been changed, MDOT and/or the municipality were the catalyst. However, in some cases, the business owner made the change on their own. For instance, Figure 2-1 shows a salon on a corner lot where the owner closed the driveway along the state roadway that was closest to the intersection. In this case the driveway had been torn up while a water line was being connected to the business. During the time the driveway was not usable, the owner determined that having only one driveway to the busy state roadway would be safer and provide for better internal circulation and let the grass grow back over the driveway location. The owner indicated that the remaining driveway to the state roadway was vital to the business’s success.



**Figure 2-1. Driveway closed by business owner.**

In other cases driveways were closed by mutual agreements among the property/business owner, the municipality, a downtown development authority (DDA), and/or MDOT. Figures 2-2 and 2-3 present a location where the DDA funded a driveway closure and subsequent landscape feature. Figure 2-2 shows the new businesses that came in as part of the site redevelopment that included the driveway closure. Figure 2-3 is a close-up picture showing the place designation feature on the wall and the landscaping.



**Figure 2-2. Landscaped wall in place of closed driveway.**



**Figure 2-3. Wall place designation and landscaping details.**

Property redevelopment is an opportune time to implement access management plan recommendations. Figure 2-4 illustrates an example of a successful implementation of an access modification to provide a right-out-only driveway where a full-movement driveway previously existed.



**Figure 2-4. New right-out-only driveway at redeveloped site.**

Some access management plans include recommendations for future development, such as shared access points. Figure 2-5 contains an example of a shared access point—one driveway shared by two adjacent businesses.



**Figure 2-5. Future development recommendation implementation – shared driveway.**



It can be difficult to convince a business owner that converting a completely open frontage, sometimes referred to as a “laydown curb” or “open access,” to frontage with defined driveways will not be detrimental to business. Figure 2-6 provides an example of how a business that has a completely open frontage can function with defined driveways when necessitated by snowplowing. Figure 2-7 illustrates the “open access” at the site before snowplowing defined the driveways shown in Figure 2-6.



**Figure 2-6. Access reduced to two defined points because of snow.**



**Figure 2-7. “Open access” at site shown in Figure 2-6.**

Access management plans have been very effective resources as municipalities have worked with developers to identify appropriate types and numbers of access points. Figure 2-8 illustrates an example of a development for which two full-access points were requested, but through negotiations, one full-access point and one right-in/right-out access point were granted on the state roadway.



**Figure 2-8. Grocery store development with negotiated access to state highway.**

“A grocery store development wanted two full-access openings on the state facility, but using the access management plan, we were able to negotiate one full opening and one right-in/right-out opening. The store is now open and everything is working well.”

*Ms. Lynn Kooyers  
Zoning Administrator  
Filer Township*



In some cases MDOT and municipalities have been successful in working with property owners to close driveways on properties as they transition among uses. Figure 2-9 shows an example of a property that was unused at the time of this study where driveways along a state highway have been closed. When this property is redeveloped, it will have access on streets that intersect the state highway.



**Figure 2-9. Driveways closed on currently unused property.**

Another access management technique that has been successfully implemented as a result of plan recommendations is to have outparcels at large developments share major access points with the adjacent businesses. This practice reduces the number of access points on the state highway, focusing turning movements for vehicles accessing multiple businesses to one well-designed access point. It also provides opportunities for vehicles to move among businesses without returning to the state highway. Figure 2-10 includes a bank outparcel that has no direct access to the state highway.



**Figure 2-10. Bank with no direct access to state highway.**

Many access management plans include recommendations for cross access (e.g., frontage, backage, or service drives) that allows motorists to drive between adjacent businesses and developments without having to re-enter and re-exit the adjacent highway. Figure 2-11 shows such a drive that traverses two big-box developments, smaller outparcels, and previous developments.



**Figure 2-11. Cross-access among big-box developments, outparcels, and previous developments.**

Reconfiguring intersections to improve geometrics is another access improvement included in some access management plans. This technique can improve safety at intersections where streets cross state highways at sharp angles. Figure 2-12 presents a location where an intersection was reconfigured to make a street intersect a state highway closer to a right angle.



**Figure 2-12. Reconfigured intersection to improve geometrics.**



Business expansions and changes of use can trigger access modifications. Figure 2-13 shows a car dealership where at least one access point was removed when the building footprints on part of the property were significantly changed when they were rebuilt.



**Figure 2-13. Business where an access point was removed when building footprints were significantly modified.**

Numerous access management plans recognize the benefits of right-turn lanes by removing turning vehicles from the through lanes. The primary benefit is removing the speed differential (between the slower turning vehicle and the faster through vehicles) from the through lanes. Figure 2-14 presents an example of a right-turn lane that was installed when a hotel was constructed along a state highway.



**Figure 2-14. Right-turn lane installed upon development of new hotel.**

- 2. As identified in several locations throughout the state, continually seek opportunities to partner with municipalities on access management and other issues as well.**

*General finding leading to recommendation #2: Local municipal agencies are adopting zoning ordinances and/or the access management plans.*

There are varying levels of success related to access management plan and ordinance adoption. In many studies, the access management plan and/or zoning ordinance were adopted by the local agencies. Ordinances may be entirely new or modifications to existing ordinances. Subsequent developments/redevelopments are then affected by the plans/ordinances—providing opportunities to review access decisions more closely.

“Our access management work group and all of the positive things that happen are due to the original study and plan development. The group continues to help the various communities move forward with access management activities.”

*Mr. Bernie Ardis  
Permit Agent  
Ionia County Road Commission*

In some cases, local municipalities do not adopt the plan or ordinance. Where there is a lack of acceptance of the plans and/or ordinances, it is generally due to property/business owner fears and/or disagreements with the plans, and concerns about how the plans/ordinances may affect property values and/or business success. This can lead to political pressures to not adopt the new plans/ordinances.

After discussions with local municipality staff, business/property owners, and MDOT staff at the Transportation Service Center (TSC) and Region Office, it also appears that successful adoption of the plan/ordinance is related to the personalities involved. As indicated previously, those MDOT TSCs and/or Region Office staff who are making efforts to identify, understand, and listen to the cares, concerns, and issues of the local municipalities and the communities, are having success. Building such relationships takes a lot of time and effort. Where it is successful, it does not occur overnight. It is a time-consuming process that must have the support at all levels of MDOT. When coordination is established, the benefits extend beyond access management studies.

**3. Build consistency statewide on identified successes to identify, understand, and listen to local agency and community cares and concerns.**

*General finding leading to recommendation #3: MDOT relationships are being nurtured/developed with local governments.*

“MDOT looks at access requests with us and is very supportive when we have to consider closing driveways or denying access requests.”

*Ms. Jennifer Thum  
Zoning Administrator and Planner  
Chocolay Township*

There are many locations with good coordination between TSC staff and local government staff. Generally local governments were complimentary of the MDOT TSC staff. Many local government staff reported being pleased with the fact that MDOT understands, acknowledges, and works to facilitate local needs. The most successful coordination efforts on site planning and successful access management implementation often have this commonality. TSC and Region Office staff who are able to understand and work to facilitate local needs and find the most appropriate access solution often experience the most success. These access management implementation successes are due in part to MDOT staff making access management implementation a priority, and having an attitude of finding a solution for all stakeholders.

Examples of local concerns include the mix of truck and automobile traffic along relatively confined state highways, seasonal traffic volume variances, needs for additional roads to relieve congestion, and environmental concerns. Figure 2-15 exemplifies a mix of truck and automobile traffic on a state highway through a central business district.



**Figure 2-15. Mix of truck and automobile traffic through central business district.**

- 4. Ensure that access management plan recommendations reflect that access management implementation is not “one-size-fits-all,” or a “quick fix.” In some cases, implementation is long term, and in others it can be short term.**

*General finding leading to recommendation #4: Some plans include access management recommendations without consideration to the “on-the-ground” context (e.g., topography that prohibits recommended cross-access, incompatible land uses where cross-access is recommended).*

The TTI project team observed some examples of locations where access management recommendations were presented without the adequate context of the physical features of the site and/or the existing, adjacent land uses. Such recommendations can imply that implementing access management is “one-size-fits-all” without a need to consider the context of the recommendations. Certainly this is not an accurate representation of access management implementation, and inclusion of such recommendations could cause external stakeholders (i.e., the public) and others to lose respect for the plan and other recommendations.



Due diligence by the consultant team, working with local agency staff, will help prevent inclusion of recommendations in the plan that may not be practical. The following are specific examples identified by the TTI project team of recommendations that did not reflect an understanding of the context of the physical features of the site and/or existing land uses.

Figure 2-16 provides an example of a location where an access management plan included a recommendation for cross-access between adjacent properties. The topography, however, prevents viable cross access between the two properties.



**Figure 2-16. Topography prevents cross access between adjacent properties as recommended in access management plan.**

Figure 2-17 provides another example of a location where an access management plan included a recommendation for cross access. However, the land uses may not be compatible for cross access. In this case a church with a preschool is located next to a retail business.



**Figure 2-17. Adjacent land uses (church with preschool and retail business) that may not be compatible for cross access.**

5. **Based on successes observed in numerous locations throughout the state, develop on-going access management committees after the conclusion of an access management study to facilitate consistent implementation of the plan recommendations.**

*General finding leading to recommendation #5: Local coordination (among neighboring municipalities) is being nurtured, especially when access management committees are established.*

“The Access Management Committee, which meets semi-annually, has been very helpful in our on-going process since the study and plan were completed. The Committee reviews the annual crash data from the State Police as a measure to determine if conditions are improving and where capital improvements and other strategies should be focused. The Committee also prepares semi-annual reports with updates on construction, driveway closures, and crash data. The Committee is vital to the successful communications and coordination among the various stakeholders.”

*Mr. Tim Faas  
Municipal Services Director  
Canton Township*

Not only have relationships between MDOT and specific municipalities improved, local coordination among neighboring municipalities is also being nurtured. Some MDOT regions have had more success than others with establishing on-going access management committee meetings after access management studies. These access management committees provide a great opportunity for coordination on site planning and access review. The project team spoke to many members of such committees and had the opportunity to attend one such meeting. Local agencies indicated that these meetings are successful, in part, because there is a unified voice from the public agencies when evaluating site plans.



“All member municipalities on our access management committee along our corridors have experienced benefits. The opportunity to have municipal agency representatives, elected officials and MDOT staff sitting face-to-face in a relatively informal setting is invaluable. It makes the formal part of the process go much more smoothly with the coordination we have.”

*Mr. Jeff VanLaanen  
Former Mayor  
City of Iron Mountain*

One positive byproduct of the meetings is that local agencies that previously may not have had good working relationships find a common focus on improving access in their communities. One interviewee stated that there is the “privilege” of commenting on site plans in each other’s communities, and that it can soften any adversarial positions on the committee since there is nothing to gain politically. An additional comment was that municipality representatives are participating because they care about the community and they want to make it better.

Municipal representatives also reported to the project team that the access management committees allow cooler heads to prevail because conversations do not get as overly emotional as site plan review can get in a one-on-one (municipality representative/developer) environment. In the committee setting, the conversations are more likely to stay on point.

While the access management committees do provide for an environment to strengthen the relationships between public agencies, the role, and perspective of the business/land owner/developer (applicant) must be considered. It is important that the applicant’s needs be recognized also. In several cases, the project team heard from business owners or developers that there is a need for public agencies to better recognize what the developers are trying to bring to the community with their developments/redevelopments. All parties, private and public, must recognize the benefits of implementing sound access management along the corridor of interest.

**6. Encourage municipalities that have not yet done so to identify objective criteria defining a land use change that requires site review, which includes access review.**

*General finding leading to recommendation #6: In some cases, there is a need for objective criteria defining a land use change, which includes site review at municipalities.*

TTI also investigated the definition of “change of use” that is used to “trigger” the need for an access review at the local level when an existing development changes its use. Municipalities that reported having a change of use threshold typically indicated that it is a function of traffic volume, land use, and/or building size changes. Individual municipal definitions generally provide the local agencies the needed flexibility to identify and/or prioritize which driveways should be considered for closure for safety and mobility reasons, given the changes on the parcel of interest.

There is a wide range of “change of use” thresholds that trigger a site review, and associated access review, in municipalities throughout the state. Though some municipalities use changes in development to trigger access reviews, rarely were objective change of use definitions (e.g., 25 percent change in building square footage) identified. Instead, local officials commonly rely on professional judgment and the access management plan recommendations to determine if an access review is necessary.

Some municipalities require an access review for relatively small changes of use and/or building footprint, while others rarely require such reviews. In one case recalled by an interviewee, a company wanted to add a small foyer to the front of its building. It was located in a relatively rural area and had completely open access along the state highway. Though the addition would not result in a change of traffic volumes or patterns, the county ordinance required that any building footprint change would require a full-access review. When the company found out how much the potential access changes would cost, it decided not to install the foyer. This scenario is an extreme example of the unintended impacts that a change of use threshold can yield.

“Our county adopted an ordinance that calls for any change of building footprint to require a full access review. When a company came in to add a small foyer to their building, I had to tell them it would trigger a full-access review. Knowing that they would likely have to spend more on the access changes than the foyer would cost, they did not install the foyer.”

*County Zoning Administrator*

**7. Recognize consultants as a valuable resource and vital third party participant in the access management study, plan development, fostering, and adoption, and take advantage of their skills and what they do well (complementing local agency capabilities).**

*General finding leading to recommendation #7: There are benefits to having consultants involved with access management studies.*

There are many benefits to having consultants involved with the development and adoption of the access management plans and ordinances. In several cases, municipality staff indicated that it was very helpful to have consultants present the plan and ordinances and work toward their adoption. This was especially useful if the municipality did not have a staff planner.

Consultants also provide objectivity because they are a “non-governmental” entity. In many cases, they know the local situations very well. In fact, in some cases, the consultants were on retainer with the cities for planning services already, and they knew the local situation very well. Consultants typically have the resources, experience, and skills to solicit input, facilitate meetings, and bring local areas to consensus. Consultants are also valuable because access management studies include issues related to land use considerations outside the MDOT right-of-way, and consultants have the experience to perform such work.

Finally, the use of consultants provides the accurate perception that implementing access management is not something MDOT is mandating to the local municipalities.

“Sometimes local staff can present things to elected officials, but it can be very beneficial having an outsider present it. Sometimes local agencies need someone from the outside to make a recommendation or usher something through, and the idea might be appreciated more at a later time.”

*Township Manager*

However, it is important to note that MDOT is currently facing a funding crisis which could result in its inability to fund private consultants to prepare studies and ordinances. In the interim, MDOT can use “in house” Central Office and Region staff to perform the studies, and when funding becomes available in the future a balance between the use of MDOT staff and the private sector can be used. To assist MDOT staff on ordinance development for the “in house” study development, MDOT may benefit by investigating sample ordinances already adopted in some municipalities and/or using sample ordinances available through the Michigan Townships Association (MTA).



### CHAPTER 3

## HOW CAN INITIAL CORRIDOR SELECTION AND THE STUDY PLANNING PROCESS BE IMPROVED BEFORE CONTRACT SIGNING?

#### *Recommendations:*

- 1. Establish a statewide access management policy that is identifiable in appropriate documents requiring an access management component within all rehabilitation and reconstruction (R&R) and capacity improvement projects. The component should include study location criteria/guidance with an emphasis on corridors of significance identified in the Five-Year Plan and State Long-Range Transportation Plan, and requirements for preparing RFPs and/or basing study need on objective indicators (e.g., increasing safety, volumes and/or future changes in land use). (See page 31 for additional information.)*
- 2. Perform educational outreach meetings with local municipalities and the business community before the project starts, and obtain local support through the use of memos of understanding (MOUs) and/or resolutions of support. (See page 36 for additional information.)*
- 3. Improve coordination between MDOT's Asset Management Section and the Access Management Program in refining the use of data resources to select study locations, inform corridor committees and property owners, meet consultant needs at the study start, and to incorporate access management activities into Congestion Management Program (CMP) functions. (See page 37 for additional information.)*

The following key findings and observations support the recommendations above.

- 1. Establish a statewide access management policy that is identifiable in appropriate documents requiring an access management component within all rehabilitation and reconstruction (R&R) and capacity improvement projects. The component should include study location criteria/guidance with an emphasis on corridors of significance identified in the Five-Year Plan and State Long-Range Transportation Plan, and requirements for preparing RFPs and/or basing study need on objective indicators (e.g., increasing safety, volumes and/or future changes in land use).**

*General finding leading to recommendation #1: TTI found there is not a consistent use of formal criteria to identify when an access management study should be performed. Further, there is no formal recognized statewide access management policy.*

TTI found that there are no consistent statewide formal criteria established to identify when an access management study will be performed. Through survey responses, past access management study managers identified the following as considerations for when they have performed studies:

- Focusing on local communities interested and willing to adopt a memorandum of understanding, indicating they are interesting in implementing the recommendations;
- Focusing on locations where local agency staff desire additional roadway capacity in locations where added-capacity projects were programmed; and
- Using general observations, including
  - 1) Is there a significant amount of frontage that has developed with commercial land use?
  - 2) Does the local land use plan maintain or extend commercial land use along the roadway?
  - 3) Is the average daily traffic volume near or above 20,000 vehicles per day?
  - 4) Is there a history of access-related crashes that provides some evidence that access management is appropriate?

The considerations bulleted above provide a good foundation for identifying when to consider performing an access management study. It appears it would be valuable for MDOT to develop statewide criteria to formalize these and possibly other considerations to provide consistent guidance. It will be necessary to have flexibility by region. Objective guidance could also assist project selection decisions when there are competing projects from throughout the state and funds are limited to perform all of the studies.

The TTI project team investigated how the access management efforts have been, or should be, linked to road construction projects to improve implementation of access changes. A majority of the survey feedback from Region Planners and Traffic and Safety Engineers indicated that the access management study locations were identified in anticipation of a road construction project. In some cases, the study was performed during the road construction project. In these cases, the access management study provides opportunities for local input from the public and property owners regarding the roadway improvement project. The study also assisted design staff in identifying potential access management improvements.

The general sentiment in the survey responses is that if there is a need to close access points as part of the development of a road project to maintain safe operation of the roadway, then those opportunities are pursued. From the responses received, access management is generally, but not consistently, considered during the design phase of all projects.

In a contrasting case, the respondent indicated they had stopped facilitating access management studies. They noted that the municipalities are not willing to change their zoning to facilitate or improve safety, and they do not see the need to invest in these

actions if there is no gain for MDOT. Such comments reinforce the need for MDOT TSC and Region Office staff to continue to emphasize to the local agencies the benefits of having a coordinated and cooperative site-planning process with MDOT involved. MDOT and the local agencies will experience benefits from this cooperation beyond just access management projects.

It should be noted that Traffic and Safety Note (TSN) 601A (Access Management) states that “corridor access management plans are required before adding capacity along a corridor and recommended when a corridor is reconstructed.” The TSN goes on to discuss that “project scheduling for capacity type projects is governed by the willingness of the abutting communities to participate and enforce a corridor access management plan and ordinance.” These statements in TSN 601A provide an excellent, consistent foundation for requiring studies prior to R&R and capacity improvement projects. MDOT must fully utilize this requirement when programming R&R and capacity improvement projects. Studies identified for funding should be agreed upon by both the Central Office and Region Office and ensure established criteria are incorporated.

One approach that would gain input from metropolitan planning organizations is to develop a work activity as part of their Unified Planning Work Programs, related to identifying potential corridors along free access state highways within their study area. This effort would afford an opportunity for the various member agencies to have a cooperative effort in identifying potential corridors.

In communities under 50,000 population, MDOT could begin assembling a file that lists and prioritizes communities by the number of driveway-related crashes, traffic volumes, and the highway segment length within each community. The Access Management Program staff could work with Traffic & Safety personnel (at the TSC and at the Central Office) to begin a statewide evaluation of urban routes using the traffic volume and crash history along those routes to establish a list of locations that are recommended for consideration by the Regions. The idea is that the Regions and TSCs can then pursue the projects based on inclusion in the 5-Year Plan and/or local interest.

These efforts would yield a list of potential access management study routes. If the route has had a study, then it would be removed from the list. Those remaining would then have priority from a statewide perspective. Then each corridor would be reviewed against the Five-Year R&R program to see if the Region/TSC is considering an access management study.

#### Case Study: Ottawa County Countywide Corridor Plan

“Due to Ottawa County’s high rate of growth, coupled with three geographically separated urban areas, current traffic conditions and future transportation demands are a major concern for the Ottawa County Planning Commission. In response to this concern, the Planning Commission has facilitated the completion of two major corridor studies within Ottawa County.

These studies analyzed traffic, population, and land use trends as well as provided recommendations for access management measures, capital improvements, zoning and master plan regulations, right-of-way preservation, aesthetic improvements, and natural features preservation.

In addition to providing a comprehensive strategy for conducting future corridor studies, another major objective of the Plan is to increase the ability of local units and the county to obtain funding for these studies. Officials from area Metropolitan Planning Organizations (MPOs) have indicated that they are more likely to provide partial grants for corridor studies if these proposed studies are included in a comprehensive corridor plan.

Our corridor prioritization is a function of 10-year percentage changes in traffic counts, population, and local priority (i.e., verbal/written, or financial commitment from local governments).”

*Mr. Mark Knudsen  
Planning and Performance Director  
Ottawa County*

To establish a statewide access management policy, a sample policy is offered below. MDOT may choose to use this statement, or a variation of it, as they develop their official access management policy. A suggested access management policy statement is “MDOT will use access management strategies and techniques to improve safety and mobility for the motoring public.”

TTI recommends the following amendments for specific MDOT documents to reinforce the policy in the State Long-Range Transportation Plan, Five-year Transportation Program, and yearly Integrated Call for Projects:

- *MDOT State Long-Range Transportation Plan (Decision Principles, pp. 14-15)*
  - **Access Management:** Continue to include access management issues in the project programming process. Corridors where access issues, such



as driveway frequency and safety concerns, have been identified should be given priority in the project selection process.

- *MDOT State Long-Range Transportation Plan (Performance Measures, p. 16)*
  - **Access Management:** Because safety is the primary reason to implement access management, crash reduction is the main performance measure that can indicate success of implementation. Crash reduction can be measured in terms of crash numbers and/or rates.
- *MDOT Five-year Transportation Program (Passenger Transportation section on p. 55)*
  - One strategy that MDOT continues to use in maintaining the passenger transportation system is access management. By implementing access management techniques on roads, MDOT can re-capture or gain additional vehicle capacity without constructing additional general purpose travel lanes. Relatively inexpensive improvements, such as raised medians, turn lanes, and driveway closures typically improve safety and mobility on the road at a much lower cost than constructing additional travel lanes or parallel facilities.
- *Five-year Transportation Program: Financial Crisis Key Messages (Highway Program Strategies on p. 4)*
  - MDOT will continue to address safety and mobility issues using access management techniques. By implementing access management improvements, MDOT can often improve mobility on roads without purchasing much, if any, additional right-of-way or building additional general purpose travel lanes. Vehicle capacity on roads typically can be increased far more inexpensively using access management than by constructing additional lanes.
- *Integrated Call for Projects Instructions (example from December 4, 2009; Access Management section, p. 4)*
  - Delete “when feasible” from the first sentence.
- *MDOT Memo to initiate Integrated Call for Projects (example from December 12, 2009 memo; Project Submittal Requirements, p. 4)*
  - *Include access management as a required point of discussion in the submittal (along with context sensitive solutions, economic development, environmental justice, stakeholder input, and work zone safety and mobility).*

**2. Perform educational outreach meetings with local municipalities and the business community before project starts, and obtain local support through the use of memos of understanding (MOUs) and/or resolutions of support.**

*General finding leading to recommendation #2: There is not always an understanding of why MDOT is doing an access management study or the need for a cooperative, continuing process.*

In some cases local agency staff indicated an attitude of indifference regarding MDOT's Access Management Program. Example comments related to this attitude include:

- *"I don't see why I should duplicate what MDOT is doing (reviewing access permit requests)."*
- *"MDOT is just having us do their work for them."*
- *"If it's MDOT's road, why should we care?"*
- *"MDOT has no teeth or money to do [access management improvements]. Why do they want us to do it? We have no money."*

Similarly, instances were identified when the local governments indicated that MDOT works independently of the local government staff when permitting access points. In all of these cases, it is especially important for MDOT staff to refer back to the long-term benefits of coordination, which include all projects, not just access management efforts.

TTI also met with business owners, business managers, and developers regarding their perspectives on MDOT's Access Management Program. While several corridors have had at least one access modification, a very low percentage of the overall recommended driveway closures from studies around the state have actually been closed. There have been relatively few driveway closures because there have been limited reconstruction projects and/or site redevelopments to provide opportunities for closures.

While the TTI project team was not able to identify enough locations to perform any scientific assessment of the economic impacts, there are some anecdotal observations of interest. For the interviews performed, feedback from business owners was relatively positive. Business owners/managers generally indicated there has been limited, if any, economic impact, and they generally understand the safety benefit of the driveway closures, along with the improved operation of the road and their site. MDOT interviewees reported that there have been some business owners who have not been as pleased with access modifications. These appear to be relatively rare observations and do not indicate that access modifications are causing negative economic impacts.

It appears that these misgivings and misunderstandings could be facilitated with informational opportunities to clearly discuss the study purpose with local municipalities. This would also allow an opportunity to hear any local community concerns. These meetings begin the coordination opportunities with local agencies. MDOT staff should

understand, and embrace, the fact that the local agencies are their best opportunity for implementing access management improvements.

These early meetings with municipality staff will provide an opportunity to communicate the benefits of access management and a coordinated effort. This will likely not take place over one meeting, but may be more effective with frequent meetings in group and/or individual settings for each municipality. They all must have the opportunity to express their input and have their concerns heard and understood. Similarly, meetings with the business community and property owners are necessary to provide them an opportunity to express their input and hear any concerns.

“On corridors with multiple municipalities, there may be some that are very comfortable adopting the Plan and/or ordinance(s). Other municipalities may not be as eager to adopt until they become more comfortable with issues, such as when to begin closing access points and other impacts on existing and future businesses. Our experience has been that communities are more likely to take swift action when early access management education is offered, and personal attention rather than general guidance is provided throughout the process.”

*Ms. Sherrin Hood  
Senior Planner  
LSL Planning, Inc.*

These early meetings with local municipalities provide an opportunity to obtain local support through the use of memos of understanding (MOUs) and/or resolutions of support. These MOUs are described further on page 42.

**3. Improve coordination between MDOT’s Asset Management Section and the Access Management Program in refining the use of data resources to select study locations, inform corridor committees and property owners, meet consultant needs at the study start, and to incorporate access management activities into Congestion Management Program (CMP) functions.**

*General finding leading to recommendation #3: Coordination between MDOT’s Access Management Program staff and MDOT’s Asset Management Section could facilitate access management study location identification and other needs.*

The project team assessed the possibilities of MDOT’s Access Management Program connecting with MDOT’s Asset Management Section. An asset management data depository can provide key data elements for prioritizing where an access management

study should be performed, and the asset management data inventory could further provide valuable data elements for inclusion in the access management study.

“Informing decision-making for MDOT’s Access Management Program is yet another opportunity where MDOT’s rich asset management data inventories can assist internal department users. MDOT’s Asset Management Section will investigate ways to include and collect additional data elements that facilitate prioritizing locations for performing access management studies, and also ways to streamline and provide useful data elements to contractors performing access management studies.”

*Mr. Ron Vibbert  
Asset Management Section Manager  
Michigan Department of Transportation*

The TTI project team met with key staff from MDOT’s Asset Management Section and the MDOT Project Advisory Committee to discuss these possibilities. The discussion between the MDOT access management personnel and the MDOT asset management personnel was very productive and numerous examples of how the two groups could assist one another were identified. The following sections highlight these areas.

### ***Data elements***

The following data are not currently available in the asset management data inventories:

- access density,
- median type, and
- crash rate.

Crash number and traffic volume data, however, are available in the inventories. Participants decided to pursue inclusion of the driveway density data element into the next round of updates to the asset management data inventory. It was also determined that median type information would be a valuable data element that could be added to future updates to the asset management data inventory. A variable that simply identifies the type of median present (undivided, traversable, or non-traversable) would be valuable. For example, existing Highway Performance Monitoring System (HPMS) data item 56 (Median Type) currently characterizes the median type of roadway sections, per the *HPMS Field Manual* (May 2005), as:

- 1=curbed,
- 2=positive barrier,
- 3=unprotected, and
- 4= none.

Such link-level data could be used to determine “hot spot” locations for possible identification as candidate access management study locations by establishing relevant access management-related thresholds (e.g., average daily traffic, crash data, or driveway density).

TSC staff (Utilities and Permits Engineer and TSC Traffic and Safety Engineer) grants new driveway permits and are involved when driveways are closed. This can occur when site plans are reviewed locally and also as R&R or capacity improvement projects are constructed. Therefore, it is important for TSC staff to be in contact with Central Office staff to ensure driveway data in the asset management inventory are kept up to date. TSC staff can also assist in providing local access management study site priorities to Region and Central Office staff based upon their local knowledge of potential corridors.

### ***Consultant “Package” of Data***

Meeting representatives discussed the fact that after the data elements described in the previous section have been updated in the asset management data inventories, the consultant performing an access management study could be provided the data at the onset of the study. The “package” of data elements could include photologs of the corridor of interest, crash history (frequencies, rates, types), segment length information (to estimate access densities and crash rates, as needed), traffic volumes, and the number of driveways. Note that crash rates are more effective for communicating crashes and comparing corridors at the statewide level. Crash frequency (e.g., total number of crashes, crashes per day) are often more useful at the local level for a specific corridor.

Currently, MDOT collects a photolog of all state roadways every other year at the same time the pavement inventory is performed. Photos are taken every 26.5 feet in the photolog. The photolog is a valuable resource for contractors to view the corridors and driveway locations to verify important features without requiring additional travel to the site. Available software such as Google Earth® is not always available at the resolution needed by consultants performing studies, so the photolog can be an important tool.

Regarding aerial photography, some locations may have geographic information system (GIS) databases that have property or parcel lines that provide a perspective on frontage limitations that are a factor in determining access modifications. In other state agencies (e.g., Department of Natural Resources) have aerial photography available for the areas of interest.

It is beneficial for the consultants performing access management studies to receive all necessary data elements at the start of the study to avoid project delays, and providing such a “package” of data would fill this need.

### ***Integration in Congestion Management System Activities***

MDOT's Asset Management Section develops data used for MDOT Congestion Management System activities. This includes collecting data for conditions and performance reporting. These data help identify where congestion is located statewide to help focus investment in the future. It was identified that it is important for MDOT's Access Management Program staff to be plugged into these congestion management activities. This is especially important because implementing access management techniques provides a proven operational and safety improvement for a relatively modest investment.

The TTI project team meeting with the MDOT access management staff and asset management staff was very successful beyond the needs of this project. Participants identified many opportunities for coordination. Each group identified opportunities where improved coordination would facilitate the objectives of the other group. MDOT asset management staff will investigate ways to incorporate key access management-related variables into the data inventory, and MDOT access management staff will investigate ways to become involved in, and assist with, the Congestion Management System activities of the asset management staff.

## CHAPTER 4

### HOW CAN THE RFP AND CONTRACTING PROCESS BE IMPROVED TO HELP ENSURE SUCCESS?

#### *Recommendations:*

1. *In the RFP development stages, determine if any of the municipalities involved desire to have the consultant assist or lead in taking the plan and ordinance to elected officials for adoption. (See page 41 for additional information.)*
2. *Provide consistent local agency (municipal) input to the RFP and contractor selection. (See page 42 for additional information.)*
3. *Recognize advantages and disadvantages of contracting with State Planning and Development Regions (SPDRs). (See page 42 for additional information.)*
4. *Emphasize to prospective consultants that plan/ordinance adoption is the key task in ensuring successful implementation. To this end, incorporate additional items into the study RFP related to plan/ordinance adoption, timely delivery of data elements to the contractor, study length, presentation of results, and encouragement to develop corridor access management committees. (See page 43 for additional information.)*
5. *Continue the use of a checklist for evaluating proposals and include input from municipalities. Consider inclusion of proposal evaluation checklist items provided in this report. (See page 47 for additional information.)*

The following key findings and observations support the recommendations above.

- 1. In the RFP development stages, determine if any of the municipalities involved desire to have the consultant assist or lead in taking the plan and ordinance to elected officials for adoption.**

*General finding leading to recommendation #1: Some staff and elected officials desire to have the consultant either assist or take the lead in presenting the plan and ordinance to the elected officials.*

According to interviews with staff and elected officials in various municipalities, there are instances when at least some of the municipalities involved in a study will prefer to have the consultant either assist or take the lead in presenting the plan and ordinance to the elected officials. To address this issue appropriately in the RFP, MDOT should discuss

it with each municipality involved prior to issuing the RFP, and include such presentation in the RFP as necessary.

## **2. Provide consistent local agency (municipal) input to the RFP and contractor selection.**

*General finding leading to recommendation #2: Sometimes municipalities indicated they were allowed input on consultant selection, while other times they did not feel they were given adequate time to provide input.*

While investigating whether municipalities signed a memorandum of understanding (MOU) with MDOT prior to the access management study, some municipalities indicated that even if they signed the MOU, they sometimes did not feel they had any say in the consultant that would do the access management plan. Allowing local municipality staff input on the consultant selection goes a long way to facilitate obtaining their buy-in for the actual plan development and implementation.

The TTI project team investigated whether the access management studies required an MOU among MDOT and the local agencies prior to beginning the study. The project team found that MOUs were typically required and obtained by MDOT with the local agencies prior to performing an access management study.

In unique cases, an additional MOU was developed *after* the access management study was completed. These MOUs were among all of the local agencies along a study corridor indicating that the local agencies would abide by the plan in future decision-making. Such an MOU goes a long way in ensuring coordination, consistency, and buy-in after the study is completed. In many cases, such an MOU was a small formality prior to access management plan and/or ordinance adoption.

## **3. Recognize advantages and disadvantages of contracting with State Planning and Development Regions (SPDRs).**

*General finding leading to recommendation #3: There are advantages and disadvantages to contracting with SPDRs to manage MDOT access management studies.*

Project management is the key to success for any study. In some cases, MDOT may manage a given study, while in other cases the agency representing the State Planning and Development Region (SPDR) (Regional Planning Commission) may manage the study. Generally, it seems that whether MDOT or an agency representing the SPDR manages the study differs by MDOT Region. In rare cases a local agency (e.g., county) assumed management of the study.

Through interviews, the TTI project team identified that when an agency representing the SPDR manages the study, portions of the MDOT consultant selection process can



be avoided, resulting in expedited consultant selection. Drawbacks identified include the fact that MDOT could lose more control of the studies, and may not be able to establish relationships with local agencies as well as in MDOT-managed studies, which may allow more direct interaction between MDOT and the local agencies.

MDOT should consider the advantages and disadvantages of subcontracting studies through agencies representing the SPDR on a study-by-study basis. While contractor selection is facilitated, it may not allow MDOT to develop valuable relationships with local agencies. The decision likely depends on the experience level of the Regional Planning Commission staff, and this should be considered by MDOT.

**4. Emphasize to prospective consultants that plan/ordinance adoption is the key task in ensuring successful implementation. To this end, incorporate additional items into the study RFP related to plan/ordinance adoption, timely delivery of data elements to the contractor, study length, presentation of results, and encouragement to develop corridor access management committees.**

*General finding leading to recommendation #4: RFPs generally followed a consistent format and contents, and additional items need to be incorporated into the RFP.*

Consistency in application and implementation of an Access Management Program across the state and at all levels of governments is essential for success. Consistency begins in the definition of objectives within the RFP to ensure the goals and objectives of each project are clearly understood by proposers.

The TTI project team reviewed all of the available RFPs, final reports, and proposals, and performed interviews with study managers and local agency municipality/MDOT staff to identify:

- Common work items,
- Work items unique to one or more RFPs,
- Causes for unique work items,
- Whether appropriate access management process were followed per MDOT's *Access Management Guidebook*, and
- Successes, failures, and lessons learned.

Because only about 50 percent of the RFPs were available, TTI also used final reports to assess these items—assuming that what was produced in the final report was generally in line with what was asked for in the RFP. For studies where TTI had both the RFP and final report, this assumption was validated.

### ***RFP Consistency***

In general, the available RFPs were consistent and asked for similar work items. Typically this includes sections in the RFP on the following items:

- Inventory: assembling/meeting with the steering committee, obtaining “as built” drawings for 660 feet on each side of the roadway, securing aerial photography, property lines, securing MDOT’s *Access Management Guidebook*, securing traffic volume and crash data, and determining locations where access can be improved and showing this on the aerial photography as part of the plan.
- Assemble the Conceptual Plan: mapping existing/future land use, securing zoning ordinances for subject corridors, assembling a composite of the township land use plans/zoning ordinances on aerial photography, and developing conceptual access management plan on aerials.
- Conceptual Plan Workshop: Review composite land use plan, zoning ordinance, and conceptual access management plan with all parties.
- Conceptual Plan Refinement: Based on comments, develop a corridor overlay land use plan for the corridor. Develop/refine the zoning ordinance and refine the conceptual access management plan. Develop draft interagency site plan review process. Perform public meetings and a final workshop plan.
- Corridor Plan and Zoning Ordinance Adoption: Present the plan as part of each agency’s public hearing process and then seek approval of the plan.
- Deliverables: Develop deliverables including overlay plan with future land use maps and corresponding zoning ordinance maps, access management plan presented on aerial photography, zoning ordinance with provisions/coordination with existing ordinances, outline/diagram of access review and coordination process for site plan, and providing all materials in hard copy as well as CD format.

“Corridor Plan and Zoning Ordinance Adoption” is not always listed in that way as a specific element of the RFPs, though this is the underlying goal of the studies.

“The RFP should have included the consultant taking the ordinance to adoption because ours has taken several years since the study was finished.”

*Mr. Ryan Cotton  
Village Manager  
Village of Spring Lake*

TTI has also found that there is a range in the amount of detail provided in the zoning ordinances developed. The planning processes put forth in MDOT’s *Access Management Guidebook* appear to be followed in the studies. The *Guidebook* identifies numerous design techniques related to access management as well as model/sample

access management ordinances. The final reports for the studies do vary in the detail they provide in the developed ordinances. It is assumed that this is because each corridor has different specific needs, and the steering committee/MDOT likely guide the project to focus on the needs for each specific corridor, which may not include all items included in MDOT's *Access Management Guidebook*.

TTI has discovered substantial variability in the detail and graphical quality of the access management plans prepared with the aerial photography. In almost all cases, the level of detail and content are appropriate and clear. However, there are some cases when improved graphics would help to communicate key points in the access management plan. Improved/consistent guidance on aerial photography quality, color use, line style, and markings may help provide consistency.

### ***Selected Unique Work Items***

Occasionally, the TTI project team identified unique work items in the RFPs and in the final reports. Examples of such unique work items include:

- Identifying in the RFP that business owners be included in the steering committee;
- Including specific elements in the zoning ordinance, which seemed to appear more as the exception than the rule (e.g., performance bonds or cash deposits for each temporarily permitted driveway to ensure compliance with removal of the driveway at later time, text for determination of appropriate retrofit for existing nonconforming driveways, sign ordinances, rural access control and ordinance);
- Including implementation pages that document the different goals/responsibilities of the parties involved;
- Documenting the by-laws of the advisory committee to continue work into the future;
- Performing "Corridor evaluation tours" at the start of the project to get commissioners and board members familiar with the problems and what needs to be fixed as well as investigating successful examples;
- Including technical assistance on three to five site plan reviews as part of the contract;
- Interviewing owners/operators of businesses along the corridor;
- Providing media coverage, including setting up a telephone "hotline" and sending numerous meeting notices;
- Including micro-simulation of alternatives to investigate operational impacts;

- Including/highlighting bicycle and pedestrian impacts (e.g., In the Bay Region, it was found that the titles of the access management plans RFPs were identified as “...Access Management Plan for the Control of, Elimination and/or Relocation of Access to Maintain Capacity and Improve Safety of Local Residents Who May Be Local Motorists, Bicyclists and/or Pedestrians.”)
- Highlighting the importance of coordinating a future land use plan with capital improvement programming for water/sewer; and
- Developing a checklist for site plan requirements and review criteria.

These unique elements were identified in a few studies. In most cases they were not explicitly required by the RFP. Most were the result of consultant innovation or were likely the result of specific input from the steering committee.

### ***Study Costs and Duration***

Due to the relative consistency of the RFPs, most studies seem to reflect similar costs for similar services. Study costs are not broken down by service in MDOT contracts nor does there appear to be a reason to do so. It appears MDOT generally received the services agreed to in the contracts for the negotiated prices. In some cases, time extensions and/or funding increases have been granted to consultants. In most cases, the studies are funded with 100 percent MDOT Statewide Planning and Research (SPR) funds. In a few cases, local or regional agencies also provided some funding.

In some cases, the local Downtown Development Authority has been a proponent of implementing the access management plan and has provided funding to eliminate driveways through their funds. MDOT has used the “carrot” that it sometimes has DDA funds to pay for driveway closures for those willing to commit to driveway closures. This has proven effective in some cases. TTI encourages MDOT to work closely with DDAs early in the process to get them “on-board” with access management plan study goals and objectives because they can have substantial influence in getting access plans accepted, and ultimately getting driveways closed.

Previous studies range from 5 months to 19 months in duration. The length (in miles) of study corridors ranges from approximately 2 miles to 50 miles. In many cases, the access management plan includes more than one roadway. The number of agencies, including MDOT, varies from 3 to 16. Obviously, longer corridors incorporate more stakeholders and local agencies. It appears that a study period of up to 18 months is appropriate. A study duration of up to 18 months is also consistent with suggested timelines provided in Traffic and Safety Note 601A. (Access Management).

## ***Proposed RFP Changes***

As of the time of this report, there is a boilerplate RFP on the MDOT website for US 24 (Telegraph Road) in the University Region (see:

[http://www.michigan.gov/mdot/0,1607,7-151-9621\\_11041\\_29705-87915--,00.html](http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_29705-87915--,00.html)).

In light of the findings and information above, the TTI project team developed an updated sample RFP that incorporates additional items that would help ensure access management plan and implementation success. The proposed RFP is shown in Appendix D. In summary, the following changes are included in the RFP shown in Appendix D:

- “Corridor Plan and Zoning Ordinance Adoption” is a specific element of the RFP.
  - MDOT will get data elements to the contractor before the start of the project.
  - Study duration is recommended to be up to 18 months.
  - Report recommendations should be presented by roadway section with similar characteristics and/or by local jurisdiction, and the recommendations should be shown on aerial plans. This facilitates reader understanding and implementation of the results.
  - The development of an access management committee is encouraged. The RFP provides the flexibility for the consultant to organize the group and activities, and establish voting members, bylaws, and other particulars within the context of what the local municipalities see as fitting for them. This goes back to the key of understanding local concerns, issues, and interests and incorporating them into the plan implementation.
- 5. Continue the use of a checklist for evaluating proposals and include input from municipalities. Consider inclusion of proposal evaluation checklist items provided in this report.**

*General finding leading to recommendation #5: There is a need for a checklist for MDOT staff to evaluate proposal content and assist contractor selection.*

Through interviews with MDOT staff and study managers, and from reviewing available RFPs and final reports, the TTI project team realized a need for a checklist for MDOT staff and local municipality staff to evaluate proposal content and assist in contractor selection. The “checklist style” will allow evaluators to know, at a glance, if required elements are included in the proposal. It is likely that the factors included in the checklist may need to be weighted differently by various MDOT Regions. For instance congestion issues may be a greater factor in the Metro Region than in the Superior Region.

MDOT should share the checklist with the local agencies when they are part of the selection process. This action will provide additional input in the process and potentially give the local agencies a greater sense of ownership in the process. The TTI project team developed such a checklist to evaluate competing proposals for performing access management studies, and the checklist appears in Appendix E.

Note that the checklist in Appendix E is not meant to substitute for, but rather enhance, the current items and process currently used by MDOT to evaluate proposals for access management studies. It is still important that MDOT evaluate items currently evaluated in proposal review including past performance, consultant availability for meetings and presentations outside of the normal workshops and required public open house meetings and other important items currently evaluated.

## CHAPTER 5

### WHAT ARE THE NEEDS AFTER THE STUDY?

#### *Recommendations:*

1. *MDOT should develop and sponsor a statewide peer exchange with MDOT and municipality staff along with the business community and developers. (See page 49 for additional information.)*
2. *Provide on-going training to municipality and MDOT staff. (See page 50 for additional information.)*
3. *Promote an understanding of MDOT Traffic and Safety Notes and their application, and ensure they remain updated. (See page 50 for additional information.)*
4. *Update key asset management database information when there are changes if access management-related data are collected in the future. (See page 52 for additional information.)*
5. *Continue to keep an updated inventory of each access management study for future program evaluations. (See page 53 for additional information.)*

The following key findings and observations support the recommendations above.

#### **1. MDOT should develop and sponsor a statewide peer exchange with MDOT municipality staff along with the business community and developers.**

*General finding leading to recommendation #1: There is a need for a statewide peer exchange of successes and best practices.*

Throughout Michigan there are examples of Regions and associated municipalities that have had success implementing access management, while there are other locations that are seeking guidance on how to successfully implement access management. A peer exchange could facilitate information exchange of best practices and experiences between municipalities and Regions. There is a need for a statewide conference every two to three years to allow for an informational exchange between MDOT and local agency staff involved in implementing MDOT's Access Management Program. Such a conference could allow TSC and/or Region Office staff the opportunity to hear how staffs in other parts of the state have been successful in implementing site-planning review committees and/or implementing access management, in general.

Through this conference, all perspectives and stakeholders can be represented. Business owners, developers, and property owners can be included to present case studies that describe specific examples. Audience members can learn from examples



of successful access management implementation as well as gain valuable lessons learned for projects that were less successful.

## **2. Provide on-going training to municipality and MDOT staff.**

*General finding leading to recommendation #2: All local agencies experience attrition, and new staff can be ignorant to access management concepts, previous access management studies, etc., and there is a need for training to keep them informed.*

“The Planning Commission and staff have frequent turnover – in person and/or other training materials from MDOT would be very helpful.”

*Ms. Jennifer Thum  
Zoning Administrator and Planner  
Chocolay Township*

Attrition of MDOT and local agency staff, as well as the turnover in elected officials, requires methods to ensure an Access Management Program will stand the test of time. The TTI project team investigated ways to ensure future adherence to access management plans. The project team observed instances of significant turnover in local agency staff and MDOT staff throughout the state. TTI recommends that MDOT perform additional training of local agencies on the MDOT Access Management Program. The training could be targeted to locations where there has been substantial turnover in local agency staff, elected officials, and/or MDOT TSC or Region Office staff.

Such training opportunities provide an opportunity to foster communication and coordination with municipality staff and MDOT staff. They provide an opportunity to listen to local cares, concerns, and issues.

## **3. Promote an understanding of MDOT Traffic and Safety Notes and their application, and ensure they remain updated.**

*General finding leading to recommendation #3: There is a need for an understanding of MDOT Traffic and Safety Notes (TSNs) and their application, and to ensure they remain updated.*

TSNs are important for access management implementation in Michigan. The TTI project team reviewed all of MDOT’s TSNs related to access management. As part of this element, a survey instrument was developed and sent to access management practitioners at the Region Offices and TSCs to gain insight into the application and benefit of TSNs.

Nearly all respondents indicated they refer to TSN 607B (Traffic Impact Studies) and TSN 608A (Spacing for Commercial Drives and Streets). The following TSNs were also mentioned (at least once) as being used:

- 207B (Guidelines for Pedestrian Push Button Use and Location),
- 304A (Authorization of Crosswalk Markings and Stop Bars),
- 401B (Mid-Block Pedestrian Crosswalks),
- 601A (Access Management),
- 603A (Traffic Volume Guidelines for Driveway Passing Flares),
- 604A (Traffic Volume Guidelines for Right-Turn Lanes and Tapers),
- 605A (Traffic Volume Guidelines for Left-Turn Lanes and Passing Flares at Unsignalized Intersections),
- 606B (Passing Relief Lanes),
- 610A (Stopping Sight Distance and Intersection Sight Distance),
- 611A (Guidelines for Selecting Curb at Commercial Drives),
- 613B (Traffic Impact Assessment),
- 702A (Parking Restrictions in Municipalities),
- 703A (Parking for Handicapped),
- 704A (Parking Facility Dimensions), and
- 901B (Guidelines for Maintaining Traffic Capacity).

Nearly all respondents indicated that the TSNs are beneficial to implementing access management. The TSNs provide uniform procedures and guidance on how to be consistent throughout the Region and state when implementing access management.

Survey respondents indicated several recommendations for changes to selected TSNs. These recommendations include:

1. TSN 601A could be improved on pages 1-2 if the bullets regarding 40 commercial drives were more specific, and if there was a reference to the TSN on spacing driveways (TSN 608A) at the end. It would also help if the end of this note included a table with the TSN numbers and titles so information could be located easily. Adding other useful or commonly used references would also be helpful.
2. TSN 607B and TSN 613B should be revised to provide recommendations on how far the study area should go.
3. TSN 608A needs additional details for indirect turn operations in conjunction with driveway placement. Also, the note should address dual turning from indirect turns and direct access with a boulevard section. This should include design and recommendations for their use.
4. TSNs should continually be updated. An example of TSN 610A was given to include reference to the recently updated guideline prepared by MDOT Traffic and Safety (Geometrics and Operations Unit) dated February 6, 2008 and entitled "Sight Distance Guidelines."

One benefit of this survey administration and feedback was that it provided an opportunity to obtain internal MDOT comments regarding the TSNs by those individuals implementing access management within the department. The TTI project team recommends that MDOT evaluate these recommendations from MDOT engineers to evaluate the need and specific verbiage to incorporate these items into the TSNs. The important point is that there is a need to keep the TSNs updated, and reviewing them on a regular basis would allow the opportunity for feedback on needed updates.

A respondent also commented that others should be made more aware of the existence of the TSNs, including Project Planning, Region Offices, and TSCs, as well as possibly consultants and local units of government. It was also indicated that the procedure for seeking revisions to the TSNs should be made known to all users in case there are new situations encountered that need to be addressed. The existence, purpose, and application of the TSNs could be incorporated into on-going statewide training efforts on access management.

**4. Update key asset management database information when there are changes if access management-related data are collected in the future.**

*General finding leading to recommendation #4: There is a need for feedback to the asset management section if changes are made to the number of driveways or median type (and these data items are recorded in the future).*

As discussed in detail in Chapter 3, one recommendation is that MDOT Access Management Program staff internally “*Improve coordination between MDOT’s Asset Management Section and the Access Management Program in refining the use of data resources to select study locations, inform corridor committees and property owners, meet consultant needs at study start, and to incorporate access management activities into Congestion Management Program (CMP) functions.*” If asset databases are updated to include access management-related data items, then there will become a need for feedback to MDOT’s Asset Management Section of changes in the number of driveways or median type (if these data elements are recorded in the future.)

TSC staff (Utilities and Permits Engineer and TSC Traffic and Safety Engineer) grants new driveway permits and are involved when driveways are closed. This can occur when site plans are reviewed locally and also as R&R or capacity improvement projects are constructed. Therefore, it is important for TSC staff to be in contact with Central Office staff to ensure driveway data in the asset management inventory are kept up to date.

**5. Continue to keep an updated inventory of each access management study for future program evaluations.**

*General finding leading to recommendation #5: Even with the existing, ongoing and extensive record keeping, it is sometimes difficult to identify what agencies adopted plans or ordinances for each access management study (as well as contact information). This information will assist future program evaluations.*

MDOT Central Office keeps detailed records on each access management study performed. Even with this documentation, it was a time-consuming process for the TTI project team to identify the “status” and associated contacts for each access management study performed by MDOT. The TTI team often spoke with Region Office/TSC staff from MDOT as well as municipality staff to identify what agencies adopted plans/ordinances, and to what extent access changes had been made to the corridor since the plan/ordinance adoption. In some cases, equally difficult was identifying the key contacts involved at MDOT and the local agencies. Often this was due to attrition since the studies were completed.

There is a need to keep the inventory of the access management plans updated regarding plan/ordinance adoption, reasons either the plan or ordinance may not have been adopted, successful access changes as a result of the plan, funding used for the access improvements, and key MDOT/municipality contact information.

It is important to revisit the list occasionally to identify when it may be fruitful to revisit municipalities about adopting the plan/ordinance in situations where it was not adopted the first time. As political climates change within municipalities, there are opportunities for successful adoption and access management implementation. To the extent possible, keeping a record of MDOT and municipality names, titles and contact information would also be valuable in the inventory.

Continuing the current inventory and documentation is encouraged. This inventory will be valuable for identifying the success of Michigan’s Access Management Program as well as assisting future evaluations of the program.

As previously indicated, identifying the quantitative and qualitative benefits of access management implementation takes time. Quantifying successful implementation, to the extent possible, will provide objective evidence of program benefits. Therefore, there is a need to perform future evaluations of the program to identify what is working well and where refinements can be made. Specific corridors where access changes have been implemented can also be evaluated to identify crash impacts over time.



## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

In 2008, the Michigan Department of Transportation (MDOT) contracted with the Texas Transportation Institute (TTI) to evaluate MDOT's Access Management Program. Evaluation findings indicate several positive elements of the program during the period 2002 to 2008. To evaluate the program, the TTI project team conducted interviews and surveys of local officials, MDOT staff, and private property owners. The TTI project team conducted a comprehensive review of each access management plan completed during this period and investigated implementation of plan recommendations.

#### **Key Recommendations**

Because access management is not a "quick fix," successful implementation of access management studies can take many years to come to fruition. Since there has not been sufficient time to make a scientific and quantitative assessment of all the program benefits along all impacted roadways, it was not the intent nor the scope of this evaluation to do so. It was beneficial to provide a "snapshot" of MDOT's program to determine if the program is heading in the right direction. The evaluation determined that the proper program steps are being taken to experience additional future benefits statewide, including evidence in specific locations such as Bay Region, where plan recommendations are being implemented through individual negotiations with property owners. In addition, local ordinances and plans are being adopted or modified, local coordination is occurring, and access management committees are being formed. There will be more opportunities in the future for statewide benefits when rehabilitation and reconstruction (R&R), or capacity improvement projects are constructed and/or as land redevelops along areas with adopted access management plans and/or ordinances. While a quantitative assessment is difficult in this, the near term, the TTI project team investigated the presence of key policies, guidance documents, training, and personnel resources to put MDOT in the best position for long-term and continued program success. Based upon the evaluation and to ensure future program success, TTI makes the following key recommendations:

1. ***Continue Support of the MDOT Access Management Program by Department Management:*** The bottom line is safety. It is a fact that access management limits vehicular conflicts and reduces crashes over time. Because of the tremendous opportunity for continued long-term benefits to the motoring public, and even with the current fiscal crisis, MDOT should prepare studies "in house" by utilizing both central and region office staff. Once funding levels become stabilized, the program should seek a balance between the use of MDOT staff and private-sector consultants. This will ensure that a high level of technical expertise is maintained within the department and that the Access Management Program is advocated industry-wide. TTI noted that the use of private-sector consultants can create a higher degree of credibility by the public in cities and townships, especially through the plan/ordinance adoption phases

because consultants can provide objectivity as a “non-governmental” entity. (See pages 14 and 29 for additional discussion.)

2. ***Establish and Promote an MDOT Policy Requiring Access Management Inclusion in R&R and Capacity Projects:*** Such a policy would require inclusion of an access management component in proposed rehabilitation and reconstruction (R&R) and capacity improvement projects that are entered into the Five-Year Program for non-freeway state trunklines. For these projects, the policy would ensure that access issues, if they exist, are thoroughly addressed with a request for proposal (RPF) for an access management study. Access management should also be included in the MDOT and MPO long-range plans as a safety and congestion management component. These plans should indicate that near-term attention be given to corridors when enhancement, safety or local funding programs are being pursued. This Five-Year/Long-Range Plan policy would trigger those circumstances when a study is initiated and should establish consistency as to when and where the access management process is promoted by the central and regional offices of MDOT. (See page 31 for additional discussion.)
3. ***Recognize and Replicate Beneficial Practices Throughout the State to Improve Local Coordination:*** Based on positive experiences observed in numerous locations, especially throughout the Superior Region, TTI recommends that MDOT’s practice of forming and nurturing corridor committees after an access management study be replicated statewide. The benefits of these committees extend well beyond access management studies, plans and implementation. Almost, if not all, of the positive implementation stories are founded on an MDOT understanding of the local situation, including challenges and long-range plans, as well as a cooperative attitude from MDOT and the local governments involved. Consistent with this idea, it is vital that MDOT, municipality staff, and consultants (when used) understand the importance to take the access management plan and ordinance through to adoption as part of the process. This is important because plan/ordinance adoption and the establishment of on-going access management site review committees are primarily how access management is implemented. (See pages 22, 23, 24, 41, and 42 for additional discussion.)
4. ***Continue Support for Access Management Training and Awareness:*** There is a need to include an access management component into the internal department training program to ensure junior and mid-level staff are knowledgeable of the purpose, need and elements of the Access Management Program. A public informational outreach program should continue to highlight the program to outside professional organizations, local communities and business groups. This could be accomplished through meetings, training seminars and conference workshops. (See pages 36, 49, and 50 for additional discussion.)



5. ***Improve Coordination between MDOT's Asset Management Section and the Access Management Program Staff:*** MDOT's asset management data depository can provide key data elements for prioritizing where an access management study should be performed. For example, if crash information (rates, frequencies, and types) show access-related patterns, then the corridor may be a candidate for a future access management study. MDOT's asset management data depository also provides valuable data elements for inclusion in the access management study, and to inform corridor committees and property owners. Incorporating the number of driveways or median type in asset inventories would be valuable. Including access management activities into the Asset Management Section's Congestion Management Program (CMP) is also important because implementing access management provides a proven operational and safety improvement for a relatively modest investment. (See pages 37 and 52 for additional discussion.)
6. ***Review, Update, and Promote Traffic and Safety Notes (TSN's):*** Review TSN's as they relate to Access Management to ensure they address changes in safety and operational guidance pertaining to access along state trunklines and assure the TSN's are consistently understood and applied at all levels within the department. This can be accomplished through an annual Planning/Operations review and appraisal of issues or concerns relating to their application. This review can take place as part of the annual Operations Conference. (See pages 31 and 50 for additional discussion.)
7. ***Continue Access Management Program and Corridor Evaluations into the Future:*** Identifying the quantitative and qualitative benefits of access management implementation takes time. Quantifying successful implementation, to the extent possible, will provide objective evidence of program benefits. Therefore, there is a need to perform future evaluations of the program to identify what is working well and where refinements can be made. Specific corridors where access changes have been implemented can also be evaluated to identify crash impacts over time. (See page 53 for additional discussion.)

Many of the findings and recommendations throughout this report can be traced back to the needs identified in these seven key recommendations that give MDOT the best chance of future success for the Access Management Program.

### **Specific Chapter Recommendations**

The body of the report is organized around the specific chapter recommendations provided in this section. Discussion of each of these specific chapter recommendations is provided in the body of the report.

## **What Should MDOT Do for Continued Success Now and into the Future? (Chapter 2)**

The following recommendations are provided to ensure continued success into the future:

1. *Continue the Program and support thereof despite the current fiscal crisis by preparing studies “in house” utilizing both MDOT Central Office and Region staff. When funding becomes available, strike a balance between the use of MDOT staff and the private sector. (See page 14 for additional information.)*
2. *As identified in several locations throughout the state, continually seek opportunities to partner with municipalities on access management and other issues as well. (See page 22 for additional information.)*
3. *Build consistency statewide on identified successes to identify, understand, and listen to local agency and community cares and concerns. (See page 23 for additional information.)*
4. *Ensure that access management plan recommendations reflect that access management implementation is not “one-size-fits-all,” or a “quick fix.” In some cases, implementation is long term, and in others it can be short term. (See page 24 for additional information.)*
5. *Based on successes observed in numerous locations throughout the state, develop on-going access management committees after the conclusion of an access management study to facilitate consistent implementation of the plan recommendations. (See page 26 for additional information.)*
6. *Encourage municipalities that have not yet done so to identify objective criteria defining a land use change that requires site review, which includes access review. (See page 28 for additional information.)*
7. *Recognize consultants as a valuable resource and vital third party participant in the access management study, plan development, fostering, and adoption, and take advantage of their skills and what they do well (complementing local agency capabilities). (See page 29 for additional information.)*

## **How Can Initial Site Selection and the Study Planning Process be Improved Before Contract Signing? (Chapter 3)**

The following recommendations are provided to improve corridor selection and the study process:

1. *Establish a statewide access management policy that is identifiable in appropriate documents requiring an access management component within all rehabilitation and reconstruction (R&R) and capacity improvement projects. The component should include study location criteria/guidance with an emphasis on corridors of significance identified in the Five-Year Plan and State Long-Range Transportation Plan, and requirements for preparing RFPs and/or basing study need on objective indicators (e.g., increasing safety, volumes and/or future changes in land use). (See page 31 for additional information.)*

2. *Perform educational outreach meetings with local municipalities and the business community before the project starts, and obtain local support through the use of memos of understanding (MOUs) and/or resolutions of support. (See page 36 for additional information.)*
3. *Improve coordination between MDOT's Asset Management Section and the Access Management Program in refining the use of data resources to select study locations, inform corridor committees and property owners, meet consultant needs at the study start, and to incorporate access management activities into Congestion Management Program (CMP) functions. (See page 37 for additional information.)*

## **How Can the RFP and Contracting Process be Improved to Help Ensure Success? (Chapter 4)**

The following recommendations are provided to improve the RFP and contracting process:

1. *In the RFP development stages, determine if any of the municipalities involved desire to have the consultant assist or lead in taking the plan and ordinance to elected officials for adoption. (See page 41 for additional information.)*
2. *Provide consistent local agency (municipal) input to the RFP and contractor selection. (See page 42 for additional information.)*
3. *Recognize advantages and disadvantages of contracting with State Planning and Development Regions (SPDRs). (See page 42 for additional information.)*
4. *Emphasize to prospective consultants that plan/ordinance adoption is the key task in ensuring successful implementation. To this end, incorporate additional items into the study RFP related to plan/ordinance adoption, timely delivery of data elements to the contractor, study length, presentation of results, and encouragement to develop corridor access management committees. (See page 43 for additional information.)*
5. *Continue the use of a checklist for evaluating proposals and include input from municipalities. Consider inclusion of proposal evaluation checklist items provided in this report. (See page 47 for additional information.)*

## **What are the Needs After the Study? (Chapter 5)**

The following recommendations are provided to address needs after a study is performed:

1. *MDOT should develop and sponsor a statewide peer exchange with MDOT and municipality staff along with the business community and developers. (See page 49 for additional information.)*
2. *Provide on-going training to municipality and MDOT staff. (See page 50 for additional information.)*
3. *Promote an understanding of MDOT Traffic and Safety Notes and their application, and ensure they remain updated. (See page 50 for additional information.)*

4. *Update key asset management database information when there are changes if access management-related data are collected in the future. (See page 52 for additional information.)*
5. *Continue to keep an updated inventory of each access management study for future program evaluations. (See page 53 for additional information.)*

## **APPENDIX A WORK ELEMENT ACTIVITIES**

This appendix contains a short description of each of the 14 elements investigated by the TTI project team.

The Michigan Access Management Program evaluation began in December 2008 and concluded in May 2010. The TTI project team investigated 14 elements to assess Michigan's Access Management Program and implementation within MDOT's seven regions. The project was performed in five phases, each containing several of the elements below. Phase 1 included Elements 1 through 4, Phase 2 included Elements 5 through 7, Phase 3 included Elements 8 through 11, Phase 4 included Phases 12 through 14, and Phase 5 included the final report production and final presentation delivery. The following are highlights of the elements and key work activities performed by the project team.

### **Element #1: Review Past Requests for Proposals (RFPs) for Consistency**

Consistency in application and implementation of an Access Management Program across the state and at all levels of governments is essential for success. The TTI project team investigated:

- Common work items;
- Work items unique to one or more RFPs;
- Causes for unique work items;
- Whether appropriate access management processes were followed per MDOT's *Access Management Guidebook*; and
- Successes, failures and lessons learned.

Because only about half of the study RFPs were obtained, TTI also used final reports to assess Element #1, assuming that what was produced in the final report was generally in line with what was asked for in the RFP.

### **Element #2: Study Costs**

As part of this element, TTI investigated the RFPs (and other documentation) to identify:

- Any major discrepancies where similar services have significant cost differences;
- Reasonable cost ranges for typical services;
- Study costs that could or should be absorbed by local governments or property owners to obtain "buy-in" to the access management objectives; and
- Any agencies that have funding or have created incentives for access management.

### **Element #3: Study Length and Time**

TTI documented the duration of each study (in month), the length of each road segment (in miles), and the number and type of agencies involved for each RFP.

**Element #4: MDOT Study Corridor Criteria**

TTI investigated any formal criteria or informal considerations that are used to determine the need for a study.

**Element #5: Data Collection Format**

The TTI project team investigated the type and quality of data used for the access management studies as part of this element. The project team investigated all of the access management study reports to identify the type of data used in the study, the “age” of the data for applicability, and data quality (i.e., data sources and completeness).

**Element #6: Access Management Report Format**

As part of this element, TTI investigated the RFPs (and other documentation) to identify clarity and consistency. Because RFPs were not available for all studies, the project team also investigated the format/organization of final reports as well.

**Element #7: Study Management**

Project management is the key to success for any study. In some cases, MDOT may manage a given study, while in other cases the agency representing the State Planning and Development Region (SPDR) (Regional Planning Commission) manages the study. Generally, it seems that whether MDOT or an agency representing the SPDR manages the study differs by MDOT Region. In rare cases a local agency (e.g., county) assumed management of the study. This element includes documentation of best study practices, including staying on schedule, within budget, and running smoothly.

**Element #8: Local Agency Memorandum of Understanding (MOU), and Ordinances**

The project team investigated whether the studies required a memorandum of understanding (MOU) among MDOT and the local agencies prior to beginning the study. Through this element, the project team also surveyed cities, villages, and/townships within the study areas to identify if the resulting access management plans and/or recommended ordinances were adopted.

**Element #9: Coordinated Site Plan Reviews**

As part of this element, the project team surveyed local agency staff to determine if they hold corridor access management plan meetings with MDOT on a regular basis. A larger number of the access management plans have resulted in some type of coordinated site plan review processes with MDOT on a regular basis. Through interviews with local transportation agencies and MDOT staff, in many cases it was indicated to the project team that these meetings were the most beneficial product of the studies.

**Element #10: Local Government and Business Perspectives about MDOT's Access Management Program**

The project team interviewed selected local government representatives regarding MDOT's Access Management Program.

**Element #11: Maintaining Viability**

Attrition of MDOT and local agency staff, as well as the turnover in elected officials, require methods to ensure an Access Management Program will stand the test of time. For this element, the TTI project team investigated ways to ensure future adherence to access management plans. The project team observed instances of significant turnover in local agency staff and MDOT staff throughout the state.

**Element #12: Study Linkage to MDOT Construction Projects**

The TTI project team investigated how the access management efforts have been, or should be, linked to road construction projects to improve implementation of access changes. The project team also investigated the extent that road reconstruction projects have followed, and not preceded, corridor access management studies to document possible "missed opportunities."

**Element #13: Asset Management Links**

As part of this element, the project team assessed the possibilities of MDOT's Access Management Program connecting with MDOT's Asset Management Section. As asset management data depository could provide key data elements for prioritizing where an access management study should be performed, and the asset management data inventory could further provide valuable data elements for inclusion in the access management study.

**Element #14: Traffic and Safety Notes**

The project team reviewed all of MDOT's Traffic and Safety Notes (TSNs) related to access management. As part of this element, a survey instrument was developed and sent to access management practitioners at the MDOT Regions and Transportation Service Centers (TSCs) to gain insight into Traffic and Safety Notes application and benefit.

**Final Report and Presentation Development**

The TTI project team developed this final report documenting recommendations. TTI project team personal presented the recommendations to MDOT leadership responsible for implementing MDOT's Access Management Program.





## APPENDIX B SURVEY INSTRUMENTS

The TTI project team developed survey instruments to obtain in-person and/or email responses to gain insights on the 14 elements identified in Appendix A. Table B-1 provides a summary of key characteristics of the surveys and how they relate to the elements in Appendix A. All survey instruments are contained in this appendix.

**Table B-1. Summary of Survey Characteristics**

<b>Survey Name / Audience</b>	<b>Element Number(s) Benefiting from Survey</b>	<b>How Administered</b>
MDOT Staff—General Questions	1, 3, 4, 7, 8, 9	Email, telephone interviews, in-person interviews
Local Officials and Staff	1, 3, 7, 8, 9, 10	Email, telephone interviews, in-person interviews
Regional Planning Agency and Metropolitan Planning Organizations Staff/Study Managers	1, 3, 4, 7, 8, 9, 10	Email, telephone interviews, in-person interviews
Business Owner/Manager Survey	10	Telephone interviews, in-person interviews
MDOT Staff—Linking Studies to Construction Projects	2, 3, 4, 5, 12	Email
MDOT Staff—Asset Management Program	13	In-person interviews
MDOT Staff—Traffic and Safety Notes	14	Email, telephone interviews
Study Contractors	Not Applicable—not part of initial project scope/elements.	Email, in-person interviews

Note: Some elements did not require survey instruments.

The project team submitted all of the survey instruments and required related documentation (e.g., research information sheet for participants, interview/email scripts) through the Texas A&M University System Institutional Review Board (IRB). This process, required of all surveys and projects that will involve contact with human subjects, ensures that proper procedures are followed, that potential responders are treated properly and not coerced into participating, and that confidentiality, when necessary, is maintained. The IRB gave the surveys, and survey administration procedures, an “exempt” status, meaning they were approved for use and did not require a full IRB review.

## SURVEY TO MDOT STAFF—GENERAL QUESTIONS

Thank you very much for your time in filling out this important survey! Please complete and save a separate survey file for each study that you were involved in.

1. Are there established thresholds for when to perform a study to develop a corridor access management plan in your MDOT Region/TSC?
  - 1A. If “yes,” what are they?
  - 1B. If “yes” to #1, do you recommend a different threshold? If so, why?
  - 1C. If “no” to #1, how do you determine where and when to do a study?
2. Were you involved in project management for any access management plan(s) completed in your MDOT region/TSC?
  - 2A. If “yes,” what was your role?
  - 2B. If “yes” to #2, what are lessons learned through the project management process (e.g., contracting, public involvement, etc.)?
  - 2C. If “no” to #2, do you know any names of project managers and related projects, including those managed by regional and/or local planning agencies (would you be willing to volunteer contact names and projects)?
3. Was the study process and duration sufficient to keep all stakeholders engaged?
  - 3A. If not sufficient, do you have any recommendations?
4. For access management studies that were contracted by regional planning agencies, were there benefits and/or drawbacks of having them do the contracting?
5. Is your office involved in site plan review with local agencies?
6. If “yes,” describe how; and has the involvement changed since the access management plan was developed?
7. Was there anything unique about this study – work items, tasks, concerns, issues, etc?
8. Did the consultant appear to follow Chapter 6 and Chapter 7 of MDOT’s *Access Management Guidebook*? (Chapter 6 is *A Model Process for Developing an Access Management Program*, and Chapter 7 is *Access Management Plan Elements*).

- 8A. If the *Guidebook* was not followed, was it acceptable – why or why not?
9. Do you feel the study was successful?
- 9A. If “yes,” what elements made it successful?
- 9B. What might be changed to make it more successful?
10. What other comments do you have on this study?
11. Do you have any additional comments or recommendations on MDOT’s Access Management Program?
12. Could you provide the name, telephone number and e-mail address of local transportation officials whose agencies were included in the geographic area of this study? Relevant agencies/individuals might include the Study Advisory Committee, and/or local officials/staff from cities, counties, villages, or townships.
13. Would you be willing to volunteer your contact information below if there is interest by the project team to perform a site visit and/or if there is a need for clarification of responses?
- Name:
  - Title:
  - Region or TSC office:
  - General responsibilities:
  - Telephone number:
  - Email address:

## **SURVEY TO LOCAL OFFICIALS AND STAFF**

Thank you very much for your time in filling out this important survey!

1. Were you involved in the development of the \_\_\_\_\_ access management plan completed in \_\_\_\_\_ (year)?
  - 1A. If “yes,” what was your role?
2. Has your community adopted the access management plan and overlay ordinance?
3. Has your community implemented any of the recommendations (e.g., ordinances) in the final report of the access management plan? If so, which recommendations?
  - 3A. If “yes,” have you received any feedback from the public and/or business community?
  - 3B. If “no” to #3, does your community plan to implement the recommendations of the access management plan? If so, which recommendations?
4. During the access management plan development (and associated study) was there appropriate opportunity for your agency’s input? (Please provide details to support answer.)
  - 4A. Was the study process and duration sufficient for your agency?
  - 4B. Do you have any recommendations related to local agency involvement in the study process?
5. Was there adequate access to the study consultant and appropriate input from other stakeholders (e.g., public, business community)?
  - 5A. Did these other stakeholders stay engaged throughout the study?
  - 5B. Was the project process and/or duration sufficient for these stakeholders?
  - 5C. If not sufficient, do you have any recommendations?
6. Are any of the recommendations in the access management plan cost prohibitive to implement?
7. Are any of the recommendations potentially politically prohibitive to implement? If so, which recommendations and why?

8. Has the access management plan and/or implementation of the resulting recommendations, changed transportation in your community? Why or why not?
9. Are you aware of a more coordinated site plan review process now as a result of the access management plan?
10. How would you describe the public involvement process?
  - 10A. Do you have any recommendations to improve the public involvement process?
11. Can you recommend any business owners/managers we should interview to gain additional insight?
12. Do you feel the study was successful?
  - 12A. If “yes,” what elements made it successful?
  - 12B. What might be changed to make it more successful?
13. What other comments do you have on the development of this access management plan?
14. Do you have additional comments on MDOT’s Access Management Program, in general?
15. Are there elected officials in your jurisdiction that you recommend with whom we follow up with a similar survey (please provide any names, phone and e-mail information you have)?
15. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a site visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email address:

## **SURVEY TO REGIONAL PLANNING AGENCY AND METROPOLITAN PLANNING ORGANIZATION STAFF/STUDY MANAGERS**

Thank you very much for your time in filling out this important survey!

1. Are there established thresholds for when to perform a study to develop a corridor access management plan?
  - 1A. If “yes,” what are they?
  - 1B. If “yes” to #1, do you recommend a different threshold? If so, why?
  - 1C. If “no” to #1, how do you determine where and when to do a study?
2. Which access management plan were you involved in and in which year was it developed?
  - 2A. If “yes,” what was your role?
  - 2B. If “yes” to #2, what are lessons learned through the project management process (e.g., contracting, public involvement, etc.)?
3. Was the study process and duration sufficient to keep all stakeholders engaged?
  - 3A. If not sufficient, do you have any recommendations?
4. As a contractor for an MDOT study, were there benefits and/or drawbacks of doing the contracting, and what were they?
5. Was there anything unique about this study – work items, tasks, concerns, issues, etc?
6. Did the consultant appear to follow Chapter 6 and Chapter 7 of MDOT’s *Access Management Guidebook*? (Chapter 6 is *A Model Process for Developing an Access Management Program*, and Chapter 7 is *Access Management Plan Elements*).
  - 6A. If the *Guidebook* was not followed, was it acceptable – why or why not?
7. Do you feel the study was successful?
  - 7A. If “yes,” what elements made it successful?
  - 7B. What might be changed to make it more successful?

8. What other comments do you have on this study?
9. Do you have any additional comments or recommendations on MDOT's Access Management Program?
10. Could you provide the name, telephone number and e-mail address of local transportation officials whose agencies were included in the geographic area of this study? Relevant agencies/individuals might include the Study Advisory Committee, and/or local officials/staff from cities, counties, villages, or townships.
11. Would you be willing to volunteer the contact information below if there is interest by the research team to perform a site visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Regional Planning and Development Commission:
  - General responsibilities:
  - Telephone number:
  - Email address:



## BUSINESS OWNER/MANAGER SURVEY

Thank you very much for your time in filling out this important survey!

1. When did this business open at this location?  
Month\_\_\_\_\_ Year\_\_\_\_\_
2. What is the primary type of business?  
☐ Retail    ☐ Gas Station/Conv    ☐ Fast-food Restaurant    ☐ Sit-down  
Rest./Bar  
☐ Hotel    ☐ Service    ☐ Other (please describe):\_\_\_\_\_
3. What type of access management technique(s) was/were implemented (e.g., driveway closure, raised median, turn lane, provided cross-access to neighboring property, other)? (When the term "access management" is used throughout the rest of this survey, it is intended to relate back to the treatments identified in this question.)
4. How close to your business was the change made (e.g., affected one or more of your driveways, affected a common driveway with neighboring property, in front of your property, etc.)?
5. What do you believe is the percentage of your customers who are "passer-by" customers versus those who intend on stopping at your business? "Passer-by" customers are those customers that are not intending to stop at your particular business (i.e., impulse customers) as opposed to planned stops by customers that had intended on stopping at your business.  
\_\_\_\_Percent passer-by traffic\_\_\_\_Percent planned stop
6. Prior to access management implementation, what do you believe was the percentage of your customers who were passer-by customers and those that intended on stopping at your business?  
\_\_\_\_Percent passer-by traffic\_\_\_\_Percent planned stop
7. What do you believe is the reason(s) for the difference, if any, in the percentages you reported in question 3 and question 4?
8. Do you believe your regular customers have remained about the same, are more likely, or are less likely to visit your business since driveways have been closed?  
☐ Less likely    ☐ More likely    ☐ Stay about the same

9. Please rank the following considerations in ascending order from “1” to “6” (with “1” being the most important) that consumers use when selecting a business of your type. Note: You should use each number from 1 to 6 only once.

Distance to Travel	Hours of Operation	Customer Service	Product Quality	Product Price	Access to Store
-----------------------	-----------------------	---------------------	--------------------	------------------	--------------------

10. Can you describe the general trends in gross sales before implementation, during implementation (construction), and after implementation of the access management treatments?

11. Your number of customers per day?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

12. Your number of full-time employees?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

13. Your number of part-time employees?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

14. Your property values?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

15. The affect on the number of crashes along the corridor where driveways were closed?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

16. The affect on the traffic volumes along the corridor where driveways were closed?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

17. The affect on gross sales along the corridor where driveways were closed?

<input type="checkbox"/> Increased	<input type="checkbox"/> Decreased	<input type="checkbox"/> No Change
_____ %	_____ %	

18. Please indicate below whether you feel the driveway closures have made the following items “Better,” “Worse,” or about “The Same” as before the driveway closures.

	Better	Worse	The Same
a Traffic Congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b Traffic Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c Property Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d Business Opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e Customer Satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f Delivery Convenience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Please indicate the extent of your involvement in the public meeting process for the access management study performed along this roadway by placing an "X" next to the appropriate category below.
- ☐ High (attended several meetings)
  - ☐ Somewhat high involvement
  - ☐ Moderate involvement
  - ☐ Low involvement
  - ☐ No involvement (attended no meetings)
20. Do you feel you had adequate access to MDOT and/or the study consultant throughout the study process, as necessary?
- 20A. If "no," what recommendation do you provide to improve adequate access?
21. Do you feel the study process and study length (time) were appropriate?
- 21A. If "no," what recommendation do you provide?
22. How would you describe the public involvement process?
- 22A. Do you have any recommendations to improve the public involvement process?
23. What other comments do you have on the development of this access management plan?
24. Do you have additional comments on MDOT's Access Management Program, in general?
25. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a sites visit and/or if there is a need for clarification of responses?
- Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email Address:

**SURVEY TO MDOT STAFF  
(LINKING STUDIES TO CONSTRUCTION PROJECTS)**

Thank you very much for your time in filling out this important survey!

1. Were you involved in the development of the [researcher to fill in roadway name] access management plan completed in [researcher to fill in year]?
2. Was this study performed because of an anticipated road construction project?
  - 2A. If “yes,” what type of road construction was planned?
  - 2B. If “yes,” do you believe this improved implementation of the study recommendations? Why or why not?
  - 2C. If “no,” did a road reconstruction project precede the access management plan study (i.e., was there a “missed opportunity”)?
3. If “yes,” to #2, how far in advance of the anticipated design and letting of the roadway project, was the original study concept developed?
  - 3A. How far in advance of the actual design and letting was the study completed?
  - 3B. Did the access management plan affect the design incorporated in the final roadway project?
4. If applicable to your area, do you use metropolitan planning organizations (MPOs) transportation improvement plans (TMPs) as a possible “target” list of projects to which staff could refer to identify possible locations for performing access management studies?
  - 4A. If “no,” are there other project listings that could be used to identify possible locations for performing access management studies?
5. Regarding the study itself, when an access management study begins, how far into the study do you typically provide the necessary data (e.g., aerial photographs, crash data, volume data, other) to the contractor?
  - 5A. In addition to those data elements identified in question #5, are there other data elements you provide? If “yes,” what are they, and when do you typically provide them?
6. Regarding the study, have you needed to amend the contract for more money? Or for more time? If “yes,” why?

7. Do you have any additional comments related to these topics?
8. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a sites visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email address:

**SURVEY TO MDOT STAFF  
(ASSET MANAGEMENT PROGRAM)**

Thank you very much for your time in filling out this important survey!

1. To what extent are the following roadway section data elements included in MDOT's asset management inventory for state facilities?: access density, median type, crash number, crash rate, and traffic volume.
2. Are there other roadway section data elements in the database/inventory that could be used to identify "hot spot" locations where access management studies might be performed?
3. How are each of the data elements identified in questions #1 and #2 defined in the inventory?
4. How are typical section lengths defined? Is there a "typical" section length in the inventory?
5. How are thresholds currently set for transportation system analyses/reporting?
  - 5A. Do you see ways that thresholds (AADT, crash rates, driveway density) could be established and analyzed within the asset management system to prioritize potential study corridors with the data elements identified in questions 1 and 3?
6. What types of interfaces do you use for analysis and reporting (e.g., GIS, etc)?
7. Do you see other ways that MDOT's Access Management Program can connect to MDOT's Asset Management Program?
8. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a sites visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email address:

**SURVEY TO MDOT STAFF  
(TRAFFIC AND SAFETY NOTES)**

Thank you very much for your time in filling out this important survey!

1. To which MDOT Traffic and Safety Notes (TSNs) do you refer the most often related to access management?
2. Do you believe the TSNs are beneficial to implementing access management?
  - 2A. If “yes,” how?
  - 2B. If “no,” what would make them more beneficial?
3. Are there specific TSNs that you believe need to be revised?
  - 3A. If “yes,” which ones, and what needs to be revised?
  - 3B. If “yes,” do you have recommendations on how these specific TSNs could be improved?
4. Do you have additional suggestions on how TSNs use could be improved?
5. Do you have any additional comments?
6. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a sites visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email address:

## SURVEY TO ACCESS MANAGEMENT STUDY CONTRACTORS

Thank you very much for your time in filling out this important survey!

1. Were you involved with the development of the [project team to fill in roadway name] access management plan completed in [project team to fill in year] ?
2. Do you feel the study process and duration were sufficient to engage advisory committee members and/or local-agency representatives (i.e., stakeholders)?
  - 2A. If “no,” which stakeholders did not have sufficient engagement? Why not?
  - 2B. Did the stakeholders play an active role? If “yes,” which ones, and were there any indications as to why they were more actively involved?
  - 2C. Do you have any recommendations related to stakeholder involvement in the study process?
  - 2D. What methods did you use to engage all stakeholders?
3. How would you describe the public involvement process?
  - 3A. Did the general public become involved?
  - 3B. Do you have any recommendations to improve the public involvement process?
4. Can you recommend any business owners/managers we should interview to gain additional insight?
5. What types of data did you collect for the study?
6. What types of data were provided to you? From where were they provided?
  - 6A. How soon into the project were necessary data (e.g., aerial photos, counts, crash data) provided? Please be specific with each type of data, and mention others as relevant.
  - 6B. How current to the time of the study (“1-year old,” etc) were each data type?
7. Do you feel the study was successful?
  - 7A. “if “yes,” what elements made it successful?
  - 7B. What might be changed to make it more successful?



8. After development of the plan, did you have additional involvement with the jurisdictions to assist in plan/ordinance adoption?
9. From your perspective, was plan/ordinance adoption successful? Why or why not?
  - 9A. Do you have any recommendations to improve the plan/ordinance adoption process at the local level?
10. What other comments do you have on the development of this access management plan?
11. Do you have additional comments on MDOT's Access Management Program, in general?
12. Are there elected officials or others that you recommend with whom we follow up (please provide any names, phone and e-mail information you have)?
13. Would you be willing to volunteer your contact information below if there is interest by the research team to perform a sites visit and/or if there is a need for clarification of responses?
  - Name:
  - Title:
  - Agency:
  - General responsibilities:
  - Telephone number:
  - Email address:

## APPENDIX C

### SITE VISITS AND PERSONAL INTERVIEWS

Through the course of the project, two individuals from TTI traveled to Michigan on several occasions. These trips served as opportunities for meetings with the MDOT Project Advisory Team, interviews using the survey instruments shown in Appendix B, and field investigations. Field inspections involved driving on the highways, looking for and identifying recommendation implementation (e.g., driveway closures and median installations), making field observation notes, and photographing roadway elements. Field inspections allowed the project team to compare report elements, including recommendations, to what is physically present. The TTI project team efficiently scheduled the trips to coordinate and schedule meetings, interviews, and field investigations throughout MDOT's seven regions when traveling. Table C-1 summarizes the key characteristics of site visits and associated MDOT regions.

**Table C-1. Characteristics of Site Visits for Field Observations**

<b>Dates</b>	<b>MDOT Regions Visited</b>	<b>Study Corridors Visited</b>
December 8, 2008 (Monday) to December 12, 2008 (Friday)	Southwest and Bay	M-40/M-89, Napier Avenue, US 131 (south segment in Three Rivers), M-21 (middle segment), M-24 (Lapeer Road), M-15, and M-84
March 29, 2009 (Sunday) to April 3, 2009 (Friday)	Grand, Southwest, and University	M-66, M-104, M-40/M-89, M-37, M-11, and M-43/M-52 (University Region)
May 3, 2009 (Sunday) to May 8, 2009 (Friday)	North and Metro	US 131, US 10/US 31 (Ludington area), M-55, US 31 (Manistee area), M-72, and M-153 (Metro Region)
May 31, 2009 (Sunday) to June 5, 2009 (Friday)	Superior	US 41 / M-28 (Marquette area), US 41 / M-26 (Houghton/Hancock area), US 45/M-64/M-38 (Ontonagon area), US 2 (Ironwood/Bessemer area), and US 2/US 141/M-95 (Iron Mountain area)
August 30, 2009 (Sunday) to September 4, 2009 (Friday)	Metro and Bay	M-153, M-3, M-15 (Detroit area), M-84, M-58, M-46, (Saginaw area), US 127/M-20 (Mt. Pleasant), M-30 (Midland), M-24 (Lapeer), and M-24 (City of Oxford)
November 8, 2009 (Sunday) to November 13, 2009 (Friday)	Superior, Grand, Southwest, Metro, and University	US 2/US 141/M-95 (Iron Mountain), US 41/M-28 (Marquette area), M-104 (Spring Lake), M-37 (Barry County), US 24 (Monroe), M-25 (Port Huron), US 131 (Schoolcraft), M-96 (Battle Creek), and BL 94 (Ann Arbor)
December 11, 2009 (Sunday) to December 17, 2009 (Friday)	North, University, and Southwest	M-55 (Houghton Lake), M-43/M-52 (Meridian Township), US 127 (St Johns), M-24 (Monroe), BL 94 (Ann Arbor), and M-40/M-89 (Allegan)



## **APPENDIX D**

### **SAMPLE RFP INCLUDING PROPOSED CHANGES**

Note: Text shown in *italics* in the RFP shown on the following pages is meant to be replaced by staff of the specific MDOT Region developing the RFP for a specific corridor(s).

As of the time of this report writing, there is a boilerplate RFP on the MDOT website for US 24 (Telegraph Road) in the University Region (see: [http://www.michigan.gov/mdot/0,1607,7-151-9621\\_11041\\_29705-87915--\\_00.html](http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_29705-87915--_00.html)). The TTI project team made proposed changes to that RFP, and that is what is contained in this appendix.





## **Request for Proposals**

### **ACCESS MANAGEMENT PLAN**

**for the**

**Coordination of Transportation and Land Use Activities  
Along *Corridor Name*  
WITH EMPHASIS ON ACCESS MANAGEMENT**

Date of Issuance:	Xxxx XX, XXXX
Proposal Due Date and Time:	_____, XXXX, 4:30 p.m.
Pre-Proposal Written Questions Due:	_____, XXXX, 4:30 p.m.
Response to Pre-Proposal Questions:	_____, XXXX
Oral Presentations, If Held:	_____, XXXX

Issuing Agency:      The Michigan Department of Transportation  
                              Xxxxxxx Region Office  
                              Address  
                              City, Michigan Zip

Contact Person:      xxxxxxx, MDOT *appropriate Region/Title*  
Phone:  
Fax:  
E-mail:



## I. GENERAL INFORMATION

### A. Purpose

This Request for Proposals (RFP) provides interested consultants with specific information to prepare and submit proposals to produce a plan for managing access along the *Corridor Name* corridor between *end point one* to *end point two*. The study area will include the communities of *municipalities*.

### B. Type of Contract

The contract will be a cost plus fixed fee contract, not to exceed \$XX,000, to begin on or after *commencement date*, for fiscal year *xxxx*. The contract will be for a period of up to 18 months, unless otherwise agreed upon by MDOT and the consultant. If a contract is entered into as a result of this RFP, the contract will include all necessary information/work items, as required in the Scope of Work to produce the Access Management Plan. The contract will be funded with Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) funds and must comply with federal-aid transportation project requirements and be approved by the State Planning and Research Program Coordinator. The proposed consultant must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the consultant's job-order cost accounting system.

### C. Issuing Office

This RFP is issued by the *Xxxxx* Region Office of the Michigan Department of Transportation. All inquiries and requests for information from MDOT staff related to this RFP must be submitted to the Project Manager:

Michigan Department of Transportation  
*Xxxxxx* Region Office  
*Street Address*  
*City, ST Zip code*  
Attn:  
*Phone number*

Verbal inquiries or requests for information shall not be made of MDOT staff. Any attempt on the part of a consultant or any of its employees, agents or representatives to contact MDOT staff with respect to this RFP, other than as described above, may lead to disqualification.

### D. Submission of Proposals

Send one original (unbound) and 7 copies (bound) of the technical proposal to the issuing office by the proposal due date and time, as indicated on page 1 of this RFP. The pages must be numbered consecutively, e.g., 1, 2, 3, etc. No other distribution of the proposals will be made by the consultant or his agent.

Send one original and one copy (both unbound) of the price proposal, separate from the technical proposal, in a sealed envelope clearly marked, "Price Proposal", with the consultant's name identified on the front of the envelope. Continue the consecutive page numbering from the last page of the technical proposal, e.g., 3, 4, 5. The instructions and format for the price proposal are attached.



Proposals must be signed by an authorized agent to bind the consultant to its provisions. The proposal must remain valid for a period of at least 120 days from the due date of submission.

E. Addenda to the RFP

If it becomes necessary to revise any part of the RFP, addenda will be provided by the issuing office to all consultants who receive the RFP.

F. Pre-Proposal Questions

All questions related to the meaning or interpretation of this RFP shall be submitted in writing only by the date and time specified on page 1 of this RFP. MDOT shall provide a copy of all the questions and answers to all consultants who receive an RFP. Consultants who download the RFP from the MDOT website must notify the issuing office in order to receive a copy of the questions and answers.

G. Oral Presentations

Consultants who submit a proposal may be requested to make an oral presentation of their proposal. This presentation will provide an opportunity for the consultant to clarify his/her proposal.

H. Pre-qualification

This project does not require pre-qualification in any of MDOT's service classifications. However, the prime consultant's staff must have attended the Access Management Workshop for consultants that was conducted on September 25, 2001, or one of the subsequent workshops hosted by the Michigan Society of Planning and sponsored by MDOT.

I. Cost Liability

MDOT assumes no responsibility or liability for costs incurred by any prospective consultant prior to the signing of a contract by all parties.

J. News Releases

Any news release(s) pertaining to this RFP or the services, study, data or project, to which it relates, will not be made without prior written MDOT approval, and then only in accordance with the explicit written instructions from MDOT.

K. Disclosure

All information in a consultant's proposal and any contract resulting from this RFP are subject to disclosure under the provisions of the "Freedom of Information Act," 1976 Public Act No. 442, as amended, MCL 15.231, et seq.

L. Acceptance of Proposal Content

The contents of the proposal by the successful consultant shall become contractual obligations if a contract ensues. Failure of the successful consultant to accept these obligations may result in cancellation of the award.

## M. Independent Price Determination

A proposal will not be considered for award if the price in the proposal was not arrived at independently without collusion, consultation, communication, or agreement as to any matter relating to such prices with any other bidder or with any other competitor.

The consultant must include a certified statement in the proposal certifying that the price was arrived at without any conflict of interest as described in the paragraph above. Should a conflict of interest be detected any time during the contract, the contract shall be null and void and the consultant shall assume all costs of this project until such time as a new consultant is selected.

## II. BACKGROUND

One of the greatest threats to non-freeway trunkline capacity is the proliferation of driveway access. This is often the result of insufficient information and standards being shared between the transportation and land use/zoning decision makers.

This project is to devise a method of coordination in which MDOT and the local units of government work as true partners to protect and preserve the roadway condition, capacity, and safety. Each would be aware of the impacts of its decisions on the other agencies, and on the roadway.

This coordination will take the form of an access management plan, which will include establishment of a corridor-wide framework within which to review, discuss, evaluate, and mitigate proposed development along the corridor. The coordination framework would be designed in a way that it will continue to operate long after the study is complete.

The study area begins at *end point one*. From there, it continues *general direction and communities traversed*, and terminates at *end point two*.

Local issues identified along the *Corridor Name* corridor include a need to address the following issues (list should be specific to corridor – examples provided below):

- Concerns over a proliferation of driveways along *Corridor Name* especially within the more developed areas within the *municipality(s)*,
- Concerns associated with the location of all mailboxes for businesses along *Corridor Name* being located along the road, which results in a blocking of a travel lane when mail is being delivered,
- Concerns about the ability to access adjacent businesses along *Corridor Name*,
- Concerns about existing congestion within *municipality(s)* between *end point one* and *end point two* and the need to provide long-term access recommendations for future developments within this section of the corridor.
- Concerns about the need to incorporate better pedestrian facilities along the corridor, especially in light of *specific issues*.

Working with local units of government as partners, the MDOT *Region Name* Region and the *TSC Name* TSC would like to accomplish the following objectives:

- a. Cooperatively prepare an access management plan;
- b. Review and improve cooperation on permit and zoning practices within the study area, using MDOT's Access Management Guidebook;
- c. Establish regional review committees for proposed land uses meeting an established threshold;
- d. Work with local officials to identify zoning ordinance language that needs to be updated to carry out the access management plans;
- e. Review local zoning ordinances and identify where more coordination is needed by MDOT and the local agencies. For example, making sure all information that MDOT needs is required on the site plans (including storm water drainage plans, since storm water is often destined for MDOT right-of-way).

MDOT will provide the consultant the most recent photologs, crash data, segment length information (to estimate crash rates and access densities), traffic volumes, the number of driveways, aerial photography, construction plans, and other pertinent, available information to the consultant by the contract commencement date.

### III. SCOPE OF WORK

#### A. Work Statement

The Access Management Plan will provide a strategy to implement access management through a combination of traffic engineering measures, local land use regulations, and close coordination among transportation and land use decision makers.

The consultant will be responsible for incorporating into the plan the principles, tools, and techniques of good access management. Additionally, the consultant will be responsible for assuring the plan is consistent with MDOT policies and procedures. The Access Management Plan developed subsequent to this RFP must be consistent with MDOT's Access Management Guidebook. The consultant will be responsible for gathering the information needed to complete the plan from the appropriate state, county, regional or municipal agencies.

#### B. Agency Coordination

1. The Access Management Plan will provide a strategy to implement access management through a combination of traffic engineering measures, local land use regulations, and close coordination among transportation and land use decision-makers.

The consultant will utilize a Steering Committee to provide input and oversight throughout the study process. The Steering Committee will include, at a minimum, representatives from the Michigan Department of Transportation, *appropriate local and regional agencies*, and other such members as deemed appropriate by MDOT or the Steering Committee. The consultant will be responsible for providing a committee meeting schedule, agenda, meeting minutes, and support materials such as maps and graphics. The consultant will be responsible for preparing clear and concise project briefings to present to the Steering Committee at each meeting. The consultant should schedule *a minimum of nine (9)* Steering Committee meetings for the Plan.

The consultant will also encourage the Steering Committee to continue working together and meeting after the study is completed for site plan and access review.

2. Partnering Session (**Workshop #1**) - At the onset of the project the consultant will hold a partnering session between MDOT and key representatives of each of the participating municipalities. The purpose of the partnering session will be to identify areas with existing access issues, identify future access concerns based on planned development, and identify areas where an improved coordination process can be developed between MDOT and the local municipalities that will result in improved access management principles being implemented. During Workshop #1 the consultant will work with the representatives of each municipality to identify issues and concerns specific to each municipality. These issues will be used to customize the plan and recommendations for each municipality. At this time the consultant will verify with each municipality involved if there is a desire for the consultant to lead or assist in making presentations to elected officials at the time of Plan and/or ordinance adoption.

C. Inventory

1. Obtain available "As Built" and any proposed reconstruction plans for the *Corridor Name* corridor from *end point one* to *end point two*, as well as any information that is available for county or city routes intersecting and extending at least 660 feet either side of Corridor Name.
2. Secure latest available and highest quality aerial photography coverage from *most appropriate sources* for the entire study area. Make comparative review of the access control shown on the aerial photograph with the "As Built" and proposed plans. The consultant shall perform a field review to note changes in land use or land activity from what is depicted on the aerial photography. The consultant shall also secure right-of-way plans from MDOT and digital property line data from the *Municipality* Planning Department(s) so lot frontages and depths can be determined along the corridor.
3. Secure and review the MDOT Access Management Guidebook for guidelines on driveway spacing, turn lane requirements, guidelines for deceleration lanes and drive/intersection design.
4. Secure traffic volume and crash data for the *corridor name*. Note traffic generators within these segments and any crash concentrations which appear to be access related (driveway or intersection).
5. Map existing land uses; secure the existing and future land use master plans for each local jurisdiction. Update plans based on development which has occurred since adoption.
6. Utilize the aerial photography to determine potential driveway elimination/consolidation locations and/or joint driveway construction that would reduce the number of traffic conflicts along *corridor name* and would enhance access into the adjacent land uses. Attention should be given to potential or existing "left turn lock up" situations along *specific* sections of the roadway. Identify the potential for frontage or service roads which permit motorists/patrons to access other land uses along the corridor without requiring them to re-enter *corridor name*. In undeveloped areas, determine what building setbacks would be desirable which would provide opportunities for a service road and/or joint driveway access provisions.
7. (**Workshop #2**) – The consultant shall meet with the Steering Committee to present the findings of the inventory and to determine what land use changes, if any, are being discussed or are proposed for necessary revisions.

D. Assemble the Conceptual Plan

1. Secure and assemble the zoning ordinance of each jurisdiction as it applies to the corridor *name* corridor. Determine compatibility with existing land use plans. Review critical elements that will impact access management; i.e., building, sign, and parking lot setback requirements, parking and sign regulations, any existing access management provisions, density and lot frontage requirements for commercial and industrial land uses. The consultant shall also determine the compatibility of zoning ordinances between each jurisdiction.
2. Assemble a composite of the municipality(s) land use plans and zoning ordinances along corridor *name*. Note potential access/motorist conflict locations based on current plans and ordinances. Make a list of those problem locations and what traffic and/or land use techniques should be considered to resolve those problem locations.
3. Using copies of local tax maps, the consultant shall create an overlay file that can be plotted on aerial photography of the adjacent parcels. The consultant shall define the front lot width and lot depth of each parcel. Highlight those parcels that have a common owner or owners.
4. Develop a conceptual access management plan on aerial photography. Utilize frontage or backage roads where that access management technique could provide alternative access, indicate where cross-access connections are logical, where shared driveways would be desirable and where directional driveway design is necessary. Compare the access points with MDOT's spacing and offset guidelines, noting those parcels that do not or cannot meet those distances specified within the guidelines. The conceptual access management plan will include recommendations by roadway segment and/or municipality.
5. **Conceptual Plan Workshop (Workshop #3)** – The consultant will conduct a third workshop to review the composite land use plan, zoning ordinance language and conceptual access management plan with the Steering Committee. The consultant shall seek to resolve differences in the land use plans, zoning ordinances and seek to obtain consensus on the conceptual access management plan. During Workshop #3 the consultant will discuss “change of use” thresholds with the municipality representatives. The change of use thresholds will determine what change of use level will necessitate an access review. The consultant will incorporate the thresholds (they may be different for each municipality involved) into the refined ordinance.

E. Conceptual Plan Refinement

1. Based on comments from the Conceptual Plan Workshop, the consultant shall refine the initial access management concepts and develop a corridor overlay land use plan for the corridor *name* corridor. The overlay plan will be used to develop or refine the municipality(s) zoning ordinance. Specific components of the plan may include:
  - a. Land use recommendations;
  - b. Minimum lot width recommendations;
  - c. Minimum structure setback recommendations;
  - d. Minimum corner clearance design criteria;
  - e. Driveway design and spacing criteria;
  - f. Parking and internal circulation design criteria;
  - g. Right turn and taper design criteria;

- h. Shared driveway provisions and possible incentives;
  - i. Provisions to accommodate transit routes;
  - j. Provisions to accommodate pedestrian and non-motorized travel;
  - k. Signage placement; and
  - l. Other provisions as identified throughout the study process.
2. Develop a draft interagency site plan review process which includes interagency agreements for driveway permit evaluation. This review process will become an exhibit within the corridor *name* access management plan and will outline to developers and/or private land owners the step by step process for securing site plan approval, a rezoning and/or a zoning variance.
  3. **Public Meeting(s)** - Public involvement and awareness is a key component of the plan development process. The consultant should plan for a minimum of two (2) public meetings. The consultant will be responsible for providing meeting schedules, agenda, meeting minutes and support materials such as maps and graphics. The meetings should include a formal presentation of the plan, an opportunity for public verbal comment, but also there should be an informal time period where questions may be asked and written comments submitted. All public comments are to be recorded as they pertain to the plan and ordinance amendments.
  4. **Workshop #4** – A fourth workshop should be conducted by the consultant at whom local agencies are presented with comments from the public meeting.

The consultant should provide the advantages/disadvantages of adjusting the plan and zoning ordinance amendments based on the public comments received. Consensus should be obtained regarding any adjustments or revisions from the conceptual plan and ordinance.

5. **Informal Review Meetings** – The consultant shall meet individually with designated representatives (i.e. *appropriate boards and councils*, etc.) from each of the participating communities. The purpose of this meeting will be to allow each individual community an opportunity to review the proposed plan and ordinance language with their respective agencies and resolve any final outstanding issues or concerns. It is anticipated a maximum of four meetings will be required to complete this task.

#### F. Final Corridor Plan and Zoning Ordinance Amendment

1. After making any necessary changes from Workshop # 4, the consultant shall develop the final overlay plan and the necessary zoning ordinance language amendments.
2. **Workshop #5** – The consultant will conduct one final corridor workshop. The purpose of this workshop is to review the plan and ordinance with all parties and to provide formal copies (electronic and paper) to each participating Steering Committee member. The consultant will also lead the group in formalizing a monitoring process and make recommendations on how frequent the access management plan should be revised.

The consultant will assist, as previously agreed upon among MDOT and municipalities, with taking the plan and ordinance to elected officials for adoption consideration.

G. Expected Outcome

The expected outcome is a plan which, through its implementation, will preserve the functionality of this corridor, while maintaining the urban and rural settings where appropriate. This outcome can only be obtained by the cooperative efforts of local governments and MDOT. It is expected that varying levels of detail may be required for different segments of the corridor.

H. Deliverables

1. The consultant will complete a draft and final Access Management Plan for the corridor *name* corridor. The draft is to be submitted to MDOT and the Steering Committee for review and comment, in sufficient time to allow for revision before the due date. The consultant is to incorporate MDOT review comments into the final Plan. Xxxxx (xx) copies of the draft plan will be delivered, and xxxxx (xx) final copies of the plan. One unbound, copy-ready original shall be delivered to MDOT. The remaining copies shall be distributed to each affected local, regional and state agency and other study participants. Any left-over copies will be delivered to MDOT. The draft and final Plan should be submitted in both hard copy form and electronically in a form agreeable to MDOT.
2. Overlay plan with future land use maps and with corresponding zoning ordinance language. An executive summary should also be included as part of the access management plan. The executive summary will be formally adopted into the local Master/Comprehensive Plans of each community.
3. A flow chart diagramming the access review and coordination process that occurs for site plan and corridor plan reviews between the local communities, MDOT and the *county name* County Road Commission.
4. All plans, ordinances and documents shall be produced in hard copy and also in a CD format useable by local agencies.

I. Other Requirements and Meetings

The consultant will update the MDOT Project Manager on an on-going basis, along with a written monthly progress report which will clearly reflect progress, timeliness, and budget expenditures. The monthly progress report will be required with submission of each invoice.

The consultant may be responsible for presenting project recommendations to MDOT management and/or Region/TSC staff. This will include preparation of all presentation material, including exhibits, handouts, etc. The purpose of this meeting would be to provide a broader cross-section of MDOT with a first hand opportunity to review the progress of the program and ask questions directly of the consultant. Justification for proceeding with implementation of subsequent project phases and successful implementation of the program is likely to be based on the final report recommendations and successes of this presentation.

J. Items to be provided to MDOT

In addition to work products described in this RFP, all reports prepared by the consultant, including all graphics and texts, as instruments of service, and all data collected as part of this project or furnished by MDOT, together with all computer generated disks, tapes, summaries, and charts derived therefrom, are the property of MDOT.

#### IV. INFORMATION REQUIRED FROM THE CONSULTANT

##### A. Technical Proposal

Provide a description of the methodology, work product, and schedule for completing each element of the scope of work. A proposal should be prepared simply and economically, providing a straightforward, concise description of the consultant's ability to meet the requirements of the RFP. Fancy bindings, colored displays, promotional material, and similar ornamental features should not be included. Emphasis should be on completeness and clarity of content.

##### 1. Business Organization

State the full name and address of your organization and, if applicable, the branch office or subordinate element that will perform or assist in performing the work. Indicate whether you operate as an individual, partnership or corporation. If as a corporation, include the state in which you are incorporated. Include your firm's Federal Identification Number.

##### 2. Consultant Qualifications and Prior Experience

Include as a part of your proposal a brief statement concerning the recent experience of the persons from your firm who will be actively engaged in creating the Access Management Plan. Do not include firm experience unless persons who will work on this project participated in that experience, and clearly state his/her role.

In addition to specific technical capabilities required of the consultant to perform this project, it is desired that the consultant project manager have detailed knowledge and experience that can be applied to an overall understanding of state and federal highway financing and highway program delivery procedures and the ability to coordinate with MDOT and other appropriate agencies or individuals.

##### 3. Key Personnel

Specific background information on key individuals who will be assigned to the project must be included. The background information on these individuals should emphasize their experience relative to project requirements. The proposed key personnel must be the personnel assigned to the project. Key people are defined as those people whose qualifications and experience are essential to providing quality services. The project team means the personnel assigned by the consultant and the subconsultant(s) who are responsible for the completion of the services.

The contract for this project will contain a provision that the consultant may not replace key people without prior written approval from MDOT. A violation of this provision will be considered a breach of the contract, and MDOT may terminate the contract.

##### 4. Project Management

- a. The consultant's Project Manager must be readily accessible to MDOT personnel. Response to this RFP should include a proposal to address and clarify all aspects of project administration, quality assurance, variation and change control, contract deliverables,



budget and cost control, schedule control, and internal/external coordination.

- b. The MDOT Project Manager shall be the official MDOT contact person for the consultant. The consultant must either address or send a copy of all project correspondence to the MDOT Project Manager. This includes all verbal contact records. The MDOT Project Manager shall be made aware of all communications regarding this project.
- c. The consultant will update the MDOT Project Manager on a monthly basis with a progress report that clearly reflects progress, timeliness, and budget. The consultant will attend any project-related meetings as directed by the MDOT Project Manager.
- d. The consultant will maintain a project record, which includes a history of significant events (changes, comments, etc.) which influenced the development of the research report and receipt of information.
- e. The consultant shall notify the MDOT Project Manager whenever discoveries or new information has the potential to require changes in the scope, limits, quantities, or costs of the project.

5. Project Schedule and Staff Allocation

Provide a detailed project plan that shows the milestones and deliverables. Include the number of hours allocated for each staff person for each task for the duration of the contract.

6. Authorized Negotiators

Include the names and telephone numbers of your organization's personnel authorized to negotiate the proposed contract with MDOT. In the event that this proposal, and the subsequent negotiations, lead to a contract, you will be asked to provide a written verification that the person signing the contract is authorized to do so. If this will require a meeting of the Board of Directors or the Partners of your firm, you should begin arrangements so that the contract will not be delayed.

7. Subconsultants

All subconsultants must be identified and are subject to approval by MDOT. Qualifications and background information is required as specified in the "Key Personnel" section of this RFP.

The contract for this project will contain a provision requiring prior written approval to sublet any of the services. If the amount to be sublet is \$25,000 or more, the proposed subcontract must be submitted to MDOT for review and approval prior to execution.

B. Price Proposal

Instructions and format for the price proposal are attached. The price proposal must be submitted apart from the technical proposal in a sealed envelope clearly marked, "Price Proposal" with the consultant's name identified on the front of the envelope. The price

proposal will only be opened for the highest scoring technical proposal. The other unopened price proposals will be returned to the respective consultant.

***Please note, if you are selected and to prevent contract delays, your current financial information, including labor rates, overhead computations, and financial statements if overhead rate is not audited, must be on file with MDOT's Office of Commission Audits. This information must be on file for the prime consultant and all subconsultants.***

## V. PROPOSAL EVALUATION AND AWARD CRITERIA

All proposals received by the deadline shall be subject to an evaluation by the Project Manager, assisted by representatives of MDOT and others as deemed appropriate for the purpose of selecting the consultant with whom a contract will be executed. Proposals must be complete and responsive to all sections of the RFP. Proposals which do not fulfill all program requirements or omit any of the proposal contents as described in the RFP may be rejected.

MDOT reserves the right to award by item, part or portion of an item, group of items or total proposal, and to reject any and all proposals in whole or in part if the best interest of MDOT will be served.

The proposals will be evaluated based on a two-step process. The first step will involve an evaluation of each consultant's technical proposal, using the selection criteria below. The top ranked consultants may be asked to make an oral presentation as a part of this step. The second step will involve reviewing the price proposal for the consultant with the highest technical score from the first step. If MDOT determines that the price proposal of the consultant with the highest technical score is unreasonable, negotiations will commence. If an agreement cannot be reached, then the price proposal for the next highest technical score will be reviewed. This evaluation process will continue until a recommendation of award can be made in the best interest of MDOT.

The criteria and the percentage of their importance in making the selection are as follows:

A. **METHOD OF APPROACH: 15 Percent.**

This refers to the technical soundness of the consultant's stated approach to the project, the comprehensiveness of the proposed approach, and the techniques to be used.

B. **UNDERSTANDING THE PURPOSE: 15 Percent.**

A determination will be made of the consultant's understanding of the project purpose and goals as presented in the RFP. Evaluation will be based on the data presented in the consultant proposal, and the approach and allocation of time on specific tasks. Consultants should feel free to suggest other requirements and problems that may have been overlooked.

C. **CAPABILITY AND QUALIFICATIONS: 30 Percent.**

We will evaluate the ability of a prospective consultant to meet the terms of the RFP relative to having a consulting team with the qualifications needed to successfully complete the project. Qualifications of professional personnel assigned to the project, as specified in the proposal, including subconsultants, will be measured by both education and experience, with particular reference to experience on projects similar to that described in the scope of work. The consultant's professional and project staff who work on the project must be the same staff identified in the proposal. Subconsultants must be approved by MDOT.

- D. **ORIGINALITY OR INNOVATIVENESS OF PROPOSALS: 20 Percent.**  
This RFP generally outlines the work activities and products expected by MDOT. A factor in the selection of a firm, in addition to terms in A through C above, is any innovative approach that goes beyond the suggested scope of work. It must be shown how this will be accomplished within the time limits.
- E. **COOPERATIVE WORK EXPERIENCE: 10 Percent.**  
This covers the prospective consultant's experience working as a cooperative team with other consultants and public agencies. Qualifications of professionals assigned will be measured by experience on past projects within a cooperative team environment.
- F. **SCHEDULE: 10 Percent.**  
We will evaluate the clarity and adequacy of the detailed project plan and the ability of the consultant to appropriately allocate staff to the identified tasks.

## PRICE PROPOSAL INSTRUCTIONS

**Please submit the Price Proposal in a separate envelope clearly marked “PRICE PROPOSAL”. The consultant’s name should be identified on the front of the envelope.**

The Price Proposal shall be divided into two parts, as follows:

1. Derivation of Cost - Prime consultant
2. Derivation of Cost - Sub-consultant(s)

### **DERIVATION OF COST - PRIME CONSULTANT:**

Attached is a sample layout for the prime consultant's proposed costs. These costs are broken out into direct labor, overhead, direct costs, fixed fee, and concluding with a total estimated cost.

Direct Labor - Indicate each labor classification, the estimated hours for that classification, the related hourly rate for that classification, and the dollar total for that classification. At the bottom of the Direct Labor portion of the sheet, indicate the total hours and dollars for direct labor.

Overhead - Indicate the overhead rate being applied against direct labor. At the right, indicate the total overhead in dollars that results from the multiplication of the rate times the direct labor cost shown on this page.

Direct Expenses - List the direct expenses with a brief description of the expense and the actual cost of the purchase of that item. Indicate the total of these direct expenses at the bottom right of this portion of the sheet.

Fixed Fee - Indicate the fixed fee percentage for this project. This fee is to be applied against direct labor and overhead only, not against direct expenses. At the right, indicate the total of this calculation.

Subtotal Prime consultant - At the bottom of the page, indicate the sum of the direct labor, overhead, direct expenses and fixed fee as calculated on this page for the Prime consultant.

Subconsultant Total(s) - List the total estimated costs for each subconsultant, if any. Each subconsultant must also have a separate page itemizing these costs.

Total Estimated Costs - Indicate the sum of the total estimated costs for the prime consultant and all subconsultants.

### **DERIVATION OF COST - SUB-CONSULTANT(S):**

Use the attached sample layout for the subconsultant(s) proposed costs. A separate sheet for derivation of costs must be submitted for each subconsultant in the same manner as described above for the prime consultant.

### **FEDERAL IDENTIFICATION NUMBER:**

Provide the Federal I.D. Number of the Prime consultant and the Subconsultant(s).

## DERIVATION OF COST PROPOSAL

### PRIME CONSULTANT NAME

Federal ID #00-000000

### ESTIMATED DIRECT LABOR

<u>Classification</u>	<u>Estimated</u> <u>Person-hours</u>	x	<u>Hourly</u> <u>Rate</u>	=	<u>Labor</u> <u>Costs</u>
ABC Position	0,000		\$00.00		\$00,000.00
DEF Position	0,000		\$00.00		\$00,000.00
Total Estimated Hours			<u>00,000</u>	Total Estimated Labor	<u>\$ 000,000.00</u>

### ESTIMATED OVERHEAD

\$000,000.00 x 000.00% = Total Overhead \$ 000,000.00

(Total Estimated Labor)

### ESTIMATED DIRECT EXPENSES

(Listed by Item at Estimated Actual Cost to you - NO MARKUP)

Expense #1	\$ 00,000
Expense #2	\$ 0,000
Expense #3	\$ 000
Total Direct Expenses	<u>\$ 00,000</u>

### FIXED FEE

\$0,000,000.00 x 00% = Total Fixed Fee \$ 000,000  
(Total Estimated Labor + Overhead)

**SUBTOTAL - PRIME CONSULTANT** \$00,000,000

(Sum Totals: Labor, Overhead, Direct Expenses, Fixed Fee)

Total ABC Subconsultant	\$ <u>000,000</u>
Total DEF Subconsultant	\$ <u>000,000</u>

**TOTAL ESTIMATED COSTS** \$00,000,000.00

(Sum Totals: Prime & Subs)

**DERIVATION OF COST PROPOSAL**  
**SUB-CONSULTANT NAME**

(Submit a separate page for each Subconsultant.)

Federal ID #00-000000

**ESTIMATED DIRECT LABOR**

<u>Classification</u>	<u>Estimated Person-hours</u>	<u>Hourly Rate</u>	=	<u>Labor Costs</u>
ABC Position	0,000	\$00.00		\$00,000.00
DEF Position	0,000	\$00.00		\$00,000.00
Total Estimated Hours <u>00,000</u>			Total Estimated Labor	<u>\$ 000,000.00</u>

**ESTIMATED OVERHEAD**

\$000,000.00 x 000.00% = Total Overhead \$ 000,000.00

(Total Estimated Labor)

**ESTIMATED DIRECT EXPENSES**

(Listed by Item at Estimated Actual Cost to you - NO MARKUP)

Expense #1	\$ 00,000
Expense #2	\$ 0,000
Expense #3	\$ 000

Total Direct Expenses \$ 00,000

**FIXED FEE**

\$0,000,000.00 x 00% = Total Fixed Fee \$ 000,000  
(Total Estimated Labor + Overhead)

**TOTAL ESTIMATED COSTS**

\$00,000,000

(Sum Totals: Labor, Overhead, Direct Expenses, Fixed Fee)



**APPENDIX E**  
**CHECKLIST TO EVALUATE PROPOSALS FOR ACCESS MANAGEMENT STUDIES**





## PROPOSAL EVALUATION CHECKLIST

This checklist serves as a tool to use in proposal review and comparison when selecting a consultant to conduct a study and develop a plan and ordinance. It covers most of the main points from the recommended boilerplate RFP. Users should recognize that there are some issues that will vary among different studies and RFPs; the checklist should be modified as necessary in these cases. The checklist is shown as in Table E-1 to demonstrate how the checklist items could be used for comparison of several proposals. The checklist in the form of Table E-1 provides the evaluator an “at-a-glance” way to identify how different proposals compare to one another. Presumably MDOT staff in Lansing or at the regions would desire to add appropriate weights to these items and the items or process traditionally used in proposal review.

**Table E-1. Proposal Evaluation Checklist.**

Description Information	Proposal 1	Proposal 2	Proposal 3
Corridor information <sup>1</sup>			
Contractor contact information			
Contractor project manager contact information			

**Table E-1. Proposal Evaluation Checklist (Continued).**

<i>Proposal Elements</i>	<i>Yes = Proposal contains applicable and sufficient information</i>			<i>Comments</i>
	<b>Proposal 1</b>	<b>Proposal 2</b>	<b>Proposal 3</b>	
Appropriate number of copies	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Shows ability/intent to incorporate principles, tools, and techniques of good access management (Work Statement)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Strategy to implement access management through a combination of traffic engineering measures, local land use regulations, and close coordination among transportation and land use decision makers (Work Statement)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Steering Committee to provide input and oversight throughout study process (Agency Coordination)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Partnering Session—Workshop 1 (Agency Coord.)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Plan to obtain necessary graphics (Inventory)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Workshop 2 (Inventory)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Plan to secure necessary ordinances/plans/related documents and compare (Assemble Conceptual Plan)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Steps to develop conceptual plan on aerial photographs (Assemble Conceptual Plan) and present them by roadway section with similar characteristics and/or by local jurisdiction	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Conceptual Plan Workshop – Workshop 3 (Assemble Conceptual Plan)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Use of comments from Workshop 3 to refine initial concepts and develop corridor overlay land use plan (Conceptual Plan Refinement)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Public meetings (Assemble Conceptual Plan)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Workshop 4 (Assemble Conceptual Plan)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Informal review meetings (Assemble Conceptual Plan)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Steps to develop final overlay plan (Final Corridor Plan and Zoning Ordinance Amendment)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Review plan and ordinance with all interested parties – Workshop 5 (Final Corridor Plan and Zoning Ordinance Amendment)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Description of corridor plan and ordinance adoption process <sup>2</sup>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Deliverables <sup>3</sup>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	

Note: Parenthetical descriptions under the “Proposal Elements” column refer to specific sections of the RFP where the item occurs.

<sup>1</sup>Includes roadway, study limits, municipalities involved, study length, MDOT Region, and MDOT TSC.

<sup>2</sup>Inclusion depends upon prior discussions with MDOT and municipalities to determine which, if any, prefer to have the consultant help take the plan and ordinance to the adoption phase.

<sup>3</sup>Includes an overlay plan with future land use maps and corresponding zoning ordinance maps, an access management plan presented on aerial photography, a zoning ordinance with provisions/coordination with existing ordinances, and an outline/diagram of the access review and coordination process for the site plan, with all materials provided in hardcopy and CD format.