

Chapter One INTRODUCTION

BACKGROUND

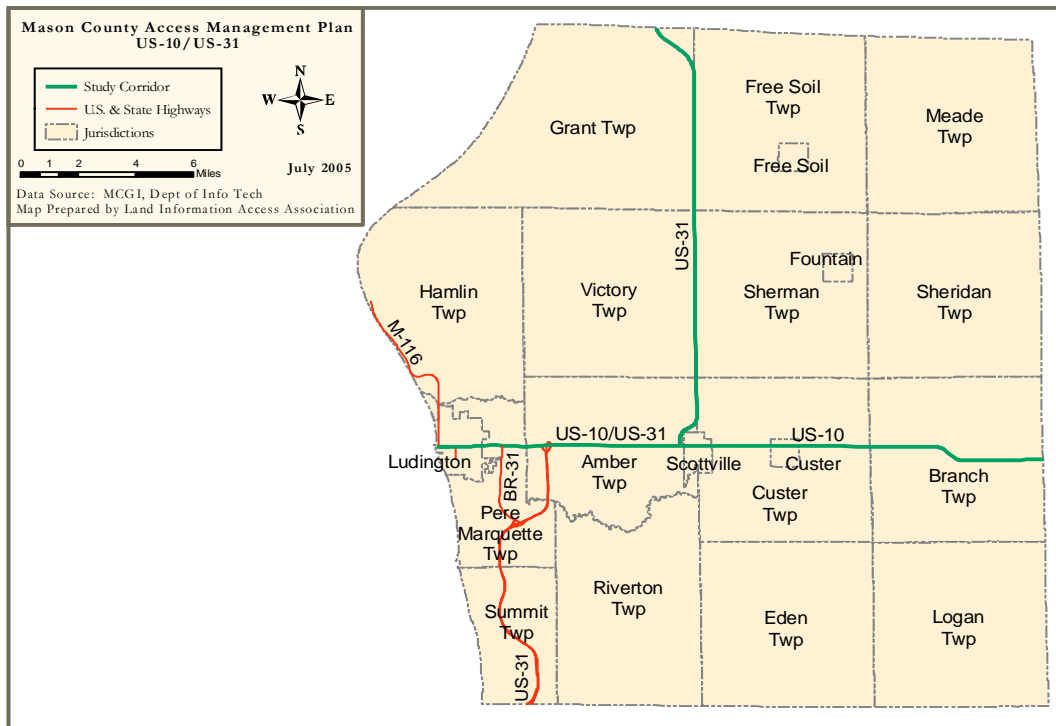
Introduction

This Chapter provides an overview of the US-10/US-31 corridor and its importance to the region, state and nation. It defines basic terms and explains the purpose and benefits of access management plans. It briefly explains the relationship of this Plan to local master/comprehensive plans and zoning ordinances and the process used to create this Plan.

Importance of Preserving the US-10/US-31 Corridor

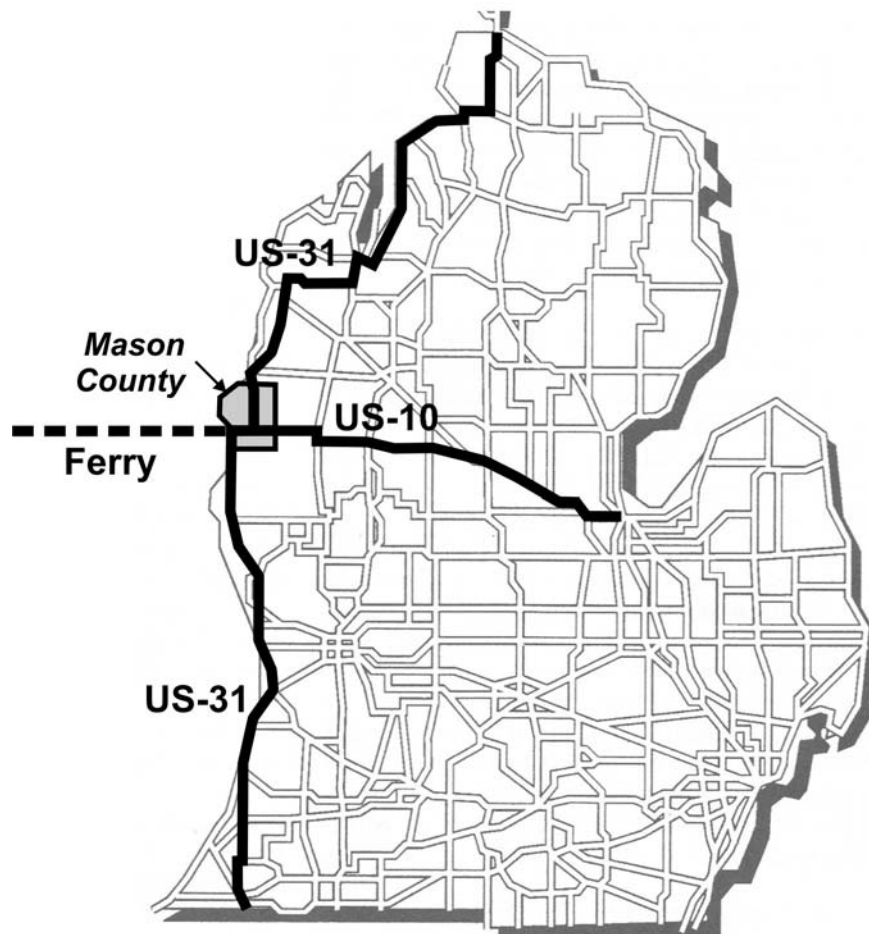
The non-freeway portion of US-10/US-31 included in this study is the highway lifeline that runs through two cities, one village and four townships and splits four other townships in Mason County (see Figure 1-1). It connects the communities, and their residents to jobs, shopping, education, entertainment and major recreation opportunities. It also helps to bind and bond them to historic and contemporary features of the area such as agriculture, forest products, and tourism activities.

Figure 1-1
Location of Jurisdictions Along US-10/US-31 Study Area



But the US-10/US-31 corridors are much more than local lifelines. US-10 serves as a major east/west route across the Lower Peninsula and has the added distinction of connecting to the S.S. Badger car ferry which links Ludington to Manitowoc, Wisconsin. See Photo 1-1. Tourists, cars, and trucks routinely make this 50 mile trip six months of the year. US-10 begins at Bay City and terminates at Fargo, North Dakota. US-31 is a major north/south route that goes up to the Mackinac Bridge and south to Indianapolis. See Figure 1-2.

Figure 1-2
US-10/US-31 Within the Lower Peninsula



Since the two principal purposes of US-10/US-31 are: 1) to provide a highway on which vehicles can safely move at design speeds (as long as weather permits), and 2) to link communities along the route, if measures are not vigilantly taken to preserve these functions, then one or both of these highway functions will be lost.

It is natural for local governments and land owners along a state trunkline to view the functions of the highway more narrowly. The opportunity for new economic development and the associated jobs and tax base is often great when highway improvements are made.

Photo 1-1

SS Badger Provides Ferry Service from Ludington to Manitowoc, Wisconsin



Photo by Robert Garrett

But if new economic development takes place in a manner which undermines the integrity of the principal highway functions, then the investment the motorists, trucking firms and other users of the highway have made in the highway can be compromised. If capacity or traffic movement is severely compromised by congestion, or by local traffic “fixes” that undermine the through traffic function of the highway, then at some point the road may have to be moved. Bypasses usually have predictable negative economic impacts on communities. These include:

- Businesses along the old route may suffer as traffic moves to the new bypass.
- The number of jobs and property tax values along the old route may fall.
- Bypasses inevitably move traffic further away from the established community center and all the existing links to the center become challenged as traffic shifts.
- Bypasses are also expensive to plan for, acquire right-of-way for, and build, plus the old route will still need to be maintained.

What is needed is a mechanism to balance national, state, regional, and local interests in a manner which protects the function of the highway as well as the existing and future investments in it, along with allowing reasonable economic development opportunities. This Plan sets forth a series of proposed access management measures along US-10/US-31 and a strategy for implementation that seeks to define an achievable balance among what otherwise could be competing state and local objectives. All of these measures are designed to preserve and enhance the existing location of the highway since no bypasses are proposed.

DEFINITIONS & BENEFITS

Definition of Access Management

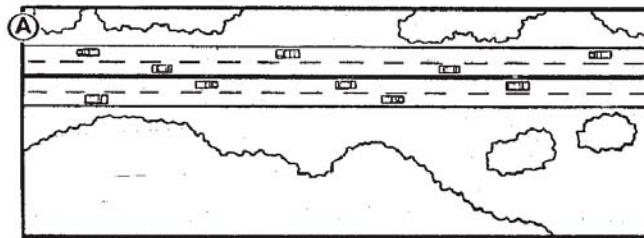
The Michigan Department of Transportation publication entitled **Reducing Traffic Congestion and Improving Traffic Safety in Michigan Communities: The Access Management Guidebook** defines access management as:

“Access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing road capacity and preserve investment in roads by managing the location, design and type of access to property.”

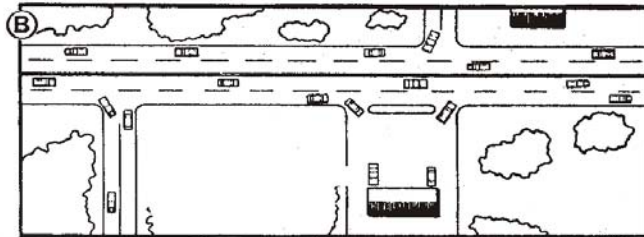
New conflict points, such as driveways and intersections, can rapidly increase congestion and the crash rate along a corridor. Figure 1-3 illustrates that how land is used adjacent to roadways has a tremendous impact on roadway function and operations. If unrestricted driveways are permitted, unnecessary traffic crashes and congestion will result, especially if the land is developed for commercial purposes. Traffic safety on roadways with inadequate spacing of driveways, poorly designed driveways, or improper sight distances for driveways can be improved through the use of appropriate access management techniques.

Figure 1-3

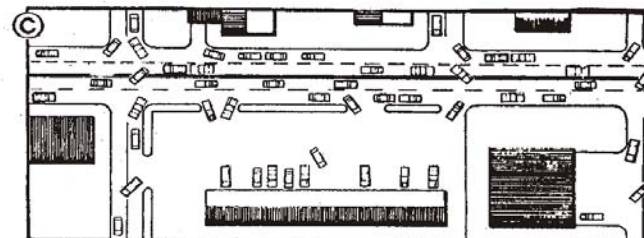
Cumulative Impact of Increased Roadside Development . . .



What happens when unrestricted development takes place . . .



over time . . .



Source: Center for Transportation Research and Education, Iowa State University, **Iowa Access Management Guidebook**, October 2000, p. 19.

Roadways with congestion due to too many driveways or driveways too close together, can also be improved through various access management techniques. Remedial access management efforts can be accomplished through alternative driveway design such as consolidation, closure, or sharing of driveways or access roads, or parking lot cross access. Access management techniques are applied during site plan review for a parcel as it goes through the redevelopment review process. However, the best time to institute access management is when there are few land uses frequently accessing the roadway, or when new roadway improvements are being made.

Access Management

This Plan is an access management plan. An access management plan is concerned with improving traffic safety and efficiency of traffic movement with a focus on access to abutting properties. Access management plans usually involve multiple jurisdictions, as there is a recognition that planning and regulating land use in one part of the corridor, needs to be coordinated with other jurisdictions along the same corridor, or the benefits will be marginalized.

Benefits of an Access Management Plan

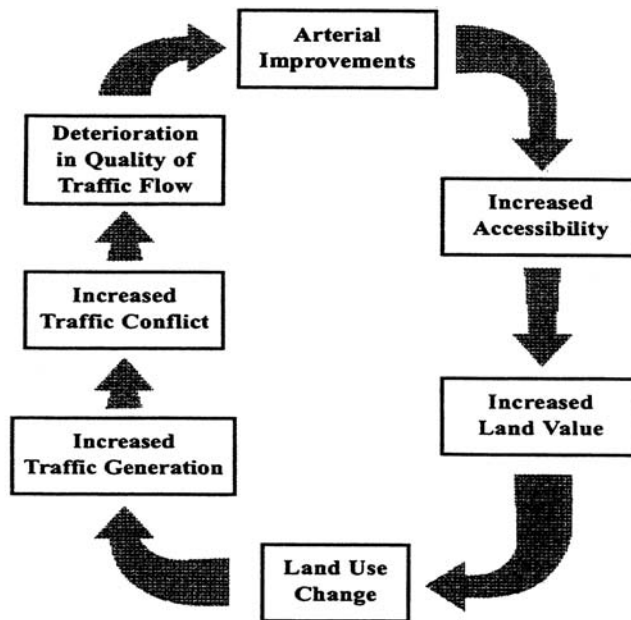
An access management plan identifies driveway closures, consolidations, parking lot cross access options, and alternative means of access such as frontage roads and rear service roads. Implementation of the recommendations in this Plan will improve traffic safety and efficiency of traffic flow. These benefits are most directly realized by motorists. There will be fewer traffic crashes than otherwise would have occurred and congestion will be less severe.

Property owners along the corridor also benefit with safer access. Businesses that consolidate driveways have additional space for parking or landscaping. Customers appreciate businesses with safe, easy and attractive entrances. Properly spaced and well-designed driveways, as well as connected parking lots, help with customer satisfaction.

When an access management plan is prepared on an inter-jurisdictional basis, as this one was, it also enhances the likelihood of coordinated land use decisions that both protect and enhance the new investments to be made in the corridor. This is especially true with regards to decisions concerning future access to the highway.

For the eastern portion of US-10 and the northern portion of US-31 in Mason County, there is little existing development, so access management is focused on preventive actions. Preventive access management actions are far easier and less expensive to implement than remedial actions. They preserve the function of the corridor and they provide added safety for motorists. If a community is able to put access management plans, review procedures and regulations in place before a corridor develops, then there is a good chance that when development does occur, the roadway function will be preserved, instead of a typical cycle of improve and expand (see Figure 1-4). In this Figure, increased development deteriorates the road capacity and safety due to numerous driveways and creates a seemingly endless cycle of road modifications linked to the new roadway conflict points. This is very costly in time and money for everyone.

Figure 1-4
Traffic Improve and Expand Cycle



The Transportation Land Use Cycle

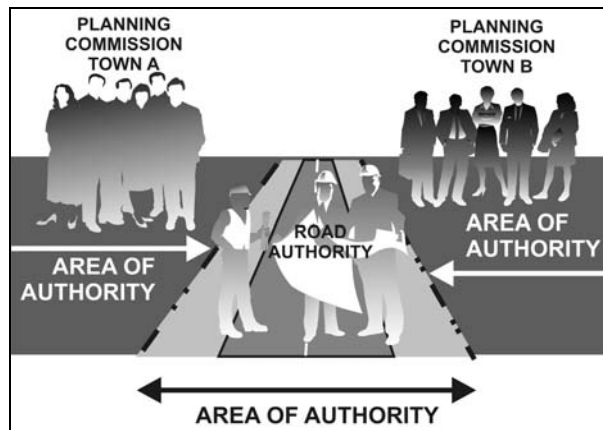
Source: National Highway Institute, Course 15255, FHWA, 1998, p. 1-18.

For areas that are already developed, the focus is on remedial access management techniques. Remedial access management focuses on reducing congestion, improving safety and improving aesthetic conditions on arterials that have developed into the familiar strip pattern with numerous separate driveways. Closing or consolidating driveways, sharing driveways, improving on-site circulation, linking adjoining parking lots, and constructing parallel access roads are common access management techniques applied in existing developed areas. Remedial recommendations are largely targeted at the portions of the corridor in the City of Ludington, Pere Marquette Charter Township, parts of Amber Township and the City of Scottville.

If all jurisdictions along a corridor have the same basic access management regulations that are consistent with MDOT's driveway permit regulations, then the chances of retaining existing highway function go up dramatically. That means the large recent investment in improvements to US-10/US-31 will last a lot longer than without coordinated access management.

Coordinated regulations are especially important because local governments have all the land use authority, and control key aspects of access decisions, such as parking lot design, location, connections, parallel access and rear service roads, and other features of access that are outside the right-of-way and hence outside the scope of MDOT to regulate. This is especially significant where a roadway has one community on one side of a road and another on the other side. See Figure 1-5. This is the case in Grant Township which has independent zoning, and Free Soil Township which is under county zoning.

Figure 1-5
Land Use & Transportation Agency Authority



Benefits of Access Management

The **MDOT Access Management Guidebook** identifies the following five benefits of access management.

- *Access management improves traffic safety and can prevent vehicular crashes.*
- *Access management results in shorter travel times and reduces motorist costs.*
- *Access management extends the function and capacity of roadways.*
- *Access management improves access to property while enhancing the value of private land development.*
- *Access management results in nicer communities.*

All these benefits are expected from implementation of this Plan.

RELATIONSHIP TO LOCAL MASTER PLANS AND ZONING ORDINANCES

Obviously, the relationship between US-10/US-31 and abutting land is more important than simply being adjacent. If abutting land develops in a way which undermines the integrity of the public investment in the highway, then future highway improvements will be necessary, that otherwise would not have been (see Figures 1-3 and 1-5). Since local governments have authority through the local planning and zoning statutes to plan and zone for future land use, their decisions can create or prevent future highway problems. It is important therefore, that local governments incorporate key considerations from this Plan into the local plan (also known as a master plan), or adopt this plan by reference in the local comprehensive plan, and incorporate access management standards in the zoning ordinance.

Local master plans set forth, in both text and on maps, land use and public infrastructure improvements for the next twenty years. Statutorily, local master plans are required in order to provide a strong legal basis for local zoning. In December 2001, the Michigan Legislature enacted changes to the planning enabling acts to beef up the relationship between the plan and local zoning, to require communities to review, and as necessary, to update local master plans every five years, and to coordinate plans with neighboring

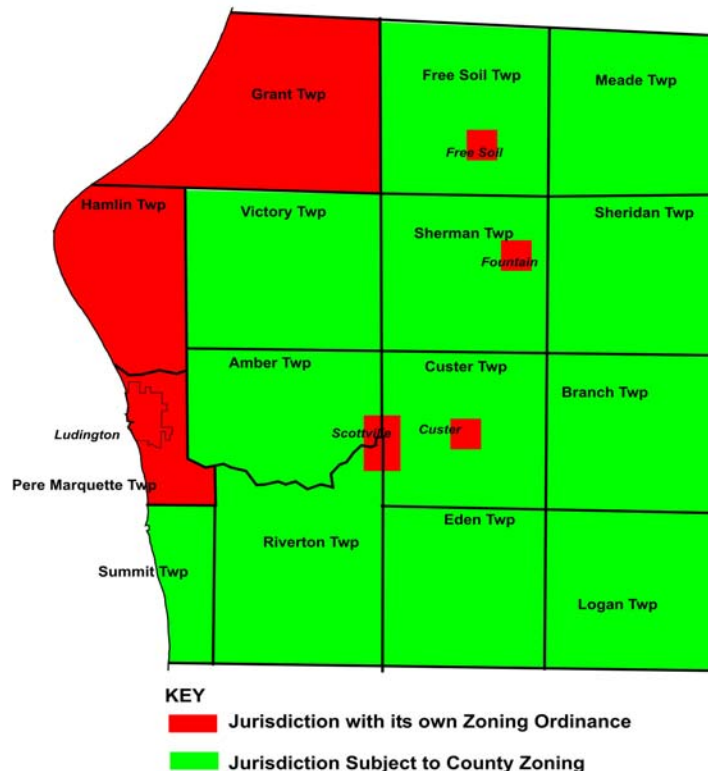
jurisdictions through new mandatory review and comment procedures. When a community has a current future land use map and accompanying text embodied in a local master plan, it is much easier for road authorities to plan future road improvements that are compatible with adopted local master plans.

A local zoning ordinance classifies land for various uses by means of zones or districts which establish permitted uses, and dimensional standards for lots and structures. The zoning map should reflect existing use of land, except where the community has committed to a more intensive use of land due to investment in (usually sewer and water) infrastructure. Land is often rezoned into a different zoning class when consistent with the local master plan and when the necessary infrastructure is in place to accommodate the proposed new use.

In order for local comprehensive plans and zoning ordinances to achieve the goals and objectives of this Plan, it will be important for those documents (in addition to the usual elements described above), to be consistent with the access management recommendations in this Plan. It will also be important for local governments along the corridor to adopt nearly identical access management regulations and to coordinate land use and zoning decisions along the corridor. Figure 1-6 shows which jurisdictions have their own zoning and which are subject to county zoning in Mason County. Appendix A includes a sample set of access management regulations that should be added to the zoning ordinance of each jurisdiction along US-10 or US-31.

Figure 1-6

**Mason County Communities
With their own Zoning or Subject to County Zoning**



The Michigan Department of Transportation and the cities and townships along the portion of US-10/US-31 included in this study have worked together for about nine months to complete this plan and associated regulations. Other project partners included the Mason County Road Commission and the Mason County Planning Commission. Representatives of each jurisdiction have been instrumental in identifying access management issues and potential solutions.

OVERVIEW OF CHAPTERS IN THIS PLAN

This Plan has five chapters and an Appendix. Following is a brief summary of the remaining chapters:

- Chapter Two defines the most basic goals and objectives of this Plan.
- Chapter Three presents a detailed description of the corridor, and identifies the key problems and opportunities along the corridor.
- Chapter Four presents a detailed description of both major and minor traffic, safety and access management recommendations along the corridor. Associated bus, bicycle, pedestrian and snowmobile issues are also discussed.
- Chapter Five presents the key steps that need to be taken to implement this Plan.
- Appendix A: Sample access management ordinance language to be added to the local zoning ordinance of jurisdictions with zoning along US-10/US-31.