

WIS 241 (South 27th Street) Access Management Plan

County Line Road to County ZZ (College Avenue),
Milwaukee County, Wisconsin

November 29, 2005

Adopted: _____

Prepared for:

Wisconsin Department of Transportation - Southeast Region
Waukesha, WI 53187

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Table of Contents

	Page
1.0 Introduction	1
1.1 Project Overview & History	2
1.2 Project Team.....	3
1.3 Project Stakeholders	4
1.3.1 Wisconsin Department of Transportation (WIS 241).....	4
1.3.2 Milwaukee County (County BB & County ZZ)	4
1.3.3 City of Oak Creek (Land Use & Local Street System).....	4
1.3.4 City of Franklin (Land Use & Local Street System)	5
1.4 Project Input Process	6
2.0 Purpose and Need	7
2.1 Corridor Growth and Development Pressures	7
2.2 Increasing Traffic, Safety, and Operational Issues	8
2.3 Intergovernmental Coordination.....	9
2.4 Common Long-term Vision for the Corridor	10
3.0 Access Management Techniques & Strategies	11
3.1 Strategies & Recommendations	11
3.1.1 Public and Private Access to WIS 241 (South 27 th Street).....	11
3.1.1.1 Consolidating, relocating, or removing existing private driveways	12
3.1.1.2 T-type Intersections	14
3.1.2 Local Circulation.....	15
3.1.3 Medians.....	18
3.1.4 Signalized Intersections and Traffic Progression	19
3.2 Differences Between this Plan & South 27 th Street Corridor Plan.....	20
4.0 Plan Adoption and Certification	22
4.1 CERTIFICATES OF ADOPTION	24

List of Tables

Table 1 – General Access Criteria

Table of Contents (Continued)

List of Figures

- Figure 1 – Plan Location
- Figure 2 – Relationship Between Access Points and Crash Rates
- Figure 3 – Minimize Direct Access
- Figure 4 – Link Adjacent Land Uses
- Figure 5 – Proper Driveway Location
- Figure 6 – Align Roads and Driveways
- Figure 7 – Roadway Functionality
- Figure 8 – Functional Roadway Classification
- Figure 9 – Access Management
- Figure 10 – Transportation System
- Figure 11 – Right-in/Right-out/Left-in Median Opening

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Prepared for Wisconsin Department of Transportation - Southeast Region

1.0 Introduction

Access management techniques have been increasingly used across Wisconsin by both state and local units of government in an effort to preserve the safe and efficient operations of the highway system. The relationship between local land use decisions and the transportation system is widely recognized. The WIS 241 (South 27th Street) corridor is located in a rapidly changing area of Milwaukee County. Land use along the corridor is currently intensifying from agriculture and low-density uses to higher density commercial and business uses.

The WIS 241 (South 27th Street) Access Management Plan is sponsored by WisDOT as a collaborative planning effort to create a common long-term vision for the corridor. The purpose of the plan is to provide WisDOT, local units of government, and developers with a long-range access management plan for the corridor. The plan will provide WisDOT with a comprehensive and collaborative tool for evaluation of access requests along WIS 241 (South 27th Street). The plan would also provide a guide to local officials to determine the appropriate type, scale, and location of development along the corridor. The objective of the plan is to preserve the safe and efficient operations and primary mobility function of WIS 241 (South 27th Street) and balance this function with access needs along the corridor.

The plan would be adopted locally and is intended for use as an advisory tool to guide land use, transportation, and access decisions. A common long-term vision would help ensure that the WIS 241 (South 27th Street) corridor remains a safe and efficient corridor for regional mobility long into the future.

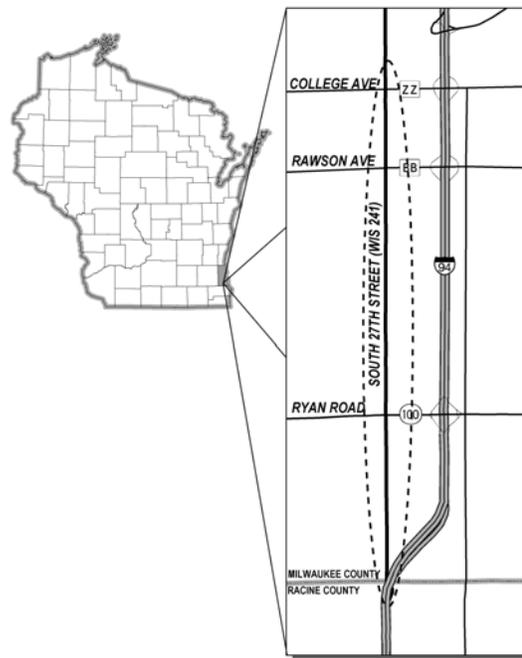
WisDOT has initiated this plan because of the recent transportation and land use trends, anticipated pressures for future development, and the projected traffic volumes within this segment of WIS 241 (South 27th Street). The plan provides recommendations for addressing long-term access needs and traffic

progression along the corridor that will preserve the ability of the highway to meet the demands of the anticipated traffic for as long as possible.

1.1 Project Overview & History

The focus of the access management plan is the WIS 241 (South 27th Street) corridor from the Milwaukee/Racine County Line near County Line Road north to the WIS 241 (South 27th Street)/College Avenue (County ZZ) intersection, a distance of approximately six miles (see Figure 1, Plan Location). WIS 241 (South 27th Street) follows the border between the city of Franklin, located west and the city of Oak Creek to the east. College Avenue (County ZZ) lies on the border of the city of Greenfield and the city of Milwaukee just to the north of the plan area limits. Racine County lies to the south of the plan corridor.

Figure 1 – Plan Location



The WIS 241 (South 27th Street) Access Management Plan area of influence includes elements located within ½ mile on either side of the corridor for a total corridor width of one mile. The elements considered include local land use plans, zoning and subdivision ordinances, future development plans, existing access, and the local road system.

The text of this report includes the plan process, criteria, and general information pertaining to access management strategies and recommendations. The plan also includes two maps of the study area. These maps depict the detailed strategies and recommendations for the WIS 241 (South 27th Street) corridor. The maps and text together represent the WIS 241 (South 27th Street) Access Management Plan in its entirety.

The original northbound lanes along South 27th Street were built in 1932, with the southbound lanes constructed in 1934. The lanes were constructed at 10 feet. This segment of South 27th Street was formerly part of US 41, until US 41 was changed to follow I-94 in 1998. South 27th Street was redesignated as WIS 241 at that time.

WIS 241 (South 27th Street) has experienced incremental changes since it was originally constructed. This has been the result of growth and development in the cities of Franklin and Oak Creek, its location bordering the city of Milwaukee and its suburbs, and its proximity to the I-94 corridor. Growth and development has played a role in increased traffic and congestion on the corridor as well. Property owners adjacent to, and near the corridor, continue to benefit from the development opportunities that the existing four-lane facility provides to the area.

In recent years, development pressures along the corridor have increased. The corridor is now experiencing a rapid transition from rural and suburban land uses such as motels, taverns, and agricultural activities to urban residential and commercial/industrial activities including large volume discount retailers, warehouse and distribution industry, medium and high density residential subdivisions, strip retail, and other transportation dependent commercial enterprises.

Currently, new access or changes in type of access are considered on a case by case basis, and follow a permitting process. Under the permitting process construction of new driveways and/or a change in the status of driveways along WIS 241 (South 27th Street) requires WisDOT approval. Adoption of this plan would not change the current WisDOT process. However, the plan would be used to guide access decisions made by WisDOT.

This plan included the development of a traffic model using Synchro/SIM Traffic modeling software to determine the most appropriate locations for future traffic signals based on anticipated traffic volumes. The analysis from the model helps to identify important locations along the corridor where additional signalized intersections would enhance traffic progression along the corridor if/when they become necessary. Land use decisions should consider the recommended future signalized intersections and their proposed locations.

1.2 Project Team

Short Elliott Hendrickson Inc. (SEH[®]) was contracted by the Wisconsin Department of Transportation (WisDOT), Southeast Region to conduct the WIS 241 (South 27th Street) Access Management Plan in February 2004. The plan was an 18-month process consisting of comprehensive data collection, public and local official involvement, and application of access management principles. The project team concluded its work on the plan with the culmination of this document released in July 2005.

The core project team and contributors to this report consisted of the following individuals:

- Vida Shaffer (WisDOT)

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- Robert Anderson (WisDOT)
 - City of Franklin
 - City of Oak Creek
 - Jim Hanson, PE (SEH)
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1.3 Project Stakeholders

The WIS 241 (South 27th Street) plan area falls under the jurisdiction of WisDOT, Milwaukee County, and the cities of Franklin and Oak Creek. The Southeast Wisconsin Regional Plan Commission (SEWRPC) provides transportation and land use planning services within the plan area as well. The plan development and adoption process reflects the varying roles of each of these units of government, and the need for a collaborative approach to achieve its implementation. Plan adoption is intended to provide longevity to the plan and does not change its advisory nature. If adopted, the plan would not change the existing political jurisdiction pertaining to transportation and land use decisions within the plan limits.

1.3.1 Wisconsin Department of Transportation (WIS 241)

Because South 27th Street is a state highway, access and other transportation decisions directly related to its operation fall under the authority of WisDOT. WisDOT coordinates with local units of government in addressing access issues along the corridor.

1.3.2 Milwaukee County (County BB & County ZZ)

County highways within the plan area fall under the authority of Milwaukee County. County highways intersecting with WIS 241 (South 27th Street) include County BB (Rawson Avenue) and County ZZ (College Avenue). In addition to their participation in this project, Milwaukee County and WisDOT coordinate on a regular basis.

1.3.3 City of Oak Creek (Land Use & Local Street System)

The city of Oak Creek administers land use controls and plans that fall under its jurisdiction. City plans and ordinances reviewed as part of the WIS 241 (South 27th Street) Access Management Plan included:

- 2020 Vision - A Comprehensive Plan for the City of Oak Creek (2002)
- Chapter 17 - Zoning Code
- South 27th Street Corridor Plan (2005)

The city of Oak Creek adopted its comprehensive plan in April 2002 with a planning horizon of 2020. In the planned land uses along the west side of WIS 241 (South 27th Street) are to include commercial, residential, industrial and mixed uses. The primary concentration of commercial activity would be located along Ryan Road between I-94 and WIS 241 (South 27th Street) with concentrations of commercial land uses also occurring at intersections with Puetz Road, Drexel Avenue, and Rawson Avenue. Industrial and mixed use developments would be located in the areas south of Ryan Road. Changes in land use would occur in phases of commercial, industrial, and residential development between 2000 and 2015 according to the plan.

Current zoning along WIS 241 (South 27th Street) exists primarily as a strip of commercial zones from Puetz Road north to College Avenue, with large zones of residential located behind.

1.3.4 City of Franklin (Land Use & Local Street System)

The city of Franklin administers land use controls and plans that fall under its jurisdiction. City plans and ordinances reviewed as part of the WIS 241 (South 27th Street) Access Management Plan included:

- Franklin First - Economic Development Strategic Plan (2000)
- Comprehensive Master Plan - Selected Planning District Maps (1992)
- Unified Development Ordinance
- South 27th Street Corridor Plan (2005)

In 2000 the city of Franklin conducted an Economic Development Strategic Plan, which provides a blueprint for future development in the community. The focus of the plan is the development of non-residential land uses in targeted locations to improve the non-residential tax base of the community. The WIS 241 (South 27th Street)/Rawson Road intersection is the primary trade area with influence over the entire access management plan area.

The economic development plan indicates that it will set out to revise the primarily residential neighborhood planning districts in those areas with significant economic development potential. The goal of the revision is to achieve a land use and development pattern that maximizes the opportunities for economic development.

Six planning districts from the city's Comprehensive Master Plan are located along the WIS 241 (South 27th Street) corridor in the city of Franklin and include:

- County Line Industrial Park Planning District
- Fitzsimmons Planning Area (A portion of the South 27th Street Planning District, and the Oakwood Hills Planning District)
- Hunting Park Neighborhood (A portion of the South 27th Street Planning District)
- Pleasant View Neighborhood (A portion of the South 27th Street Planning District)

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- Southwood Neighborhood (A portion of the South 27th Street Planning District)
 - Xaverian Neighborhood (A portion of the South 27th Street Planning District)

Land uses planned within these districts along WIS 241 (South 27th Street) include limited industrial, business park (suburban setting), residential, neighborhood, community, and general business districts accommodating a wide range of commercial business activities. Residential land uses are planned behind these land uses and further from the WIS 241 (South 27th Street) Corridor.

The city of Franklin has a diverse set of zoning ordinances allowing for a wide range of permitted land use activities within the community. Along WIS 241 (South 27th Street) zoning ordinances closely match the planned land uses from the planning districts. Commercial, industrial, and public/institutional zoning occurs in a strip manner adjacent to the corridor with park, and residential zones located behind. The exception is in areas along WIS 241 (South 27th Street) where residential activities already occur adjacent to the corridor.

1.4 Project Input Process

This plan included an active process for coordination between all plan participants as well as the public. The process included the development of a Technical Advisory Committee (TAC) comprised of representatives from each of the local government units that could be affected by the plan. The role of the committee was to provide technical assistance, act as the plan liaison to the community, and help develop and review the plan.

In addition to the TAC, a number of other meetings were held to gather input from local officials, the local business community, and the general public. These groups provided general input for all phases of the study via the following meetings:

- Technical Advisory Committee Meeting – May 2004
- Local Business Meeting – June 2004
- Public Information Meeting – June 2004
- Technical Advisory Committee Meeting – November 2004
- Public Information Meeting – January 2005
- Local Business Meeting – March 2005
- Technical Advisory Committee Meeting – April 2005
- Local Official Meeting – May 2005
- City of Franklin Plan Commission Meeting – August 2005
- City of Oak Creek Plan Commission Meeting – August 2005

2.0 Purpose and Need

The WIS 241 (South 27th Street) Access Management Plan was undertaken to develop a long-term vision for the corridor that provides a safe and efficient transportation system and balances the increasing access needs with the mobility needs of a state highway. Specifically, the needs include, but are not limited to addressing:

- Corridor growth and development pressures
- Increasing traffic, safety, and operational issues
- Intergovernmental cooperation
- Common long-term vision for the corridor

To address the needs, the access management plan is designed to act as a proactive, advisory, and collaborative tool. To achieve this purpose, the access management plan includes strategies and recommendations to:

- Address the impacts of changing development patterns.
- Develop strategies for managing the existing access.
- Develop strategies to address access issues as land uses change.
- Be a venue for coordination between WisDOT and local units of government.
- Identify a consistent long-term plan for both sides of South 27th Street.

In addition, other important activities associated with the plan include:

- Identify opportunities for local implementation of access management principles and promote local traffic circulation.
- Coordinate with the joint comprehensive planning process currently underway for the corridor.

2.1 Corridor Growth and Development Pressures

The WIS 241 (South 27th Street) corridor continues to experience rapid growth and development pressures on both the city of Franklin and the city of Oak Creek sides of the highway. Development activities occurring along South 27th Street include:

- Redevelopment of existing parcels
- New development of vacant or agricultural parcels

Future development plans for property along the corridor include medical facilities expansion, large and medium-scale mixed use subdivisions, large volume discount retail, a business park including light industrial uses, shopping centers, gas stations, and residential developments. Future development could compete with existing land uses along the corridor for transportation needs such as access to WIS 241 (South 27th Street) and regional mobility.

In addition to the development described above, the corridor is also experiencing an increase in the development and relocation of major service industry employers. The development associated with these industries

consists of campus style, large-scale office development that can house thousands of employees. These facilities typically generate significant peak hour traffic, and can influence neighboring land use and transportation characteristics. The siting of these types of facilities requires careful consideration because the impact to land use and transportation can be significant.

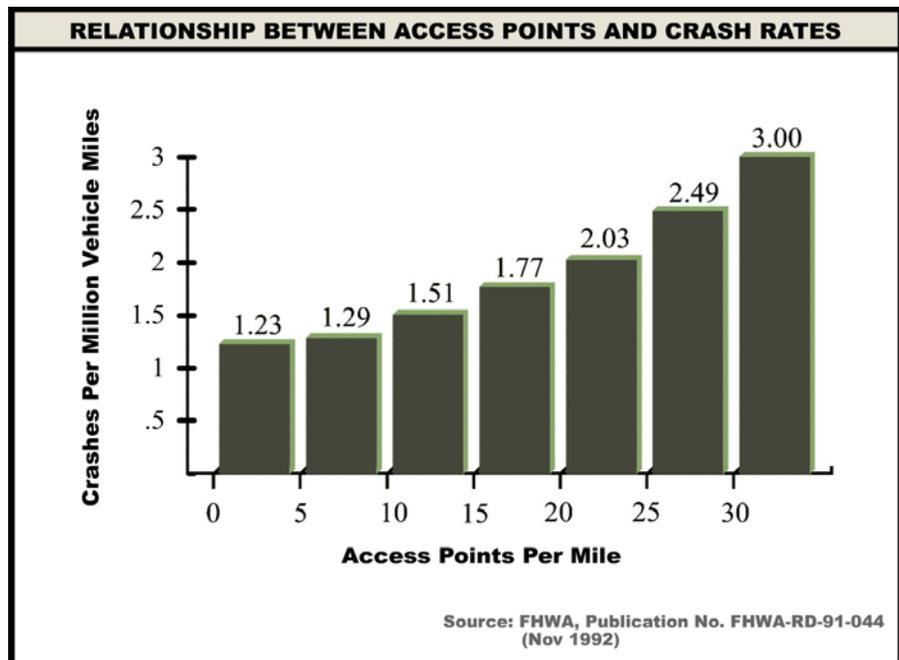
2.2 Increasing Traffic, Safety, and Operational Issues

Between 1990 and 1999, traffic on South 27th Street has increased between 49 and 124 percent. Current traffic volumes range from 7,200 Average Annual Daily Traffic (AADT) on the southern end of the corridor to 32,400 AADT near College Avenue. Traffic volumes are anticipated to increase to between 21,000 and 62,300 AADT by the year 2030 under the present trends in development. This represents an increase of between 190 percent and 290 percent over the 28 year period, or roughly a seven to 10 percent increase per year.

The corridor experienced 166 crashes between 2000 and 2002. Of these crashes, 38 percent resulted in injury. Though the crash rate for the corridor as a whole falls below the statewide average for similar urban highways state wide, the crash severity is a concern for the corridor. The segment with the highest crash rate was between Ryan Road and Puetz Road, even though the segment between College Avenue and Rawson Avenue experienced slightly more crashes. Crash types consisted primarily of angle and rear end collisions, which are typical of urban streets and highways, due to numerous access points and high traffic volumes.

There is a relationship between the number of crashes and the number of access points according to a study conducted by the Federal Highway Administration (see Figure 2, Relationship Between Access Points and Crash Rates). According to the study as the number of access points increase along a highway, the rate of crashes also increase.

Figure 2 – Relationship Between Access Points and Crash Rates



Intersections within the plan area that had the highest crash rate included Ryan Road and Peutz Road. Crash rates are used to compare intersections within the state that have varying traffic volumes. A crash rate of 1.5 crashes per million entering vehicles is cause for further investigation, whereas a crash rate of 2.0 or higher is cause for concern. All of the intersections along the corridor had crash rates well below 1.5 between 2000 and 2002.

Crash severity at intersections along WIS 241 (South 27th Street) is a cause for concern even though crash rates are currently below 2.0. The majority of intersections experienced crash severities between 33 and 67 percent. This indicates that even though the number of crashes may be relatively low, when they do occur, in the majority of instances, they result in injury.

With the exception of the College Avenue intersection; the majority of intersections along the corridor currently operate under their maximum capacity, and are efficiently moving vehicles. However, under 2020 traffic forecasts, many of the signalized intersections between College Avenue and Drexel Avenue are anticipated to exceed their capacity and begin to fail.

Portions of the WIS 241 (South 27th Street) corridor are beginning to experience increases in delay and congestion during the morning and evening peak traffic volumes.

2.3 Intergovernmental Coordination

The WIS 241 (South 27th Street) corridor currently falls under the jurisdiction of WisDOT for transportation and access considerations. Milwaukee County has jurisdiction over county highways that intersect WIS 241 (South 27th Street) including County ZZ (College Avenue) and County BB (Rawson Avenue). In addition to several local streets connecting to WIS 241 (South

27th Street), the city of Franklin, and the city of Oak Creek have jurisdiction over land use decisions along the corridor.

South 27th Street is part of the state highway system, the function of which is to accommodate statewide mobility needs. These facilities also serve the ancillary function of providing local access when no other local roadway system is in place to serve this need. In addition, WIS 241 (South 27th Street) is a designated route for the management of incidents on I-94. Preserving the mobility function of the corridor is critical to the ability to implement an effective action plan should an incident occur on I-94.

Land use decisions are the responsibility of the local community and are achieved through a set of powers granted by the state. The South 27th Street corridor falls under both the city of Franklin and the city of Oak Creek jurisdiction where land use decisions are concerned. Essentially, two sets of ordinances and land use plans independently guide decisions on the east and west sides of the corridor.

Recognizing the importance of a plan that treats the corridor in a unified manner, both cities have undertaken a joint effort to create a plan that guides land use decisions between the two communities. WisDOT is an advisory participant in the process, and the timing of the access management plan was adjusted to better incorporate the guidance of local planning efforts (see Section 4.2, 27th Street Corridor Plan).

2.4 Common Long-term Vision for the Corridor

A function of the access management plan is to provide a central and advisory reference to guide WisDOT, Milwaukee County, the city of Franklin, and the city of Oak Creek in providing a safe and efficient transportation system within the plan area that balances mobility with local access needs. As access decisions such as the location, type, and spacing of public and private driveways are made by the various entities with jurisdiction along the corridor, the plan can be used as an advisory guide to ensure that the decisions made by each participant compliment the decisions made by the other jurisdictions. A collaborative decision making process would assist in land use and transportation activities that compliment each other.

3.0 Access Management Techniques & Strategies

It is anticipated that elements of the plan would be implemented in an incremental approach over time as land uses and access needs change. Existing access to WIS 241 (South 27th Street) would remain unchanged unless safety becomes an issue or until such time as existing properties are converted to a different use.

The plan also suggests a cooperative approach with WisDOT having the primary responsibility for maintenance and construction within the existing right-of-way and locals in the areas parallel to the corridor. This cooperative approach is an integral component in the success of plan implementation because many of the strategies provide the greatest benefit when coordinated implementation occurs. In addition, some of the strategies of the plan, such as providing alternate routes for circulation, fall under local jurisdictions. Local units of government and/or land developers would be responsible for funding local circulation concepts within the plan.

3.1 Strategies & Recommendations

Many elements of the plan are intended for implementation as land uses change over time unless safety becomes an issue in the short-term. Land use changes could include new development of vacant or agricultural parcels, redevelopment of existing commercial, residential, and industrial properties, or redevelopment that results in the consolidation of adjacent parcels.

There are four primary areas of focus for the strategies included within the plan:

- Public and private access to WIS 241 (South 27th Street)
- Local circulation needs
- Medians
- Signalized intersections and traffic progression

3.1.1 Public and Private Access to WIS 241 (South 27th Street)

Direct access to the WIS 241 (South 27th Street) corridor was evaluated using a generalized matrix of access criteria to identify appropriate access locations and spacing along the corridor (see Table 2, General Access Criteria). The matrix was developed from resources such as the Transportation Research Board (TRB) Access Management Manual, The Institute of Transportation Engineers (ITE) Toolbox on Intersection Safety and Design Final Draft Chapter 1 - Geometric Design, WisDOT Facility Development Manual, and review by WisDOT Access Management staff. The table was intended to act as a neutral reference in the development of the WIS 241 (South 27th Street) Access Management Plan maps. *The General Access Criteria Table is intended as a guideline for use during the WisDOT access permitting process.*

Access types examined with the aid of the matrix included private driveways, private roads, and public streets. These access types were further examined depending on the type of driveway and/or street or its primary function.

In many cases, there are numerous driveways located in close proximity to each other along the corridor. The numerous driveways result from narrow adjacent lots abutting the existing right-of-way and/or large lots with two or more driveways. Each lot is provided access, and in the majority of cases, the access is from the state highway with the absence of a local road or street to provide an alternative.

Strategies to address numerous access points along WIS 241 (South 27th Street) include:

- Finding opportunities to reduce the number of driveways for lots with multiple access points.
- Consolidating, relocating, or removing existing driveways if multiple lots are consolidated or redeveloped, or the land use changes.

Table 1 – General Access Criteria

South 27th Street/WIS 241 Access Management Plan				
General Access Criteria For Retrofit Situations				
Intersecting Facility Type	Signal	Median Condition		
		Full Access	Restricted Access	Closed Access
Single Use Private Driveway	No	No	No	Allowable
Shared Private Driveway/Cross-Access	No	No	Allowable	Allowable
Private Road	No	No	Allowable	Allowable
Public Street - Cul-de-Sac (no circulation)	No	No	Allowable	Allowable
Public Street - Local	No	Allowable	Allowable	Allowable
Public Street - Collector	Allowable	Allowable	Allowable	No
Public Street - Arterial	Allowable	Allowable	No	No
	1/2 Mile	1/4 Mile	1/8 Mile	None
	Generalized Spacing Criteria			

*Minimum distance from the functional area of a median opening is 200 ft.

*Minimum distance from the functional area of an intersection is 500 ft.

3.1.1.1 Consolidating, relocating, or removing existing private driveways

Two techniques that can relieve operational issues caused by numerous private driveways and intersections include relocating driveways to lower function local streets, or promoting shared or cross-access agreements between properties along the highway. As shown in Figure 3, Minimize Direct Access, driveways could be relocated and/or promoted in future developments for placement on local roads. Access to the state highway would be limited to intersections with public streets. The reduction in the number of direct access points allows more efficient use of the roadway and promotes greater separation of intersections.

In the case of shared-access or cross-access agreements, multiple parcels share a common access point. Access to each property is achieved through an interconnected parking lot system or other method of on-site circulation (see Figure 4, Link Adjacent Land Uses). The movement of circulation off of the state highway and onto the adjacent properties is achieved through local zoning and subdivision ordinances. Currently, the city of Franklin requires cross-access agreements for new developments along the WIS 241 (South 27th Street) corridor.

Figure 3 – Minimize Direct Access

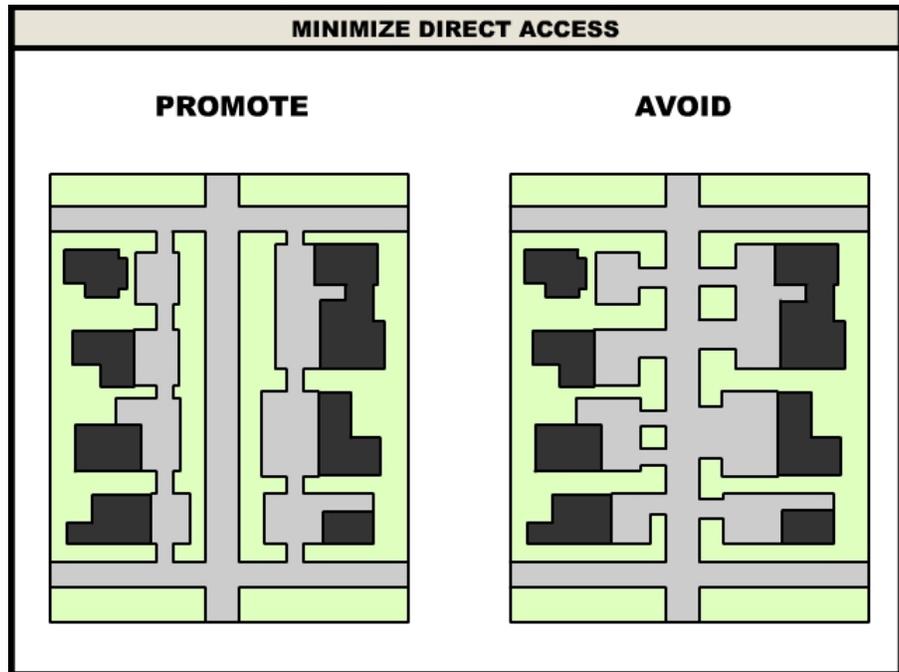
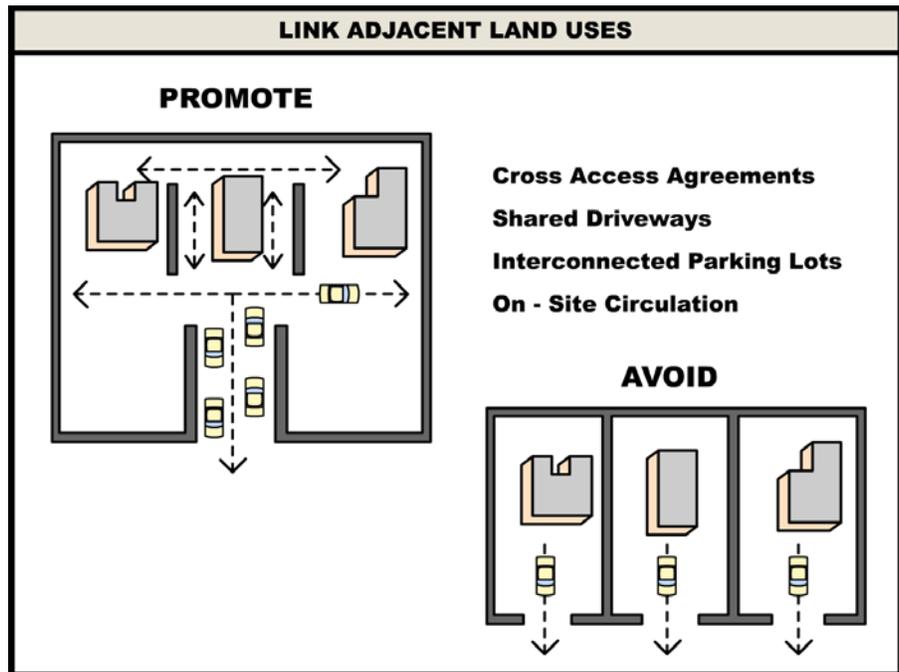


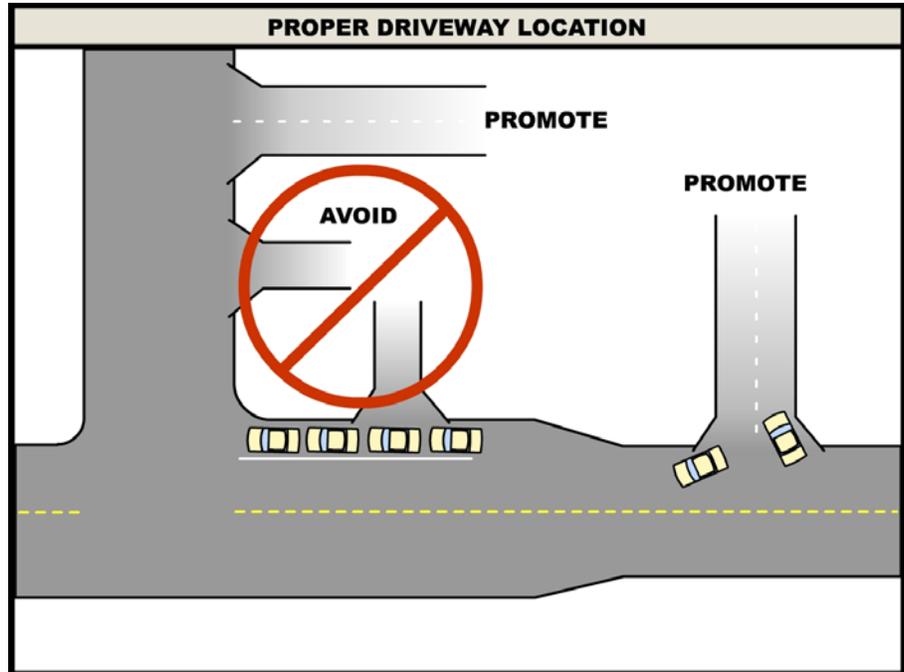
Figure 4 – Link Adjacent Land Uses



Driveways located close to an intersection can pose safety and operational issues for the intersection (see Figure 5, Proper Driveway Location). These driveways should be relocated further from the intersection where possible to eliminate conflicts between vehicles entering the intersection and those using the driveway. These driveways can pose safety hazards from vehicles making left turns into the driveways too close to the intersection. In addition, it may be difficult for drivers to determine if a vehicle is entering the

intersection to execute a turn, or if the vehicle is entering the driveway. For vehicles wishing to exit from a driveway that is too close to the intersection, they often must track several movements within the intersection to determine a safe opportunity to make a left-turn out of the driveway.

Figure 5 – Proper Driveway Location



3.1.1.2 T-type Intersections

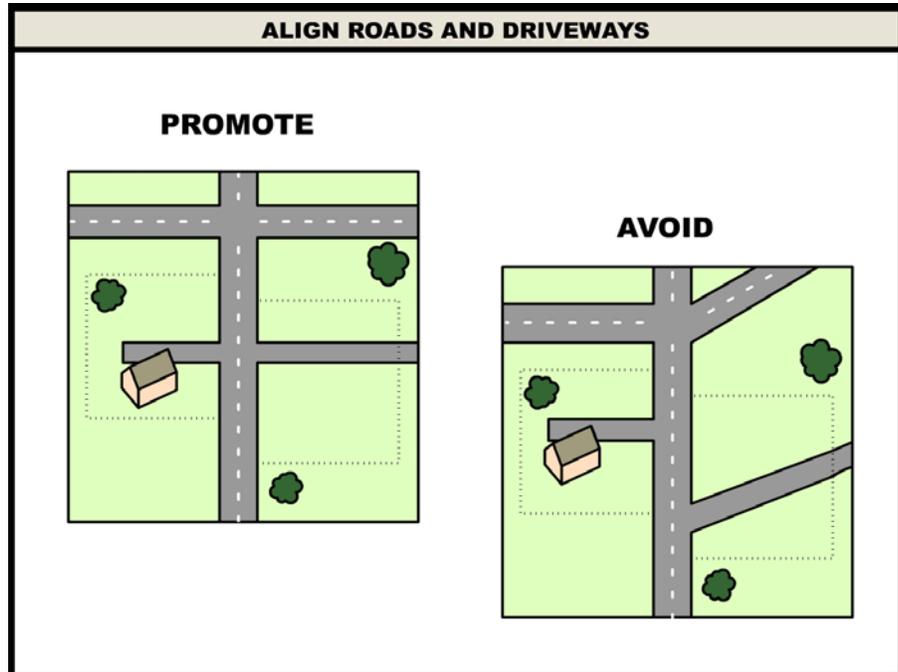
Intersections of WIS 241 (South 27th Street) with public roads are generally well spaced, however, a lack of coordination between the city of Franklin and the city of Oak Creek has resulted in a number of offset T-type intersections. A four-leg intersection is desirable over offset T-type intersections because all movements onto the local roads can be accommodated at one location more efficiently than at two closely spaced locations.

As land develops or changes to a higher use, the existing T-intersections could create operational issues and a higher risk of crashes as the number of vehicles entering the intersection increases. Closely spaced T-type intersections could also experience operational issues as it becomes difficult to accommodate left-turning vehicles due to limitations in the length of the left-turn bay that can be provided between the offset intersections. At high traffic volumes, closely spaced signalized intersections experience operational limitations and are undesirable. For this reason, as traffic increases on WIS 241 (South 27th Street) the only option available may be to limit these intersections to right-in/right-out movements. Strategies to address intersections with public streets include:

- Relocating some local road connections and providing new connections only in locations where a four-leg intersection can be created, promoting cross-access (see Figure 6, Align Roads and Driveways).

- Not allowing long cul-de-sac roadways with access only provided by WIS 241 (South 27th Street). This can be achieved by promoting cross-access agreements and local circulation.

Figure 6 – Align Roads and Driveways



3.1.2 Local Circulation

Providing alternative routes often includes providing those routes outside of the existing WIS 241 (South 27th Street) right-of-way. Because of this, providing local circulation falls under the jurisdiction of the city of Franklin and the city of Oak Creek. The recommendations pertaining to local circulation recognize that this issue lies outside of WisDOT jurisdiction and falls under local jurisdiction.

The local circulation routes presented in this plan fall under one of two strategies:

- Local circulation routes which, are conceptual rather than location specific. For example, local circulation that provides alternate routes for short trips should be provided, however, the exact method (cross-access agreement or new public road) and the exact location of those routes can be determined by local units of government.
- Connections of proposed local circulation routes with South 27th Street and/or the existing local street system are location specific. These connections are shown in their recommended locations within the figures.

A local transportation system should be developed that is balanced according to the desired function of the roadway. There are three primary functions that roadways perform including providing mobility, providing access, or acting as a transition between roadways that provide access and those that provide mobility (see Figure 7, Roadway Functionality).

Figure 7 – Roadway Functionality

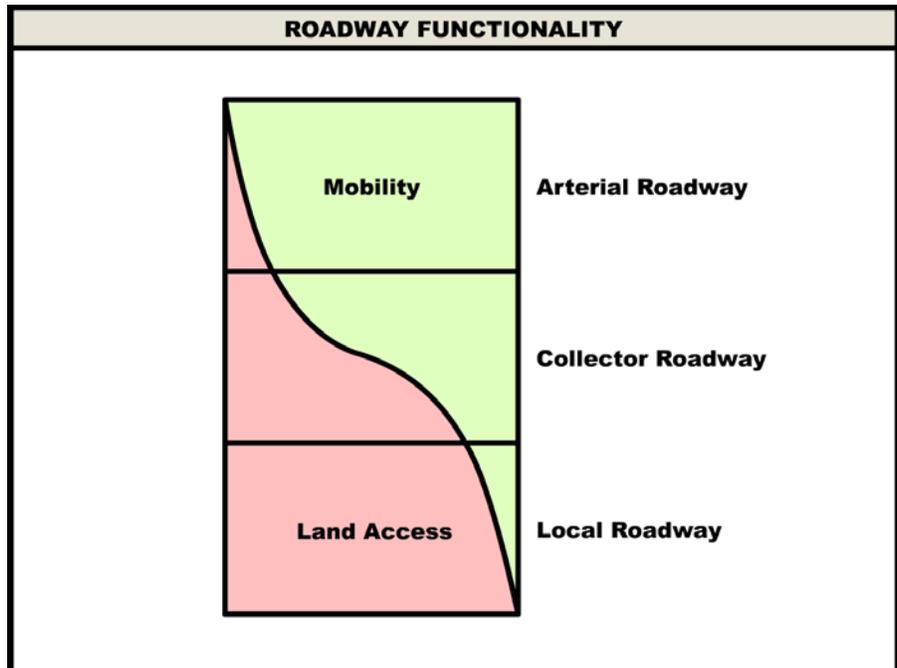
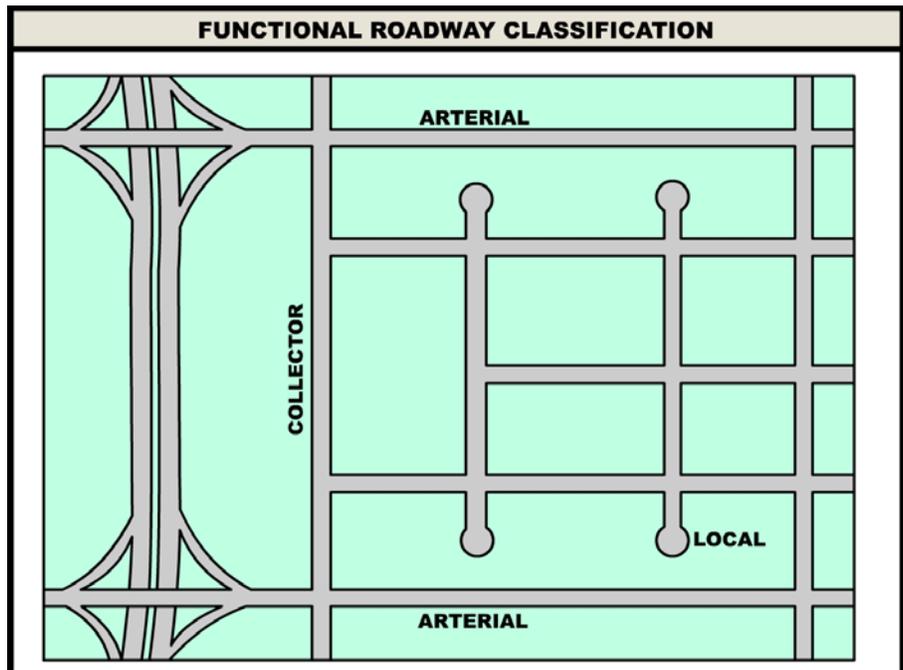


Figure 8 – Functional Roadway Classification



Roadways are classified as arterials, collectors, or local roads depending on the function they perform (see Figure 8, Functional Roadway Classification).

The benefits of providing a local transportation system include:

- Providing an alternative to WIS 241 (South 27th Street) for local trips that compete for highway capacity and reduce the ability of the roadway to provide efficient regional transportation.

- Provide opportunities to relocate existing driveways to lower function roadways as land develops or converts to a higher use (see Figure 9, Access Management).
- Providing multiple choices for vehicles, bikes, and pedestrians to get from one destination to another. Implementation of an interconnected local transportation system enhances the ability of emergency responders to access accidents during peak traffic periods (see Figure 10, Transportation System).

Figure 9 – Access Management

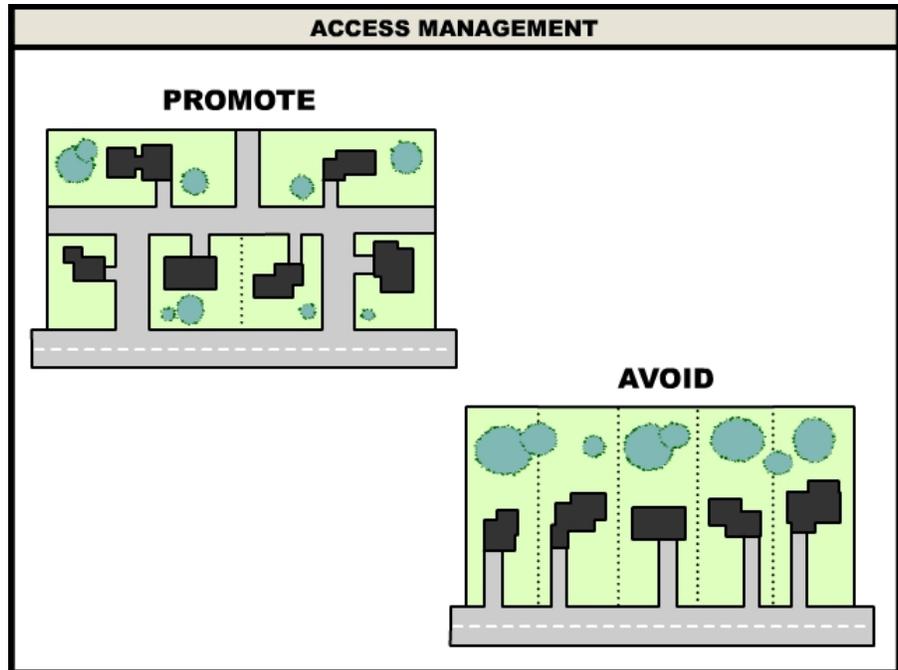
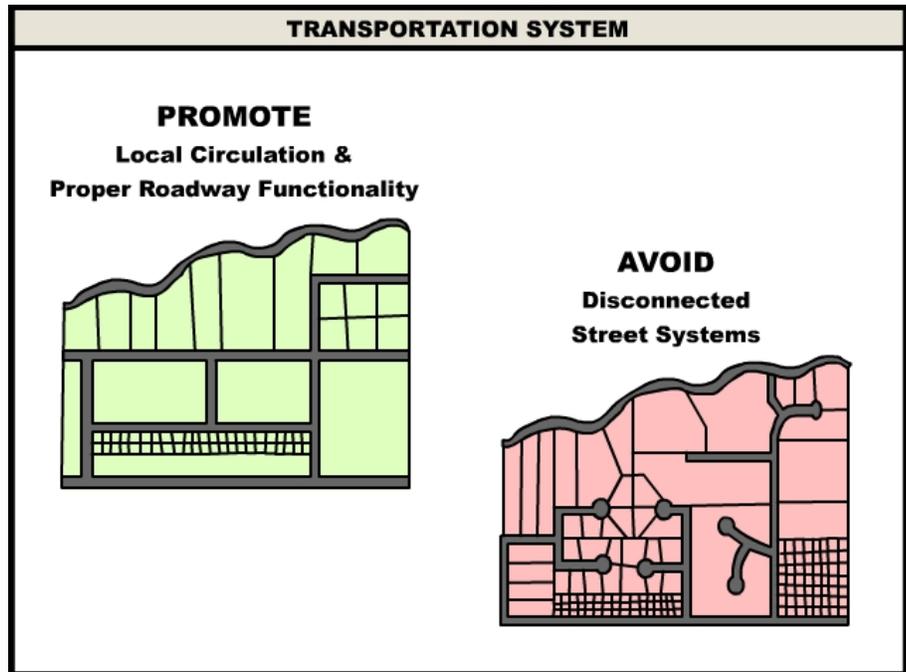


Figure 10 – Transportation System

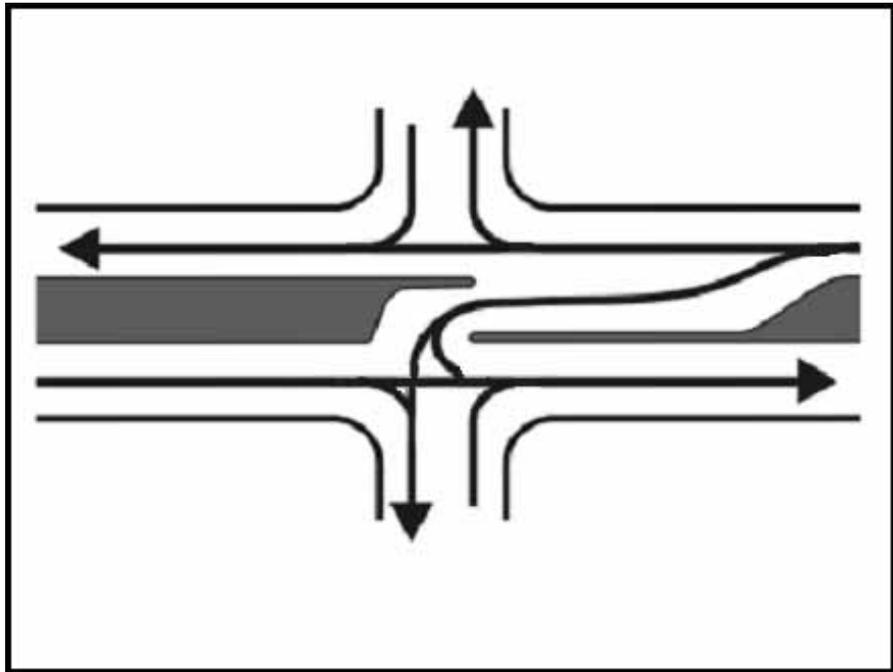


3.1.3 Medians

Standards pertaining to the location of median openings along state highways have changed over time. Some of the existing median openings that were created in the 1970's and 1980's would not be constructed under current standards. Specifically, median openings located close to signalized intersections to accommodate redirection via u-turns would not be allowed, and are being removed as part of reconstruction projects.

This plan evaluated the locations and need for median openings in conjunction with the other strategies and recommendations of the plan. The plan recommends either closing the median opening creating a right-in/right-out access situation, allowing left-in movements through the median, or leaving the median as full access.

Figure 11 – Right-in/Right-out/Left-in Median Opening



3.1.4 Signalized Intersections and Traffic Progression

The demand for additional traffic signals usually increases as traffic volumes increase. Increases in traffic volumes are related to land use and development. In the case of WIS 241 (South 27th Street), there would likely be a demand for additional traffic signals as development expands towards the south end of the corridor.

In order to preserve mobility along the WIS 241 (South 27th Street) corridor, it is important that the addition of any new traffic signal be located in a manner that allows efficient traffic progression and meets intersection control needs. Traffic progression allows vehicles to travel through the system of traffic signals along the corridor with fewer stops and delay. If the intersection location is chosen correctly, the new traffic signal could help minimize potential stops and delay for through traffic along the WIS 241 (South 27th Street) corridor.

A Synchro/SimTraffic computer model was developed and used to evaluate the traffic flow along the corridor to determine the optimal location(s) for new traffic signals. Constructing new signals at the following locations as they become warranted, would best meet the local needs for control and provide the best opportunity for traffic progression along the corridor:

- West Elm Road
- Oakwood Road
- A proposed connection 740 feet south of West Southbranch Boulevard
- Hilltop Road
- West Forest Hill Avenue

Traffic progression along the WIS 241 (South 27th Street) corridor is currently maintained from College Avenue (the system starts at I-894 north of the project limits) and extends through Drexel Avenue. The signal at Sycamore Avenue currently operates independently to accommodate pedestrians. The addition of new traffic signals at the noted locations will allow for traffic progression opportunities through to the south end of the corridor.

The recommended signal locations provide uniform spacing of approximately ½ mile promoting efficient flow of traffic at speeds of approximately 45 miles per hour. Locating new traffic signals at shorter distances than the ½ mile spacing may increase stops, delay, and reduce travel speeds along the corridor. Inadequate spacing may even result in higher potentials for rear-end crashes. Additional traffic analyses should be conducted for traffic signal requests outside of those recommended in this plan to determine the impacts to traffic flow on WIS 241 (South 27th Street).

3.2 Differences Between this Plan & South 27th Street Corridor Plan

The city of Franklin and the city of Oak Creek have cooperatively initiated a corridor plan to guide land use and development along WIS 241 (South 27th Street) in the summer of 2004. The planning process for the 27th Street Corridor Plan parallels the WIS 241 (South 27th Street) Access Management Plan and WisDOT has been invited to participate in the process. The purpose of the 27th Street Corridor Plan includes the following elements:

- To ensure development occurs in a consistent and coordinated manner
- To promote a diverse economic base to provide jobs, goods, and services to residents
- To provide a healthy, diverse property base
- To effectively respond to new development opportunities created by the opening of the Northwestern Mutual Campus

According to the plan, the following actions would occur as a result of implementation:

- Create a visionary, market-based land use plan which creates destination value and sense of place
- Design guidelines and zoning recommendations
- Cooperation and partnerships
- Investment of private dollars
- A realistic action plan

For the most part, both plans compliment each other where land use and access management decisions are concerned. However, some elements of the 27th Street Corridor Plan diverge slightly from this plan. The variations between the two plans reflect updated information in this plan that was not available at the time that the other plan was concluded. WisDOT considers this plan to be the plan that should be used in making access and operational decisions for WIS 241 (South 27th Street). It is important to note that the

following strategies from this plan vary from the 27th Street Corridor Plan in the following ways:

- An additional street connection to South 27th Street is provided 740 feet south of West Southbranch Boulevard. This connection lies directly across from the proposed connection on the west side of the highway.
- An additional street connection to South 27th Street is provided directly across from West Central Avenue to serve the proposed Pick n' Save location. The median opening at this location would likely be limited to less than full access.
- An additional street connection to South 27th Street is provided directly across from West Franklin Terrace.
- An additional street connection to South 27th Street is provided directly across from West Forest Hill Avenue.
- The proposed street connection shown in the vicinity of West Plaza Drive would be shifted slightly north. The change reflects locally approved plans and current development.
- An additional street connection to South 27th Street is provided approximately 600 feet north of South Riverwood Boulevard. The connection would be located on the east side of South 27th Street. The median opening at this location would likely be limited to less than full access.
- Future signalized intersections would likely only be allowed at the following locations: West Elm Road, Oakwood Road, a proposed connection 740 feet south of West Southbranch Boulevard, Hilltop Road, and West Forest Hill Avenue.

4.0 Plan Adoption and Certification

Wisconsin Statutes section 62.23 (2) and (3) covering cities, villages, and towns that have adopted village powers, which is the case with the city of Oak Creek and the city of Franklin, and section 59.69 (2) and (3) covering counties, all provide that a plan for the physical development of the community, including its transportation facilities, may be adopted.

In the case of cities, villages, and towns operating under village powers, adoption of the plan takes place by the Plan Commission, and is certified to the governing board (common council) for the guidance of the board.

The role of plan adoption at the county level rests with the County Board of Supervisors. The role of the Land Use Committee by statute is to assist in plan preparation, hold a hearing thereon, and approve the plan for adoption by the full county board.

The Wisconsin Department of Transportation has provided the staff of its Southeast Region planning in Waukesha, and will endorse the results through action by its Administrator.

List of Officials - January 2006

City of Franklin

Common Council

Tom Taylor	Mayor
Steve Olson	Aldersperson
Tim Solomon	Aldersperson
Alan Hammelman	Aldersperson
Pete Kosovich	Aldersperson
Lyle Sohns	Aldersperson
Ken Skowronski	Aldersperson

Plan Commission

Tom Taylor	Mayor
Ken Skowronski	Aldersperson
Randy Ritter	
Jim Ziegenhagen	
John Bennett	City Engineer
Kevin Haley	
Shari Hanneman	

*Economic Development
Commission*

James Rhiner	
Sandy Jo Adam	
Ted Grintjes	
Ken Skowronski	Chairperson
Joe Haselow	
Norm Hintz	
Richard Schauer	
Mary Karolewicz	
Steve Olson	Aldersperson
James Kerr	
Diane Oleson	
George Torres	

Wisconsin Department of Transportation

Southeast Region, Waukesha, Wisconsin

Dewayne Johnson	District Director
Reggie Newson	Systems Planning and Operations Manager

City of Oak Creek

Common Council

Richard Bolender	Mayor
Elizabeth Kopplin	Aldersperson
Allen Foeckler	Aldersperson
Ann Lampe	Aldersperson
Michael Toman	Aldersperson
Dimity Grabowski	Aldersperson
Stephen Jonas	Aldersperson

Plan Commission

Mayor Richard Bolender	Chairperson
Dimity Grabowski	Aldersperson
Patrick Correll	
Walter Dickmann	
Terry Ann Peterson	
Allan Foeckler	Aldersperson
Wayne St. John	
Jeffrey Sokol	
Edward G. Siira	

*Community
Development Authority*

Stephen Jonas	Aldersperson
Marge Kanar	
Isabel Haase	
Marie Myszkowski	
Elizabeth Kopplin	Aldersperson
Donald Gassenhuber	
James Ruetz	

4.1 CERTIFICATES OF ADOPTION

The following Certificates of Adoption reflect actions taken by the named bodies during the period of January 2006 approving the original draft of this report, dated November 2005.

The city of Franklin and the city of Oak Creek are adopting the plan with the understanding that it is an advisory document in which the guidelines are flexible and allow for future negotiation between the city of Oak Creek, city of Franklin, and WisDOT where access and land use decisions are concerned.

CITY OF FRANKLIN PLAN COMMISSION

I, _____, Secretary of said Commission, do hereby certify that on the ____ day of _____ 2005 said Commission at a duly convened meeting by a sufficient majority vote of ____ for, ____ against, and ____ members not present or voting, did adopt the above named report, which report is hereby certified to the City of Franklin Common Council for the guidance of said board pursuant to Wisconsin Statutes 62.23 (3).

_____, Secretary

Signed this ____ day of _____, 2005.

CITY OF FRANKLIN COMMON COUNCIL

I, _____, City Clerk of the City of Franklin do hereby certify that at a duly convened meeting held on the ____ day of _____, 2005 the City of Franklin Common Council by a sufficient majority vote of ____ for, ____ against, and ____ members not present or voting, did agree by resolution to having city areas included within the foregoing report made part of the Comprehensive Master Plan as certified by the City of Franklin Common Council by City Clerk _____.

_____, City Clerk

Signed this ____ day of _____, 2005.

CITY OF OAK CREEK PLAN COMMISSION

I, _____, Secretary of said Commission do hereby certify that on the ____ day of _____, 2005 said Commission at a duly convened meeting by a sufficient majority vote of ____ for, ____ against, and ____ member not present or voting, did adopt the above named report, which report is hereby certified to the City of Oak Creek Common Council for its guidance pursuant to Wisconsin Statutes 62.23 (3).

_____, Secretary

Signed this ____ day of _____, 2005.

CITY OF OAK CREEK COMMON COUNCIL

I, _____, City Clerk of the City of Oak Creek, do hereby certify at a duly convened meeting held on the ____ day of _____, 2005 the City of Oak Creek Common Council by a sufficient majority vote of ____ for, ____ against, and ____ members not present or voting, did agree by resolution to having city areas included within the foregoing report as certified to the City of Oak Creek Common Council by City Clerk _____.

_____, City Clerk

Signed this ____ day of _____, 2005.

WISCONSIN DEPARTMENT OF TRANSPORTATION

I, _____, Administrator of Highways and Transportation Services, do hereby certify that on the ____ day of _____, 2005 at a duly convened meeting of the administrator's office the administrator's minutes were modified to record endorsement by the Department of the above named report.

_____, Administrator

Signed this ____ day of _____, 2005.

