

CHAPTER 7: TRANSPORTATION

INTRODUCTION

Transportation plays a vital role in the social and economic well-being of Franklin residents. An efficient transportation system is critical to moving people and goods into and through the City. Such a system becomes more effective as it provides alternative modes of travel, including opportunities for transit and services or facilities that may serve older, younger, or disabled populations that may have limited access to conventional transportation modes. This local transportation network plays a role within a much larger regional system as well. Local transportation planning must therefore occur in coordination with state, regional, and county plans.

Franklin is fortunate to have a well-developed system of roads and highways meeting the needs of automobile travelers, although the City will need to continue development of this network as local and regional growth creates additional demands. The City is served by nearby freight rail and passenger and freight air services. Other transportation systems such as bicycle and pedestrian networks and transit services are not as fully developed, and will become increasingly important as the community grows and its demographics change.

Wisconsin's Comprehensive Planning Legislation identifies transportation as one of nine required elements in a plan. Section 66.1001(2)(c) states that the transportation element of the Comprehensive Plan must contain:

“A compilation of objectives, policies, goals, maps and programs to guide the future development of the various modes of transportation, including highways, transit, transportation systems for persons with disabilities, bicycles, electric personal assistive mobility devices, walking, railroads, air transportation, trucking and water transportation. The element shall compare the local governmental unit's objectives, policies, goals and programs to state and regional transportation plans. The element shall also identify highways within the local governmental unit by function and incorporate state, regional, and other applicable transportation plans, including transportation corridor plans, county highway functional and jurisdictional studies, urban area and rural area transportation plans, airport master plans and rail plans that apply in the local governmental unit.”

Many transportation issues have been addressed through prior planning in Franklin. The City's 1992 Comprehensive Plan established the objective to create “an integrated transportation system which, through its location, capacity, and design, will effectively serve the existing and proposed land use pattern and promote the implementation of this plan, meeting the anticipated travel demand generated by the existing and proposed land uses.” The plan established a street classification system and appropriate cross-sections based on these classes. Additional criteria were established to address issues such as access management and urban design. Criteria for sidewalks included placement on the school side of collector streets, on streets

providing access to school sites, on arterial streets with an urban cross-section, and on one side of designated collector streets.

The City has adopted plans for specific areas that include recommendations related to transportation. One such plan is the Crossroads Trade Area Regulating Plan, which identifies access points and preferred cross-sections near the intersection of State Highway 100 and U.S. Highway 36.

The South 27th Street Corridor Plan was undertaken jointly with the City of Oak Creek. This plan recognizes the linkages between land use and transportation in a corridor subject to strong growth pressures. It seeks to create a transportation system that serves the desired land uses, providing accommodation for safe bicycling and pedestrian usage. Notable transportation-related recommendations in the plan include improving the local road grid, improving access points and eliminating left turn lanes, connecting neighborhoods with greenways containing trail systems, phasing in transit, and providing new interchanges on Interstate 94 at Drexel Avenue and at South County Line Road. The South 27th Street Corridor Plan was preceded by the WIS 241 Access Management Plan prepared by the Wisconsin Department of Commerce.

Franklin's Transportation Infrastructure

“The element shall also identify highways within the local governmental unit by function...”
[excerpt from State Statute 66.1001(2)(c)]

Franklin's street system is part of a larger regional network of roads serving to move people and goods within or through the area. This road network is comprised of a hierarchy of streets. Arterial streets carry the greatest volume of traffic, including most through traffic, while local streets primarily serve adjacent properties. Collector roads serve to link arterials and local streets. The functional classification system used in Franklin is based on definitions adopted for urban areas by the Wisconsin Department of Transportation and the Southeastern Wisconsin Regional Planning Commission. This classification system is depicted on Map 7.1. The Wisconsin Department of Transportation's Facilities Design Manual contains the following definitions:

- **Principal Arterials:** Principal arterials serve the major centers of activity of an urban area, the highest traffic volume corridors, and the longest trip desires, and carry a high proportion of the total urban area travel on a minimum of mileage. The urban principal arterials are connected to the system of rural principal and minor arterials. Within this category the urban principal arterials are subdivided into (1) interstate highways, (2) other freeways and expressways (connecting links of rural principal arterials, connecting links of rural minor arterials, and non-connecting links), and (3) other principal arterials (connecting links of rural principal arterials, connecting links of rural minor arterials, and non-connecting links).

- **Minor Arterials:** Minor arterials provide intra-community continuity and service to trips of moderate length, with more emphasis on land access than principal arterials. The minor arterial system interconnects with the urban arterial system and provides system connections to the rural collectors.
- **Collectors:** Collectors provide both land access service and traffic circulation within residential neighborhoods, commercial areas, and industrial areas. The collector system penetrates residential neighborhoods, distributing trips from the arterials through the area to the local streets. The collectors also collect traffic from the local streets in residential neighborhoods and channel it onto the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid, which forms the basic unit for traffic circulation.
- **Minor or Local Streets:** Minor or local streets comprise all facilities not on one of the higher systems. They serve primarily to provide direct access to abutting land and access to the higher order systems. Minor or local streets offer the lowest level of mobility, and service to through-traffic movement on this system is usually discouraged.

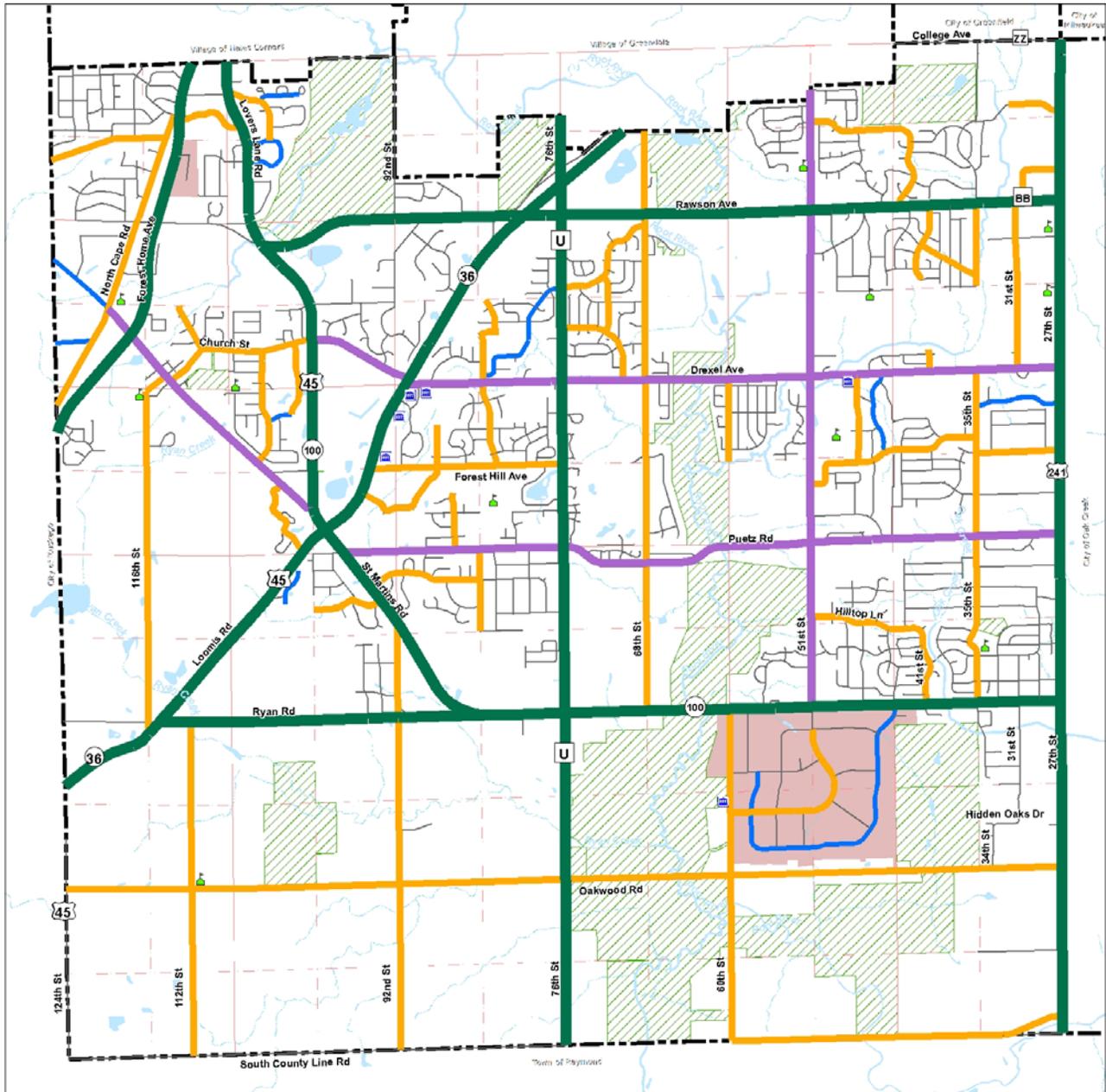
As depicted on Map 7.1, Functional Classification System for Roads, the principal arterials within Franklin are the numbered and lettered highways, including U.S. Highway 45, U.S. Highway 241 (27th Street), State Highway 100, State Highway 36 (Loomis Road), County Highway U (76th Street), County Highway BB (Rawson Avenue), and County Highway OO (Forest Home Avenue). These principal arterials carry regional traffic through neighboring communities and the metropolitan area. Minor arterials carry traffic through the city and may continue into neighboring communities. In Franklin, these roads include Drexel Avenue, Puetz Road, 51st Street, and St. Martins Road.

The collector road system consists of roads that, either now or in the future, carry traffic from residential neighborhoods to the arterial road network. They may also include streets within business parks that will carry a volume of traffic heavier than a typical neighborhood street. The remaining streets are classified as minor local roads.

As shown on Map 7.2, Road Jurisdiction, jurisdiction for the maintenance of streets in Franklin is divided between the State of Wisconsin, Milwaukee County, and the City of Franklin. Roads falling under the jurisdiction of the State of Wisconsin include those that are part of the state trunk highway system. These are State Highway 100/U.S. Highway 45, State Highway 36/U.S. Highway 45, and U.S. Highway 241. Milwaukee County maintains College Avenue (CTH ZZ), Rawson Avenue (CTH BB), Forest Home Avenue (CTH OO), Ryan Road (CTH H) (between State Highway 100 and U.S. Highway 45), St. Martins Road (CTH MM), 76th Street (CTH U), and a portion of 68th Street north of State Highway 100 (CTH A). All other public roads in the community are under the jurisdiction of the City of Franklin (see Map 7.2).

In addition to its roads, Franklin has several bicycle and pedestrian paths which are documented later in this chapter. There is no railroad, airport, or water port infrastructure within the community. Fixed route transit services provided by the Milwaukee County Transit Service are limited to select portions of the City.

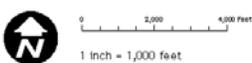
Map 7.1, Functional Classification System for Roads





City of Franklin

Functional Classification System for Roads



1 inch = 1,000 feet



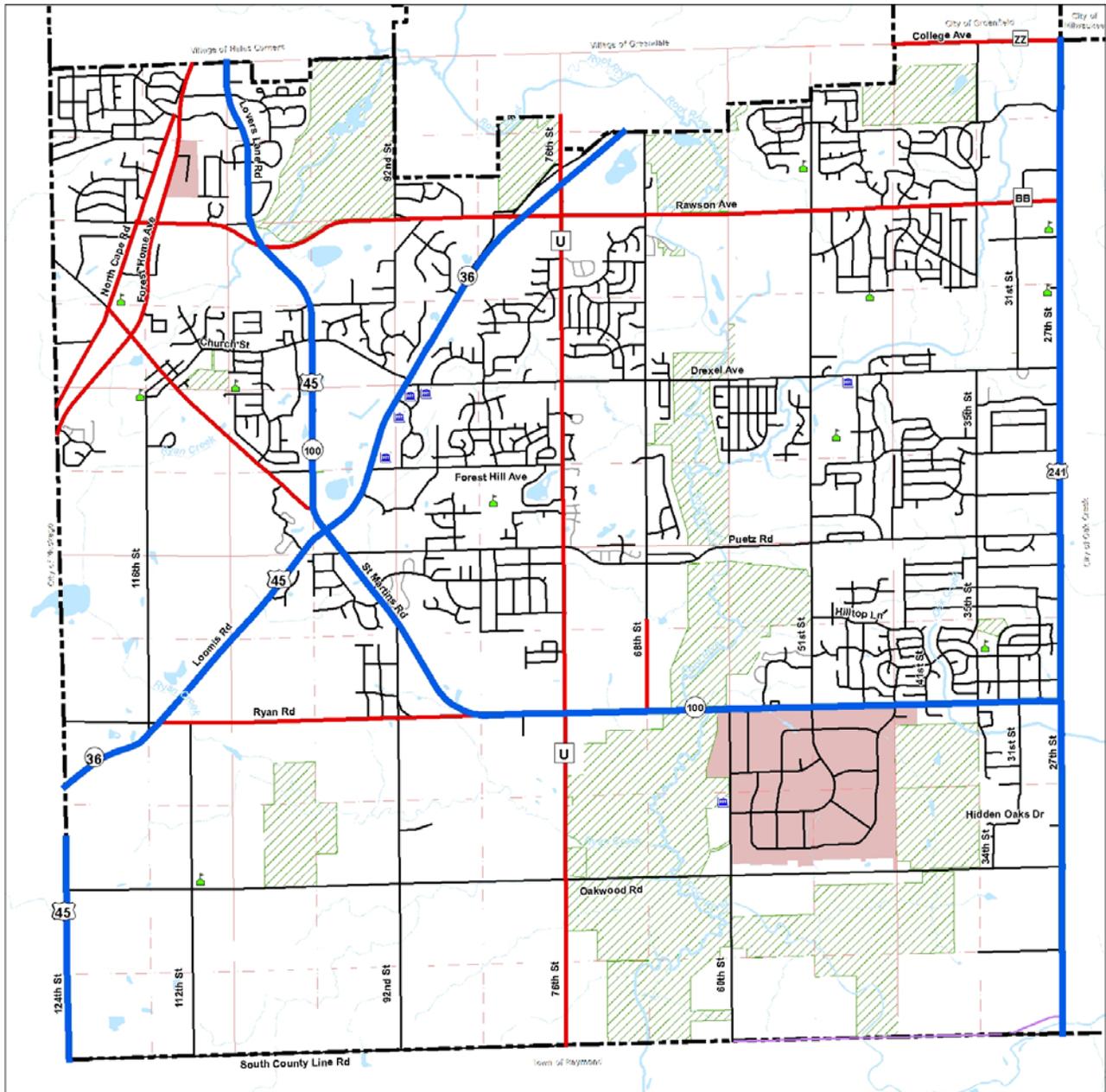
- Local
- 66' MINOR
- Collector
- Minor Arterial
- Principal Arterial



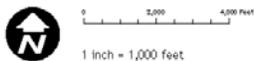
R.A. Smith National
Beyond Surveying and Engineering

July 2009
K:\Franklin\City\1000\GIS\Map\Doc\Map\Map7.1\Report\Road Classification

Map 7.2, Road Jurisdiction



Road Jurisdiction



R.A. Smith National
*Beyond Surveying
 and Engineering*

- Private
- Town of Raymond
- City of Franklin
- Milwaukee County Trunk Highway
- U.S. or State Highway

Source: City of Franklin

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Guiding Principles, Goals and Objectives

“A compilation of objectives, ... goals, ... to guide the future development of the various modes of transportation, including highways, transit, transportation systems for persons with disabilities, bicycles, electric personal assistive mobility devices, walking, railroads, air transportation, trucking and water transportation.” [from State Statute 66.1001 (2)(c)].

The following principles, goals, objectives, policies and programs will guide the City of Franklin’s provision of transportation infrastructure and services as they relate to official mapping, subdivision regulation, and zoning. Where possible, existing local, regional or state transportation guidelines have been used, as will be noted herein.

Any additional details set forth in this chapter, such as recommendations for further study or educational efforts pertaining to traffic safety, are intended to ensure that the full scope of the transportation related needs of the City are eventually addressed. They are not intended to create any further allowances or restrictions by the Comprehensive Master Plan or to create any additional conditions or requirements of the Comprehensive Master Plan. However, should the Common Council determine that changes to the Comprehensive Master Plan as a result of the studies or educational efforts are warranted, any such changes would then be made to the Comprehensive Master Plan through the formal amendment process to ensure an appropriate level of consistency between the Plan and such study or educational effort.

The overall guiding principles of the city’s transportation planning are as follows:

- **create a safe and efficient transportation network that is integrated into the regional transportation system [from consultant input]**
- **provide viable options for travel through multiple modes including driving, transit, walking, and bicycling [from consultant input]**
- **serve the needs of city residents with limited access to transportation, including the young, elderly, and disabled [from consultant input]**

It is the policy of the City of Franklin that these guiding principles provide the framework for transportation efforts in pursuit of the related goals and objectives identified below. The guiding principles are also intended to serve as a summary or simplification of the entire transportation element. Such a summary description is useful to have in discussing the importance, purpose, features, benefits, and components of transportation with members of the community. These guiding principles identify the most prominent aspects of Franklin’s desired transportation system: safe, efficient, multi-modal, and accessible to all.

Transportation Goals and Objectives

- **Ensure the safe and efficient operation of the transportation system within Franklin:** [from public and consultant input] This may be defined as a multi-modal transportation system that meets the needs of community residents and businesses with minimal congestion and a low incidence of crashes. Key strategies for achieving this objective include:
 - monitoring traffic and safety data to identify issues of concern as they arise;
 - continuing maintenance of the transportation infrastructure to ensure its design functionality;
 - planning for future transportation infrastructure improvements to serve changes in demand or newly developing parts of the city;
 - addressing transportation safety through engineering, education and enforcement;
 - link residential areas together, whenever possible, with vehicular and pedestrian circulation systems; [from public input]
 - minimize the use of cul-de-sacs except where needed to preserve the natural environment and to access land where other options are not available [from public input]; and
 - protect the traffic carrying capacity of existing and proposed arterial streets, highways, and collector streets. [from public input]
- **Provide an interconnected network of major and minor arterial roads:** [from public and consultant input] This goal will be pursued with Milwaukee County and the State of Wisconsin, along with other partners who play a role in the planning, construction, maintenance, and operation of the regional highway transportation system.
- **Establish a network of interconnected collector roads and local streets providing access from private land to arterial roads:** [from public and consultant input] Access to private land will be provided primarily through the local street system. This should be designed as an interconnected network providing alternative routes to the arterial roadways. In addition, local roads should be designed to accommodate multiple modes of transportation including bicycles.
- **Maintain a network of roadways that supports the movement of freight by truck:** [from consultant input] The ability to ship and receive goods via truck is critical to Franklin's industrial and commercial businesses. It is therefore imperative that Franklin maintain a system of designated truck (heavy traffic) routes that are designed to accommodate large and heavy vehicles.
- **Consider alternative design approaches where appropriate:** [from public and consultant input] There has been a growing movement to adopt alternative approaches to roadway design, including traffic

calming (such as roundabouts), context-sensitive design, and narrow streets within planned developments. On a case-by-case basis, Franklin may consider adopting such practices where there is a clear benefit to the community.

- **Support regional efforts to expand commuter rail options and preserve access to freight rail services:** [from consultant input] Although there are no railroads located within the physical limits of the City of Franklin, community residents may take advantage of existing or proposed nearby passenger rail services, and businesses can access freight rail through intermodal yards.
- **Enforce provisions of Franklin's Airport Overlay District that mitigate airport noise impacts:** [from consultant input] Franklin's proximity to the airport contributes significantly to its desirability as a business location. At the same time, airport noise can detract from the desirability of residential areas. The Airport Overlay Ordinance establishes standards for noise mitigation to preserve the quality of residential areas impacted by the airport operations.
- **Provide appropriate facilities to encourage recreational and commuter bicycle trips:** [from public and consultant input] Franklin should continue to develop bicycle facilities such as trails, bicycle lanes, signed on-street bicycle routes, and storage facilities, both in existing and newly developing parts of the community. Bicycling should be a viable option to access schools and parks, along with major employment centers and commercial districts within the city.
- **Develop a system of sidewalks and paths that links neighborhoods to active destinations:** [from public and consultant input] Walking should be a viable option for recreation and short trips. Franklin should prepare a pedestrian plan that identifies corridors in which sidewalks or paths will be provided to create safe routes for walking to schools, parks, employment centers, and commercial districts. Commercial development areas should be designed to allow safe pedestrian circulation.
- **Support the continuation and expansion of regional transit services:** [from consultant input] Transit services are currently available to only a portion of Franklin. While future plans indicate greater levels of local service, funding is currently a concern. As the population ages and commuting costs increase, a viable transit service will become increasingly important factor as an option for commuting and other trips.
- **Provide transportation options for the disabled and those who cannot drive:** [from consultant input] Franklin should continue to support the provision of paratransit services through the Milwaukee County Transit System, as well as transportation services for the elderly.

BACKGROUND ANALYSIS

"The element shall compare the local governmental unit's objectives, policies, goals and programs to state and regional transportation plans." [from State Statute 66.1001(2)(c)]

Franklin has a well-developed roadway system and established patterns of usage that will shape planning for a future transportation system. These are documented here and discussed in the context of regional or statewide planning by specific transportation mode.

State and Regional Transportation Plans

Milwaukee County, the Southeastern Wisconsin Regional Planning Commission, and the State of Wisconsin have prepared numerous plans addressing current and future transportation needs in Franklin and surrounding areas. System-wide planning is summarized here. Detailed planning by transportation mode is described in subsequent sections of this chapter.

Connections 2030

Connections 2030 is the Long-Range Multimodal Transportation Plan prepared by the Wisconsin Department of Transportation. It envisions “an integrated multimodal transportation system that maximizes the safe and efficient movement of products throughout the state, enhancing economic productivity and the quality of Wisconsin’s communities while minimizing impacts to the natural environment.” The plan seeks to integrate transportation modes, identify policies, and establish implementation priorities on a statewide basis. The State’s role with regard to transportation is to directly construct and maintain some elements of the system (such as the state trunk highways and interstates), while providing policy direction and funding assistance for elements managed by county and local jurisdictions.

Connections 2030 is organized around seven themes. These themes and the significant policies associated with them are described below.

Preserve and maintain Wisconsin’s transportation system. Priorities for funding address the physical condition, safety, operation, function, and connectivity of the state’s highways, and particularly the major transportation corridors. Additionally, it prioritizes continued improvements to the State’s air transportation infrastructure as identified in the Airport Improvement Plan.

Promote transportation safety. This theme incorporates improvements in engineering and technology with education and enforcement to modify unsafe behavior.

Foster Wisconsin’s economic growth. Policies to promote economic growth include partnering with stakeholders to ensure safe and reliable freight movement, encompassing waterways, railroads, airport facilities, highways, local roads and bridges. The plan advocates sustainable practices to improve energy efficiency. It also encourages support for Wisconsin’s transportation-related businesses.

Provide mobility and transportation choice. Connections 2030 notes that mobility will be an increasing concern as the state’s population ages. This need will be felt particularly where transit infrastructure is not already in place. Priorities include support for specialized services and funding for studies and development

of a capital and operational funding assistance plan for metropolitan transit systems. The plan also supports intercity passenger rail, enhanced intercity passenger bus service, air service, bicycle and pedestrian facilities and planning, transportation demand strategies (such as ride sharing), and improved intermodal connections.

Promote transportation efficiencies. These policies include improved incident response, adoption of technology to provide real-time traffic operational management, use of tools and technology to provide additional system capacity, and access management.

Preserve Wisconsin's quality of life. The plan recognizes the linkages between transportation and environmental quality, and sets policies to reduce conflict in the environmental review process, improve air quality, emphasize preservation of protected resources, continue community-sensitive design practices, incorporate environmental justice into planning and project decisions, and create a positive land use – transportation relationship.

Promote transportation security. Efforts in this area center on the ability to prevent and respond to natural or other incidents impacting the transportation system.

Corridors 2030

Corridors 2030 is a companion to the Connections 2030 plan, and provides recommendations for 3,750 miles of high-priority highway corridors throughout the state. Backbone routes are the multi-lane highways connecting major economic centers. Connector routes link other significant economic or tourist centers in the state. Corridors 2030 adds 26 miles of new backbone routes and 253 miles of new connector routes. Portions of the Interstate 94 corridor are located within the City of Franklin.

A Regional Transportation System Plan for Southeastern Wisconsin: 2035

In 2006 the Southeastern Wisconsin Regional Planning Commission adopted a plan entitled “A Regional Transportation System Plan for Southeastern Wisconsin: 2035” to address future transportation needs in the seven counties surrounding Milwaukee. The regional transportation plan primarily addresses intraregional travel, where both ends of the trip or travel is within the seven county region. Studies have consistently established that over 95 percent of total personal travel and over 90 percent of the commercial truck traffic on an average weekday is intraregional travel made by people living in southeastern Wisconsin or trucks registered in southeastern Wisconsin.

The plan establishes a vision for “a multimodal transportation system with high quality public transit, bicycle and pedestrian, and arterial street and highway elements which add to the quality of life of Region residents and support, and promote expansion of, the Region's economy, by providing for convenient, efficient, and safe travel by each mode, while protecting the quality of the Region's natural environment, minimizing disruption of both the natural and manmade environment, serving to support implementation of the regional

land use plan and minimizing the capital and annual operating costs of the transportation system.” It is based on principles that recognize the inter-relationship between land use and transportation as well as its regional scope and establishes eight objectives:

A multi-modal transportation system which, through its location, capacity, and design, will effectively serve the existing regional land use pattern and promote the implementation of the regional land use plan, meeting and managing the anticipated travel demand generated by the existing and proposed land uses.

A multi-modal transportation system which is economical and efficient and best meets all other objectives while minimizing public and private costs.

A multi-modal transportation system which provides appropriate types of transportation needed by all residents of the Region at an adequate level of service; provides choices among transportation modes; and provides inter-modal connectivity.

A multi-modal transportation system which minimizes disruption of existing neighborhood and community development, including adverse effects upon the property tax base.

A multi-modal transportation system which serves to protect the overall quality of the natural environment.

A multi-modal transportation system which facilitates the convenient and efficient movement of people and goods between component parts of the Region.

A multi-modal transportation system which reduces accident exposure and provides for increased travel safety.

A multi-modal transportation system which minimizes the amount of energy consumed, especially nonrenewable energy sources such as fossil fuels.

It addresses these objectives through a combination of measures encompassing highways, transit systems management, travel demand management, bicycle and pedestrian facilities, and transit.

MEANS OF TRANSPORTATION AND COMMUTING PATTERNS

“The element shall also ... incorporate state, regional and other applicable transportation plans, including transportation corridor plans, county highway functional and jurisdictional studies, urban area and rural area transportation plans, airport master plans and rail plans that apply in the local governmental unit.” [from State Statute 66.1001(2)(c)]

According to the 2000 Census, the majority of Franklin households (95.5 percent) had access to at least one vehicle. About two-thirds (66.9 percent) of the City’s households had two or more vehicles. While only 4.5 percent of Franklin households did not have a car, this number likely includes many of the City’s elderly residents. As the population ages, an increasing number of households may be unable to drive.

Surveys conducted by the Southeastern Wisconsin Regional Planning Commission indicate that in 2001 the typical household made 7.9 person trips per day. This is a decline from the peak of 8.1 daily trips in 1991, which may be a reflection of both smaller household size and a small decline in the number of shopping trips. Home-based work trips (commuting) accounted for about a quarter of the total. Average trip length has increased by about ten percent in each of the last four decades to 6.9 miles in 2001.

Most Franklin residents commuted to work by driving alone. This group made up 88.8 percent of all commuters, while persons traveling by carpool made up another 5.7 percent. Persons using some form of public transit made up only 0.5 percent of the total, and all other means of travel accounted for 0.7 percent. A total of 4.2 percent of the City's population worked at home. The typical resident spent 23.5 minutes traveling to work.

The largest number of Franklin residents commute to the City of Milwaukee for work. This is followed by commuting to jobs within Franklin. Milwaukee is also where the largest number of workers in Franklin live, again followed by Franklin. For both in- and out-commuting, ten communities make up about three-quarters of all trips. These are identified in Table 7.1: Commuting Patterns.

Table 7.1: Commuting Patterns

Place of Work of Franklin Residents			Place of Residence of Franklin Workers		
City or Village	Number	Percent	City or Village	Number	Percent
Milwaukee	4,923	31.6%	Milwaukee	2,636	24.8%
Franklin	2,243	14.4%	Franklin	2,243	21.1%
Oak Creek	1,055	6.8%	Greenfield	613	5.8%
West Allis	717	4.6%	Oak Creek	612	5.8%
Greenfield	651	4.2%	West Allis	422	4.0%
Wauwatosa	622	4.0%	South Milwaukee	362	3.4%
New Berlin	548	3.5%	Muskego	339	3.2%
Brookfield	420	2.7%	New Berlin	288	2.7%
Hales Corners	370	2.4%	Caledonia	238	2.2%
Greendale	358	2.3%	Greendale	212	2.0%

Source: U.S. Bureau of the Census

Highways and Local Streets

Level of service is a term used to describe the design capacity and level of congestion on roadways. Roads are graded from A through F to describe the degree of congestion experienced by motorists, with A being no congestion, and F being severe congestion. The standards for these grades, for surface arterial streets, are indicated in Table 7.2: Level of Service Standards for Surface Arterial Streets.

Table 7.2: Level of Service Standards for Surface Arterial Streets

Level of Traffic Congestion	Level of Service	Average Speed	Operating Conditions
None	A and B	70 to 100 percent of free-flow speed	Ability to maneuver within traffic stream is unimpeded. Control delay at signalized intersections is minimal.
None	C	50 to 100 percent of free-flow speed	Restricted ability to maneuver and change lanes at mid-block locations.
Moderate	D	40 to 50 percent of free-flow speed	Restricted ability to maneuver and change lanes. Small increases in flow lead to substantial increases in delay and decreases in travel speed.
Severe	E	33 to 40 percent of free-flow speed	Significant restrictions on lane changes. Traffic flow approaches instability.
Extreme	F	25 to 33 percent of free-flow speed	Flow at extremely low speeds. Intersection congestion with high delays, high volumes, and extensive queuing.

Source: Southeastern Wisconsin Regional Planning Commission

Additionally, estimated traffic volumes associated with design capacity and congestion are identified in Table 7.3: Estimated Surface Arterial Design Capacity and Level of Congestion.

Table 7.3: Estimated Surface Arterial Design Capacity and Level of Congestion

Facility Type	Average Weekday Traffic Volumes (Vehicles per 24 Hours)			
	Design Capacity and Upper Limit of Level of Service C	Upper Limit of Moderate Congestion and Level of Service D	Upper Limit of Severe Congestion and Level of Service E	Extreme Congestion and Level of Service F
Two-Lane	14,000	18,000	19,000	19,000
Four-Lane Undivided	18,000	23,000	24,000	24,000
Four-Lane with Two-Way Left Turn	21,000	29,000	31,000	31,000
Four-Lane Divided	27,000	31,000	32,000	32,000
Six-Lane Divided	38,000	45,000	48,000	48,000
Eight-Lane Divided	50,000	60,000	63,000	63,000

Source: Southeastern Wisconsin Regional Planning Commission

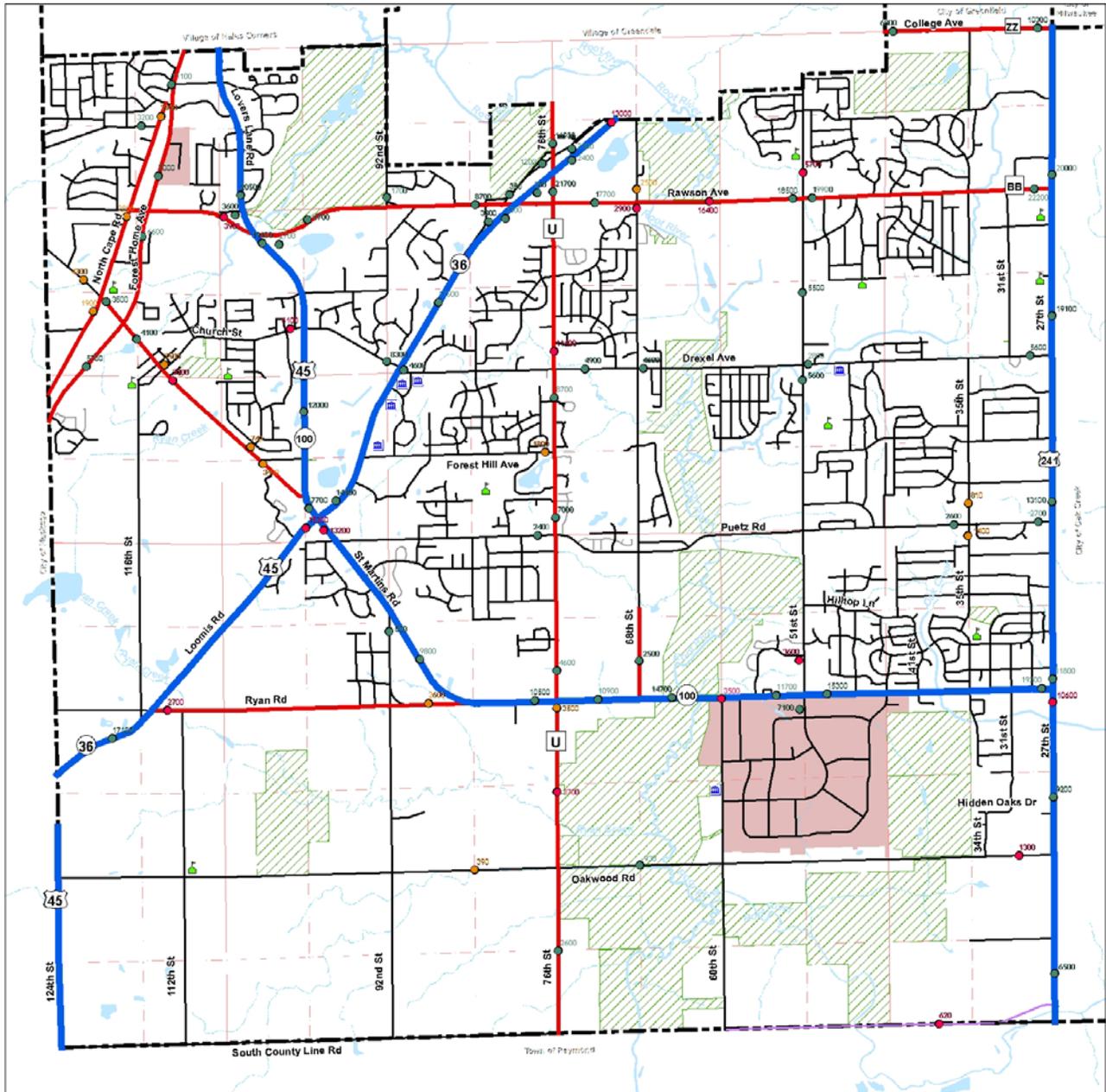
A 2001 evaluation by the Southeastern Wisconsin Regional Planning Commission of the level of service on arterial streets in the region indicated that traffic on nearly all of Franklin's arterial streets was at or under the design capacity. The exception to this was State Highway 100, which was identified as moderately congested. Recent reconstruction has addressed this concern.

The most recent traffic volume data for Franklin's arterial and collector roads, taken in 2002, shows the heaviest traffic on State Highway 100, U.S. Highway 36, 27th Street, 76th Street, and Rawson Avenue (see Map 7.3, Traffic Count). In its analysis of future demand, the Southeastern Wisconsin Regional Planning Commission identified several road improvements that should be accommodated by 2035 to maintain system capacity. These included:

- expansion of Interstate 94 and improvements to off-ramps, currently under construction;
- planned expansion of 27th Street along with access management activities;
- expansion of Ryan Road (State Highway 100) which has already been completed;
- reservation of right-of-way and expansion of 76th Street to four lanes between Ryan Road and Rawson Avenue;
- reservation of right of way for future expansion of College Avenue to four lanes; and
- reservation of right-of-way for future expansion of Rawson Avenue to four lanes between Highway 45 and Loomis Road.

It did not find that additional capacity would be needed on the City's remaining arterial streets.

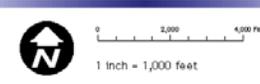
Map 7.3, Traffic Count





City of Franklin

Traffic Count



1 inch = 1,000 feet

Annual Average Daily Traffic

- 2002
- 2005
- 2008

Private
 Town of Raymond
 City of Franklin
 Milwaukee County Trunk Highway
 U.S. or State Highway



R.A. Smith National
Beyond Surveying
and Engineering

June 2009
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The Wisconsin 2008-2013 Six-Year Highway Improvement Program identifies future projects within (or impacting) Franklin including reconstruction of Interstate 94 along with the two interchanges at Ryan Road and at Elm Road, resurfacing of State Highway 36, and reconstruction of parts of 27th Street.

The Transportation Improvement Program for Southeastern Wisconsin: 2009-2012 listing of all arterial highway and public transit improvement projects proposed to be carried out by state and local governments over the next four years. Listed projects in or directly affecting Franklin include:

- bridge replacements on U.S. Highway 45 / State Highway 100 over Rawson Avenue in the City Of Franklin (2009)
- corridor study of U.S. Highway 45 / State Highway 100 from Layton Avenue to Puetz Road (2009)
- rehabilitation of Loomis Road (State Highway 36) from U.S. Highway 45 / State Highway 100 to 51st Street (2009-2010)
- reconstruction of the intersection of 27th Street (State Highway 241) and Rawson Avenue (2009)
- rehabilitation of 27th Street (State Highway 241) from south Milwaukee County line to Drexel Avenue (2009)
- corridor study of 27th Street (U.S. Highway 241) from south Milwaukee County line to College Avenue (2012)
- reconstruction with additional traffic lanes of Interstate 94 from the Illinois state line to the Mitchell Interchange (2009-2012)
- reconstruction with additional lanes of U.S. Highway 45 / State Highway 100 from Loomis Road (State Highway 36) to College Avenue (2010)
- reconstruction with additional lanes of State Highway 100 (Ryan Road) from 60th Street to Loomis Road (State Highway 36) (2009)
- reconstruct with additional lanes of 27th Street (State Highway 241) from Drexel Avenue to College Avenue (2009)
- comprehensive study of existing and future park and ride lot facilities within southeastern Wisconsin (2009)
- reconstruction of Ryan Road from State Highway 36 to State Highway 100 (2012)
- reconstruction of 76th Street from the south Milwaukee County line to Puetz Road (2012)
- reconstruction with additional traffic lanes of 76th Street from Puetz Road to Imperial Drive (2011)

- reconstruction of South 68th Street from Ryan Road (State Highway 100) to House Of Corrections (2012)
- reconstruction of Old Loomis Road from Rawson Avenue to 76th Street (2010)
- construction of the Oak Leaf Trail from Oakwood Road to Ryan Road (State Highway 100) (2010)
- construction of the Oak Leaf Trail (Root River) from 27th Street (State Highway 241) to Oakwood Road (2012)
- reconstruction of Puetz Road from State Highway 100 to 76th Street (2012)

Street pavement conditions are assessed using the PASER (Pavement Surface Evaluation and Rating) system, developed by the University of Wisconsin and the Wisconsin Department of Transportation. This system provides a means for creating an inventory, assessing pavement conditions, and prioritizing road maintenance projects. Based on objective standards, roads are rated from 1 to ten, with 10 being the best. The ratings are related to the need for maintenance as follows:

- Rating 9-10: No maintenance required
- Rating 8: Little or no maintenance
- Rating 7: Routine maintenance, crack sealing and minor patching
- Rating 5-6: Preservative treatments (seal coating)
- Rating 3-4: Structural improvement and leveling (overlay or recycling)
- Rating 1-2: Reconstruction

According to the Wisconsin Department of Transportation, the Wisconsin Information System for Local Roads (WISLR) is “an Internet-accessible system that helps local governments and WisDOT manage local road data to improve decision-making, and to meet state statute requirements.” More specifically, the Wisconsin Department of Transportation notes that WISLR can assist local governments with:

- Maintaining an accurate inventory of its local roads’ physical attributes;
- Compliance with State Statute 86.302(2) pavement condition rating submittals every two years to WisDOT;
- Decisions about road improvements; and
- Preparation of the transportation element of Wisconsin’s Comprehensive Planning Legislation.

Local municipalities have been required to collect and report this data to the Department of Transportation every two years since 2001. This information is now collected through the Wisconsin Information System for Local Roads (WISLR). Franklin most recently completed an evaluation in 2009, and updates this information annually for review by the City of Franklin Board of Public Works. The 2009 analysis indicated there were 43 sections of the City's arterial, collector, and local street system having a rating of 3. These sections ranged in length from less than 200 feet to more than 8,000 feet.

It should be noted that the City of Franklin has developed a five year road improvement plan which identifies required projects and funding. This plan is evaluated annually by the Board of Public Works and provided to the Common Council for its review and approval.

The State of Wisconsin provides financial assistance for local transportation costs. General Transportation Aids help to offset the cost of road construction, maintenance, and operations. Funding levels are based on a six-year spending average or fixed rate per mile of roadway. Wisconsin's Local Roads Improvement Program was established in 1991 to share in the cost of improving deteriorating local streets and highways. Funding is provided for up to half of the eligible costs, with the local government providing the balance.

Access Management

Franklin has addressed access management through a combination of planning and the design standards incorporated into its Unified Development Ordinance. Planning has often been conducted in participation with other governmental units that may have jurisdiction over roadways within the City. The WIS 241 (South 27th Street) Access Management Plan is an advisory tool prepared with the Wisconsin Department of Transportation and others to guide land use, transportation, and access decisions that will help ensure that the corridor remains a safe and efficient corridor for regional mobility. The plan addresses public and private access (finding opportunities to reduce the number of driveways for lots with multiple access points, and consolidating, relocating, or removing existing driveways if multiple lots are consolidated or redeveloped, or the land use changes), local circulation needs, medians, and signalized intersections and traffic progression. The City of Franklin encourages, and often requires during its development review process, cross-access between adjoining parcels as a technique to minimize the number of access points onto arterial and collector streets.

The Unified Development Ordinance addresses access management through a variety of requirements found in Division 15-5.0100 Design Standards for Land Divisions. This Division contains sections providing guidance for street arrangement, limited access highway treatment, street intersections, lots, and access to public streets. Street intersections are encouraged to be no closer than 1,200 feet on arterial streets. The City may control private access to public streets and determines spacing "as a function of arterial street and highway operating speed". Additional restrictions are placed on the location of access points near intersections, and a maximum number of access points is determined for nonresidential and multi-family residential developments.

Traffic Safety

Traffic safety is promoted through the three E's of engineering, education, and enforcement. These refer to the design of transportation facilities to minimize opportunities for crashes, programs to inform the public regarding safe practices for driving or other modes, and policing to ensure compliance with applicable regulations. While many of these activities involve a state or county role, Franklin does implement elements of these approaches through its planning, public works, and police departments, among others.

Engineering approaches include establishing recommended design criteria for transportation facilities such as those included within the Unified Development Ordinance, and those outlined in subsequent sections of this chapter. These may also include traffic calming measures designed to reduce speed on local streets, and the provision of sidewalks and off-street bicycle and pedestrian paths that separate non-motorized transportation from the roadways.

Education may include instruction, such as bicycle safety and motorcycle safety programs conducted by the police department or others, distribution of educational materials, provision of signage, and advertising campaigns designed to inform the public of safety concerns and appropriate responses.

Enforcement is typically carried out by city, county, and state police. These various levels of government often collaborate to provide coverage and to implement programs targeting specific behavior, such as drinking and driving.

Through its Highway Safety Program, the Wisconsin Bureau of Transportation Safety has focused its efforts to improve safety on occupant protection, impaired drivers, underage drinking, enforcement of traffic speeds, traffic records management, improving emergency medical services, motorcycle safety, bicycle and pedestrian safety, and community traffic safety.

Subsequent to the events of September 2001, states have seen a need to plan for transportation security. Wisconsin has evacuation routes established for the potential closure of part of the transportation network. This includes the need to redirect traffic from an interstate in order to protect motorists or provide access to communities along that freeway corridor. The plans were originally drawn up for weather-related catastrophes, and have been used to address problems caused by serious traffic incidents.

Context-Sensitive Design

Context-sensitive design is an emerging practice that seeks to create transportation infrastructure that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. It incorporates public outreach through all phases of the project development process. The Federal Highway Administration has made a commitment to promoting context-sensitive design "to improve the environmental quality of transportation decision making by incorporating context sensitive solutions principles in all aspects of planning and the project development process." Furthermore, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 6008. Section 109(c) (2) of title 23, USC, identifies eight characteristics of the context-sensitive design process:

Communication with all stakeholders is open, honest, early, and continuous.

A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.

A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and consensus on the scope is forged before proceeding.

The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.

A commitment to the process from top agency officials and local leaders is secured.

The public involvement process, which includes informal meetings, is tailored to the project.

The landscape, the community, and valued resources are understood before engineering design is started.

A full range of tools for communication about project alternatives is used (e.g., visualization).

Additionally, the project is determined to be successful to the degree in which it exhibits seven qualities:

The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.

The project is a safe facility for both the user and the community.

The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.

The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.

The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.

The project is designed and built with minimal disruption to the community.

The project is seen as having added lasting value to the community.

Sustainability

Transportation infrastructure makes up a significant portion of all urban land uses. The manner in which communities design and construct streets and other transportation facilities can have a significant bearing upon their quality to life, economic well-being, and environment. Sustainability attempts to balance these

concerns. A sustainable approach to street design will ensure the safe and efficient movement of vehicles while also promoting alternative means of transportation such as transit, bicycling, and walking. It will minimize environmental impacts including disturbance to the landscape, stormwater runoff, noise, and other impacts.

The American Association of State Highway and Transportation Officials (AASHTO) has identified five goals for achieving sustainable transportation:

- reduce carbon in the atmosphere and conserve energy;
- coordinate land use and transportation in support of sustainability objectives;
- achieve “better than before” outcomes for our communities and the natural environment;
- apply innovative, sustainable practices in the development and delivery of transportation projects and services; and
- adopt the triple bottom line as a way of advancing and as a yardstick for evaluating the sustainability of surface transportation system policies and performance.

Measures being adopted by some communities to improve the sustainability of transportation infrastructure may include:

- land use patterns that minimize travel needs and promote alternative transportation modes;
- planning for a grid or modified grid street pattern that provides connectivity and multiple routing options;
- design of transportation infrastructure that minimizes impacts to the natural environment;
- encouragement of narrower streets, particularly on local residential streets, to minimize the amount of impervious surface area;
- provision of sidewalks, bike lanes, paths, and other features to promote alternative transportation modes;
- traffic calming measures that enhance community livability;
- adoption of low-impact design practices that encourage stormwater infiltration and filtering of pollutants through so-called natural drainage systems;
- designation of “green streets” that prioritize non-motorized transportation modes and can even act as city parks;
- provision of street trees and other vegetation within the street right-of-way;

- use of LED and solar-powered light fixtures, along with other energy-saving practices;
- specification of recycled or environmentally-friendly materials in street construction or maintenance projects; and
- implementation of transportation management techniques, such as employer-funded car-pooling, flexible work schedules, telecommuting, and high-occupancy vehicle (HOV) lanes, that encourage transit, reduce trips, or mitigate congestion.

Not all practices are suitable for every condition. For example, the success of infiltration techniques is highly related to soil types that allow infiltration to easily occur. They tend not to function in areas of clay soil. Also, based on the results of a recent study, the Wisconsin Department of Commerce does not recommend use of porous pavements due to the state's climate. Techniques such as those mentioned here should be evaluated on criteria such as their proven effectiveness, cost of installation and maintenance, and benefit to the community.

Transit

The Milwaukee County Public Transit-Human Services Transportation Coordination Plan assesses the existing transportation needs and services in Milwaukee County, identifies unmet needs or service gaps, and presents a prioritized list of strategies to address those needs. It identifies several population groups that are more heavily dependent upon transit, including school-age children (ages 10 through 16), seniors (ages 65 and older), persons in low-income households, disabled individuals, and households with no vehicle available. Persons in low-income households accounted for the largest share of the transit-dependent population in the county at about 32 percent of the total population.

Several unmet needs are recognized in the plan. Those most relevant to Franklin include:

- Lack of a dedicated funding source separate from the property tax levy to provide the level of financial assistance necessary to address existing and future public transportation needs in the County.
- Need for improving the safety, security, and convenience of using existing public transit services.
Areas of need include:

Expansion of the areas served by, and higher frequency of service on, Milwaukee County Transit System routes.

More affordable fares for Milwaukee County Transit System.

Incentives to ride the bus and paratransit services.

- Need for more transportation services during weekday evenings and nights, and on weekends.

- Lack of a higher speed transit service in the County.
- Lack of transportation services between counties to serve medical, holiday, family visit, and employment trips.
- Better coordination is needed between job centers, employers, and employment training and placement networks to identify and provide needed transportation services.

The Milwaukee County Transit System (MCTS) provides transit services to Franklin and throughout the metropolitan area. During the school year, Milwaukee County Transit System operates a total of 57 routes. Of that, 30 are local, ten are freeway flyers, three are UBUS service for University of Wisconsin - Milwaukee, and 14 operate with limited morning and afternoon service, serving either schools or industrial parks. More than 85 percent of all Milwaukee County residents are within walking distance of a regularly scheduled bus route, however, this percentage is lower in communities such as Franklin, which are less densely populated and at the edge of the metropolitan area.

Routes currently serving Franklin include Route 27 (27th Street) which ends at the Walmart on 27th Street south of College Avenue, and Route 137 (House of Correction) with stops on Ryan Road. Additional routes are located nearby in Greenfield, Greendale, Milwaukee, and Oak Creek and include Routes 40/40U, the Freeway Flyers serving the park and ride lots on Interstate 94 at Ryan Road and College Avenue.

While there are no park and ride facilities located within the City of Franklin, several lots in neighboring communities may serve the needs of residents. These include lots at State Highway 100 (Hales Corners), Ryan Road (Oak Creek), West College Avenue (Milwaukee) and West Loomis Road (Greenfield). Utilization of these lots is below 50 percent. They are served by public bus transit. Bicycle storage (racks or lockers) are available at these facilities, and all Milwaukee County Transit System buses are equipped with bike racks.

The Milwaukee County Transit System receives a portion of its funding for its operations from passenger fares, advertising, and other related income, which account for 34 percent of the total. The State of Wisconsin provides an additional 42 percent, while the federal government and Milwaukee County property taxes each contribute about 11 percent.

Staff from the Milwaukee County Transit System were interviewed concerning future planning and needs specific to Franklin. There are currently no planned service enhancements (additional routes or stops), and future service levels will be determined by the availability of funding. The outcome of current proposals concerning funding in the State budget will drive the process. Milwaukee County Transit System staff indicated that there is currently little direct contact with system users in the City of Franklin. This has been an impediment to determining future needs.

The Regional Transportation System Plan for Southeastern Wisconsin: 2035 contains detailed recommendations related to future transit needs serving not only Milwaukee County, but the entire seven-county region. The plan sets out goals including:

- Connecting and serving the medium and high density areas of the urban centers and communities of the region, and the region's major employment and activity centers;
- Providing convenient service at reasonable service frequencies and travel speeds capable of attracting travel in high density travel corridors and areas. It is not possible or desirable in these corridors and areas to accommodate all travel by automobile;
- Supporting and encouraging more efficient higher density development and redevelopment, as recommended in the regional land use plan;
- Contributing to transportation system efficiency including reduced air pollution and transportation system efficiency; and,
- Providing accessibility to the region to, and meeting the travel needs of, those in the region dependent on public transit, including those unable to use an automobile, and those not having an automobile available to them.

The plan identifies three types of primary services. Rapid transit is relatively fast and convenient transportation along heavily traveled corridors and between major activity centers, with high average operating speeds and relatively low accessibility. Stations are spaced approximately three miles apart. It may be provided by technology such as light rail or buses running over dedicated bus lanes, which may be grade-separated from other traffic lanes.

Express transit service provides a greater degree of accessibility at somewhat slower operating speeds than rapid transit and may provide "feeder" service to the rapid transit system. Generally provided over arterial streets and highways, express transit service will typically have stops spaced one-quarter to two miles apart.

Local transit service offers the greatest level of accessibility but operates at the slowest speeds. Stops along arterial or collector streets are usually spaced at intervals of a quarter-mile or less. Service is most often provided by bus in urban areas.

Several additional transit services are proposed in the regional plan. Included in these is a recommendation to provide additional service to Franklin along Ryan Road and on 76th Street.

The Milwaukee Connector Study, led by the Wisconsin Center District in partnership with the City of Milwaukee, Milwaukee County and the Metropolitan Milwaukee Association of Commerce, has been commissioned to study the feasibility of bus rapid transit (BRT) or streetcar technologies for the downtown and three corridors in the region. One of these corridors is 27th Street, extending as far south as Ryan Road.

The proposed BRT component would operate much like an express bus system with faster travel times, fewer stops, more frequent service, real-time information about the next vehicle arrival time, enhanced passenger amenities at stations and on vehicles, and off-vehicle ticketing at the transit stops to allow for quicker entry onto the vehicle. The proposed Streetcar component would include similar amenities and serve workers,

residents, and visitors to circulate among downtown neighborhoods and attractions. The initial corridors were selected because they are currently the most heavily used bus routes within Milwaukee County.

Transportation for Persons with Disabilities

Demand for paratransit services, or transportation services for the disabled, has been growing in the Milwaukee region. These services are provided by the Milwaukee County Transit System. At a basic level, all of the Milwaukee County Transit System's buses are wheelchair accessible. Persons with a disabling illness or condition that prevents them from using Milwaukee County Transit System's buses can take advantage of Transit Plus. Under this program, First Transit and Transit Express provide ADA accessible van service as contracted carriers. Riders must contact the Milwaukee County Transit System in advance for service to be provided.

The Americans with Disabilities Act (ADA) of 1990 requires that all new or altered pedestrian facilities (including path projects funded by state or federal sources) must be designed to comply with accessibility standards. The Wisconsin Department of Transportation provides guidance on the types of facilities to be considered. These recommendations are found in the Wisconsin Department of Transportation's Facilities Design Manual or other sources, and are identified in Table 7.4: Criteria for Compliance with the American Disabilities Act.

Table 7.4: Criteria for Compliance with the American Disabilities Act

Transportation Facility	Required/recommended Criteria
Curb Ramps and Domes	The standard width of ramps is 5 feet wide and the maximum grade is 8.3%. All new and altered intersections shall include truncated domes (now the only permitted detectable warning field). Ramps need to have a minimum 4' by 4' landing at the top, which is not to exceed a two percent slope in any one direction.
Sidewalks and Driveways	For ADA purposes, the minimum continuous and unobstructed clear width of a "pedestrian accessible route" (sidewalk) is one foot narrower than the WisDOT standard width sidewalk (which is five feet). However, whenever a sidewalk is built between four and five feet wide, passing spaces need to be provided every 200'. The maximum cross-slope of a sidewalk is two percent. The maximum running slope of a sidewalk is five percent. The maximum cross-slope of a sidewalk that crosses a driveway is two percent and must be at least 3.5' wide across the driveway.
Sidewalk Surfaces	Sidewalk surfaces must be firm, stable and slip resistant and sidewalk faults limited to ¼". Anything between ¼" and ½" can be beveled without being ramped. Anything over ½" must be ramped up to at a maximum of 8.3 percent.
Paths/Trails	Except those trails designed to function similarly as a sidewalk, trails should be designed to comply with the Outdoor Developed Areas Report prepared by the U.S. Access Board. Trails primarily designed and constructed for recreational use by equestrians, mountain bicyclists, snowmobile users, or off-highway vehicle users, even if pedestrians may occasionally use the same trails, do not have to comply with these same ADA requirements.
Crossings	Marked crosswalks should be 6 feet wide.
Accessible Pedestrian Signals	Accessible pedestrian signals include audible tones and speech messages that provide standard information about the status of the signal cycle. Incorporation of accessible pedestrian signals for all new and altered signal systems (with pedestrian indicators) will be required by the Wisconsin Department of Transportation.

Source: Wisconsin Department of Transportation

Bicycle Transportation

In *The Economic Impact of Bicycling in Wisconsin*, the Bicycle Federation of Wisconsin notes that 48 percent of Wisconsin adults participate in recreational cycling, and in 2001 there were over 89 million bicycle trips in the state, including both recreational and commuting trips. While bicycling makes up a very small percentage of commuting trips in Franklin, trends in the city are likely similar to state and national trends that show bicycle commuting gaining in popularity.

The Wisconsin Bicycle Transportation Plan 2020 has the simple goal to “establish bicycling as a viable, convenient and safe transportation choice throughout Wisconsin”. The plan documents current bicycling conditions and establishes goals, policies, and objectives for intercity and urban/suburban bicycle transportation and bicycle safety. The plan’s objectives include:

- Plan and design new and improved transportation facilities to accommodate and encourage use by bicyclists.
- Expand and improve a statewide network of safe and convenient routes for bicycle transportation and touring, including safe and convenient access to and through the state’s urban areas.
- Expand the range of education activities such as driver licensing and training, bicycle safety education, traffic law enforcement, and provision of public service information to provide consistent safety messages and training to all roadway users.
- Improve enforcement of laws to prevent dangerous and illegal behavior by motorists and bicyclists.
- Encourage more trips by bicycle by promoting the acceptance and usefulness of this mode.

The State’s plan establishes priority corridors for bicycle facilities and provides guidance for when bicycle accommodations (such as paved shoulders, widened bridges, or off-road facilities) should be constructed in coordination with planned roadway improvements.

Wisconsin publishes bicycling condition maps for every county in the State, identifying on-street and off-street routes suitable for bicycling. Within Franklin, 51st Street and 60th Street are together identified as an urban escape route, providing safe access from the urbanized area to the rural countryside. Several streets are identified as having the “best conditions for bicycling” and include Drexel Avenue and 51st Street, which connect to the Oak Leaf Trail.

The Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin, as amended in 2001, contains the Southeastern Wisconsin Regional Planning Commission’s plans and recommendations for the seven-county area including Franklin. Recommendations include linking the urbanized areas and communities with a population of 5,000 or more, providing convenient access to transit and major activity centers, and designation of more than 1,800 miles of bicycle ways throughout the region. Portions of the planned (or existing) routes lie within the City of Franklin. These are depicted on Map 7.4, Bicycle and Pedestrian Circulation Facilities.

The regional plan also recommends that local units of government prepare community bicycle and pedestrian plans to supplement the regional plan. The local plans should provide for facilities to accommodate bicycle and pedestrian travel within neighborhoods, providing for convenient travel between residential areas and shopping centers, schools, parks, and transit stops within or adjacent to the neighborhood.

It is recommended that these state bicycle plans and maps be updated to reflect recent trail construction activity within the City, including completion of the off-road portion of the Oak Leaf Trail north of Drexel.

As shown on Map 7.4, Bicycle and Pedestrian Circulation Facilities, Franklin is developing a system of bicycle and pedestrian trails in addition to on-street bicycle facilities. The majority of trail miles in Franklin are within the Milwaukee County Oak Leaf Trail System. This trail system consists of over 100 miles of bicycle paths throughout Milwaukee County, including off-road paths and paths along parkway drives and municipal connecting streets. The off-road path portions of the system are designed for such multi-modal uses as in-line skating, bicycling and cross country skiing.

The Oak Leaf Trail in Franklin runs north – south through the central portion of the city. As a result of significant local planning and fundraising efforts, the 68th Street extension of the Oak Leaf Trail was completed in 2006 to enhance trail connections and safety. This portion of the trail extends south from Loomis Road (State Highway 36) to Drexel Avenue following the Root River. The extension takes the place of the previous 68th Street portion of the trail, replacing approximately two miles of municipal street trail with the off-road Root River path. At W. Drexel Avenue, the municipal street path continues east along the right-of-way to the city limits. As this portion of municipal street path causes significant safety concerns (traffic, speed, etc.), improved Oak Leaf Trail signage or other alternatives should be considered to better identify the street as a shared space among pedestrians, cyclists and cars.

The Franklin Spur of the Oak Leaf Trail branches off of Drexel Avenue just east of 68th Street and continues south to the Milwaukee County Sports Complex, ending at Ryan Road and 60th Street. A future connection could be considered south of Ryan Road, following the Root River south into Racine County, then continuing east to the existing Root River trail at County Line Road in Oak Creek.

The Franklin Bike and Hiking Trail is located in the northwestern portion of the City. The crushed limestone path extends south from Rawson Avenue along a WE Energies right-of-way to Swiss Street, then continuing west from Swiss Street to connect with the Muskego Trail in Waukesha County. As this trail segment was intended to provide a critical link in area-wide trail system development, consideration should be given to future trail connections to the south into both Racine and Waukesha County.

The St. Martins Trail extends along the former Interurban Right-of-Way southward from the Franklin Bike and Hiking Trail, generally along S. 116th Street to the City limits with Muskego.

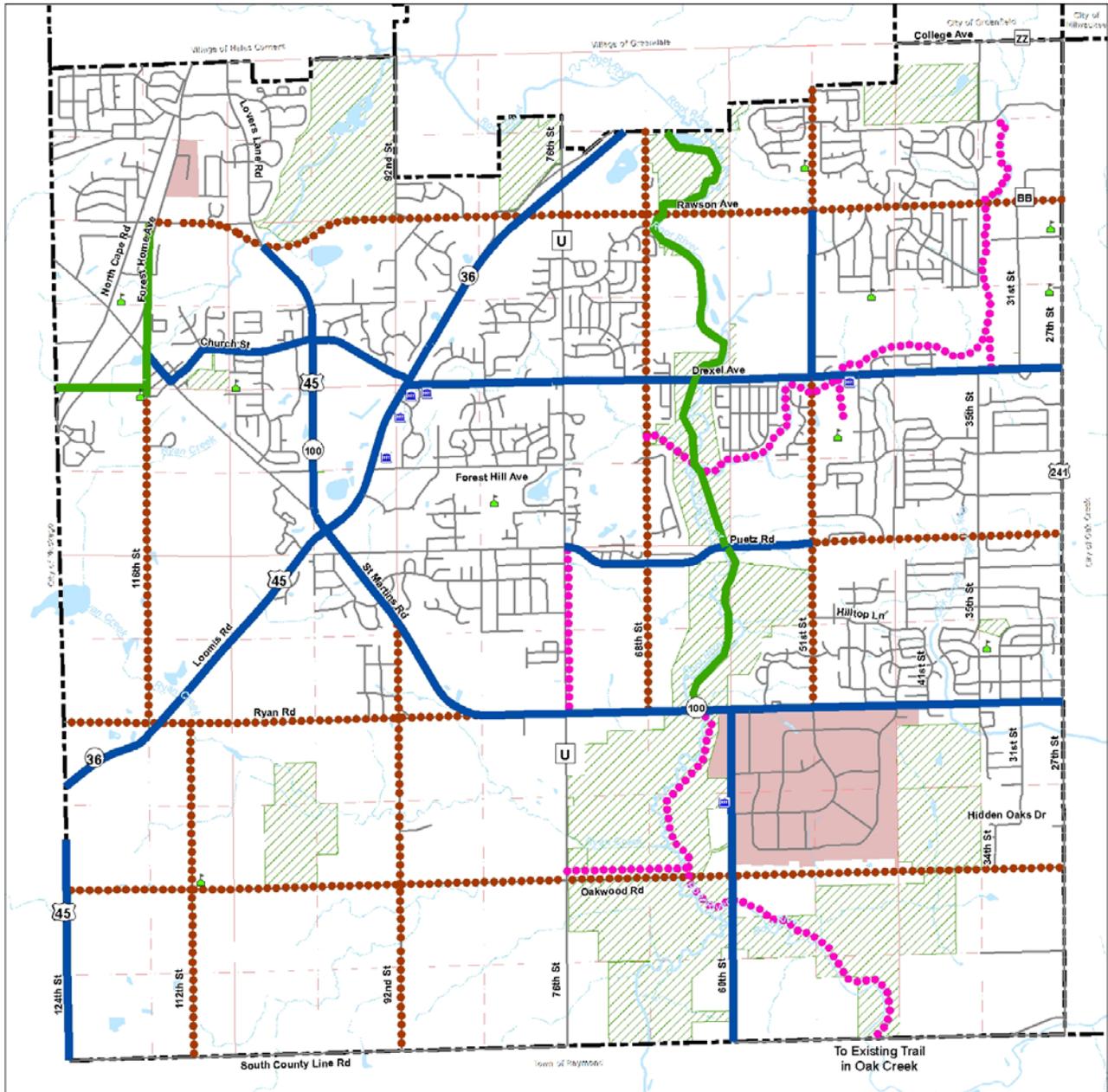
The Comprehensive Outdoor Recreation Plan: 2020 for the City of Franklin identifies multi-functional trail development standards as the following:

- Trails intended for utilitarian travel should provide direct and continuous routes which minimize delays and maximize safety.
- Trails should be provided to assist in the interconnection of the City of Franklin with Milwaukee, Racine and Waukesha urbanized areas.
- Trails should be provided to connect residential areas with City activity centers and parks.
- Trails used for pedestrians or as bicycle paths should be separated from motorized vehicular traffic by open space or barriers, and may be located within the public right-of-way of a street or highway or in an independent right-of-way or easement.
- On-street bicycle lanes should be designated with directional and information markers, striping, signing, and pavement markings for bicycle use and may be located within the right-of-way of a street or highway.
- Trails intended to be used for bicycle paths or bicycle lanes should follow the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities as amended and the Wisconsin Department of Transportation's Facilities Development Manual criteria for the design of bicycle facilities as amended.

Bicycle safety is a significant concern. A study conducted by the Wisconsin Department of Transportation, *Bicycle Crash Analysis for Wisconsin Using a Crash Typing Tool (PBCAT) and Using a Geographic Information System (GIS)*, provides extensive insight into the prevalence and causes of accidents involving bicyclists. Most crashes occur in urban areas (94 percent) and a majority are at intersections (66 percent). Many of these crashes occur at the sidewalk/crosswalk (28 percent). In a majority of cases, the motorist was at fault for the crash, with motorist drive-out from a sign- or signal-controlled intersection frequently cited as the cause. Crashes are more common on weekdays and are thought to be related to bicycle commuting, which tends to share the road with motor vehicles.

The Wisconsin Bicycle Facility Design Handbook and Wisconsin Bicycle Planning Guidance: Guidelines for Metropolitan Planning Organizations & Communities in Planning & Developing Bicycle Facilities, provide planning and design criteria for development of basic roadway improvements, bicycle lanes, and shared-use paths.

Map 7.4 Bicycle and Pedestrian Circulation Facilities





City of Franklin

Bicycle and Pedestrian Circulation Facilities



1 inch = 1,000 feet

Existing Bicycle/Pedestrian Facility

- ON-STREET
- OFF-STREET

Future Bicycle/Pedestrian Facility

- ⋯ ON-STREET
- ⋯ OFF-STREET



R.A. Smith National
Beyond Surveying and Engineering

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July 2009

Pedestrian Transportation

The Wisconsin Pedestrian Policy Plan 2020 notes that just over eight percent of all trips taken in Wisconsin are pedestrian trips, with the greatest percentage taken by younger persons (under age 14), or those over age 45. Forty percent of trips were under a half mile in length, and 70 percent were under one mile. The plan encourages including pedestrian facilities on state trunk highways, and recommends that the Department of Transportation work with local communities on issues such as transportation planning and design, public education, traffic law enforcement, and encouraging walking as a viable transportation mode.

The pedestrian facilities element of the Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin recommends policies and guidelines that local governments are encouraged to follow. These policies and guidelines include recommendations that sidewalks be provided along streets and highways in areas of existing or planned urban development based upon defined criteria (see Table 7.5), that sidewalks be designed appropriately for the levels of pedestrian and vehicular traffic in the area, that buffer areas be provided between sidewalks and the roadways to enhance the pedestrian environment, and that efforts be made to maximize pedestrian safety at street crossings.

Table 7.5: Recommendations for Providing Sidewalks in Areas of Existing or Planned Urban Development

Roadway Functional Classification	Land Use	New Streets	Existing Streets
Arterial Streets	Industrial Commercial Residential	Both Sides Both Sides Both Sides	Both Sides Both Sides Both Sides
Collector Streets	Industrial Commercial Residential	Both Sides Both Sides Both Sides	Both Sides Both Sides At Least One Side
Land Access Streets (Local Streets)	Industrial Commercial Residential (medium and high density) Residential (low density)	Both Sides Both Sides Both Sides At Least One Side	Both Sides Both Sides At Least One Side At Least One Side

Source: Southeastern Wisconsin Regional Planning Commission

As noted earlier, Franklin's 1992 Comprehensive Plan recommended placement of sidewalks on the school side of collector streets, on streets providing access to school sites, on arterial streets with an urban cross-section, and on one side of designated collector streets. Additionally, the City's Unified Development Ordinance establishes required minimum sections for urban and rural streets. Sidewalks are not required on rural streets. A five-foot sidewalk is required on one side of four-lane arterials, collector streets, and minor streets. Sidewalks are not required on difficult sites or in areas where priority is given to protection of natural resources, or on cul-de-sacs.

The Wisconsin Department of Transportation's Guidelines for Metropolitan Planning Organizations and Communities in Planning and Developing Pedestrian Facilities advocates sidewalks as the most effective

pedestrian improvement. The guidelines recommend the adoption of a sidewalk policy to require that sidewalks be installed at the time land is developed (or the street constructed). Additionally, all urban streets and bridges should have sidewalks, and where at all possible, arterials and collectors in urban and suburban areas should be retrofitted to include sidewalks on both sides, especially those that serve schools, commercial areas, recreational areas, office complexes, and bus routes.

The largest number of pedestrian crashes occurs on weekdays (peaking on Friday) between 3:00 PM and 6:00 PM, after school and during the afternoon commute. A third to a half of the annual pedestrian crashes involves children. This information underscores the importance of providing paths and sidewalks, crosswalk improvements, and other traffic safety measures on routes to schools, parks, and other significant generators of pedestrian activity.

The State of Wisconsin has participated in the Safe Routes to School Program since 2007, providing funding to local communities to conduct safety assessments, plan for system enhancements, fund infrastructure, and promote walking and bicycling for children in grades K-12. The program encourages high levels of community involvement to identify gaps or barriers in the bicycle and pedestrian network, and to plan and implement solutions that remove these barriers.

Railroads

Franklin is not directly served by railroads. Freight and passenger rail service is located in neighboring communities, with the most important link being the route between Milwaukee and Chicago, located east of the City in Oak Creek. The Wisconsin Rail Issues and Opportunities Report (2004) summarizes many of the most pressing concerns for continued rail service. The most relevant to Franklin are plans to increase the level of intercity passenger service, and a desire to expand locations allowing intermodal transfer. The Port of Milwaukee is most likely to meet the intermodal shipping needs of Franklin businesses.

Amtrak is currently providing intercity passenger rail service including the Hiawatha Route, which offers seven round trips daily between Milwaukee and Chicago. Passengers can connect to other Amtrak routes. The nearest station is located at General Mitchell International Airport. Additional passenger rail service may be available in the future. The Midwest Regional Rail Initiative is a network of routes advocated by several states within the region. The proposed routes would provide intercity passenger rail service to the region's larger population centers. In Wisconsin, this would include connections from Milwaukee to Madison and to Green Bay, in addition to the existing Chicago connection.

The Kenosha-Racine-Milwaukee (KRM) corridor has been extensively studied as a potential route for commuter rail. At its southern end, the route would provide a connection to the Chicago region's Metra rail service. The State of Wisconsin is currently considering creation of a multi-county Regional Transportation Authority to implement the proposed Kenosha-Racine-Milwaukee commuter rail plan.

Air Transportation

There are 100 airports in the State Airport System. Most of Franklin's air travel and air cargo needs are met by General Mitchell International Airport, which is located nearby in the City of Milwaukee. Wisconsin's largest airport, General Mitchell is served by most major air passenger and air freight services, in addition to offering charter and general aviation services. The Wisconsin State Airport System Plan forecasts that traffic at the airport will more than double between 2000 and 2020. Several projects are identified for the airport in the Wisconsin Bureau of Aeronautics' Five Year Airport Improvement Plan. These tend to be routine maintenance activities, along with improvements to parking, safety, and navigational aids.

A draft update of Milwaukee County's General Mitchell International Airport Master Plan had been prepared in 2007. The draft plan indicates that the proposed additional runway, referred to as the C-1 Runway in the 1993 Plan (located south of and parallel to the main east-west runway, primarily north of College Avenue and primarily east of Howell Avenue) is proposed to be needed between 2016 and 2021.

Airports, and especially major airports such as General Mitchell, can create impacts that influence nearby land uses. Chief among these are restrictions imposed by the Federal Aviation Administration on structures located within the paths of runways, and noise impacts. A Part 150 Noise Compatibility Study was prepared for the airport in 2004. This study notes that some parts of Franklin are impacted by noise from the airport, although below the 70 decibel level that is the threshold for mitigation. Franklin has adopted an Airport Overlay District to guide development in these areas. The AO Airport Overlay District is intended to:

Allow for the coordination, planning, and development of land uses in the vicinity of General Mitchell Field, but limits uses and requires noise protection.

Control conflicts between land uses and noise generated by aircraft and to protect the public health, safety, and welfare from the adverse impacts associated with excessive noise.

Ensure that land uses in the airport noise impact area are mutually compatible with airport noise.

Provide acoustical performance standards.

Be in addition to and shall overlay all other zoning districts where it is applied so that any parcel of land or lot lying in the AO District shall also lie in one or more of the other zoning districts. The effect is to create a zoning district which has the characteristics and limitations of the underlying district, together with the characteristics and limitations of the AO District.

Provide adequate notice to land owners and prospective land owners that airport operations should be considered as possibly affecting the use of property within the AO Airport Overlay District.

Regulate land uses within designated existing or projected airport impact areas by providing height restrictions which will assure safe, unobstructed access for all aircraft which enter and exit General Mitchell Field.

It can be noted that the Existing 2004 – Noise Exposure Map, and the Future 2009 Noise Exposure Map, which are both part of *Milwaukee County's Mitchell International Airport, Part 150 Noise Compatibility Study Update*, completed in 2008 and approved by the U.S. Department of Transportation Federal Aviation Administration in December 2008, indicate that the 70 decibel noise level (DNL) contour, as well as the 65 DNL contour have been reduced in size due to quieter aircraft engines, and no longer extend into the City of Franklin.

Trucking

Analysis by the Southeastern Wisconsin Regional Planning Commission suggests that about eleven percent of trips on the regional arterial street system are made by trucks. Franklin's business parks and commercial areas are significant local generators of truck traffic. Moving this traffic safely and efficiently between the major arterial system and locations within the City is a priority consideration in transportation planning.

Trucks are often limited to specific travel corridors determined by their capacity to safely accommodate long, high, or heavy loads. Unless specially permitted, Wisconsin limits trucks to a length of 40 feet for a single vehicle or 65 feet for a tractor-trailer combination. Truck height is limited to 13.5 feet and width to 8.5 feet, with a maximum weight of 80,000 pounds. Lane widths and road geometrics for designated truck routes are typically designed to provide greater room for maneuvering large vehicles. The American Association State Highway Transportation Officials (AASHTO) book, *A Policy on Geometric Design of Highways and Streets*, commonly known as the Green Book recommends alternative design standards based on the wheel base (WB), (the distance, in feet, measured between the front wheel axle of a vehicle and its rear-most wheel axle) of the largest vehicles that will utilize the route. Criteria have been designated for WB-67, WB-50, WB-40, single unit truck (SU) and passenger car (P).

The State of Wisconsin has designated several roads under its jurisdiction as truck routes. These include State Highways 36 and 100, U.S. Highways 45 and 241 (27th Street), and Rawson Avenue within the City of Franklin. Locally, additional streets have been designated as truck routes through Section 245-6 of the City of Franklin's Municipal Code. In addition to the state-designated routes, Franklin has designated the county-lettered highways as heavy traffic routes (truck routes), including BB (Rawson Avenue), MM (St. Martins Road), J (North Cape Road), OO (Forest Home Avenue), H (Ryan Road), A (the portion of S. 68th Street north of Highway 100 adjacent to the Correctional Facility), and U (76th Street). All other streets are designated Class B highways, with trucking permitted for pick-up and deliveries.

Water Transportation

The Port of Milwaukee is the largest of Wisconsin's commercial ports. Located about 8.5 miles northeast of Franklin, the port is directly served by the interstate highways system. Rail transportation is provided by the Union Pacific Railroad and Canadian Pacific Railway, which also operates the Port's intermodal yard. The Port handles an average of 2.6 million metric tons of cargo annually, with the primary commodities being

coal, scrap/pig iron, cement, general cargo, sand, limestone, salt, and grain. Shipping from the Port may proceed down the St. Lawrence Seaway to the Atlantic Ocean in about 4.5 days. Barge traffic can continue through the Illinois River (at Chicago) to the Mississippi River.

The Lake Express, a private ferry service, operates seasonally from the Port of Milwaukee to Muskegon, Michigan. Two daily round-trips ferry both cars and passengers across Lake Michigan, allowing them to avoid congestion and the additional time it takes to travel through Chicago and around the south end of the lake.

FUTURE TRANSPORTATION NEEDS

No additional segments of arterial or collector streets are envisioned in this plan. Franklin's arterial and collector street system is already established, and is anticipated to adequately address future needs. Future transportation needs will be related to the need to acquire right-of-way as indicated on the Official Map, and to reconstruct existing street segments according to the City's dimensional criteria as road conditions, traffic volume, and the pace of development dictate.

Recommended Street Cross-Sections

The City of Franklin has adopted "Minimum Dimensional Design Standards for Streets and Other Public Ways" through Table 15-5.0103 of the Unified Development Ordinance. Alternative standards are provided for urban and rural areas, and address four-lane arterial streets, two-lane arterial streets, collector streets, minor streets (three types), cul-de-sacs, alleys, bicycle paths, and pedestrian ways. As Franklin's demographics change, transportation demand grows, and land uses become more complex, it will be necessary to consider modifications to these standards as well as an expansion of alternative design criteria.

Recommended design standards are summarized in the following tables (see Tables 7.6, 7.7, and 7.9). Recommended arterial street sections are for standard city streets (see Table 7.8 and 7.10). Specific standards for roadways under county or state jurisdiction will be based on detailed engineering studies. Both major and minor arterial streets are identified based on an estimate of future traffic volume. Current conditions may not warrant immediate construction to the higher standard (i.e., number of lanes, etc.) recommended, however, the City should obtain sufficient right-of-way to expand the roadway in the future. These standards are intended to be applied flexibly according to specific conditions related to the roadway.

Table 7.6: Design Standards for Arterial Streets

	Major Urban Arterial	Minor Urban Arterial	Major Rural Arterial	Minor Rural Arterial
Purpose	Connects regional activity centers and prioritizes mobility over access	Connects minor activity centers and provides some local access.	Connects regional activity centers and prioritizes mobility over access	Connects minor activity centers and provides some local access.
Posted Speed Limit	45-55 MPH	30-45 MPH	45-55 MPH	30-45 MPH
Intersection Spacing	¼ - ½ mile	⅓ - ¼ mile	¼ - ½ mile	⅓ - ¼ mile
Land Access	None to Limited	Limited	None to Limited	Limited
Right-of-Way	130'	130'	130'	130'
Driving Lanes	4 lanes	2 or 4 lanes	4 lanes	2 or 4 lanes
Pavement ¹	Dual 36'	12' driving lanes (2 or 4) Site specific, see Bicycle Facilities below.	Dual 24' driving lanes 10' outside shoulder 6' inside shoulder	12' driving lanes (2 or 4) Site specific, see Bicycle Facilities below.
Turning Lanes	Provided	May be provided	Provided	May be provided
Stormwater ²	30" Curb and gutter	30" Curb and gutter	Open ditch	Open ditch
Median	26'	May be undivided	18'	May be undivided
Curb Lawn	10' per side	10' or more per side		
On-street Parking	None	None	None	None
Bicycle Facilities	Optional: may include bike lanes or separated path	Optional: may include bike lanes or separated path	Optional: may include paved shoulder or separated path	Optional: may include paved shoulder or separated path
Sidewalks ³	Both sides	Both sides, if urban cross section	To be considered during construction or reconstruction	To be considered when and where appropriate
Based on design standards contained in the Wisconsin Department of Transportation's Facilities Design Manual				

¹ Urban sections measured curb face to curb face. ² Alternative treatments may be used on a case-by-case basis to address unique circumstances or to address stormwater management best practices. ³ Sidewalks are located one foot from the property line.

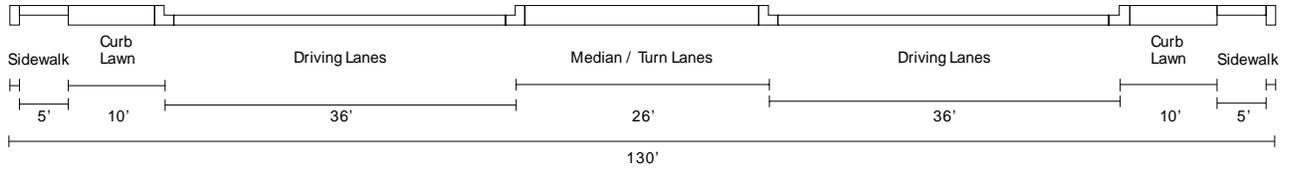
Table 7.7: Design Standards for Collector Streets

	Urban Collector Street	Rural Collector Street
Purpose	Provides access to commercial areas and feeder to arterial streets	Provides access to commercial areas and feeder to arterial streets
Posted Speed Limit	25-35 MPH	25-45 MPH
Intersection Spacing	1/8 mile	1/8 mile
Land Access	Limited to Moderate	Limited to Moderate
Right-of-Way	80'	80'
Driving Lanes	2 Lanes	2 Lanes
Pavement	2-12' driving lanes 40' face to face	2-12' driving lanes 8' shoulder or marked bike lane on both sides
Stormwater ¹	Curb and gutter	Open ditch
Curb Lawn	12'	
Parking	May be allowed	None
Bicycle Facilities	Shoulder or marked bike lane	Shoulder or marked bike lane
Sidewalks ³	One side	Not required
Based on standards contained in the Wisconsin Department of Transportation's Facilities Design Manual		

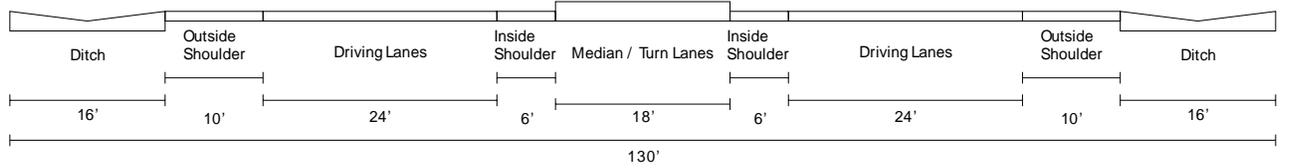
¹ Urban sections measured curb face to curb face. ² Alternative treatments may be used on a case-by-case basis to address unique circumstances or to address stormwater management best practices. ³ Sidewalks are located one foot from the property line.

Table 7.8: Cross-Sections for Arterial and Collector Streets

Major Urban Arterial



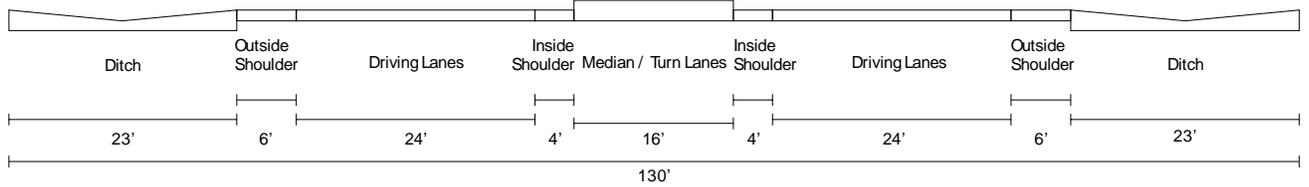
Major Rural Arterial



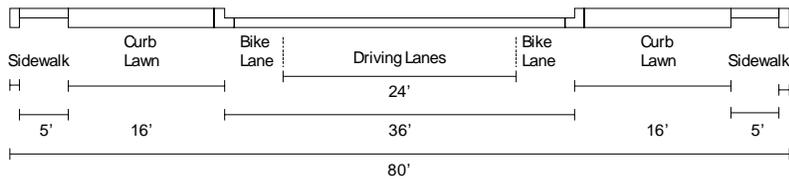
Minor Urban Arterial (Shown with Four Lanes)



Minor Rural Arterial



Urban Collector Street



Rural Collector Street

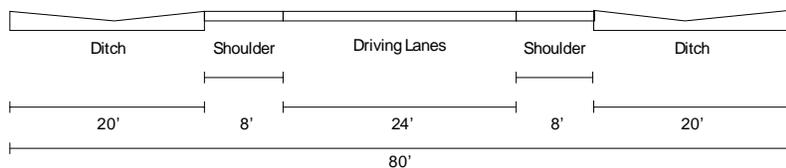


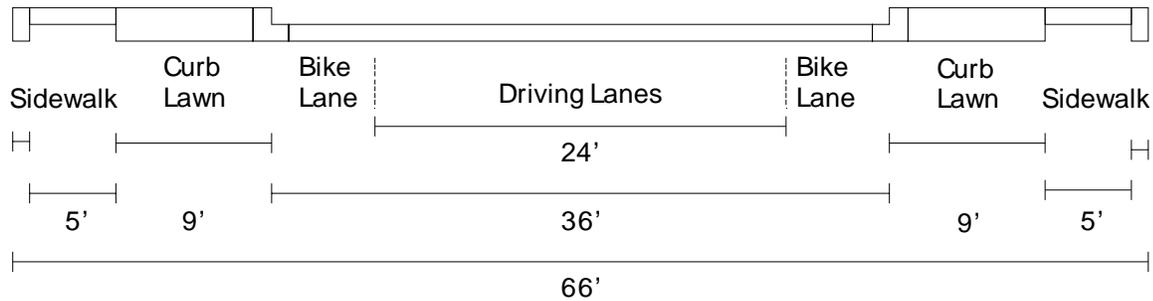
Table 7.9: Recommended Design Standards for Local Streets (Minor Streets)

	Minor Street (higher-volume)	Minor Street (typical)	Minor Street (difficult terrain)	Alley (urban only) ³
Purpose	Provides access and conveys traffic to arterial or collector streets, or multi-family areas	Provides access and conveys traffic to arterial or collector streets	Provides access and conveys traffic to arterial or collector streets – short cul-de-sacs	Provides direct access to small numbers of parcels
Land Access	High	High	High	High
Right-of-Way	66'	60'	50'	25'
Driving Lanes	2 Lanes	2 Lanes	2 Lanes	1-2 Lanes
Pavement	36'	28'	28'	20'
Stormwater ¹	Curb and gutter	Curb and gutter	Curb and gutter	As needed
Curb Lawn	9' per side	10' per side	11' per side	
Parking	May be allowed	May be allowed	May be allowed, one side only	None
Sidewalks ²	Minimum one side	Minimum one side	Not required	Not required

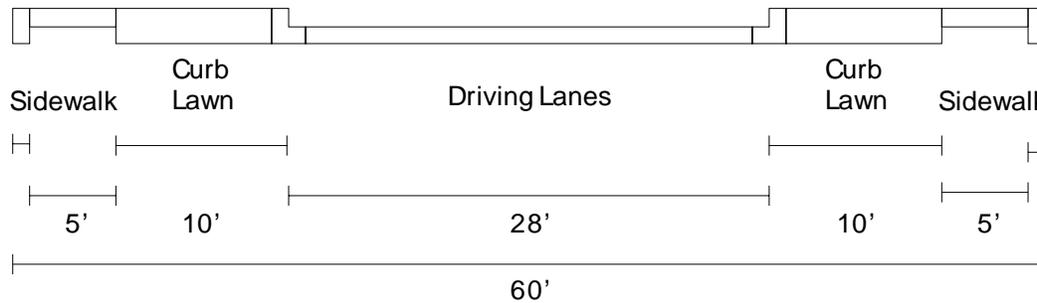
¹ Alternative treatments may be used on a case-by-case basis to address unique circumstances or to address stormwater management best practices. ² Sidewalks should be provided along all streets providing access to schools, parks, and neighborhood commercial centers. ³ There are no alleys within the City, nor are any envisioned at this time.

Table 7.10: Cross Sections for Minor Streets

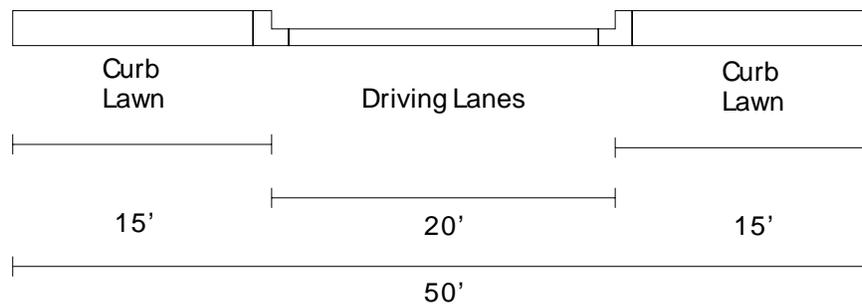
Minor Street (higher volume)



Minor Street (typical)



Minor Street (difficult terrain)



Official Map

An official map is one of the oldest public plan implementation devices available to local communities, and its use in the United States dates back to colonial times. Wisconsin State Statute 62.23(6) authorizes cities to adopt an official map. The official map is a planning tool used to help implement the comprehensive plan, with particular regard to the reservation of land for future streets, highways, historic districts, parkways, parks, and playgrounds, railroad rights-of-way, transit facilities, and waterways that have been identified

through a surface water drainage plan. Pursuant to State Statute 62.23(6), future construction of buildings, structures, or other improvements within the city must be in conformity with an adopted official map.

In recognition of the importance of official maps, the Southeastern Wisconsin Regional Planning Commission, in 1964, prepared Planning Guide No. 2, Official Mapping Guide, to encourage the local communities within southeast Wisconsin to consider the preparation and adoption of official maps. However, the Official Mapping Guide notes that the official map “is probably the least understood and the least used of all local plan implementation devices.” The Official Mapping Guide further notes that “The reluctance of counties and communities to use the official map device probably stems, historically, from a single principal difficulty; namely, the assumed expense of locating and mapping each existing and proposed street and public open area within the geographic limits of the planning jurisdiction...” and that “The term ‘official map’ is often misapplied or misused. This common confusion stems in part from the fact that many local governments may have several maps used for different purposes which are designated as official documents, and, therefore, loosely referred to as ‘official maps’.”

For purposes of the City of Franklin 2025 Comprehensive Master Plan, the term ‘official map’ applies only to that map properly adopted pursuant to Wisconsin State Statute 62.23(6). The full text of the statute follows.

(6) OFFICIAL MAP.

(a) As used in this subsection, “waterways” includes rivers, streams, creeks, ditches, drainage channels, watercourses, lakes, bays, ponds, impoundment reservoirs, retention and detention basins, marshes and other surface water areas, regardless of whether the areas are natural or artificial.

(am) 1. In this paragraph:

a. “Airport” means an airport as defined under s. 114.002 (7) which is owned or operated by a county, city, village or town either singly or jointly with one or more counties, cities, villages or towns.

b. “Airport affected area” means the area established by an agreement under s. 66.1009. If a county, city, village or town has not established such an agreement, “airport affected area” in that county, city, village or town means the area located within 3 miles of the boundaries of an airport.

2. If the council of any city which is not located in whole or in part in a county with a population of 500,000 or more has established an official map under par. (b), the map shall show the location of any part of an airport located within the area subject to zoning by the city and any part of an airport affected area located within the area subject to zoning by the city.

(b) The council of any city may by ordinance or resolution establish an official map of the city or any part thereof showing the streets, highways, historic districts, parkways, parks and playgrounds laid out, adopted and established by law. The city may also include the location of railroad rights-of-way, waterways and public transit facilities on its map. A city may include a waterway on its map only if the waterway is included in a comprehensive surface water drainage plan. The map is conclusive with respect to the location and width of streets, highways, waterways and parkways, and the location and extent of railroad rights-of-way, public transit facilities, parks and playgrounds shown on the map. The official map is declared to be established to conserve and promote the public health, safety, convenience or general welfare. The ordinance or resolution shall require the city clerk at once to record with the register of deeds of the county or counties in which the city is situated a certificate showing that the city has established an official map. An ordinance or resolution establishing any part of an official map enacted prior to June 16, 1965, which would be valid under this paragraph is hereby validated.

(c) The city council may amend the official map of the city so as to establish the exterior lines of planned new streets, highways, historic districts, parkways, railroad rights-of-way, public transit facilities, waterways, parks or playgrounds, or to widen, narrow, extend or close existing streets, highways, historic districts, parkways, railroad rights-of-way, public transit facilities, waterways, parks or playgrounds. No such change may become effective until after a public hearing concerning the proposed change before the city council or a committee appointed by the city council from its members, at which parties in interest and citizens shall have an opportunity to be heard. Notice of the public hearing shall be published as a class 2 notice under ch. 985. Before amending the map, the council shall refer the matter to the city plan commission for report, but if the city plan commission does not make its report within 60 days of reference, it forfeits the right to further suspend action. When adopted, amendments become a part of the official map of the city, and are conclusive with respect to the location and width of the streets, highways, historic districts, waterways and parkways and the location and extent of railroad rights-of-way, public transit facilities, parks and playgrounds shown on the map. The placing of any street, highway, waterway, parkway, railroad right-of-way, public transit facility, park or playground line or lines upon the official map does not constitute the opening or establishment of any street, parkway, railroad right-of-way, public transit facility, park or playground or alteration of any waterway, or the taking or acceptance of any land for these purposes.

(d) The locating, widening or closing, or the approval of the locating, widening or closing of streets, highways, waterways, parkways, railroad rights-of-way, public transit facilities, parks or playgrounds by the city under provisions of law other than this section shall be deemed to amend the official map, and are subject to this section, except that changes or additions made by a subdivision plat approved by the city under ch. 236 do not require the

public hearing specified in par. (c) if the changes or additions do not affect any land outside the platted area.

(e) No permit may be issued to construct or enlarge any building within the limits of any street, highway, waterway, railroad right-of-way, public transit facility or parkway, shown or laid out on the map except as provided in this section. The street, highway, waterway, railroad right-of-way, public transit facility or parkway system shown on the official map may be shown on the official map as extending beyond the boundaries of a city or village a distance equal to that within which the approval of land subdivision plats by the city council or village board is required as provided by s. 236.10 (1) (b) 2. Any person desiring to construct or enlarge a building within the limits of a street, highway, railroad right-of-way, public transit facility or parkway so shown as extended may apply to the authorized official of the city or village for a building permit. Any person desiring to construct or enlarge a building within the limits of a street, highway, waterway, railroad right-of-way, public transit facility or parkway shown on the official map within the incorporated limits of the municipality shall apply to the authorized official of the city or village for a building permit. Unless an application is made, and the building permit granted or not denied within 30 days, the person is not entitled to compensation for damage to the building in the course of construction of the street, highway, railroad right-of-way, public transit facility or parkway shown on the official map. Unless an application is made, and the building permit granted or not denied within 30 days, the person is not entitled to compensation for damage to the building in the course of construction or alteration of the waterway shown on the official map within the incorporated limits of the municipality. If the land within the mapped street, highway, waterway, railroad right-of-way, public transit facility or parkway is not yielding a fair return, the board of appeals in any municipality which has established such a board having power to make variances or exceptions in zoning regulations may, by the vote of a majority of its members, grant a permit for a building or addition in the path of the street, highway, waterway, railroad right-of-way, public transit facility or parkway, which will as little as practicable increase the cost of opening the street, highway, waterway, railroad right-of-way, public transit facility or parkway or tend to cause a change of the official map. The board may impose reasonable requirements as a condition of granting the permit to promote the health, convenience, safety or general welfare of the community. The board shall refuse a permit where the applicant will not be substantially affected by not constructing the addition or by placing the building outside the mapped street, highway, waterway, railroad right-of-way, public transit facility or parkway.

(f) In any city in which there is no such board of appeals, the city council shall have the same powers and shall be subject to the same restrictions. For this purpose such council is authorized to act as a discretionary administrative or quasi-judicial body. When so acting it shall not sit as a legislative body but in a separate meeting and with separate minutes kept.

(g) Before taking any action authorized in this subsection, the board of appeals or city council shall hold a hearing at which parties in interest and others shall have an opportunity to be heard. At least 15 days before the hearing notice of the time and place of the hearing shall be published as a class 1 notice, under ch. 985 Any such decision shall be subject to review by certiorari issued by a court of record in the same manner and pursuant to the same provisions as in appeals from the decisions of a board of appeals upon zoning regulations.

(h) In any city which has established an official map as herein authorized no public sewer or other municipal street utility or improvement shall be constructed in any street, highway or parkway until such street, highway or parkway is duly placed on the official map. No permit for the erection of any building shall be issued unless a street, highway or parkway giving access to such proposed structure has been duly placed on the official map. Where the enforcement of the provisions of this section would entail practical difficulty or unnecessary hardship, and where the circumstances of the case do not require the structure to be related to existing or proposed streets, highways or parkways, the applicant for such a permit may appeal from the decision of the administrative officer having charge of the issue of permits to the board of appeals in any city which has established a board having power to make variances or exceptions in zoning regulations, and the same provisions are applied to such appeals and to such boards as are provided in cases of appeals on zoning regulations. The board may in passing on such appeal make any reasonable exception, and issue the permit subject to conditions that will protect any future street, highway or parkway layout. Any such decision shall be subject to review by certiorari issued by a court of record in the same manner and pursuant to the same provisions as in appeals from the decision of such board upon zoning regulations. In any city in which there is no such board of appeals the city council shall have the same powers and be subject to the same restrictions, and the same method of court review shall be available. For such purpose such council is authorized to act as a discretionary administrative or quasi-judicial body. When so acting it shall not sit as a legislative body, but in a separate meeting and with separate minutes kept.

(i) In those counties where the county maintains and operates parks, parkways, playgrounds, bathing beaches and other recreational facilities within the limits of any city, such city shall not include said facilities in the master plan without the approval of the county board of supervisors.

Franklin has already adopted an official map for a portion of the City (a portion of U.S. Public Land Survey Section 16, and all of U.S. Public Land Survey Section 17, Township 5 North, Range 21 East, Milwaukee County, Wisconsin) through Chapter 58 of the Municipal Code, adopted August 5, 1997 by Ordinance 97-1461. The original official map was prepared by the City in 1970.

It is recommended that the City of Franklin prepare and adopt an official map for the entire City, to include at a minimum, all existing public street right-of-ways (see Map 7.5: City of Franklin Right-of-Way).

SUMMARY OF RECOMMENDATIONS

- It is recommended that the City adopt the Design Standards for Arterial Streets set forth in this chapter.
- It is recommended that the City adopt the Design Standards for Collector Streets set forth in this chapter.
- It is recommended that the City adopt the Design Standards for Local Streets set forth in this chapter.
- It is recommended that the State bicycle plans and maps be updated to reflect recent bicycle trail construction activity within the City, including completion of the off-road portion of the Oak Leaf Trail north of Drexel.
- It is recommended that the City consider implementation of the transportation related sustainability measures identified in this chapter (such as grid-like street patterns, narrower streets, pedestrian facilities, etc.), as may be determined by the Common Council.
- It is recommended that the City consider implementation of the transportation management techniques set forth in this chapter (such as employer-funded car-pooling, flexible work schedules, telecommuting, and high-occupancy vehicle (HOV) lanes), as may be determined by the Common Council.
- It is recommended that the City of Franklin prepare and adopt an official map for the entire City, to include at a minimum, all existing public street right-of-ways.

