

CHAPTER 3

Transportation

This section of the plan discusses the existing transportation system and recommends methods of creating a more comprehensive intermodal transportation system in the City.

Existing Transportation System

Streets and Highways

De Pere currently contains one US highway, one state highway, six county trunk highways, and many city streets. These streets and highways are currently the primary means of reaching the City's residential, commercial, industrial, and other destinations (see Figure 3-1 for the City's street and highway system).

Functional Classification System

A component of a street and highway system is the functional classification network. This network is typically based on traffic volumes, land uses, road spacing, and system continuity.

The four general functional classifications are freeways, arterials, collectors, and local streets. These classifications are summarized below.

Freeways: Freeways are controlled-access highways that have no at-grade intersections or driveway connections. US 41 is an example of a freeway in De Pere.

Arterials: Principal and minor arterials carry longer-distance vehicle trips between activity centers. These facilities are designed to provide a very high amount of mobility and very little access.

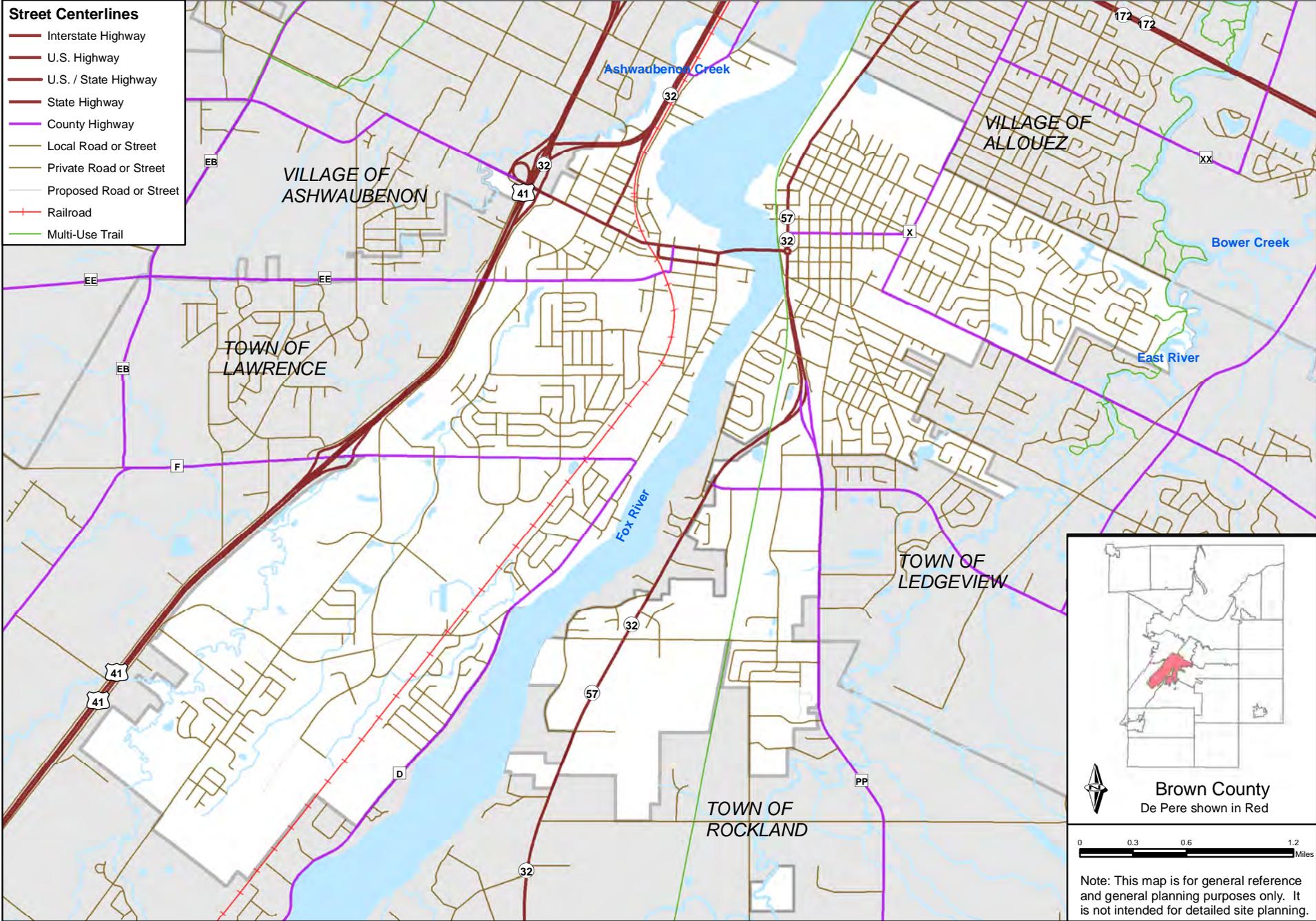
Collectors: Collectors link local streets with the arterial street system. These facilities collect traffic in local areas, serve as local through routes, and directly serve abutting land uses.

Locals: Local roads and streets are used for short trips. Their primary function is to provide access to abutting land uses, and traffic volumes and speeds are relatively low.

The current street patterns in the older sections of De Pere enable many vehicle trips to occur on the local and collector streets because they are well connected. However, the newer sections of the City contain cul-de-sacs, horseshoe roads, and other streets that do not provide convenient connections to surrounding streets. The lack of street connectivity in these parts of the City forces motorists to use the arterial streets at some point during nearly every trip, and this concentration of traffic can create barriers to other transportation modes (such as walking, bicycling, and transit). Figure 3-2 shows the City's existing functional classification system.

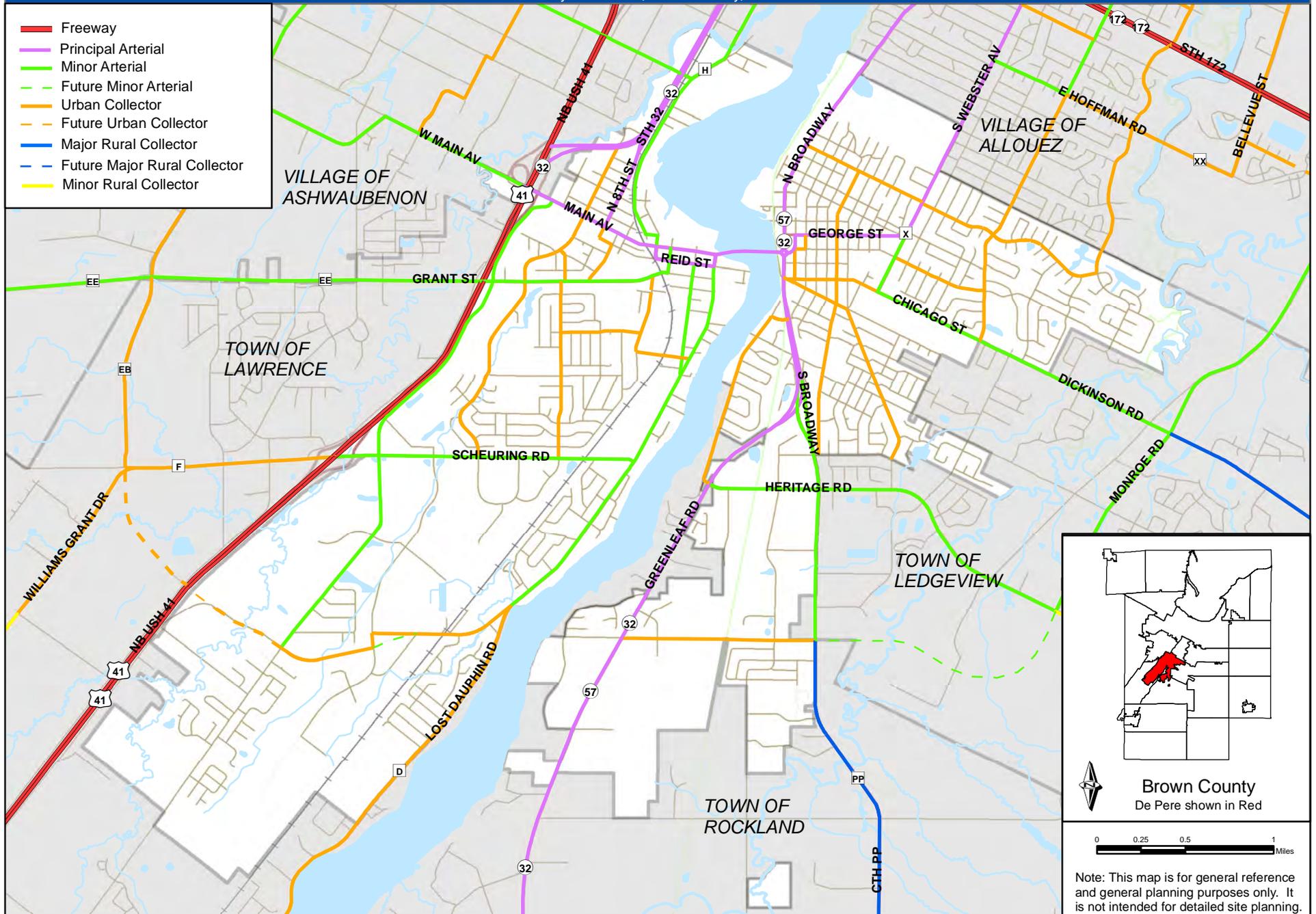
Figure 3-1
Street Network / Railways
 City of De Pere, Brown County, WI

- Street Centerlines**
- Interstate Highway
 - U.S. Highway
 - U.S. / State Highway
 - State Highway
 - County Highway
 - Local Road or Street
 - Private Road or Street
 - Proposed Road or Street
 - - - Railroad
 - Multi-Use Trail



Note: This map is for general reference and general planning purposes only. It is not intended for detailed site planning.

Figure 3-2
Functional Classification
 City of De Pere, Brown County, WI



Pedestrian and Bicycle Facilities

De Pere currently has the most extensive pedestrian system and one of the most extensive bicycle systems in Brown County. For several years, the City has installed sidewalks along both sides of its streets unless the street is a cul-de-sac or industrial park road, and bicycle facilities can be found on major streets. De Pere also contains portions of the Fox River and East River Trails, and a local trail system is currently being developed on the west side of the City. These pedestrian and bicycle facilities complement the street system and transit routes that serve the community and provide safe and convenient access to schools, parks, businesses, and other destinations. The City's existing pedestrian and bicycle systems are shown in Figure 3-3.

Transit

De Pere is currently served by one Green Bay Metro fixed transit route and three limited service routes. The fixed route serves the east and west sides of the City, and the downtown area is served during the route's outbound and inbound trips. The fixed route provides hourly service during Metro's weekday and Saturday service periods. The City's fixed bus route is shown in Figure 3-4.

Specialized Transportation Services for the Elderly and Disabled (Paratransit)

De Pere's inclusion in the Green Bay Metro service area allows the City to be served by Metro's paratransit provider. Metro's paratransit service allows clients in De Pere to be picked up at their homes and taken directly to their destinations in vehicles that accommodate wheelchairs, scooters, and riders who do not require mobility devices. This service provides another transportation option to elderly and disabled De Pere residents who need assistance to reach medical appointments, grocery stores, and other destinations throughout the Metro service area. The paratransit service is also a means of enabling clients to reach Syble Hopp School and other agencies in De Pere.

Rail Transportation

De Pere currently contains one active freight rail line that runs along the west side of the Fox River (see Figure 3-1 for the line's location). This line currently serves Green Bay Packaging and some warehouses in the De Pere Business Park, and plans for the southwest portion of the City recommend establishing rail spurs to serve industrial land uses as these uses are developed near the line.

Figure 3-3
Pedestrian and Bicycle Facilities in De Pere
 City of De Pere, Brown County, WI

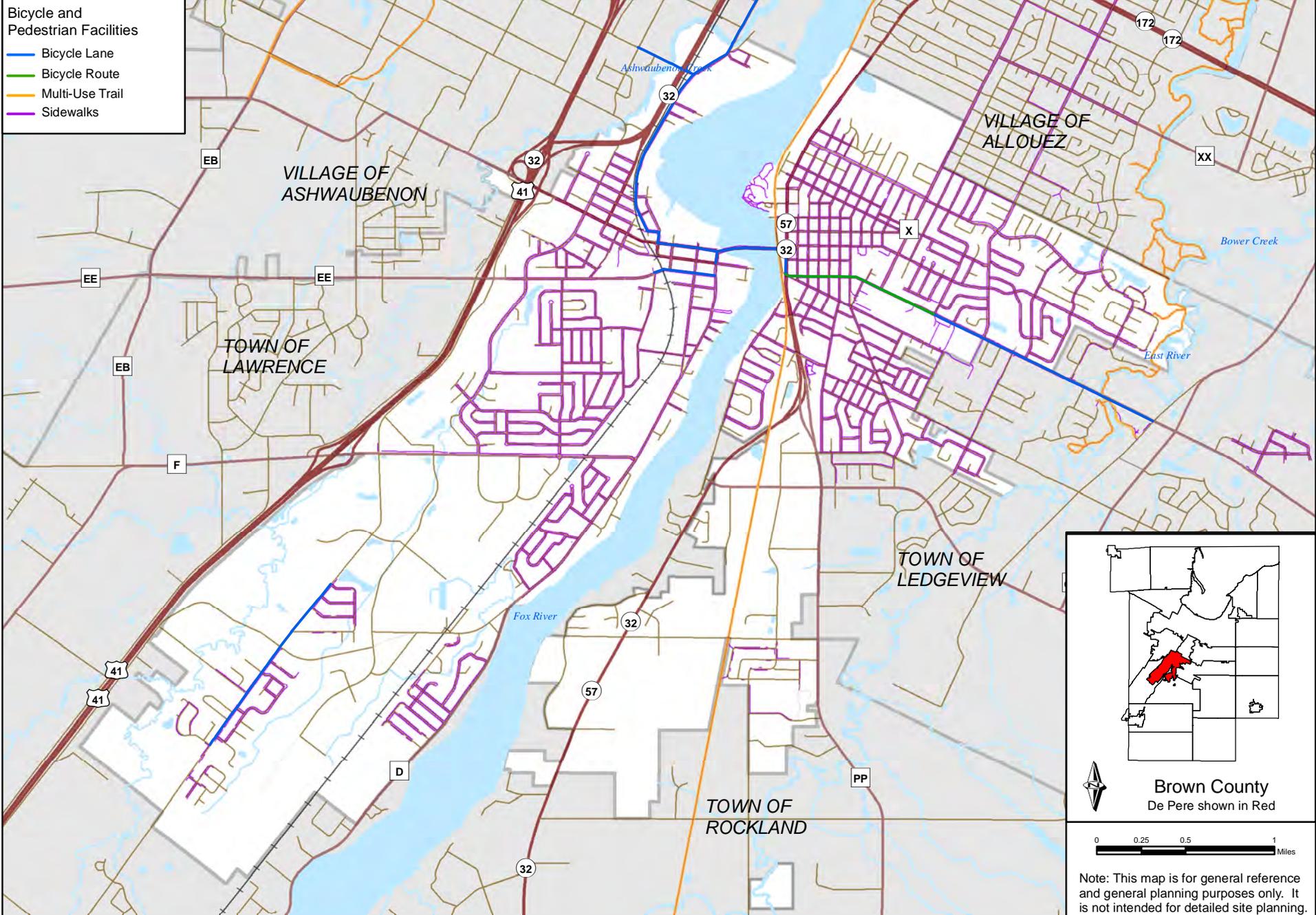
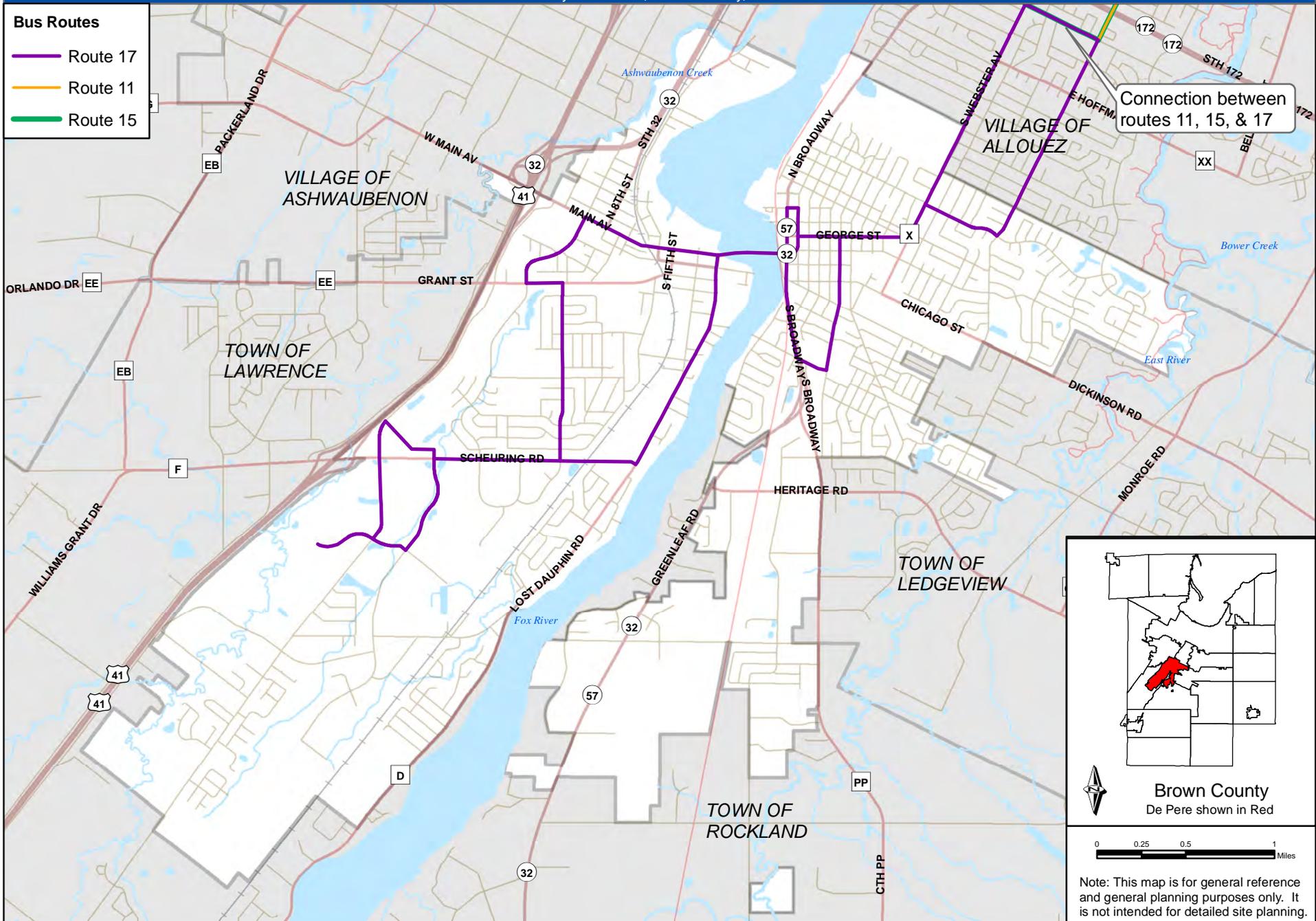


Figure 3-4
Green Bay Metro Fixed Route in De Pere
 City of De Pere, Brown County, WI



Brown County
 De Pere shown in Red

0 0.25 0.5 1 Miles

Note: This map is for general reference and general planning purposes only. It is not intended for detailed site planning.

Air Transportation

Austin Straubel International Airport is approximately three miles northwest of De Pere (see Figure 3-5 for the airport's location). Commercial service is currently provided by Northwest/Delta Airlines, American Eagle, United Express, and Midwest Connect. Charter service is provided by Executive Air and Titletown Aviation. Air cargo service is provided by Northwest/Delta Airlines. The City's economy is not significantly affected by the airport at this time.

Truck Transportation

Truck traffic is relatively high in De Pere because the City contains large industrial and business parks and other developments that rely on heavy trucks. The Claude Allouez Bridge, STH 32/57, and the county highways in the City also attract several local and pass-through truck trips. Although most of the truck trips occur on the state and county highways, trucks occasionally need to travel on city streets to reach local businesses and other destinations.

Water Transportation

De Pere currently has docking or launch facilities at the Fox Point Boat Launch, Voyageur Park, Bomier Street Boat Launch, and the Perkofski Boat Landing, but this is the extent of the City's reliance on the river for commercial activity. The City also does not currently rely on the Port of Green Bay to import or export goods. The port's location is shown in Figure 3-5.

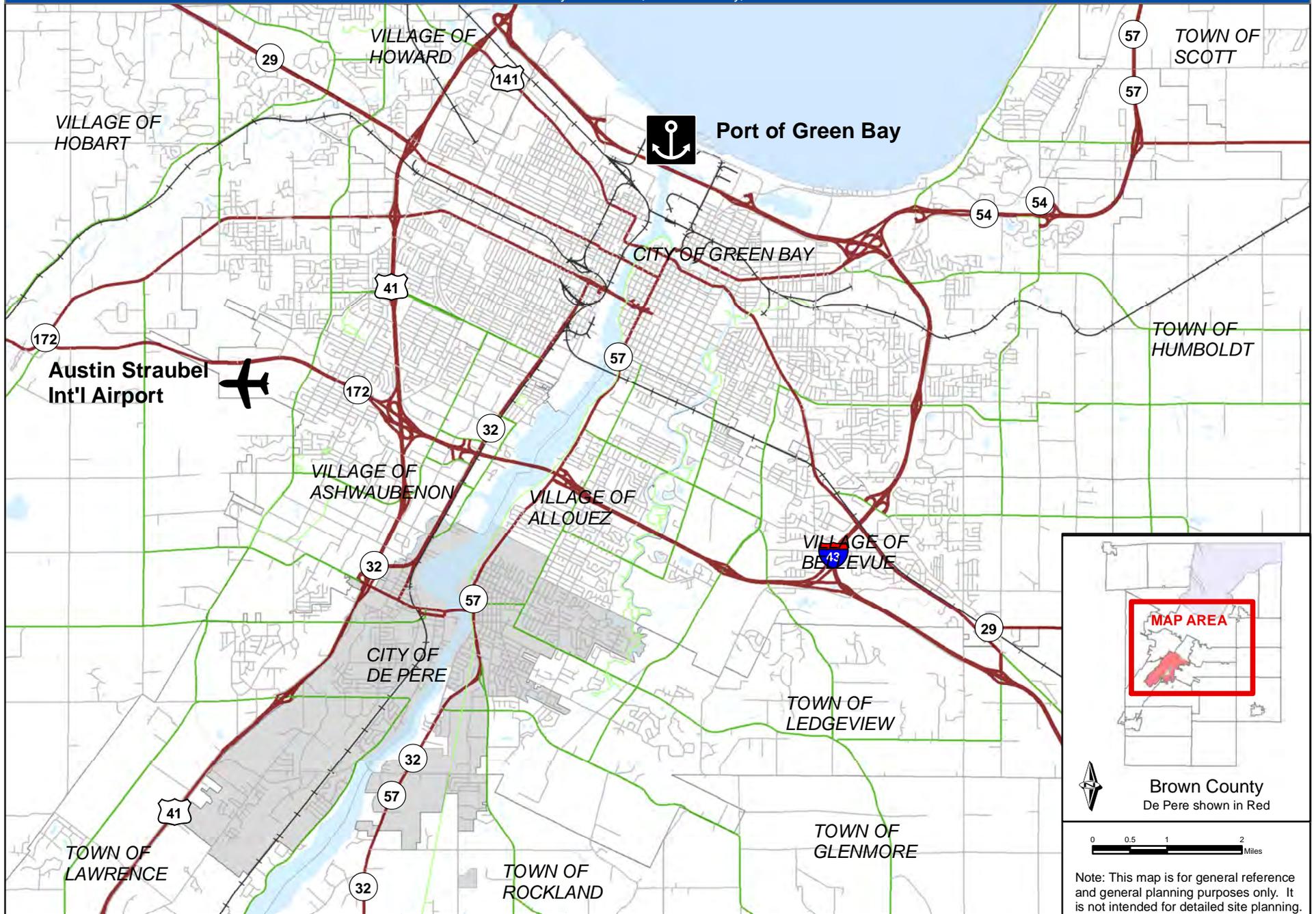
Future Transportation System

De Pere contains some areas where land uses are mixed and people can reach their destinations without a car, and the undeveloped and partially vacant parts of the City can accommodate additional higher density infill and adjacent development and redevelopment that includes a mix of residential, commercial, and institutional uses. This section of the Transportation Chapter identifies the major aspects of De Pere's transportation system and recommends methods of developing them over the next 20 years to create a more comprehensive intermodal transportation system. The chapter also discusses the land use patterns that should be promoted during this period to create this system.

Streets and Highways

De Pere currently has relatively few multi-lane streets, but some of the City's two-lane streets are still at least 40 feet wide. The City also contains some cul-de-sacs and long blocks that provide infrequent connections to intersecting streets (such as in the East River Drive, Lawrence Drive, and Ninth Street areas). In addition to being expensive to construct and maintain, the wide streets encourage people to drive rapidly through neighborhoods, school zones, and other areas where high speeds are not appropriate. The long blocks, cul-de-sacs, and separation of land uses in the newer portions of the

Figure 3-5
Port and Airport Facilities
City of De Pere, Brown County, WI



MAP AREA

Brown County
De Pere shown in Red

0 0.5 1 2 Miles

Note: This map is for general reference and general planning purposes only. It is not intended for detailed site planning.

City also do more than encourage people to drive from place to place – they often force them to drive because other transportation modes are not practical.

To enhance everyone’s ability to safely and efficiently navigate the City’s transportation system with and without personal vehicles, the City needs to:

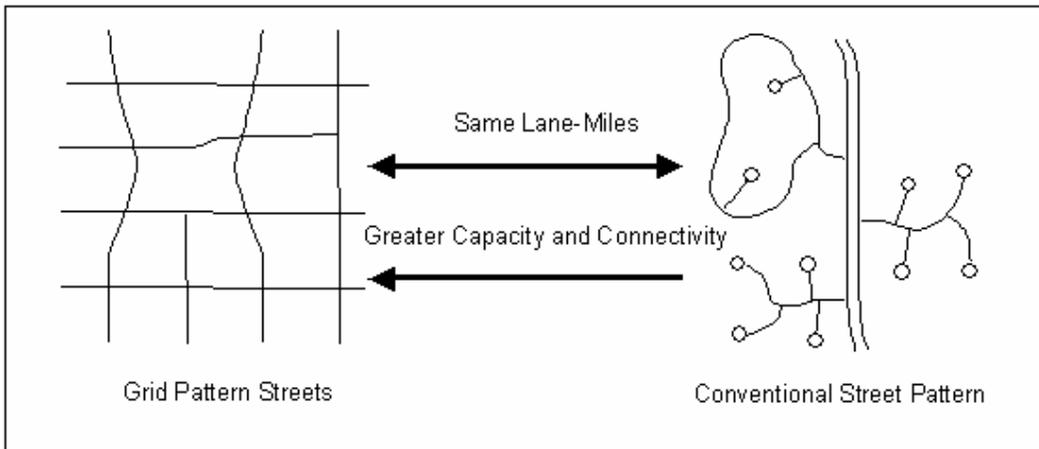
- Increase street connectivity and intersection frequency.
- Minimize barriers to pedestrian and bicycle travel and encourage people to drive at appropriate speeds.
- Improve accessibility and safety at intersections and other potential conflict points.

Methods of achieving these aims are addressed in this section.

Develop Well-Connected Street Networks

To enable and encourage people to walk and bicycle throughout the City and the adjacent communities, De Pere should require the development of well-connected street networks within new developments that have frequent connections to the existing street system. These kinds of street patterns will also provide motorists several route options and avoid concentrating traffic on relatively few streets. A comparison of well-connected and conventional street networks is shown in Figure 3-6.

Figure 3-6: Comparison of Well-Connected and Conventional Street Patterns



Although well-connected street patterns enable traffic to be distributed evenly, are very accessible to a variety of transportation system users, are easy for public works departments to plow and maintain, enable communities to create efficient sewer and water systems (that do not have several stubs), and provide efficient routes to incidents for fire departments and other emergency responders, situations will arise where streets cannot be connected due to physical or environmental constraints. The City should not allow cul-de-sacs and loop streets when constraints do not exist, but if constraints prohibit street connections, the City should allow the development of cul-de-sacs near the constraints. However, to maximize connectivity in these neighborhoods, the cul-de-sacs should have public rights-of-way or easements reserved at the bulbs to enable

pedestrians and bicyclists to travel throughout the area easily. This connectivity concept is discussed later in this chapter and in the plan's Bicycle and Pedestrian Safety Chapter.

Allow the Construction of Narrow Streets

The City currently requires local streets to be 32 feet wide, sub-collector streets to be 36 feet wide, and collector and arterial streets to be 44 feet wide. The rights-of-way for city streets are also typically at least 70 feet wide. However, these widths are often not necessary (especially in the City's neighborhoods) and force the City to maintain a significant amount of land that could instead be taxable property. To address this issue, the City's street width requirements should be changed to allow the construction of narrower streets. The City should also establish right-of-way width standards that do not require the acquisition of more right-of-way than necessary.

Define the Parking Areas of Streets

The parking areas of streets should be defined by curb extensions at many of the City's intersections. If a block is relatively long, extensions should also be placed at other points along the street. The curb extensions will prohibit drivers from using the parking lanes as passing or turning lanes at intersections and encourage people to drive slowly when parked vehicles are not present. The curb extensions will also minimize pedestrian crossing distances at the City's intersections. Pictures of curb extensions that were built along Fourth Street and Grant Street in De Pere are shown below, and this concept is addressed in greater detail in the plan's Bicycle and Pedestrian Safety Chapter.



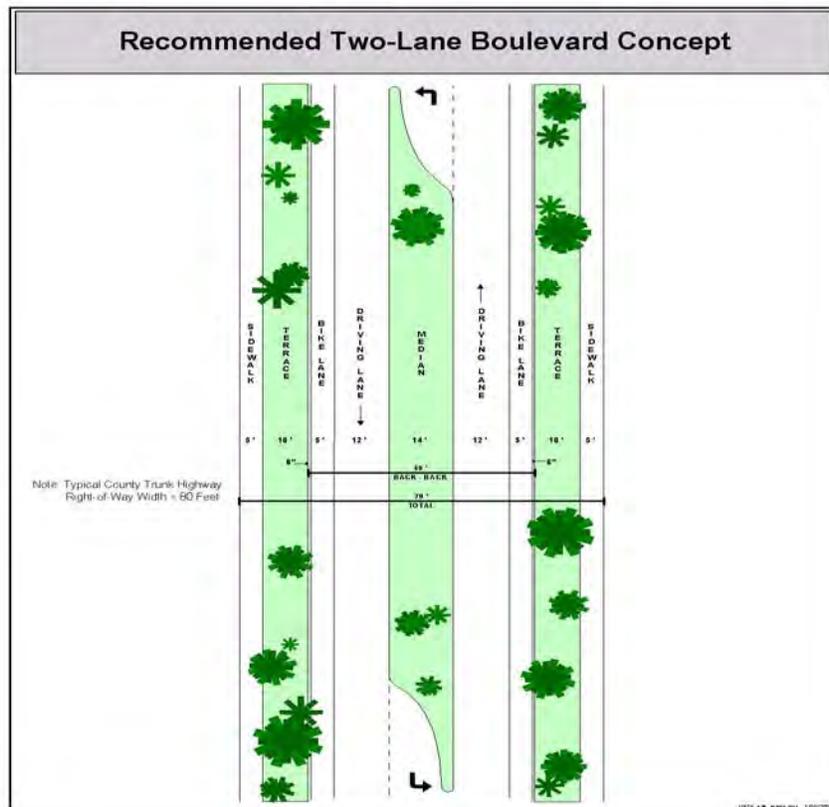
Curb extension on Fourth Street in De Pere.



Curb extension on Grant Street in De Pere.

Avoid Expanding Streets to Four or More Lanes

Although it is unlikely that most of the City's streets will be considered for widening in the future, two lane streets like Heritage Road and Grant Street might be seen as candidates for widening as traffic levels rise over the next 20 years. However, street widening has not proven to be an effective long-term method of relieving traffic congestion, so the City and Brown County should save the money that will be necessary to expand these streets and maintain their narrow configurations.



Source: Brown County Planning Commission.

One way to move traffic efficiently while minimizing barriers to pedestrian and bicycle travel and encouraging people to drive at appropriate speeds is the construction of a system of two-lane arterial boulevards and three-lane arterial streets that are complemented by an interconnected collector and local street system, mixed land uses, and efficient traffic control techniques at intersections. The street interconnectivity and mixing of land uses make walking and bicycling viable transportation options and help to avoid forcing traffic onto a system of relatively few large arterial streets. Building narrower arterial streets instead of the standard wide arterial streets will also make the City's thoroughfares more attractive.

These and similar design techniques were used by De Pere and Brown County when Chicago Street, Scheuring Road, and Lawrence Drive were reconstructed. These projects are examples of how the City and Brown County have chosen to promote multi-modal accessibility and neighborhood friendliness instead of the mere movement of motor vehicles through the community, and these and similar street design approaches should be used on the City's other major streets in the future.

Continue to Design Intersections to Maximize Safety and Accessibility

The City should continue to utilize street design techniques that reduce vehicle speeds, minimize the possibility of conflicts, and enhance traveler awareness to maximize

pedestrian, bicyclist, and motorist safety and accessibility at the City's intersections. Techniques that the City should continue to use include roundabouts, curb extensions at intersections, and other similar street design features. The narrower street widths recommended for the City will also help make intersections safer by controlling the speed of vehicles as they approach the intersections.



Claude Allouez Bridge roundabout.



Chicago/Swan roundabout.

Roundabouts in De Pere

There are currently seven single-lane roundabouts in De Pere, and the county's first multi-lane roundabout was built at the east end of the Claude Allouez Bridge in 2008. Because these roundabouts have proven to be safe, efficient, and attractive, the City should continue to work with the state, Brown County Planning Commission, and Brown County Highway Department to install roundabouts at and near the US 41 interchanges when the highway is reconstructed and to study the possibility of installing roundabouts at other intersections in De Pere. Some intersections that should be studied include:

- Heritage Road (CTH X) and CTH PP (a roundabout is planned for 2010).
- Ashland Avenue and Eighth Street (a roundabout is planned for 2010).
- Broadway and Cook Street.
- Scheuring Road and American Boulevard.
- Southbridge Drive at Lawrence Drive and American Boulevard (as recommended in the *Southwest De Pere Development Plan*).

The City should also investigate the installation of smaller neighborhood traffic circles at minor intersections throughout De Pere to calm traffic and enhance the appearance of neighborhoods.

Pedestrian and Bicycle Facilities

As mentioned in the Existing Transportation System section of this chapter, the City's extensive pedestrian and bicycle systems complement the street system and transit routes that serve the community and provide safe and convenient access to schools, parks,

businesses, and other destinations. As new development and redevelopment occurs over the next 20 years, it is important that the City continue to utilize many of the design concepts that have made De Pere easily accessible to drivers and non-drivers. To accomplish this, the City should:

- Continue to develop land use patterns that enable and encourage walking and bicycling.
- Continue to create a safe, continuous pedestrian system throughout the City.
- Enable people to easily reach developments in the City on foot or by bicycle.

Methods of achieving these aims are addressed in this section and are discussed in greater detail in the plan's Bicycle and Pedestrian Safety Chapter.

Mixing Land Uses Throughout the City

To enable and encourage people to make additional walking and bicycling trips in De Pere, the City should continue to implement the Land Use Chapter's recommendations for mixing land uses within the downtown and elsewhere to create destinations that can be easily reached by pedestrians and bicyclists. The additional mixing of residential, commercial, institutional, and recreational uses will enable people of all ages and physical abilities to travel from place to place without a motorized vehicle, which will significantly improve mobility for all City residents and minimize traffic on the existing street system. Examples of mixed land uses in De Pere and Green Bay are shown below.

Figure 3-7 compares a conventional land use and street pattern with a mixed land use and grid street pattern. The dotted circle on the diagram represents a 500-foot radius, which is a distance that most people feel comfortable walking. This diagram demonstrates that a greater number and variety of destinations are easily reachable on foot (and by bicycle) when land uses are mixed and streets are frequently interconnected. The benefits of street connectivity in neighborhoods are also illustrated in Figure 3-8, which demonstrates that a well-connected street system requires people to travel much shorter distances to reach their destinations than a system with few connections.

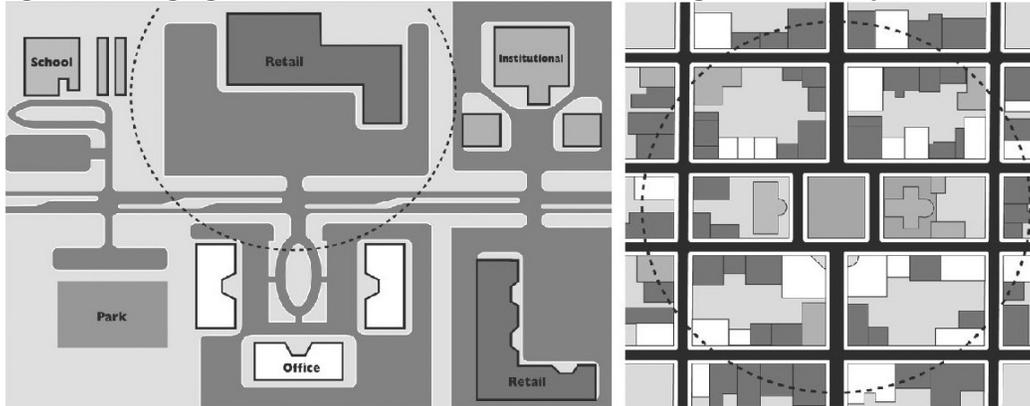


Dentist's office in a De Pere neighborhood.



Bakery in a Green Bay neighborhood.

Figure 3-7: Segregated Land Uses vs. Mixed Uses with High Connectivity



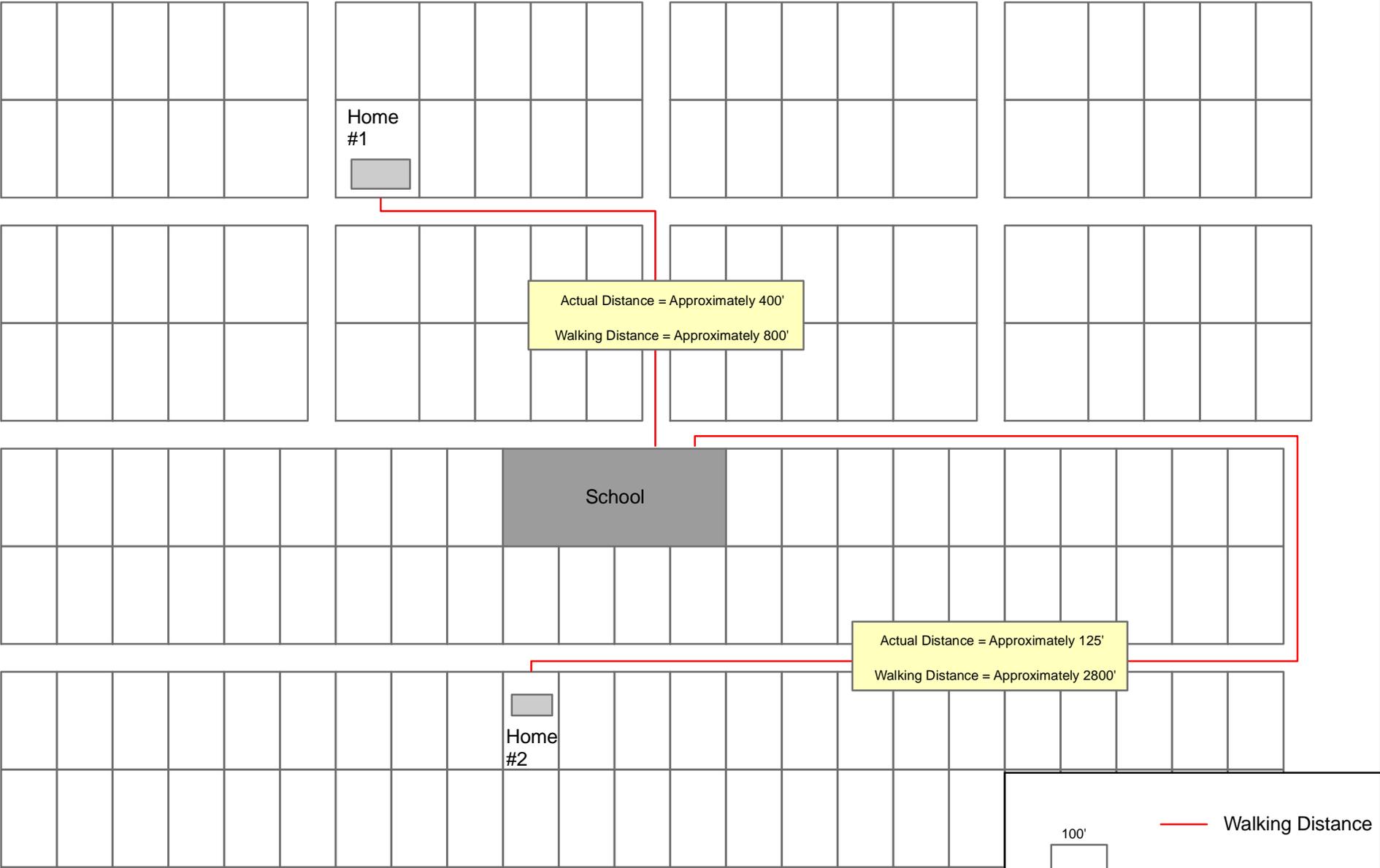
The older neighborhoods on the east and west sides of the Fox River have many of the characteristics of the high connectivity diagram on the right side of Figure 3-7, but some of the newer developments in the southwest and far east sections of the City resemble the diagram on the left side. The *Southwest De Pere Development Plan* that was prepared by the Brown County Planning Commission and accepted by the De Pere Common Council in May of 2003 recommends mixing land uses, maximizing connectivity, and implementing other accessibility techniques in this part of the City, but a significant number of stand-alone developments had already been built or approved before the development plan was started. To avoid this situation elsewhere as De Pere grows, the City should implement the Land Use Chapter's recommendations and require the creation of well-connected neighborhoods that contain sidewalks and, in some cases, trails.

Continuing to Develop a Comprehensive Sidewalk System

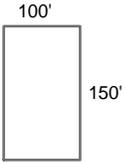
De Pere currently has the most comprehensive sidewalk system in Brown County, and this feature is likely one of the reasons that many people choose to live in De Pere. In addition to providing a place for people of all ages and physical abilities to travel safely, the City's sidewalks are a place for friends and neighbors to interact with each other, for children to play, and for commerce to occur. The sidewalks also provide the "street life" that helps to enhance neighborhood security. For these and other reasons, the City should continue to develop its sidewalk system as the community grows over the next 20 years by building sidewalks along both sides of public streets. The only situation where sidewalks should not be required on both sides of a street is when physical or environmental constraints exist. In these situations, sidewalks should be required on at least one side of the street. The City should also enhance pedestrian access within and near its business and industrial parks by installing sidewalks or trails along Heritage Road, Enterprise Drive, and other major streets. A trail system is currently being built within a portion of the west side business park, and a similar system should be constructed within the east side industrial park (in addition to the Fox River Trail) to provide a safe place for people to walk or bike when they travel to work, to the restaurants at the intersection of Heritage Road and CTH PP, and to other destinations.

Example of Neighborhoods With and Without Street Connectivity

Figure 3-8
City of De Pere, Brown County, WI



Even though home #2 is much closer to the school than home #1, the lack of street connections in home #2's neighborhood forces people to walk more than three times as far to reach the school.



Walking Distance



Walkways Along Streets with Reverse Frontage Lots

One of the reasons that sidewalks are not installed along major streets is that many of these streets do not have homes or other developments that directly face or access them. This lack of direct access prevents governmental (state, county, and local) entities from assessing for the costs of the sidewalks and makes it difficult to justify requiring property owners to maintain them, and these entities often do not want to make the equipment and labor investments needed to maintain the sidewalks themselves. Unfortunately, this results in minimal or no pedestrian access along streets where traffic is very heavy and many commercial and other destinations are located. It also restricts the ability of non-drivers to travel in the newly developed parts of Brown County because the arterial street system must be used at some point to make many trips in these areas.

If sidewalks cannot be installed, the City should consider enhancing pedestrian access along major streets that have reverse frontage lots and little or no driveway access by constructing multi-use trails that are 10 or 12 feet wide. Once the trails are installed (the costs of which can likely be covered with grant and local funds), they can be plowed and maintained using equipment that governments at all levels already have.

Continuing to Develop a Pedestrian and Bicycle Trail System that Complements the Sidewalk System

The City should continue developing its off-street pedestrian/bicycle trail system to complement the extensive sidewalk network. On the west side of the Fox River, the City should continue to develop the trail system within and near The Preserve by acquiring right-of-way through easement, dedication, or purchase. As the southern arterial is built on the river's west side, the City should work with Brown County to extend this trail system to the east along the arterial street. This trail should then extend across the Fox River when the Southern Bridge is built and connect to the Fox River Trail and East River Trail (which is planned to be extended to Rockland Road and the Fox River Trail in the near future). In addition to serving destinations within De Pere, these efforts will enhance the City's connections to the surrounding communities and improve intercommunity mobility.

Designing Developments That Provide Direct Access to Sidewalks and Streets

Many downtown buildings can be easily reached by pedestrians, bicyclists, and motorists because they have minimal or no setbacks. However, the City's grocery stores and some other destinations are more difficult to reach on foot or by bicycle because they were built a significant distance from the street and are fronted by large parking lots that are difficult for walkers and bikers to cross. An example of this in De Pere is the Festival Foods complex on the City's west side, which contains several destinations that have large setbacks and a large parking lot between the buildings and street.

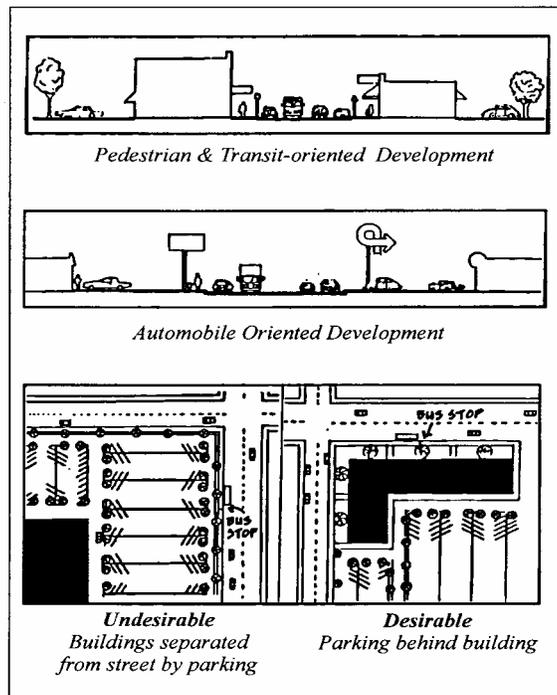


Commercial buildings along Broadway.



Office building on Grant Street.

Figure 3-9: Pedestrian- and Transit-Oriented Development vs. Automobile-Oriented Development



To enable and encourage people to travel to destinations in the City with and without motorized vehicles, the City should ensure that new and redevelopment projects have buildings with zero or minimal setbacks, parking along the side or in the rear, and other features similar to those recommended in the plan's Land Use Chapter. (Figure 3-9 shows examples of pedestrian- and transit-oriented vs. auto-oriented development patterns). People will still be able to reach their destinations with motorized vehicles, but these design features will also enable and encourage people to travel to them using other transportation modes.

Ensuring That All Transportation Structures Have Pedestrian and Bicycle Facilities

The City should continue to work with WisDOT and the Brown County Highway Department to ensure that all of the bridges, interchange overpasses, and other transportation structures within the City have adequate pedestrian and bicycle facilities when they are constructed or reconstructed. The new interchanges, overpasses, and underpasses along US 41 are examples of facilities that will need to be equipped with adequate pedestrian and bicycle facilities when they are built to avoid the cost and inconvenience of retrofitting the structures in the future. The City should also work with WisDOT and the Brown County Planning Commission to determine if additional non-motorized transportation crossings can and should be built along US 41 when the highway is reconstructed.

Enabling People to Travel Easily Between Subdivisions and Other Developments

As opportunities present themselves over the next several years, the City should require the designation of public rights-of-way at or near the end of the cul-de-sacs, horseshoe roads, and other streets for multi-use paths that connect to neighboring subdivisions, schools, parks, and other destinations. These paths should be between 10 and 12 feet wide and paved to accommodate pedestrians, bicyclists, skaters, and other non-motorized uses. This width and surface will also be able to handle authorized vehicles such as park and public works trucks. The area between Lawrence Drive and American Boulevard on the City's southwest side is an example of where trail connections should be created (when possible) because very few street connections exist in this area.

Implementing the Recommendations in the Comprehensive Plan's Bicycle and Pedestrian Plan Chapter

The comprehensive plan update includes a new chapter that addresses De Pere's existing bicycling and walking conditions, defines and discusses the "4E" approach to creating safe and comprehensive bicycle and pedestrian systems, and identifies specific projects, programs, and policies the City should implement to enhance its multimodal transportation system. These recommendations should be implemented by the City in cooperation with the state, county, and other public and private entities according to the schedule at the end of the Bicycle and Pedestrian Plan Chapter.

Developing land use patterns that enable and encourage walking and bicycling, expanding the City's already extensive pedestrian system, and enabling people to easily reach developments from the streets and sidewalks will enhance accessibility and mobility for everyone in De Pere. This enhanced mobility and choice of viable transportation modes will also help attract new residents of all ages to the City, improve access to City businesses, and allow the City's existing and future street system to handle traffic efficiently.

Transit

There are many reasons for De Pere and the rest of the Green Bay Metropolitan Area to promote the use of mass transit over the next several decades. Transit uses require far less land than vehicle-oriented land uses (such as parking lots and structures), it is a form

of transportation that is available to anyone who wants to use it, a bus is a far more efficient use of the area's street system than an individual vehicle (especially a vehicle carrying only one occupant), a bus's impact on the environment is much lower than the number of cars it would take to equal a bus's carrying capacity, and transit enhances the livability of an area because it reduces people's reliance on cars and minimizes the negative impacts of driving (noise, traffic congestion, etc.). But despite these positive attributes, Green Bay Metro's ridership primarily serves area residents who do not have access to cars. There are many reasons that the bus system appeals to these "captive" riders and does not appeal to most people who have other transportation options. Some of these reasons include:

Travel time. Since the Metro buses have to share the same streets (and the same delays) as personal vehicles, the buses do not provide travel time incentives for people who have the option to use their own vehicles. In most cases, buses actually take longer to travel from place to place than cars because the buses have to stop to pick up passengers. This time deterrent is especially significant for trips where people have to transfer to another route to reach their destinations.

Direct costs. The cost per mile to operate a personal vehicle is often higher than the per-mile cost of riding a bus when indirect costs such as vehicle depreciation, insurance, vehicle registration, vehicle maintenance, and parking subsidy are added to direct vehicle operating costs such as fuel and parking. However, people tend to only consider direct (out-of-pocket) travel costs when they choose a transportation mode, and these costs are often very low for drivers because fuel is relatively cheap and parking is often free or very inexpensive. These personal considerations and pricing conditions make paying \$1.50 for a one-way transit trip much less appealing than spending about \$0.10 per mile for gas and little or nothing for parking.⁶

Frequency, convenience, and reliability. Compared to many other transit systems, Green Bay Metro provides relatively frequent service to many destinations in the metropolitan area. However, the most frequent Metro routes only provide access to many destinations every half hour, and the rest of the routes serve their areas once an hour. Although this service frequency is pretty good by transit standards, it cannot compete with the current level of convenience offered by personal vehicles that can be accessed quickly and driven to any destination without having to continually stop. The missed transfers that occasionally occur also make it difficult for people to rely on the system for work and other trips.

Urban design. Over the last several decades, many of the communities in the Green Bay Metropolitan Area have not developed in a transit-friendly manner. For instance, many communities in the area have not built interconnected street networks and have instead built systems that contain cul-de-sacs or long uninterrupted streets that provide minimal access. Only De Pere and Howard currently require sidewalks along most of their streets, and many new land development projects in the metro communities contain minimal density and little, if any, mixture of uses (residential with commercial, etc.). These types of street and sidewalk patterns make it very difficult for a bus to serve an area within a specified schedule and make it very inconvenient (and possibly unsafe) for

⁶ Based on a per gallon cost of \$2.50 and a vehicle fuel efficiency of 25 mpg.

potential riders to walk to and from bus stops. Low-density and homogenous development patterns also make transit service very inefficient because the number of potential riders in these areas is low.

Another element of urban design that has made transit less appealing is the decentralization of the metropolitan area. When Green Bay was the area's clearly defined economic center, taking a bus from the outlying areas to downtown Green Bay for work, shopping, or other purposes was more convenient than it is today because transfers often weren't necessary and several destinations were within easy walking distance of the downtown transit center. But today, many large employers, educational institutions, commercial developments, and other destinations are located on the edge of the transit service area or outside the service area altogether. This situation makes taking the bus to these places inconvenient or impossible, and it is certainly one of many reasons why people who have other transportation options do not choose transit.

In 2009, Green Bay Metro modified De Pere's portion of the route system to serve Humana and the growing commercial area in the southwest part of the City. Over the next two years, the City should work with Green Bay Metro to monitor the success of this route modification. The City and Metro should also cooperate with other employers within and near the service area, retail centers, the De Pere Area Chamber of Commerce, the Brown County Planning Commission, and others to implement programs and projects that could increase transit ridership to, from, and within the City. Examples of programs and projects that should be pursued include:

- A U-Pass program for St. Norbert College students that is similar to UWGB's existing program.
- A commuter bus service that connects De Pere to the Green Bay and Appleton Metropolitan Areas.
- The creation of a Regional Transit Authority (RTA).
- Free bus passes for employees (the cost of which employers could deduct from their taxes) and implementation of parking charges at their workplaces.
- Transit trip validation programs (where shoppers who ride the bus get free bus tokens after a purchase).
- Marketing campaigns that inform people of the service provided by Metro in De Pere.
- Paving landings at heavily-used bus stops and stops that are frequently used by disabled passengers.

Specialized Transportation Services for the Elderly and Disabled

As long as De Pere participates in the Green Bay Metro system, the City's elderly and disabled residents will have access to the service offered by Metro's paratransit provider within $\frac{3}{4}$ of a mile of the City's fixed bus route. Although there are other companies in Brown County that offer the same service, Metro's paratransit provider is able to offer clients a very low per-trip rate that is largely subsidized by Metro. The Metro paratransit provider is also obligated to pick up and drop off clients within time limits specified in a contract with Metro (which is based on standards in the Americans with Disabilities Act),

so the service is very reliable. Retaining access to this service will be very important in the future as De Pere's population continues to age and agencies such as Syble Hopp School and the Aurora Medical Clinic continue to rely on Metro's paratransit provider to transport clients to and from their facilities.

Highways

Special Emphasis Area 1: Pedestrian and Bicyclist Movements in Downtown De Pere

Highways are typically seen as facilities that are designed to move traffic efficiently, but it is very important to consider the area the highway serves when deciding how it should be designed. For many years, De Pere, Brown County, WisDOT, and various consultants considered several options for replacing the deteriorating Claude Allouez Bridge (State Trunk Highway 32) in downtown De Pere. The final decision that was made by the City and its partners was to replace the two-lane bridge with a four-lane bridge, add wide sidewalks and striped bicycle lanes to the bridge and connecting streets, and construct a roundabout at the bridge's east approach. The City and WisDOT also agreed to reduce the number of travel lanes on Main Avenue from three to two and to add a traffic calming device (chicane) at the west bridge approach to slow westbound vehicles as they left the bridge.

In addition to these features, the City's 2004 comprehensive plan recommended additional lane reduction and traffic calming measures on Main Avenue and Reid Street. These measures (which are shown in Figure 3-10 on the following page) were designed to create pedestrian crossing areas that are highly visible, relatively short, and frequent enough to enable people to cross the streets easily. The goal was to maximize safety, accessibility, and efficiency for non-motorists and motorists on the downtown's west side and make it easier and more pleasant for people to stop and spend some time (and money) in the downtown.

Figure 3-10
Recommended Improvements to Main Avenue and Reid Street Between Third and Fifth Streets in De Pere
City of De Pere, Brown County, WI



Special Emphasis Area 2: Southern Bridge and Connecting Arterial Streets or Highways

Following the adoption of the Brown County Year 2020 Land Use and Transportation Plan in 1996, the Brown County Planning Commission began working with WisDOT, De Pere, and other communities and agencies to study methods of handling existing and projected transportation demand in this part of the metropolitan area. The 1996 plan and the findings of subsequent plans, meetings, and studies suggested that the addition of a Fox River bridge and connecting roadway segments in this area would be the most effective method of handling the demand that will be generated by the development planned for the area. However, the federal, state, and local agencies involved in these efforts also recognized the need to complete an environmental analysis before proceeding with a project that could affect the area's natural, social, and other characteristics.

The Brown County Planning Commission is currently working with federal agencies, state agencies, local agencies and communities, and the public to develop an Environmental Impact Statement (EIS) and Interstate Access Justification Report (IAJR) for this project. The EIS process is currently in the Alternatives Identification and Analysis phase, and the draft EIS document that recommends a location for a new southern bridge and connecting arterial streets or highways is expected to be completed in 2010.

Rail Transportation

Freight Rail

The rail line that runs through the western section of the City currently carries several trains every day, and the line provides some service to Green Bay Packaging, International Paper, and some warehouses in the City's business park. Since some of the industrial developments that are planned for the southwest section of the City near the rail line will likely use the line to import and/or export goods in the future, the City should work with the Canadian National Railroad to establish rail spurs that could serve these land uses.

Passenger Rail

The Green Bay Metropolitan Area does not currently have access to passenger rail service, but a high-speed passenger rail line is expected to be extended to the metropolitan area through the Midwest Regional Rail Initiative (MRRRI). If this service is implemented, it will provide another means for De Pere residents to travel throughout the Midwest without using their personal vehicles. The implementation of this service will also enhance the attractiveness of public transit to residents by enabling them to use the bus to reach what will likely be the area's primary MRRRI terminal in Green Bay.

Air Transportation

Austin Straubel International Airport will continue to provide air service to people traveling to and from De Pere, and the expansion of De Pere's commercial and industrial

base over the life of the plan will likely increase the demand for air freight service at the airport. De Pere should work with representatives of the airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Truck Transportation

De Pere's truck routes are mainly the state and county highways that run through the City. However, as commercial and other truck-generating land uses are mixed into various parts of the City over the next 20 years, the City should consider formally identifying streets where heavy trucks are allowed to travel. These truck routes should be designed to minimize impacts on residential areas and inform truck drivers of the most efficient routes into and out of the City.

Once this system is identified, the City should mark the truck routes with street signs that distinguish them from the other City streets. One method of doing this would be to paint the truck route street signs a different color so they can be easily identified by truck drivers. This approach has been used by the Village of Ashwaubenon for several years to enable truckers to determine if they can drive on certain streets before they unknowingly enter them illegally.

Water Transportation

To ensure that De Pere's current and future interests are considered by Port of Green Bay representatives, the City should participate in the port's plan implementation process. Participating in this process will enable the City to inform the port planners of its intentions to utilize the port over the next 20 years and ensure that modifications to the port's policies and facilities are consistent with the City's long-term economic development strategy.

Funding to Help Develop the City's Transportation System

To help the City fund the development of its multimodal transportation system, it should continue to apply for transportation grants from various sources over the next several years. Some examples of these programs are identified in this section.

Transportation Enhancements (TE) and Wisconsin Stewardship Program

De Pere should continue to apply for federal Transportation Enhancement (TE) grants through the Wisconsin Department of Transportation to help fund the development of the City's bicycle and pedestrian system. The City should also continue to apply for funds from the state's Stewardship Program to assist in funding the construction of its off-street trail system. Examples of projects that have been completed in De Pere using TE and Stewardship funds include the Grant Street streetscaping and traffic calming project, the Fort Howard Drive bicycle lane project, the Fox River Trail, and the East River Trail extension. Information about the TE program can be obtained from the Brown County Planning Commission or WisDOT, and the City can contact the Wisconsin Department of Natural Resources for information about the Stewardship Program.

Safe Routes to School (SRTS) Program

The federally-funded Safe Routes to School (SRTS) program is an initiative to encourage people to lead healthy and active lifestyles from an early age by increasing the number of students in kindergarten through 8th grade who walk or bicycle to school. The program is also designed to reduce fuel consumption, air pollution, and traffic near schools.

The Wisconsin SRTS program offers grants for planning and infrastructure projects, and information about the SRTS program can be obtained from the Brown County Planning Commission or WisDOT.

Highway Safety Improvement Program (HSIP)

Over the last 10 years, De Pere and its partners have obtained funds from the Highway Safety Improvement Program and the Hazard Elimination and Safety (HES) Program to fund 90 percent of the cost of correcting safety problems in the City. Two examples of projects that were funded through the HES program are the roundabout at the intersection of Ninth Street and Grant Street and intersection safety improvements along Main Avenue west of Eighth Street. The City should continue to apply for HSIP grants to correct existing and potential transportation safety problems, and other grant programs through WisDOT's Bureau of Transportation Safety should also be investigated by the City to address safety issues.

CMAQ Program

If Brown County is designated as an air quality non-attainment area in the future, the City should seek funds from the Congestion Mitigation and Air Quality (CMAQ) program administered by WisDOT to implement projects that will improve the area's air quality.

The City should also investigate other grant opportunities as they arise in the future.

Consistency With State and Regional Transportation Plans

State and Regional Bicycle and Pedestrian Plans

The bicycle and pedestrian system recommendations in the De Pere plan are consistent with the goals of the Wisconsin and Brown County bicycle and pedestrian plans. Like the state and regional bicycle and pedestrian plans, many of the recommendations in the De Pere plan are designed to increase the number of people using these transportation modes and to ensure that walkers and bikers are able to travel safely throughout the area.

State and Regional Highway Plans

Several aspects of the state and regional highway systems in this area are addressed throughout the chapter.

State and Regional Rail Plans

The state railroad plan is currently being developed by WisDOT, and the De Pere plan addresses freight rail service in the City. The De Pere plan also acknowledges the Midwest Regional Rail Initiative (MRRRI) and recommends that City residents use the passenger rail service as an alternative to their personal vehicles if the service is extended to the Green Bay Metropolitan Area in the future.

State Airport Plan

The Wisconsin State Airport System Plan 2020 recognizes Austin Straubel International Airport as an important component of the state's airport system, and the De Pere plan recommends that the City work with representatives of the airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Regional Waterway Plans

The importance of De Pere's participation in the development and implementation of Brown County's port plan is addressed in this chapter.

Summary of Recommendations

This chapter recommends the following policies:

Streets and Highways

- To enable and encourage people to walk and bicycle throughout the City and the adjacent communities, De Pere should require well-connected street patterns within new developments that have frequent connections to the existing street system. The City should not allow cul-de-sacs and loop streets when physical or environmental constraints do not exist, but if these constraints prohibit street connections, the City should allow the development of cul-de-sacs near the constraints.
- The City should allow the development of narrower streets. The City should also establish right-of-way width standards that do not require the acquisition of more right-of-way than necessary.
- The parking areas of streets should be defined by curb extensions at many of the City's intersections, and extensions should also be placed at other points along long uninterrupted blocks. The curb extensions will prohibit drivers from using the parking lanes as passing or turning lanes at intersections and encourage people to drive slowly when parked vehicles are not present. The curb extensions will also minimize pedestrian crossing distances at the City's intersections.
- Once the City allows the development of narrow streets, it should encourage developers to build narrow streets by offering them incentives.
- If traffic congestion becomes a problem in the future, the City should not expand its two-lane streets to four lanes. Instead, the City should construct two-lane arterial

boulevards or three-lane arterial streets that are complemented by an interconnected collector and local street system, mixed land uses, and efficient traffic control techniques at intersections.

- The City should continue to utilize street design techniques that reduce vehicle speeds, minimize the possibility of conflicts, and enhance traveler awareness to maximize pedestrian, bicyclist, and motorist safety and accessibility at the City's intersections. Techniques that should be used include roundabouts, curb extensions at intersections, and other street design features.
- De Pere should create a school zone traffic calming program that identifies street design and other techniques that will slow traffic and maximize safety and accessibility to encourage students to walk and bike to school. Once the traffic calming program is established, the City should budget funds each year and apply for funds from the Safe Routes to School grant program to implement traffic calming and other improvements. The City should also cooperate with representatives of the Unified School District of De Pere, West De Pere School District, Brown County, and possibly other agencies to create the program. Specific calming techniques that should be used in school zones are addressed in the plan's Bicycle and Pedestrian Safety Chapter.

Pedestrian and Bicycle Facilities

- To enable and encourage people to make additional walking and bicycling trips in De Pere, the City should implement the Land Use Chapter's recommendations for mixing land uses within the downtown and elsewhere to increase the number of destinations that can be easily reached by pedestrians, bicyclists, and transit users.
- The City should continue to develop its sidewalk system as the community grows over the next 20 years by building sidewalks along both sides of public streets. The only situation where sidewalks should not be required on both sides of a street is when physical or environmental constraints exist. In these situations, sidewalks should be required on at least one side of the street. The City should also enhance pedestrian access within and near its business and industrial parks by installing sidewalks or trails along Heritage Road, Enterprise Drive, and other major streets.
- The City should continue developing its off-street pedestrian/bicycle trail system to complement the extensive sidewalk network. In addition to serving destinations within De Pere, these efforts will enhance the City's connections to the surrounding communities and improve intercommunity mobility.
- To enable and encourage people to travel to destinations in the City with and without motorized vehicles, the City should ensure that new and redevelopment projects have buildings with zero or minimal setbacks, parking along the side or in the rear, and other features similar to those recommended in the plan's Land Use Chapter.
- De Pere should continue to work with the Wisconsin Department of Transportation and Brown County Highway Department to ensure that all of the bridges, interchange overpasses, and other transportation structures within the City have adequate pedestrian and bicycle facilities when they are constructed or reconstructed. The City should also work with WisDOT and Brown County to determine if

additional non-motorized transportation crossings can and should be built along US 41 when the highway is reconstructed.

- As opportunities present themselves over the next several years, the City should require the designation of public rights-of-way at or near the end of the cul-de-sacs, horseshoe roads, and other streets for multi-use paths that connect to neighboring subdivisions, schools, parks, and other destinations.

Transit

- Over the next several years, the City should work with Green Bay Metro, employers within and near the service area, retail centers, the De Pere Main Street Program, and others to implement programs and projects that could increase transit ridership to, from, and within the City.
- De Pere should continue to utilize Green Bay Metro's paratransit service as a transportation option for the City's elderly and disabled residents.

Highways

- To maximize accessibility for everyone and enable the expanded Claude Allouez Bridge to fit within the context of De Pere's downtown, the City should work with WisDOT, the Brown County Highway Department, and Brown County Planning Commission to implement the street designs recommended for Main Avenue and Reid Street between Third and North Sixth Streets.
- The City should continue to work with the Brown County Planning Commission, WisDOT, and other agencies to complete the Environmental Impact Statement (EIS) and Interstate Access Justification Report (IAJR) for a new Fox River bridge and connecting arterial streets or highways.

Rail Transportation

Freight Rail

- Since some of the industrial developments that are planned for the southwest section of the City near the rail line will likely use the line to import and/or export goods in the future, the City should work with the Canadian National Railroad to establish rail spurs that can serve these land uses.

Passenger Rail

- The City should monitor the progress of the Midwest Regional Rail Initiative (MRRI) and encourage residents to use it to travel throughout the Midwest. The City should also investigate the feasibility and desirability of locating a depot in De Pere.

Air Transportation

- De Pere should work with representatives of Austin Straubel International Airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Truck Transportation

- As commercial and other truck-generating land uses are mixed into various parts of De Pere over the next 20 years, the City should consider identifying streets where heavy trucks are allowed to travel. Once this system is identified, the City should mark the truck routes with street signs that distinguish them from the other City streets.

Water Transportation

- To ensure that De Pere's current and future interests are considered by representatives of the Port of Green Bay, the City should participate in the port plan implementation process.

Funding to Help Develop the City's Transportation System

- To help De Pere fund the development of its multimodal transportation system, the City should continue to apply for transportation grants from various sources over the next several years.

