

Transportation

- Streets and Highways
 - Air Service
 - Bicycle and Pedestrian System
 - Rail Transportation
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-



Transportation is a vital element of the **Comprehensive Plan**, as well as one that is heavily shaped by the plans of regional authorities such as counties, transportation authorities, and the State of Wisconsin. This chapter seeks to document key initiatives of these regional entities and to coordinate Appleton's local initiatives with them. It addresses air, water, rail, bicycle, pedestrian, and automobile or truck transportation modes. In addition, it discusses public transit services and special services for the elderly or disabled public.

An efficiently operating, multi-modal transportation system is crucial to the success of the community. While priority may still be given to the street and highway system over which a majority of the region's traffic moves, the City of Appleton is increasingly concerned with providing alternative transportation options, and transit services to decrease reliance on automobiles. This concern is fueled by rising gasoline costs as well as traffic congestion, public health, and environmental degradation. As the population ages, Appleton and other communities will need to consider new services for elderly residents who may have limited mobility.

Besides moving people, the transportation system is designed to move freight into, through, and out of the region. A majority of the freight is now shipped on trucks, with small portions moved by rail or air. Current trends suggest that rail may play a greater role in future freight movement, while air service cutbacks seem likely due to rising costs and a general downsizing of airline operations.

Regional Transportation Planning

Perhaps more than most other community infrastructure, transportation is influenced by federal, state, and regional planning and funding. It is not uncommon, for instance, to find that some roads within a community fall under the jurisdiction of the state or county government. Additionally, a large part of the funding for road construction and maintenance, air and water ports, and transit services comes from state or federal sources. It is therefore vitally important to understand the policies and plans of these other governments as they apply to the local community.

State of Wisconsin Transportation Plans and Studies

The following is a synopsis of statewide planning related to transportation in Wisconsin.

Wisconsin Rail Issues and Opportunities Report (2004)

This report documents the importance of rail in Wisconsin's transportation network. Tonnage carried on the 3,664 miles of rail in Wisconsin is expected increase by 51 percent by the year 2020. The State's role with regard to rail has been to promote and facilitate rail service, in part by providing funding for infrastructure enhancements and passenger rail operations. Concerns noted in the report include congestion in Chicago, a potential lack of truck-rail intermodal facilities, preservation of abandoned rail corridors, intercity rail passenger service, rail safety issues, and tax and regulatory issues.

Wisconsin Pedestrian Policy Plan 2020

The *Wisconsin Pedestrian Policy Plan 2020* seeks to raise the importance of pedestrian facilities to the same level as other transportation infrastructure. It notes that just over eight percent of all trips taken in Wisconsin are pedestrian trips, with the greatest percentage taken by younger (under age 14) persons, 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 the Wisconsin Department of Transportation to include pedestrian facilities on state trunk highways, and to work with local communities on issues including transportation planning and design, public education, traffic law enforcement, and encouragement of walking as a viable transportation mode.

Wisconsin State Airport System Plan 2020

Wisconsin's 143 general aviation airports are addressed through this plan, including Outagamie County Regional Airport. Projects seeking state funding must be in compliance with its policies and recommendations. Three categories of capital project needs were identified, including pavement reconstruction projects, instrument approach capability, and airport service level enhancements.

Wisconsin State Bicycle System Plan 2020

This plan was prepared "to establish bicycling as a viable, convenient and safe transportation choice throughout Wisconsin" by ensuring an interconnected transportation system across government boundaries. Bicycling



is thought to make up less than two percent of all trips in Wisconsin, but a large percentage of trips by students to and from school. This presents some concerns for bicycle safety. The plan contains five recommendations. These are to plan and design new transportation facilities to accommodate bicycles, to expand the statewide network of bicycle routes, to improve safety, to enforce laws that prevent dangerous and illegal behavior by motorists and bicyclists, and to promote bicycling as a transportation mode.

In addition to the *Wisconsin State Bicycle System Plan 2020*, the Department of Transportation has prepared county-level maps depicting bicycling conditions. Of particular note, these include bicycle touring trails, urban escape routes, and ratings of state, county, and town roads for bicycle suitability based on factors such as traffic volume and shoulder width. The state has also published a *Wisconsin Bicycle Facility Design Handbook* and *Wisconsin Bicycle Planning Guidance*, which should provide assistance with future bicycle transportation planning in the City and region.

Wisconsin State Highway Plan 2020

Wisconsin's State Trunk Highway System includes approximately 11,800 miles of roadway and 4,600 bridges, accounting for eleven percent of the state's road mileage, but 60 percent of all traffic. The *Wisconsin State Highway Plan 2020* identifies measures to meet highway system needs including safety, highway rehabilitation, alternative transportation, land use, traffic flow, and additional capacity. The plan notes the importance of continuing to develop other modes of transportation.

County and Regional Transportation Planning

The *East Central Wisconsin Regional Comprehensive Plan 2030* includes a vision for transportation that states "in 2030, the East Central Region will have an efficient regional transportation network which provides options for the mobility needs of all people, goods, and services." This plan notes particular concerns for the impact the transportation system has had on encouraging urban sprawl, the high cost of maintaining an aging transportation infrastructure, a need to provide regional connectivity to facilitate movement of people and goods, environmental impacts of transportation, and a desire to provide alternative means of transportation, especially for an aging population.

The East Central Regional Planning Commission is the designated metropolitan planning organization for Appleton, and in 2005 adopted a *Long Range Transportation/Land Use Plan*. The primary purpose for the plan is to insure coordination between land use and transportation planning within the Fox Cities Metropolitan Planning Area, which includes the Cities of Appleton, Kaukauna, Menasha, and Neenah, the Villages of Combined Locks, Kimberly, and Little Chute, and the Towns of Buchanan, Center, Grand Chute, Greenville, Harrison, Kaukauna, Menasha, Neenah, and Vandenbroek.

The Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 required all Metropolitan Planning Organizations (MPOs) to update and adopt long-range transportation plans which conformed to ISTEA's metropolitan planning requirements. This plan establishes a vision similar to that of the *East Central Wisconsin Regional Comprehensive Plan 2030*, that "in 2035, the Fox Cities Urbanized Area will have a safe, efficient, and effective transportation network which provides options for the mobility needs of all people, goods, and services, while maximizing available resources, such as land, energy, finances, etc." It ties this vision to land use through the following goals:

- promote an orderly and planned pattern of community growth and development;
- promote the provision of government services in an efficient and socially responsible manner;
- protect the environment and manage natural resources in an ecologically sound manner; and
- provide sufficient public open space to meet the recreational needs of all residents and protect and preserve natural and cultural resources.

The plan notes concerns about the potential loss of federal funding for Valley Transit, and recommends formation of an independent funding authority. It also notes a limited number of deficiencies in the existing road system, including the College Avenue bridge and a deficient segment of North Meade Street, just north of Glendale in Appleton. Some of these issues, such as the College Avenue Bridge, have been addressed. Projecting into the future, the plan determines the following regional needs by 2030.

- US Highway 41 will likely be operating at or over capacity and should be expanded from four to six lanes south of the Fox Cities to STH 26 in Winnebago County, and from STH 15 to the north over the long term.



- Analysis shows that US Highway 10 will likely be operating at or over capacity and should be expanded from four lanes to six lanes from US Highway 41 east to Oneida Street in Winnebago County.
- State Highway 441 will likely be operating at or over capacity and should be expanded from four lanes to six lanes from US Highway 41 east to Oneida Street in Winnebago County.

The Long Range Transportation Plan recommends several improvements within the City of Appleton, including the following projects anticipated to be completed by the end of 2009, when a new plan will be prepared:

- replacement of the College Avenue bridge in 2008;
- expansion of College Avenue from two to four lanes between John Street and Matthias Street in 2010;
- expansion of County Highway AP to four lanes from US Highway 10 to County Highway P;
- reconstruction of a four-lane segment of Evergreen Drive between Ballard Road and French Road;
- reconstruction of a four-lane segment of Lake Park Drive from Plank Road to Kensington Drive; and
- Reconstruction of a four-lane section of Lawe Street from College Avenue to the Fox River, and reconstruction of the Lawe Street bridge over the Fox River.

The *Transportation Improvement Program for the Fox Cities (Appleton) and Oshkosh Urbanized Areas* is a staged multi-year program of both capital and operating projects designed to implement the long-range element of the transportation plan and shorter-range transportation system management (TSM) element. The staged program covers a period of five years and includes projects recommended for implementation during the 2009-2013 program period. The following map depicts the locations of projects included during the period between 2009 and 2013.

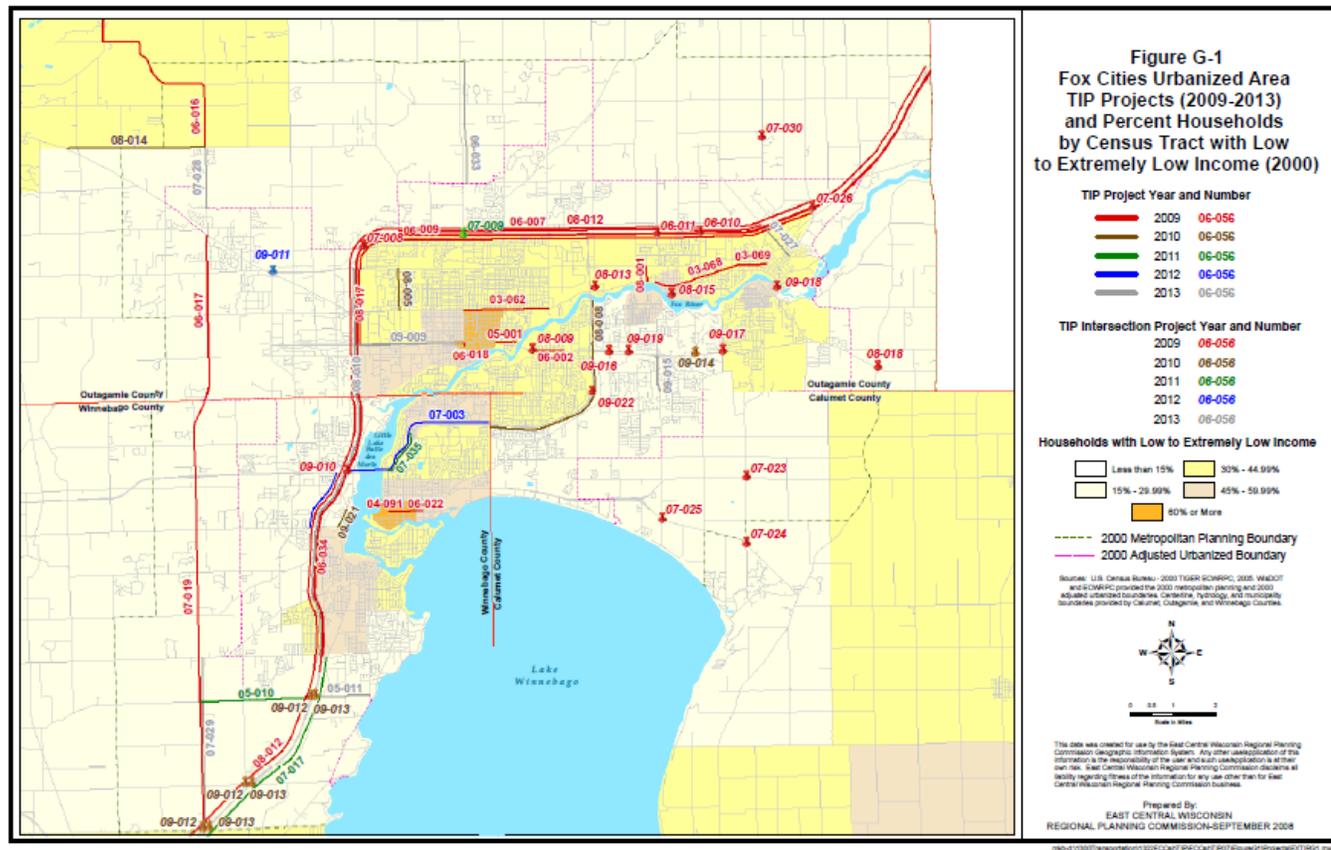


Figure from the *Transportation Improvement Program for the Fox Cities (Appleton) and Oshkosh Urbanized Areas*.

Outagamie County

Outagamie County's Comprehensive Plan contains 24 goals related to transportation, addressing issues such as system planning, accommodation for all citizens, land use, safety, multiple modes, environmental degradation, maintenance, and congestion management. The plan documents conditions related to highways, trucking, bicycling, transit, port and water transportation, and other topics further discussed in this chapter of Appleton's **Comprehensive Plan**.

Outagamie County has prepared a *Capital Improvements Program* that identifies street-related investment through 2012. This plan identifies several projects in or adjacent to the City, including:

- expansion of County Highway A from two to four lanes between Wisconsin Avenue and County Highway OO in the Town of Grand Chute in 2010;
- expansion of County Highway E from two to four lanes from County Highway JJ to East Broadway Drive in 2012;
- surface improvements to County Highway E from County Highway OO to U.S. Highway 41 in 2011;
- rehabilitation of County Highway E, including stormwater, curb, and gutter, from Wisconsin Avenue to Longview Street in 2012;
- reconstruction of County Highway JJ as an urban cross-section between County Highway E and French Road in 2012.

Winnebago County

Winnebago County's *Comprehensive Plan* sets a goal to "achieve a safe, efficient, and environmentally sound transportation system that provides personal mobility for all segments of the population and supports the economy of the county." To do so, it has defined eight objectives as follows:

- to integrate transportation with other elements of the *Comprehensive Plan*;
- to plan an effective transportation system that considers the needs and preferences of population sub-groups;
- to provide an efficient, cost-effective transportation system;
- to provide safe transportation;
- to minimize environmental disruption;
- to develop a system compatible with existing and future land use patterns;
- to promote energy conservation; and
- to provide a system that integrates multiple travel modes.

Calumet County

Calumet County identifies several concerns related to land use, increasing traffic volume, and safety. The County does not have any plans for system enhancements in the immediate vicinity of the city of Appleton.

Transportation Modes

The City of Appleton is served by a well-developed transportation system that accommodates a variety of different modes. Existing conditions, ongoing or planned initiatives, and significant concerns related to these modes are discussed here.

Streets and Highways

Cars and trucks account for 82 percent of all trips made in the United States, and there are now more motor vehicles in the country than there are licensed drivers. Through 2020, the number of vehicle miles traveled on



Wisconsin roads is anticipated to grow at a rate of 1.5 percent annually¹. This figure was prepared prior to more recent research, however, that points to a leveling of vehicle miles traveled beginning in 2004, with declines in 2007 and 2008. Still, road and highway transportation remains the dominant form of travel for commuting, errands, leisure trips, and freight movement.

A street classification system is used to describe roads within a community based on their function. The classification system describes a network that channelizes traffic flow and defines how an individual street segment should serve traffic in that network. Streets may then be planned to meet the level of demand associated with their classification. This not only includes design issues such as road width, pavement type, and radii, but also signalization and access management. Given their greater importance in moving traffic, arterial and collector roads may also be granted a higher priority for reconstruction, snow removal, or other maintenance.

The functional classifications prepared by the Federal Highway Administration and adopted by the Wisconsin Department of Transportation include arterial, collector, and local streets.

- **Freeway (Principal Arterials).** These roads serve corridor movements having trip length and travel density characteristics of an interstate or an interregional nature. These routes generally serve all urban areas with a population greater than 50,000 inhabitants. Basically, they are major routes connecting cities. They are often constructed as divided highways. U.S. Highway 41 is an example.
- **Arterial (Minor Arterial).** This classification is broken out by the State of Wisconsin and Federal Highway Administration as minor arterials. These roads serve cities and other major traffic generators, and serve traffic movement within the region. College Avenue is an example of an arterial road.
- **Collector.** State and Federal guidelines recognize major and minor collector roads. Neighborhoods and local area traffic generators (such as schools or neighborhood shopping centers) are served by major collectors, which also link those traffic generators to nearby larger population centers or higher functionally classified roadways. At the level of minor collector, these roads collect traffic from local roads and provide access from neighborhoods to the larger road network
- **Local Roads.** All roads not classified as arterials or collectors are local functional roads. They provide access to adjacent land and provide for travel over relatively short distances to a higher-level roadway.

Arterial and collector roads designated by the City of Appleton are depicted on the map on the following page. It should be noted that the arterial and collector roads defined by City of Appleton do not correspond to those designated by the East Central Regional Planning Commission or the three counties in which the city is located. Appleton has chosen to classify its roads by an alternative interpretation of criteria and needs related to traffic, access, connectivity, and other measures of road function.

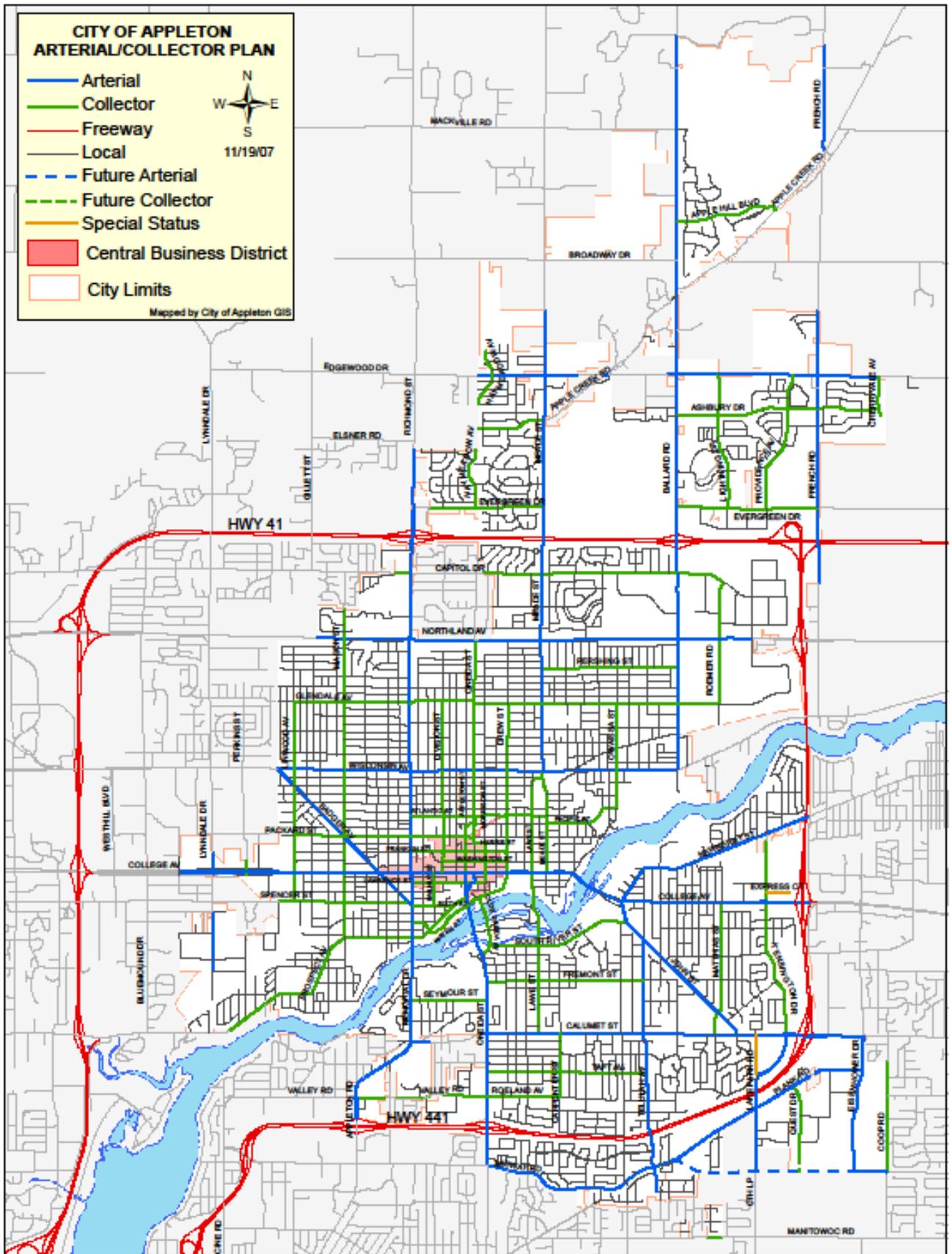
Truck Routes

The City of Appleton has designated truck routes to discourage heavy vehicle traffic on neighborhood streets and other roads where these vehicles may present conflicts. In general, these include state and county trunk highways passing through the City, along with local streets in industrial districts or business parks in the community. A full listing of designated streets and street segments is found in Section 19-136 of the municipal code.

Appleton currently designs its truck route roadways to meet the dimensional requirements of a WB-50 truck, as defined by the American Association State Highway Transportation Officials (AASHTO) book, *A Policy on Geometric Design of Highways and Streets*, commonly known as the *Green Book*. The US standard vehicle types from AASHTO include WB-67, WB-50, WB-40, single unit truck (SU) and passenger car (P). These terms refer to the wheel base (WB), which is the distance, in feet, measured between the front wheel axle of a vehicle and its rear-most wheel axle. For example, a WB-50 truck has 50 feet between the front and the rear-most wheel axle. Vehicles with a larger wheel base will require a larger turning radius.

With a growing number of large trucks on its streets, the City may want to consider selective application of WB-67 design criteria. This standard provides a wider turning radius, making turns easier to negotiate and minimizing instances where a truck may "ride over" a curb or come into conflict with traffic signal poles or other items on the corner. A drawback to doing so, however, is that the intersection will be widened and vehicle turning speeds are likely to increase, which may pose a threat to pedestrian safety. A case-by-case approach should take into account right-of-way acquisition needs and other factors.

¹ Wisconsin State Highway Plan 2020



Parking

Vehicles are prohibited from parking on any City street from 2:00 AM to 5:00 AM. In most newer parts of the City, this does not pose a problem, as individual lots have been designed to accommodate cars. Substandard on-site parking or a lack of parking may be encountered in some of the City's older neighborhoods. Where inadequate parking is found, it may contribute to depressing property values. Overnight on-street parking is found in many cities of the same age and size as Appleton. Consideration to allow on-street parking in some of Appleton's neighborhoods may be warranted, especially as an inducement to redevelopment.

Some of Appleton's commercial corridors also suffer due to a lack of adequate parking, or the available space to provide required parking. Within the downtown area this has been addressed through the construction of several public parking ramps, although redevelopment and increasing employment in the downtown may create a demand for more parking. A new parking structure may be considered in conjunction with a development such as a convention center. Additional discussion and recommendations related to downtown parking are contained in the Downtown Plan (Chapter 14).

Lots on commercial streets such as Wisconsin Avenue and Richmond Street were typically platted prior to the City enacting its current standards for parking and egress. Many of the buildings on these streets were built in an urban "Main Street" form, with little or no on-site parking, instead relying on parking provided on the public street. Parking has subsequently been removed from several stretches of these roads, and current zoning requires on-site parking comparable to parts of the City with a more suburban character. These conditions have helped to depress the commercial viability of some existing properties, and have presented an impediment to redevelopment. Because of the number of parking stalls that must be provided, it may be difficult to assemble a large enough site to make redevelopment logistically or economically feasible.

Traffic Safety

According to records kept by the City, Appleton contains 180 intersections that have averages at least one accident per year in the five years from 2003 to 2007. About half of these average two or more accidents, and the worst, Northland Avenue and Richmond Street, average about 16 accidents per year. Overall, a majority of the intersections with high crash totals are located on a handful of the City's arterial streets, including College Avenue, Wisconsin Avenue, Northland Avenue, Calumet Street, Richmond Street, Oneida Street, and Memorial Avenue.

During the period in which this data was collected, improvements were made to some of these streets, which may address some of the unsafe conditions leading to high accident totals. Additionally, improvements are scheduled for segments of Wisconsin Avenue and South Oneida Street within the next few years.

Air Service

Outagamie County Regional Airport (Appleton), Austin Straubel International Airport (Green Bay), and Wittman Regional Airport (Oshkosh) are among nine airports in the state with year-round commercial air service. These airports feed regional and major hubs such as Milwaukee, Chicago-O'Hare, Minneapolis – St. Paul, and Detroit. All three airports have seen growth in enplanements in recent years, however, current turmoil within the airline industry may impact future passenger air service. Most airlines are cutting the number of flights they offer. It remains to be seen whether airports in the Appleton area are impacted, but a reduction in the number of commercial flights available could cause airport revenue to decline and reduce the number of flight options available to travelers. This, in turn, could hamper business and leisure travel to and from the area.

Land uses around airports are impacted by rules promulgated by the Federal Aviation Administration (FAA), which has established height restrictions on uses within approach zones to airport runways. These are referred to as runway protection zones, and may extend as much as 2,500 feet beyond the end of the runway, depending on criteria such as the type of aircraft, visibility, etc. FAA rules, along with concerns regarding light, noise, and pollution, tend to favor non-residential uses (agriculture, recreation, industrial, etc.) in close proximity to commercial airports.

Outagamie County Regional Airport

Outagamie County Regional Airport began operations in 1965 with only 28 acres and four buildings, and now sits on 1697 acres, with over 20 buildings. A new 30,000 square foot addition to the terminal building adds eight gates, five of which are equipped with jet boarding bridges, and a capacity of up to 425,000 enplaned passengers. The Outagamie County Regional Airport is the fourth-largest commercial service airport in Wis-



consin and served 572,000 passengers in 2006 with over 57,500 aircraft operations. Over 10 million pounds of freight and mail move through the airport annually. A recent study conducted by the airport estimates its impact at:

- \$108 million in direct economic sales ;
- 1271 full-time jobs; and
- \$54 million in direct wages to the region and state economy.

Air Wisconsin Airlines Corporation has located their corporate headquarters at the airport. Commercial service is also provided by United Express, Comair (Delta), Midwest connect Airlines, and Northwest Airlinck. Gulfstream operates a maintenance facility at the airport.

The airport is equipped with a 24 hour manned Aircraft Fire Fighting and Rescue Station, an Automated Weather Observation System, an FAA control tower, Instrument Landing Systems, a newly constructed aircraft engine run-up pad, and a full service Fixed Based Operator. Maxair services General Aviation traffic at the Appleton Airport with airline and general aviation refueling, executive air charter services, pilot training, aircraft rental, corporate aircraft management and aircraft maintenance.

The airport is owned by Outagamie County. Planned enhancements to Outagamie County Regional Airport include terminal expansion and related taxiway and other improvements. A new crosswind runway is planned for 2012.

Austin Straubel International Airport

Austin Straubel International Airport is located just south of Green Bay, and is owned by Brown County. It is the third-largest airport in Wisconsin and operates two runways on a 24-hour schedule. American Eagle, Comair (Delta), Northwest, Skyway/Midwest Express, and United Express provide commercial passenger service at to airport. Two fixed-base operators provide aviation services and hanger facilities. More than 2,400 travelers pass through the airport each day and over 900,000 passengers utilized the facility in 2008. Through 2012, improvements planned for Austin Straubel International Airport include relocation and expansion of maintenance buildings and parking improvements.

Wittman Regional Airport

Started in 1927, Oshkosh's Wittman Regional Airport is owned by Winnebago County. It is best known as home to the Experimental Aircraft Association's annual AirVenture, and features four runways. Several aviation business are located at the airport. In 2008 the main runway was reconstructed and a new control tower was erected.

Bicycle and Pedestrian System

It is said that nearly every trip begins and ends by walking. Certainly, there is a need to accommodate pedestrians at these stages in a trip, but there is increasing interest in making walking a viable form of transportation throughout the trip. This is reflected in current theories of land use, through new standards for urban design, and by facilities that make walking a desirable choice.

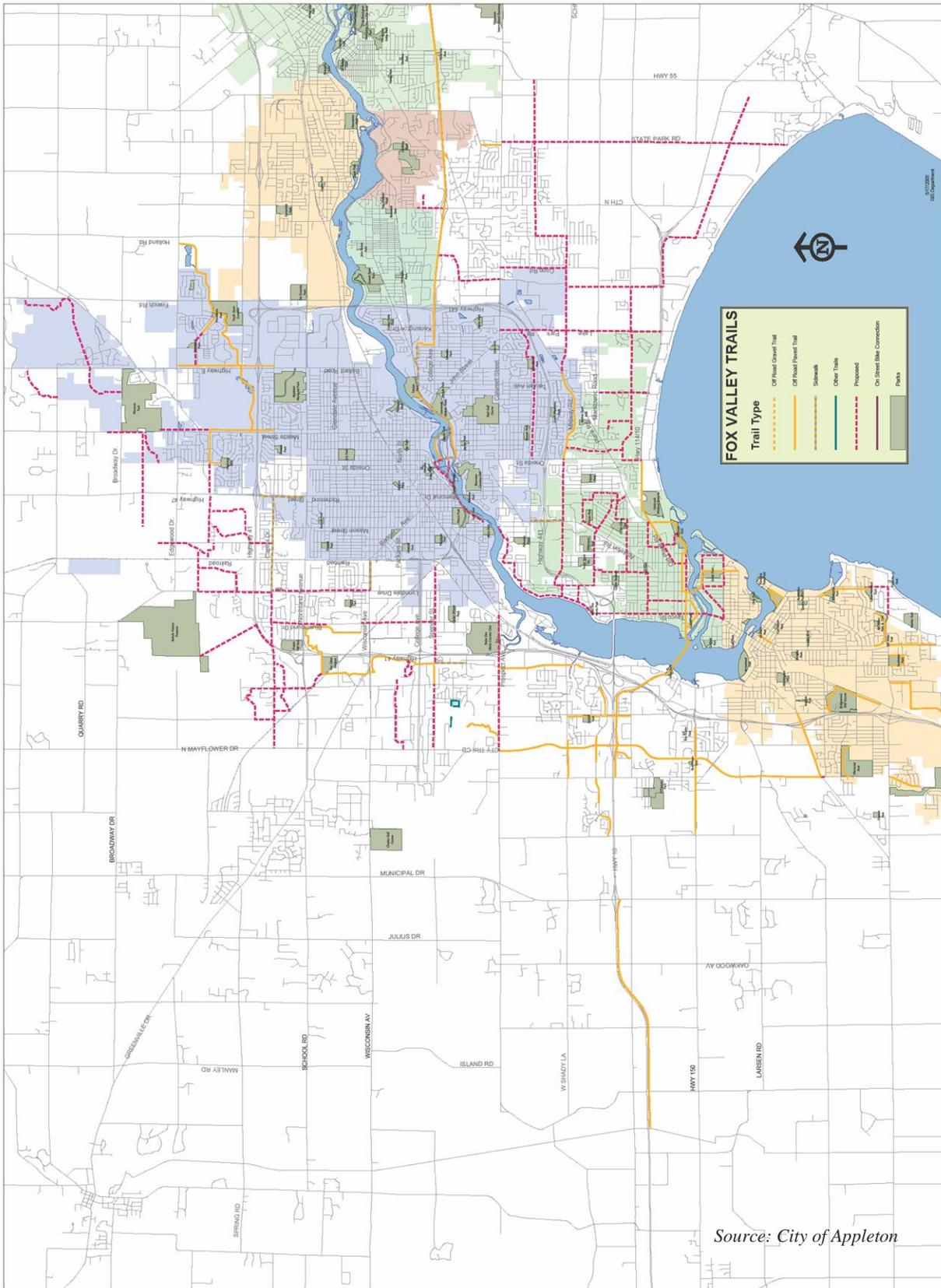
There are many reasons to encourage walking. Walking is the recreational activity most participated in by Wisconsin residents. If walking trips can replace driving a vehicle, they may help to mitigate congestion and pollution. Walking can reduce the need to provide public and private parking in downtown and neighborhood commercial districts, and pedestrian activity helps to create a more lively and attractive atmosphere. Recent research has even documented the health benefits of neighborhoods that have a pedestrian-friendly design. For many people, though, there are few choices besides walking. These include both young and elderly community residents and those who cannot drive or do not have a car.

Bicycling provides many of the same benefits as walking. While they may share some of the same facilities as pedestrians or motor vehicles, bicycles can present conflicts that need to be addressed through design and enforcement.

Appleton has received a grant to conduct a detailed study of needs for improved on- and off-street bicycle and pedestrian facilities. This study will be completed in 2010 and will guide the City in identifying priorities based on criteria such as safety and other community benefits. Areas such as the downtown and the north side, where community input has suggested a need for better connectivity, will be considered in the plan.



Existing and Planned Multi-Use Trails in the Fox Valley



Source: City of Appleton



Walking

Appleton has developed a pedestrian-friendly network of sidewalks and paths through most of its neighborhoods. This system is expanding through new sidewalks in developing parts of the community, and through the efforts to expand path systems. The Safe Routes to School Program will be one of the City's principal initiatives for addressing problem areas (such as gaps or danger points) in the pedestrian network.

Bicycling

Appleton does designate some roads as on-street bicycle routes. Except for a portion of College Avenue, bicycles may be used on sidewalks. Appleton and surrounding communities have developed or planned off-street paths for walking and bicycling. These are depicted on the map on the following page.

Bicycling is supported by the Fox Cities Transit System, which has equipped its buses with bicycle racks. The City has provided bicycle racks in the downtown and at some public facilities. In 2009 the City was awarded a grant to complete an on-street bicycle route plan.

The Wisconsin Department of Transportation prepared a bicycle crash analysis in 2006. This included data from Appleton, that show the City has a relatively low average bicycle-vehicle crash rate based on bicycle miles traveled. Statewide, 65.7 percent of crashes were found to occur at intersections, and 56.1 percent of crashes occurred on arterial streets. In four out of five crashes, the motorist was faulted for causing the crash. Motorist drive-out from a sign or signal-controlled intersection was one of the leading causes cited.

Safe Routes to School

Safe Routes to School is a national program to encourage and enable children to walk to ride their bicycles to school. The program provides a model for bringing a community together to identify barriers to walking or bicycling, establishing programs and making improvements to increase the attractiveness of these modes, and to provide education to the public. It's recommendations are developed around five E's of 1) Education 2) Encouragement 3) Enforcement 4) Evaluation and 5) Engineering.

Appleton has designated walking routes to schools for many years. The City completed a *Safe Routes to School Plan* for Franklin, Lincoln, and Richmond Elementary Schools in 2007. This plan notes that "community-wide issues in Appleton include gaps in the sidewalk system in some neighborhoods. There are also several multi-legged intersections which are difficult for pedestrians to negotiate. Crossing the street is difficult near some schools, even when an adult crossing guard is present. Many parents don't consider walking or biking to be a viable form of transportation and there is not much information currently collected to quantify mode choice within the community." The plan goes on to recommend community-wide and site or neighborhood specific recommendations to address these concerns.

Community-wide recommendations within the plan can be grouped around the following themes:

- physical improvements to roads, crosswalks, and sidewalks to facilitate walking and bicycling;
- pedestrian and bicyclist education;
- driver education;
- enforcement of traffic rules and regulations;
- enforcement of building, sidewalk, and property maintenance laws;
- encouragement of walking and bicycling as a viable transportation option;
- addressing issues of safety for pedestrians and cyclists;
- collecting data concerning walking and bicycling safety; and
- installing permanent and temporary measures to reduce traffic speed.

Neighborhood or site-specific recommendations include:

- completing gaps within the sidewalk network in neighborhoods surrounding Richmond, Franklin, and Lincoln Elementary Schools;
- improving conditions at crosswalks;



- improving drop-off and pick-up conditions;
- increasing the number of students walking or bicycling to Franklin, Lincoln, and Richmond Elementary Schools.

Although not part of a Safe Routes to School plan, Appleton has completed an analysis and mapped pedestrian and bicycle routes to all schools in the district.

Rail Transportation

The Chicago and Northwestern was the first railroad to reach Appleton, arriving in 1861. It was followed by several other railroads. Through successive waves of industry consolidation, these have been condensed to the Canadian National Railway. In the process, several of the former railroad corridors have been abandoned. The remaining active rail corridors in Appleton include the Former Wisconsin Central (Soo Line) tracks on the west side of Appleton, and the former Chicago and Northwestern track through the Fox River Valley.

Rail Safety Concerns

Up to 30 trains per day are estimated to travel over the mainline tracks in Appleton. This high volume of rail traffic can cause delays when trains block streets, and may pose safety concerns associated with accidents between trains and vehicles. Alternative strategies for reducing conflicts need to take into consideration the potential for conflict, railroad and street grades, traffic volume, and the cost of potential improvements.

There are a total of 107 at-grade railroad crossings in the City of Appleton, including 20 private crossings (usually spurs on industrial properties), seven pedestrian crossings, and 80 public street crossings. There are an additional 16 locations within the community where the railroad passes over or under a public street at a grade-separated crossing.

During the past ten years (through April of 2008) there have been a total of 17 accidents at highway-railroad crossings in Appleton, and another three within the surrounding unincorporated area classified within the Appleton Station's territory. Seventeen of the accidents involved a vehicle striking or being struck by a train. Multiple accidents were reported on three streets, including Ballard Road (4), College Avenue (3), and Division Street (2). Except for two instances in which signals were not activated, the driver either ignored or failed to

Canadian National Weight Limitations System Map



Source: Canadian National Railway; 286K compliant track is shown in green

see warning devices. Gates were installed at Ballard Road in 2003. Visibility was improved at the College Avenue crossing when the street was reconstructed in 2006.

There were three instances in which a train struck a pedestrian. All three occurred in downtown Appleton, with two occurring where Appleton Street crosses the railroad tracks. One resulted in a fatality.

The US Freight Rail Administration (FRA) requires trains to sound their horns when approaching non-gated at-grade railroad crossings. This sometimes results in noise complaints from nearby residents. The FRA does have a procedure for designation of quiet zones. To be designated as a quiet zone, the local community must often construct improvements such as gate-controlled crossing, road closures, or grade-separated crossings. These improvements have a significant cost.

Freight Rail Service

Several local industries are served by freight rail. This service is generally provided via privately owned spurs on individual sites. The *Wisconsin Rail Issues and Opportunities Report* identifies Brown, Outagamie, and Winnebago Counties as locations where there is a concentration of the types of commodities that could be associated with truck-rail intermodal opportunities.

Passenger Rail Service

Passenger rail service is not provided to Appleton, although Amtrak does provide motor coach (bus) service to its rail service in Milwaukee. The Governor's Blue Ribbon Task Force on Passenger Rail Service issued a Final Report in 2001 that supported development of a statewide network of intercity passenger trains. The priority corridor was between Chicago and Madison, via Milwaukee, where some of the report's recommendations have been implemented. Lack of federal funding has kept other recommended initiatives from being put into place.

Proposed Midwest Regional Rail System



Source: Wisconsin Department of Transportation

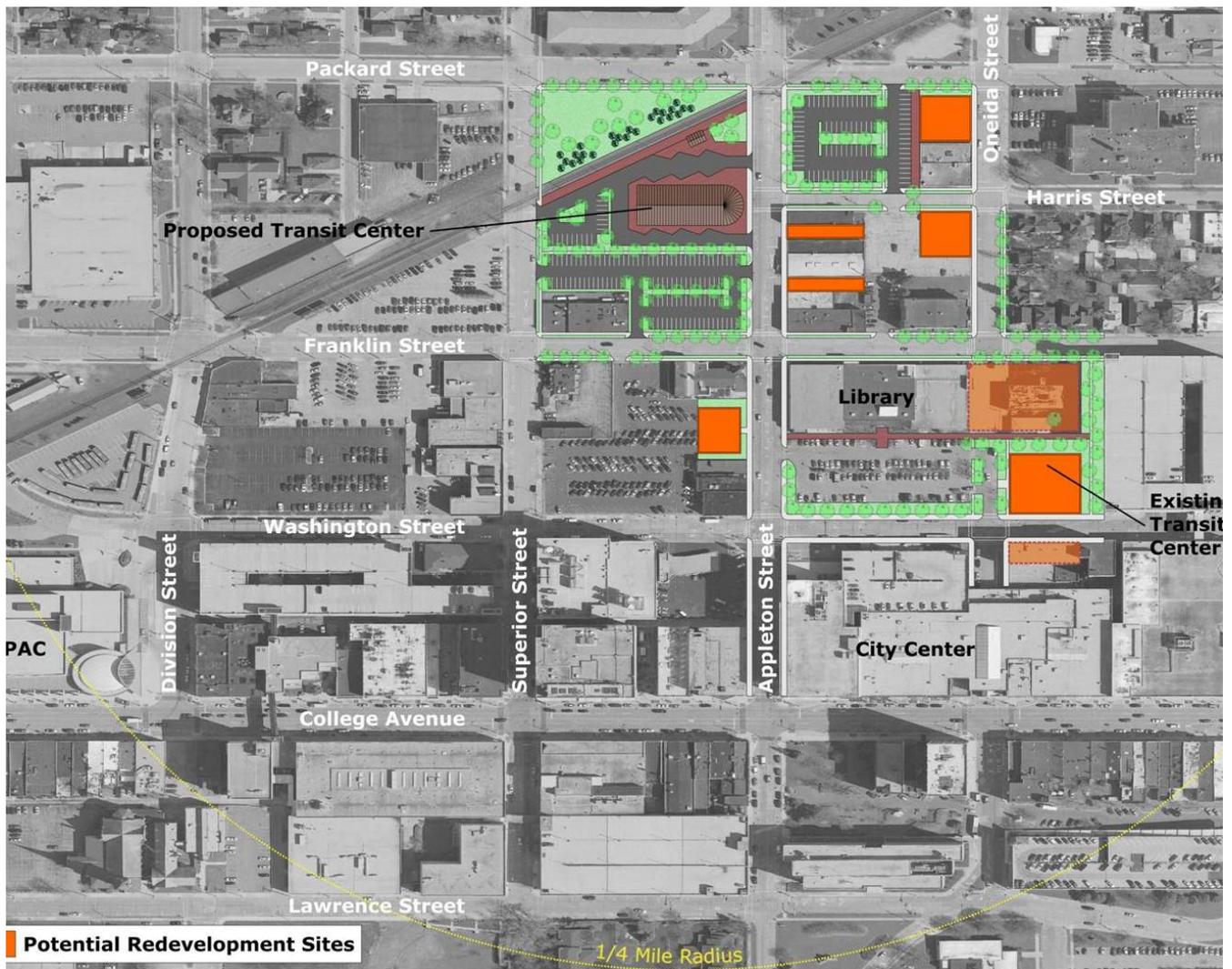
A broader plan for regional passenger rail has been forwarded by nine states. The Midwest Regional Rail System envisions high speed trains, operating at up to 110 miles per hour, connecting major urban centers in the region. Rail stops would be planned in 14 Wisconsin cities, including Appleton as well as Green Bay, Oshkosh, and Fond du Lac. Travel time from Green Bay to Chicago would be reduced to under three hours. This route

would include a stop at Milwaukee's General Mitchell International Airport, potentially reducing air travel demand at Austin Straubel and Outagamie County Regional Airports.

A report prepared by the Passenger Rail Working Group for the National Surface Transportation Policy and Revenue Study Commission in December 2007, entitled *Vision for the future: U.S. intercity passenger rail network through 2050* also recommends intercity rail service through Appleton to Green Bay, at speeds up to 79 miles per hour. Under either this national plan or the other two plans, multiple improvements are needed to allow higher-speeds or more frequent trains. These include track upgrades and new infrastructure, grade separations or road closures, signalization, and passenger facilities. There is no timeline established for providing service or constructing improvements.

Any future passenger rail route serving Appleton will pass through the downtown. This should be the preferred location for a passenger rail depot. The City may consider relocating its existing transit center to serve as a multi-modal transit center. A new transit center may be located on the west side of Appleton Street south of the railroad track. That location is large enough to accommodate a passenger depot, bus loading areas, and parking. It is within walking distance of a majority of the downtown. Based on the probable length of passenger trains, this site will cause minimal delays on major streets such as College Avenue. Additionally, a multi-modal transportation facility could provide an impetus for redevelopment on adjacent blocks in the downtown.

Concept of a Multi-modal Transit Center on Appleton Street and Redevelopment on Adjacent Parcels



Water Transportation

The Fox River was an important transportation route for countless generations of Native Americans before European settlers came to the area. As the fur trade developed in the 1700's and early 1800's, the river became an important trade route. Its importance for commercial traffic continued into the 1900's, as passengers, lumber, coal, and other goods were moved up and down the river. The last barges ceased operating on the Fox River in 1959.

Current boat traffic on the Fox River is recreational. The City maintains a boat launch at Lutz Park, but there are no public dock facilities in the City. The Appleton Yacht Club, founded in 1932, maintains a facility with 75 slips and tie-ups adjacent to Lutz Park. Public use is permitted. The facility also offers bath houses, fueling, and a restaurant. Some waterfront homes have private dock facilities.

Until locks were constructed on the Fox River beginning in the 1840's, falls in the vicinity of present-day Appleton ("La Grand Chute") necessitated a portage located roughly along the route of Water Street on the river's north bank. There are a total of 17 locks on the Fox River between Lake Winnebago (elevation 745 feet) and Green Bay (elevation 578 feet). Four of these locks are located within Appleton. These locks were under control of the U.S. Army Corps of Engineers from 1884 through 2004, when ownership was transferred to the Fox River Navigational System Authority.

Sixteen of the locks will be reopened to boats on a seasonal basis. The current schedule for rehabilitation extends through 2010. The Appleton locks were rebuilt in 2006. As a requirement for state and federal operational funding, the Fox River Navigational System Authority is required to raise \$2.8 million in matching funds. As of 2008, only \$600,000 had been raised.

Since the lock facilities operate seasonally and on a limited schedule, the City of Appleton has an interest in developing a water trail for non-motorized watercraft. This trail will require additional facilities for launching small craft (such as canoes or kayaks) and portage trails around the locks.

Transportation Services

Appleton is an urban community within a large metropolitan area. It has a history of providing both public and private transit services for more than a century.

Local Bus Service

The first commercially viable electric street car system in the United States was started in Appleton in 1886. That system continued to serve the City until 1930, when it was replaced with buses. By 1960 the private bus company, Fox City Bus Lines, required a subsidy from the City in order to continue providing service. The City of Appleton purchased the bus line in 1978 and has been operating it since that time. The Fox Cities Transit Commission, consisting of eight members representing the participating municipalities, governs its policies and procedures. The Appleton Common Council has final decision making authority over budget and major service changes.

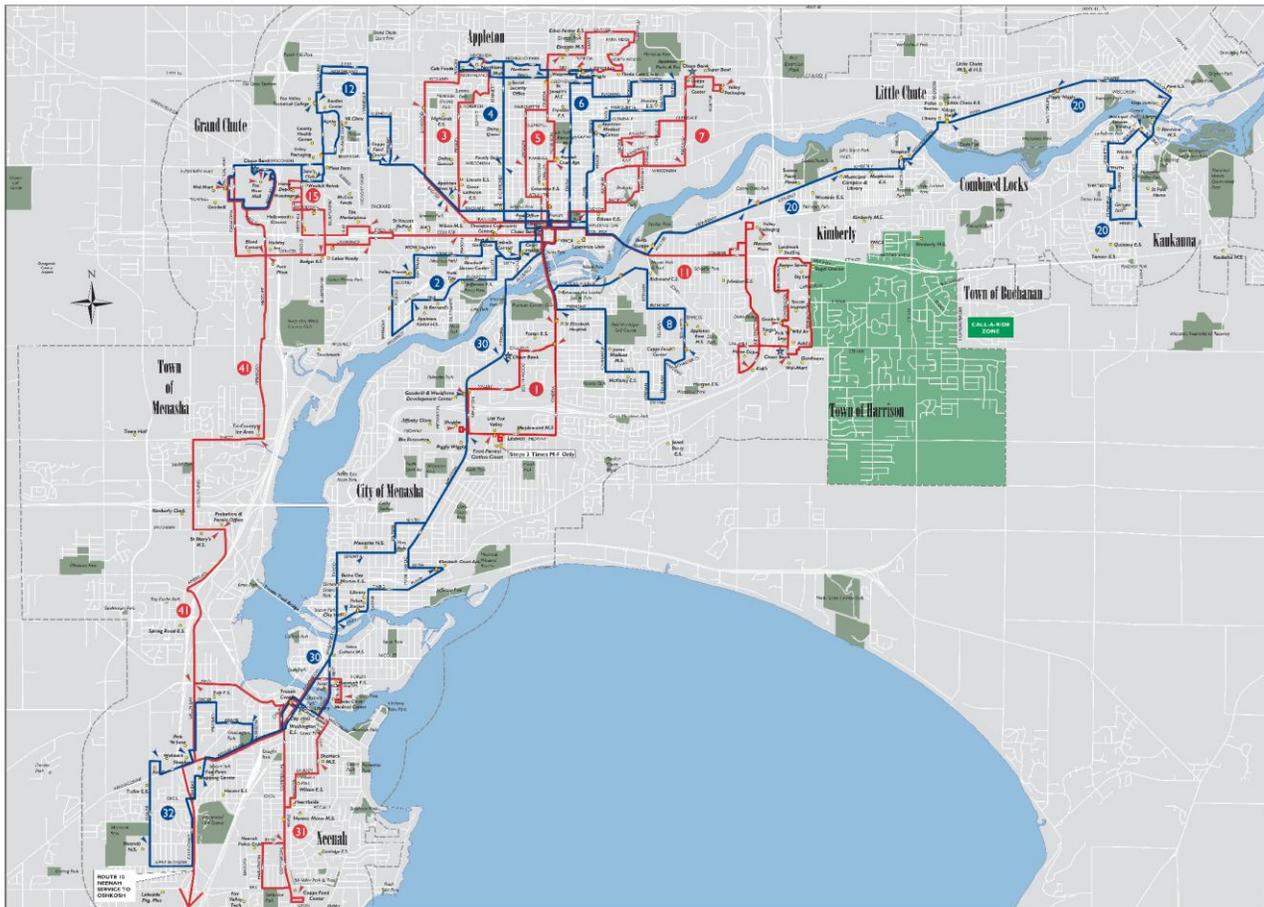
Valley Transit provides service to the Cities of Appleton, Kaukauna, Menasha and Neenah, the Towns of Buchanan, Grand Chute and Menasha, and the Villages of Kimberly and Little Chute. It operates 25 buses on sixteen fixed routes, a majority of which radiate from its transit center in downtown Appleton. Weekday route service operates from 5:45 a.m. to 10:30 PM, with the last routes leaving downtown Appleton at 9:45 PM. Saturday service begins at 7:45 a.m. and ends at 10:30 PM, with the last routes leaving downtown at 9:45 PM. There is no fixed route service on Sundays.

A new service, The Connector, offers rides to destinations beyond the fixed routes and outside of normal operating hours. United Way Fox Cities provides partial funding for this on-demand service, with ridership estimated at 400 riders per month. The rides are provided by a contracted provider charging \$21 per trip during Valley Transit's normal operating hours and \$30 for trips provided between 4 and 6 a.m., or from 10 p.m. to midnight. Users of the Connector pay no more than \$3 per trip. The majority of trips are being taken to and from employment, and during the hours that Valley Transit does not operate fixed-route service.



Overall system ridership has grown in recent years, with about 958,000 people using the bus in 2007. The average number of weekday passenger trips was 3,400. A 2002 survey of riders found that about 60 percent were Appleton residents. Riders from lower-income households tend to make up a disproportionate share of

Valley Transit Fixed-Route Map



Source: Valley Transit

the total. Seventy-three percent of riders were no licensed to drive.

Discounted fares are offered to riders who are age 65 and over, or who have been certified as having a disability. Persons 18 and under may purchase a discounted pass for unlimited rides on all Valley Transit buses during the summer months.

In 2006 the City completed installation of bike racks on all of its buses.

Federal funding (about \$1.5 million) currently makes up about 20 percent of Valley Transit's operating budget. This funding is provided to metropolitan areas with a population under 200,000. Current projections indicate that the Fox Cities will exceed this population threshold by the time of the 2010 Census. The ensuing loss of funding may result in increased fares or service cuts, or both, unless replacement funding can be found. The Governor's 2009 budget proposal includes authorization for a regional transportation authority as a potential funding mechanism for continued transit operations.

Paratransit Services

All of Valley Transit' buses are equipped with lifts to aid passengers in wheelchairs or who otherwise may have difficulty boarding the bus. In addition, Valley Transit provides paratransit service (Valley Transit II) that

meets the requirements of the Americans with Disabilities Act (ADA). This service is provided under contract with private companies. Valley Transit II operates within $\frac{3}{4}$ mile of the fixed routes and during the same hours as the fixed route operations, but does not provide same day or unscheduled service. Service is primarily curb-to-curb, with door-to-door, door-through-door and will-call service available for a premium fare rate. Reservations must be made a day in advance.

Downtown Trolley

Downtown Appleton, Inc. operates a free trolley in the downtown area from June through December. The trolley makes 12 scheduled stops in the downtown and along the river, and completes a full loop of its route every 20 minutes. Service is provided on Thursday and Friday evenings and most of the day on Saturday.

Intercity Bus Service

Lamers Bus Lines and Greyhound Lines provide regional and interstate travel options from Valley Transit Transportation Center in downtown Appleton. Lamers Bus Lines provides a daily route service to and from Milwaukee, with stops in Fond du Lac, Oshkosh, Appleton, New London, Waupaca, Stevens Point, and Wausau. This service runs 7-days a week, and 365-days a year. Greyhound provides numerous connections to cities throughout the United States and Canada.

Objectives and Policies

The overall goal for transportation established in Chapter 4 (Issues and Opportunities) states that “Appleton will support a comprehensive transportation network that provides viable options for pedestrian, bicycle, highway, rail, and air transportation, both locally and within the region.” It is intended that the objectives and policies included in this chapter will support this.

6.1 OBJECTIVE: Plan for the safe and efficient movement of vehicles on local and regional roads.

- 6.1.1 Collaborate with state and county transportation officials and neighboring municipalities to plan and coordinate improvements to the regional transportation network.
- 6.1.2 Evaluate dimensional criteria for truck routes for the need to design for larger vehicles, either as a general policy or on a case-by-case basis.
- 6.1.3 Establish a parking analysis process, as discussed in the Downtown Plan (Chapter 14), for reviewing parking needs in the downtown.
- 6.1.4 Consider amending commercial district parking requirements in the Zoning Ordinance to encourage redevelopment in older commercial corridors such as Wisconsin Avenue, Richmond Street, and South Oneida Street.

6.2 OBJECTIVE: Support regional efforts to preserve and enhance air service in the Fox Valley.

- 6.2.1 Encourage existing plans to improve air service facilities at Outagamie County Regional Airport.

6.3 OBJECTIVE: Create an environment that is safe and conducive to walking and bicycling throughout the entire city.

- 6.3.1 Prioritize bicycle and pedestrian improvement projects that enhance connectivity between important destinations within the community, and to regional bicycle and pedestrian networks.
- 6.3.2 Maintain existing sidewalks and implement plans to install new sidewalks in targeted areas where they do not exist. Continue the City’s policies to require sidewalks in new neighborhoods.
- 6.3.3 Adopt and implement an on-street bicycle network plan.
- 6.3.4 Implement the recommendations of the City’s Safe Routes to School program.



6.5.5 Continue to implement the on-street bike lane plan and the sidewalk policy as approved by the Common Council to ensure multi-modal transportation opportunities including investigating the potential for a pedestrian/bicycle path along County Highway "JJ"

6.4 OBJECTIVE: Preserve and enhance rail service within Appleton and the Fox Valley.

6.4.1 Collaborate with the Canadian National Railway and the State of Wisconsin to preserve existing rail service and to accommodate new rail users on tracks serving Appleton.

6.4.2 Encourage state and regional efforts to expand passenger rail service into the Fox Valley, including stops within the City of Appleton.

6.4.3 Evaluate future opportunities to create a multi-modal passenger hub in downtown Appleton.

6.4.4 Monitor traffic conditions at existing rail crossings and make appropriate improvements, in collaboration with the railroad and the Wisconsin Department of Transportation, as required to ensure safety.

6.5 OBJECTIVE: Continue efforts to improve boating conditions on the Fox River.

6.5.1 Support efforts of the Fox River Navigational Authority System to rehabilitate and maintain locks on the Fox River for public use.

6.5.2 Develop a water trail suitable for use by non-motorized boats.

6.6 OBJECTIVE: Maintain diverse and cost-effective options for public transportation that meets the needs of all segments of the population.

6.6.1 Implement recommendations from the Metropolitan Planning Organization to establish a regional transportation authority as a funding mechanism for Valley Transit, in anticipation of losing federal funds.

6.6.2 Seek long-term funding options, in collaboration with neighboring communities, to support Valley Transit.

6.6.3 Help to identify funding for continuation and expansion of the Downtown Trolley.