

Chapter 4: Transportation

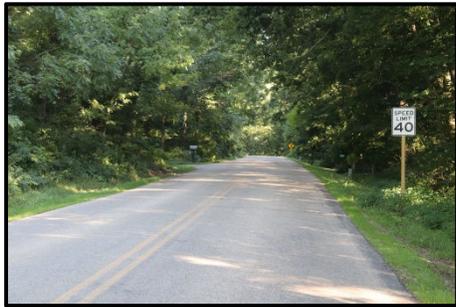
4.1 Transportation

This chapter provides a baseline assessment of the Town of Verona transportation facilities and contains information required under SS 66.1001. Information includes: commuting patterns, traffic counts, transit service, transportation facilities for the disabled, pedestrian and bicycle transportation, railroad service, aviation service, trucking, maintenance and improvements, and State and regional transportation plans. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of transportation facilities in the Town of Verona.

Existing Transportation Facilities

Highways and the Local Street Network

The Town of Verona maintains approximately 46 miles of roadway. In addition, several State and County roads run through the Town. All federal, state, county, and local roads are classified into categories under the “Roadway Functional Classification System” (Fig. 4.1). Functional classification is the process by which the nation's network of streets and highways are ranked according to the type of service they provide. It determines how travel is “channelized” within the roadway network by defining the part that any road or street plays in serving the flow of trips through a roadway network. In general, roadways with a higher functional classification should be designed with limited access and higher speed traffic. The Wisconsin Department of Transportation (WisDOT) works with metropolitan planning organizations (MPOs) and counties (outside metro areas) to functionally classify roadways for planning and federal funding purposes. The Madison Area Transportation Planning Board (MATPB) publishes the Dane County Roadway Functional Classification Map that identifies functionally classified roads in the Town of Verona and throughout Dane County



(<http://madisonareampo.org/maps/documents/FunctionalClassesDaneCountyCurrentRds.pdf>).

- **Arterials** accommodate interstate and interregional trips with severe limitation on land access. Arterials are designed for high-speed traffic. The Town of Verona is served by five principle arterial roadways: County Trunk Highway (CTH) M (north-south), CTH PD, USH 18/151, and CTH PB. The Town is served by five minor arterials: CTH M (east-west), Nesbitt Road, Mid Town Road, Raymond Road, and Old CTH PB.
- **Collectors** serve the dual function of providing for both traffic mobility and limited land access. Their primary function

Figure 4.1: Functional Classifications



is to collect traffic from local streets and convey it to arterial roadways. Major collectors in the Town of Verona include STH 69, CTH G, Cross Country Road, Woods Road, Northern Lights Road, Maple Grove Road, and Fitchrona Road.

- **Local Roads** provide direct access to residential, commercial, and industrial development and are designed for low speed, lower volume traffic. Virtually all of the roads not named above are considered local roads.

Commuting Patterns

Table 4.1 shows commuting choices for resident workers over age 16. Roughly 82% of residents drive alone to work and 4% carpool. Twelve percent of residents work at home.

Table 4.1: Commuting Methods

	Wisconsin	Dane County	Town of Verona
Car, truck, or van	89.0%	80.7%	86.0%
Drove alone	80.7%	72.7%	82.0%
Carpooled	8.3%	8.0%	4.0%
Public transportation (excluding taxicab)	1.9%	5.3%	0.0%
Walked	3.3%	5.7%	1.4%
Bicycle	0.8%	2.9%	0.0%
Taxicab, motorcycle, or other means	0.9%	0.8%	0.6%
Worked at home	4.2%	4.6%	12.0%

Between 2012 and 2016, 91% of Verona residents had a one-way commute of up to 44 minutes to work. 51% had a commute under 20 minutes, while only 3.9% reported commutes of 45 minutes or more. Dane County and the State Census counts showed similar patterns. The average Town of Verona commuter’s travel time to work was about 20 minutes, which is roughly equal to the Dane County average. State commute lengths averaged 22 minutes.

Traffic Counts

Annual Average Daily Traffic (AADT) counts are defined as the total volume of vehicle traffic in both directions of a highway or road for an average day. The AADT counts can offer indications of traffic circulation problems and trends and also provide justification for road construction and maintenance. WisDOT provides highway traffic volumes from selected roads and streets for all communities in the State once every three years. WisDOT calculates AADT by multiplying raw hourly traffic counts by seasonal, day-of-week, and axle adjustment factors. It is important to note that, due to Verona’s location near the Madison urbanized area, most of the traffic passing through the highway corridors originates and terminates outside the Town. The Wisconsin Department of Transportation has a web site that shows AADT (<https://trust.dot.state.wi.us/roadrunner/>). This site will soon be replaced with a new traffic count management service called Jackalope, which will provide more comprehensive count data and trend analysis tools.

The Institute of Transportation Engineers (ITE) Trip Generation Report, 10th edition, states that a single-family dwelling generates about 10 vehicle trips per day. A trip is defined as a one-way journey from a production end (origin) to an attraction end (destination). On a local road, one new home may

not make much difference, but 10 new homes can have quite an impact on safety and mobility. Thus, the connection between roadway planning and land use is important for the Town to consider.

The WisDOT State Access Management Plan divides the state highway system into five “Tiers,” each with its own level of access control. Within the Town of Verona there is one Tier 1 roadway (US-151) and one Tier 3 roadway (WI-69) (Fig. 4.2).

Fig. 4.2 WisDOT Guidelines for Access along State Highways

Goal for access and traffic movement	Type of new access allowed
Tier 1 maximizes Interstate/Statewide traffic movement	<ul style="list-style-type: none"> • Interchanges • Locked/gated driveways for emergency vehicles • On an interim basis – isolated field entrances
Tier 2A maximizes Interregional traffic movement	<ul style="list-style-type: none"> • At-grade public road intersections, with some interchanges possible at higher volume routes • Locked/gated driveways for emergency vehicles • On an interim basis – isolated field entrances
Tier 2B maximizes Interregional traffic movement	<ul style="list-style-type: none"> • At-grade public road intersections • Lower volume residential, commercial, and field
Tier 3 maximizes Regional/Intra-urban traffic movement	<ul style="list-style-type: none"> • At-grade public road intersections • Higher volume residential, commercial, and field
Tier 4 balances traffic movement and property access	<ul style="list-style-type: none"> • All types, provided they meet safety standards

Access Management and Safety

Studies show a strong correlation between: 1) an increase in crashes; 2) an increase in the number of access points per mile; and 3) the volume of traffic at each access point. Simply put, when there are more access points on a road, carrying capacity is reduced and safety is compromised. In general, arterials should have the fewest access points since they are intended to move traffic through an area. Collectors and local roads have more access points since they function more to provide access to adjacent land.

Additional Modes of Transportation

Transit Service

Transit service in the Town is limited. Metro Transit, operated by the City of Madison, provides weekday bus transportation from downtown Madison to the Epic Campus via Route 75 with service every 30 minutes during peak periods. Route 75 buses stop at the park and ride on the East Side of the City of Verona while in route to or from the Epic Campus. Route 55 serves the Epic Campus with connection service to downtown Madison via the West Transfer Point. Routes 51 and 57 provide service to the far northeast part of the Town via a stop located at the intersection of Muir Field Road and Raymond Road.

A handful of private inter-city bus companies provide regularly scheduled bus service from Madison. Greyhound serves a significant portion of the Midwest, while Badger Bus primarily provides service between Madison and Milwaukee, with stops in Johnson Creek and Waukesha. Badger Bus also offers seasonal limited weekend service between Madison and Whitewater, Eau Claire, and La Crosse/Minneapolis. Van Galder Bus provides service stops in Madison, Janesville, South Beloit, Rockford, O’Hare and downtown Chicago. Lamers, which has a stop at 507 West Verona Avenue in the City of Verona, provides service between Madison and Dubuque, Green Bay, and Wisconsin Rapids.

Jefferson Lines links Madison to LaCrosse on its Milwaukee to Madison Route. Megabus provides service between Madison, Milwaukee, Chicago, and Minneapolis/St. Paul, with stops in Janesville, Rockford, and South Beloit.

Transportation Facilities for the Elderly or Disabled

The Adult Community Services Division of the Dane County Department of Human Services (DCDHS) provides individual and group transportation services, which enable persons with physical or developmental disabilities and seniors to access their communities and needed services. Transportation assistance may also be provided for low-income families or persons with unusual medical transportation expenses. The Department administers wheelchair accessible group ride and demand-responsive services for this population. DCDHS operates an on-call center to help coordinate these services as well as external resources and to help riders easily connect with the correct service. Seniors may also contact the Sugar River Senior Center (608-424-6007) to arrange for transportation. For more information on specialized transit services and service needs and coordination issues, see the Dane County Coordinated Public Transit- Human Resources Transportation Plan (2013), prepared by Madison Area Transportation Planning Board in cooperation with Metro Transit, DCDHS, and other service providers (http://www.madisonareampo.org/planning/documents/2013_Coordinated_Plan_Final_web.pdf). An update to the Coordinated Plan is currently underway.

Pedestrian and Bicycle Transportation

Walkers and bikers currently use the Town's existing trails, roadways, and sidewalks, although sidewalks are not available in most portions of the Town. WisDOT maintains a map of bicycling conditions for Dane County (<http://wisconsin.gov/Documents/travel/bike/bike-maps/county/dane-w.pdf>). MATPB also maintains a map that shows route types (i.e., on street, multi-use path, etc.) and suitability of roadways (http://madisonareampo.org/maps/documents/DaneCo_Bicycle_Map_FULL.pdf).

One major bicycle trail, the Military Ridge State Trail, is located in the Town. The Badger State Trail is located just southeast of the Town. New multi-use paths will be constructed along CTH M, north of Cross Country Road, and CTH PD, west of CTH M. At the present time the Town has no plans to construct any multi-use paths.

Railroad Service

There is no direct train service to the Town. Freight service runs through the City of Madison on the Wisconsin & Southern Railroad Company Railway. Amtrak operates two passenger trains in Wisconsin: the long-distance Empire Builder operating from Chicago to Seattle and Portland, with Wisconsin stops (including Portage and Columbus); and the Hiawatha Service that has daily round-trips in the Chicago-Milwaukee corridor. More information on rail service in Dane County can be viewed at www.madisonareampo.org/trends/rail.cfm.

Aviation Service

The Verona Airport-W19 is privately owned with a grass-runway just east of the City of Verona (www.airnav.com/airport/W19). The Sugar Ridge Airport is also privately owned and located just west of the City of Verona (<http://www.airnav.com/airport/WS62>).

Dane County Regional Airport-Truax Field (DCRA), in the City of Madison, is the nearest air carrier/cargo airport with scheduled commercial air passenger service on a year-round basis.

Commercial air carriers that offer service from the Dane County Regional Airport include American, Delta, Frontier, and United. Nearly two millions passengers used this airport in 2016 and 2017.

Middleton Municipal Airport (Morey Field) is a general aviation airport with both concrete and grass runways. It is located west of Middleton on Airport Road. Many hangers house single-engine and smaller twin-engine planes.

Trucking

Freight is transported through the Town of Verona via US 18/151, STH 69, CTH PB, CTH PD, CTH MV, and CTH M. Chapter 3 of the Madison Area Transportation Planning Board's Regional 2050 Long Range Transportation Plan includes a map identifying Freight Facilities and Services in the Madison Metropolitan Area: www.madisonareampo.org/maps/documents/truckroutes.pdf. The Priority Freight Networks Map identifies freight routes throughout Dane County: www.madisonareampo.org/maps/documents/PriorityFreightNetworks.pdf.

Maintenance and Improvements

WisDOT is responsible for maintaining and improving USH 18/151 and STH 69, while Dane County is responsible for maintaining and improving the country truck highways, except when a jurisdictional transfer has occurred. Local roads are a local responsibility.

New Construction

Few Town roads have been constructed in the past 20 years. Rather, the Town has encouraged the construction of private roads. Several major County highway projects are planned that will change the character of the Town:

- Raymond Road will be closed at CTH PD. A new road, Wellness Way, will be constructed that provides access to CTH PD via Meriter Way. In addition intersection improvements will be constructed at the intersection of CTH PD and CTH M. Highway PD (CTH M to Woods Road) will be expanded to four lanes. A capacity expansion is also planned for CTH M (Cross Country Road to Flagstone Drive in the City of Madison).
- As the City of Verona and City of Madison grow, new city roads will be added and additional traffic could affect Town roads.
- The Badger Mill Creek Bridge on Old PB, just south of Verona Avenue will be constructed in 2018. Future replacement of other bridges in the Town may be needed.

The Town is focused on preservation and maintenance of roads rather than new construction. The following sections discuss the Town's approach.

Pavement Surface Evaluation and Rating

Every two years, municipalities and counties are required to provide WisDOT with a pavement rating for the physical condition of each roadway under their jurisdiction. The rating system is intended to assist the Town in planning for roadway improvements and to better allocate its financial resources for these improvements. During the inventory, roadways in the Town are evaluated and rated in terms of their surface condition, drainage, and road crown. Paved roads are rated from 1 to 10 (10 being the best), and gravel roads are rated from 1 to 5 (5 being the best). This most recent evaluation was completed in the summer of 2017 (see App. 4.1). This information is used by the Town Board to prioritize road improvements for the coming year and to develop a 5-yr road maintenance plan.

Road Replacement and Maintenance

Road repairs are divided into three classes: 1) spot maintenance (cold patch and hot mix overlays); 2) surface repairs (racking filing and chip sealing); and 3) reconstruction (road rebuild). The surface ratings (App. 4.1) are used to prioritize road improvements for the coming year and to develop a 5-yr road maintenance plan (App. 4.2).

Traffic Counts

It is anticipated that the Town will obtain traffic counts for two classes of motor vehicles (cars and light trucks and heavy trucks) and bicycles for each Town road. This information will be used to assist in planning road repairs and upgrades. Limited traffic counts are available for local roads in Appendix 4.3.

Future Local Roads

As development continues in the Town, it is expected that future local roads will need to be constructed. Map. 4.1 shows where these roads might be placed to provide for safe and efficient flow of traffic.

State and Regional Transportation Plans

This section reviews State and regional transportation plans relevant to the Town of Verona. WisDOT's Southwest Region office is primarily responsible for Interstate, U.S., and State highways in the Town. Most of the Town of Verona is also within the jurisdiction of the Madison Area Transportation Planning Board (MATPB), a Metropolitan Planning Organization (MPO). The following is a list of some of the region plans:

Madison Area Regional Transportation Plan (RTP) 2050: The Regional Transportation Plan is a multimodal system plan that provides the overall framework for transportation planning and investment decision making in the future for the Madison Area. It identifies transportation projects and strategies or action to be implemented. The plan, prepared by MATPB, was adopted in April of 2017 (<http://madisonareampo.org/planning/RegionalTransportationPlan2050.cfm>).

Transportation Improvement Program (TIP): MATPB produces a Transportation Improvement Program, which is a coordinated listing of short-range transportation improvement projects anticipated to be undertaken in a five-year period. Roadway, transit, ped/bike, and parking projects sponsored by WisDOT, Dane County, and local municipalities are identified in each update, which occurs yearly. Municipalities in the Madison Urban Area, including the Town, have the opportunity to apply for federal STBG-Urban or Transportation Alternatives program funding to help finance projects. Major projects near the Town include the CTH M (Cross Country Road to Flagstone Drive) capacity expansion project, CTH PD (Woods road to CTH M) capacity expansion project, and Old CTH PB Badger Mill Creek Bridge replacement project. The current TIP is available here:

<http://www.madisonareampo.org/planning/improvementprogram.cfm>.

Bicycle Transportation Plan: The Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County is a comprehensive bicycle plan to serve as a blueprint for continuing to improve bicycling conditions and increase bicycling levels throughout Dane County. The planning horizon is 2050. It provides a framework for cooperation between state agencies, Dane County, and local governments in planning for and developing bicycle facilities and programs. The plan is intended to educate citizens and policy makers on bicycle transportation issues and the needs of bicyclists as

well as present resources for planning, designing, and maintaining bicycle facilities. The plan is available here: <http://madisonareampo.org/planning/BikePlan.cfm>.

Wisconsin Bicycle Transportation Plan 2020: The *Wisconsin Bicycle Transportation Plan 2020* presents a blueprint for improving conditions for bicycling, clarifies WisDOT's role in bicycle transportation, and establishes policies for further integrating bicycling into the current transportation system. The plan map shows existing state trails and future "priority corridors and key linkages" for bicycling along the highway system. The Plan is available here: <http://wisconsin.gov/Pages/projects/multimodal/bikeplan2020.aspx>.

Connections 2030: Long-Range Multimodal Transportation Plan: *Connections 2030*, adopted by WisDOT in 2013, begins with a vision to create and maintain "an integrated multimodal transportation system that maximizes the safe and efficient movement of people and products throughout the state." The plan includes recommendations for highways, rail, airport, and bike and pedestrian movement. The plan identifies trends and challenges, including aging transportation infrastructure, increased use, and declining revenues. The plan is available here: <http://wisconsin.gov/Pages/projects/multimodal/conn2030.aspx>.

4.2 Issues and Opportunities

Issues

1. There are a high number of trips on the local roads from non-Town residents.
2. Increased development will place new demands on local roads. This is particularly an issue with more dense urban development on the edge of the cities where people will use Town roads.
3. There are several single use roads, roads that serve only one property, that are maintained by the Town. Maintaining roads that primarily function as driveways is not an efficient use of Town services.
4. Several private roads have recently been approved in the Town. Maintenance expectations for these road will need to be clear.

Opportunities

1. There are opportunities to work with adjacent municipalities to cooperate on road maintenance.
2. The Town has the opportunity to plan for new roads since much of the land in Town is undeveloped.
3. The Town has no debt at this time, so if needed, there is the potential to finance projects by going into debt.

4.3 Goals, Objectives and Policies

GOAL 1

Provide for the safe and efficient movement of people and goods throughout the Town of Verona, and simultaneously minimize impacts on residents, agriculture, cultural resource areas and natural resources.

Objectives:

1. Ensure the local town roads are adequately maintained to safely serve local town residents and businesses as well as non-Town residents.
2. Coordinate major transportation projects (including alternative transportation and recreational trails) with land development, neighboring communities, Dane County, and the WisDOT.
3. Support biking, walking and other modes of transportation by promoting the Ice Age Trail and other trails, keeping roads safe, and coordinating with other jurisdictions.

Policies:

1. Transportation Alternatives for Disabled and Elderly Residents – The Town will collaborate with Dane County and other local units of government in the region to provide transportation services for disabled and elderly residents.
2. Cooperative Planning for Regional Transportation Facilities – The Town will collaborate with Dane County and other local units of government to help develop appropriate transportation facilities and services, including efforts to improve highways, bikeways, and area-wide public transportation services that may serve the Town.
3. Coordination with Local and Regional Plans – The Town will utilize local and regional transportation plans when reviewing subdivision plats and certified survey maps.
4. Incorporation of Natural Resource Areas in Transportation Planning – The Town shall encourage that all practical steps be taken to minimize disturbances to natural resources with the construction of new roads.
5. Standard Right of Way Requirements – The Town will ensure that all new requests for land divisions along existing Town roads include public road right-of-way dedication to the current standard of sixty-six (66) foot roadway width.
6. Monitoring of Traffic – The Town will regularly monitor and evaluate increasing traffic counts on local roads, as well as trip generation impacts from all new and expanded development that could negatively impact Town roads, and ensure that appropriate intergovernmental agreements and maintenance measures are in place to address these increases.
7. Monitor road conditions – The Town will regularly monitor roads for maintenance and upgrades and prioritize improvements.
8. Private roads – The Town will consider policies for mowing and snowplowing private roads.
9. Traffic Associated with Future Development – The Town should develop a plan to anticipate where roads need to be improved because of future development. Plan for a network of interconnected new roads in planned development areas to control road access, preserve rural character, and improve access to deeper parcels.

10. Single use local roads – The Town shall develop policies for maintenance and potential privatization of these roads.
11. Bicycle use – The Town should monitor bicycle use of local roads and develop plans to improve bicycle safety on local roads, such as widen shoulders. Explore ways to obtain funds to improve roads for bicycle safety.
12. High traffic local roads – Explore ways to transfer maintenance costs for these local roads, which primarily support non-Town resident traffic, to other government units. Determine if it is possible to convert roads to county roads.
13. Speed limits – The Town will evaluate the current speed limits on all local roads and if necessary, work to lower the speed limit to improve safety.
14. Local road access – The Town will review and update driveway ordinance and include guidelines for private roads in developments.
15. New residences and developments – The Town will consider where new developments and residences will be located based partially on the local road network. Developers may be required to improve roads to accommodate increased traffic from development.
16. Non-resident traffic on local roads – The Town should discourage use of local roads for through traffic with policies related to speed, signage, and weight limits. Review and update weight limits on local roads.
17. Shared driveways – The Town will promote shared driveways to achieve traffic safety and rural character goals.
18. Connection of Town roads to City roads – The Town will only approve connection to a City road network when there are no adverse effects on Town roads and traffic volumes.

