

5.0 TRANSPORTATION



5.1 CHAPTER SUMMARY

A community's transportation infrastructure supports the varied needs of its residents, local businesses, visitors, and through traffic. The Transportation Chapter summarizes the local transportation system and, based on local input, provides a 20-year jurisdictional plan that will serve as a resource guide implementation guide.

Wisconsin State Statute 66.1001(2)(c)

(c) Transportation Element

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

5.2 GOALS AND OBJECTIVES

Among the 14 goals of Wisconsin's comprehensive planning law, two goals and objectives relate to transportation.

1. Encourage neighborhood designs that support a range of transportation choices.
2. Provide an integrated, efficient, and economical transportation system that affords mobility, convenience, safety, and meets the needs of all citizens, including transit-dependent and disabled citizens.

5.3 TRANSPORTATION POLICIES

The following transportation objectives and policy recommendations (not in order of priority) support the above goal. They will guide transportation decisions in the Village of Muscoda over the next 20 years.

NOT IN ORDER OF PRIORITY

1. **Maintain formal truck routes as new industrial developments are platted, with truck weight limits enforced by the County.**
2. **Maintain road standards for the construction of public and private roads.**
3. **Develop and maintain a transportation plan or a local road improvement plan to address long-term needs for road upgrades and/or new roads.**
4. **Coordinate utility maintenance, construction, and upgrades with road improvements, whenever feasible.**
5. **Work with WisDOT, Grant County, Iowa County, and Richland County Highway Departments on transportation planning projects outlined in this plan.**

5.4 TRANSPORTATION INFRASTRUCTURE

5.4.1 HIGHWAYS AND LOCAL STREETS

The County has a total of 1859.34 miles of roads. Of these, 310.87 are County miles and 1548.47 are municipal miles, according to the County’s January 2008 WISLR inventory. The County breakdown is shown in Table 5.1.

Table 5.1: Grant County Roads

	Arterial	Collector	Local
County	2.58	296.00	12.29
Municipalities	8.09	6.42	34.01
Totals	10.67	302.42	46.30

Source: WisDOT WISLR Inventory

Table 5.2: Village of Muscoda Road Details

Wisconsin Information System for Local Roads - January 1, 2007									
Road Name	Gross Miles	County Miles	Municipal Miles	County Jurisdiction			Municipal Jurisdiction		
				Arterial	Collector	Local	Arterial	Collector	Local
2nd St	0.90		0.90						0.90
3rd St	0.82		0.82						0.82
4th St	0.77		0.77						0.77
5th St	0.78		0.78						0.78
6th St	0.76		0.76						0.76
7th St	0.22		0.22						0.22
Beech St	0.77		0.77						0.77
Blue River St	0.12		0.12						0.12
Buffalo St	0.05		0.05						0.05
Catherine St	0.30		0.30					0.30	
Cedar St	0.07		0.07						0.07
Deer Run Rd	0.24		0.24						0.24
Division St	0.20		0.20						0.20
Elm St	0.71		0.71						0.71
Front St	0.20		0.20						0.20
Greentree Trl	0.30		0.30						0.30
Grove St	0.28		0.28						0.28
Howard St	0.39		0.39						0.39
Industrial Dr	0.39		0.39						0.39
Iowa St	0.69		0.69						0.69

Table 5.2(cont.) Village of Muscoda Road Details

Wisconsin Information System for Local Roads - January 1, 2007									
				County Jurisdiction			Municipal Jurisdiction		
Road Name	Gross Miles	County Miles	Municipal Miles	Arterial	Collector	Local	Arterial	Collector	Local
Maple St	0.70		0.70						0.70
Mechanics St	0.33		0.33						0.33
Minnesota St	0.56		0.56						0.56
Nebraska St	0.59		0.59						0.59
Ohio St	0.55		0.55						0.55
Pine St	0.52		0.52						0.52
River Rd	0.63		0.63						0.63
Sportsman Dr	0.80		0.80						0.80
University St	0.25		0.25						0.25
Walnut St	0.78		0.78						0.78
Warehouse St	0.61		0.61						0.61
Water St	0.07		0.07						0.07
Wisconsin Ave	0.07		0.07						0.07
Total Miles	15.42	0.00	15.42	0.00	0.00	0.00	0.00	0.30	15.12

Source: Wisconsin Department of Transportation WISLR Database, January 2007

5.4.2 FUNCTIONAL CLASSIFICATION SYSTEM

The transportation system is classified by WisDOT according to primary function representing very different purposes: 1) mobility and efficient travel and 2) access to properties. Simply put, when there are more access points, carrying capacity is reduced and safety is compromised. The responsibility for maintaining and improving roads should ordinarily be assigned based upon the functional classification of the roads. Road classifications are defined as:

- **Principal Arterials** accommodate interstate and interregional trips.
- **Minor Arterials** accommodate interregional and inter-area traffic movements.
- **Major Collectors** serve moderate-sized communities and intra-area traffic generators.
- **Minor Collectors** link local roads to higher capacity roads and smaller communities.
- **Local Roads** provide access to residential, commercial, and industrial development.

Arterials fall under state jurisdiction, collectors generally fall under County jurisdiction, and local roads are a local responsibility. See Map 5.1 for your jurisdiction's classification map.

Reflecting actual use, Jurisdictional Transfers (JT), the sharing of road responsibilities, may occur, but only when there is agreement between units of government involved (local, county, or state). When considering a possible JT, jurisdictions must take into account the level of traffic on the road, the projected responsibility for maintenance and any required improvements, and the possible impact on general transportation aids.

In addition to the functional and jurisdictional hierarchy, communities may nominate qualifying local roads (and streets, in some cases) for the state's Rustic Roads Program. The Rustic Road's designation helps citizens and local government to preserve scenic, country roads. There are currently two Rustic Roads in Grant County. The first, #99, is a 3.4 mile paved route in the Town of Potosi. The route follows segments of River Lane Road, Slazing Road and Brewery Hollow Road forming a loop off Highway 133 in the Town of Potosi. The second, #70, is a 10.1 mile gravel route near the Town of Stitzer. The route follows Liberty Ridge Road off of U.S. 61 and includes Hill Road, Ridge Road, Sleepy Hollow Road, and Scenic Road to County Highway E.

On April 27, 2009, the 100-mile stretch of Highway 60 that runs through Muscoda was designated as the Lower Wisconsin River Road Scenic Byway. Scenic Byways are recognized for archeological, cultural, historic, natural, recreational, and/or scenic qualities. The route follows along the Wisconsin River and brings travelers to a number of natural and historic attractions and the communities of Lodi, Muscoda, and Prairie du Chien.

Grant County is also home to a segment of the Wisconsin Great River Road. The Wisconsin Great River Road travels 249 miles along the Mississippi River (primarily WI 35) running between Prescott, Wisconsin and the State line near Dubuque Iowa. The road is recognized by the US Department of Transportation as a National Scenic

Byway and by the Wisconsin Department of Transportation as a State Scenic Byway. The Great River road has several unique qualities and is distinguished for its natural beauty. Several Grant County Communities lie along the Great River Road., including: Jamestown, Keiler, Dickeyville, Patch Grove, Waterloo, Tennyson, Potosi, Cassville, Glen Haven, Bagley, Bloomington and Wyalusing.

5.4.3 TRAFFIC COUNTS

Between 1990 and 2000, vehicle miles traveled (VMT) increased by 30% in Wisconsin. The Annual Average Daily Traffic (AADT) counts are an important measure when prioritizing improvements. WisDOT calculates the number by multiplying raw hourly traffic counts by seasonal, day-of-week, and axle adjustment factors. The daily hourly values are then averaged by hour of the day and the values are summed to create the AADT count.

5.4.4 TRAFFIC SAFETY

Nationwide, crash fatalities are decreasing – even as traffic is increasing. Why? The reduction in fatalities can be credited to a combination of factors, including improvements in vehicle safety, better roads, increased seat belt use, and advances in on-site and emergency room care. The AADT data show increased traffic on many Grant County roads.

Many rural roads throughout the State are not designed to handle current traffic volumes. In 2002, according to Wisconsin’s Transportation Development Association (TDA), 64% of all vehicle crashes in Wisconsin occurred on the State’s local road system (town roads and many county roads fall into this category). According to Wisconsin’s *Highway Safety Performance Plan 2004*, significant external factors include demographics (particularly the proportion of the population between the ages of 15-44 and over 65); increased number of licensed drivers; number of miles driven; as well as types of driving exposure, including lifestyle factors (such as patterns of alcohol consumption) and the weather. According to the 2004 report, better lane markings and signage, wider shoulders and lanes, additional guardrails, and reduced slopes would make rural and two-lane roads safer and reduce the personal and financial loss that results from crashes.

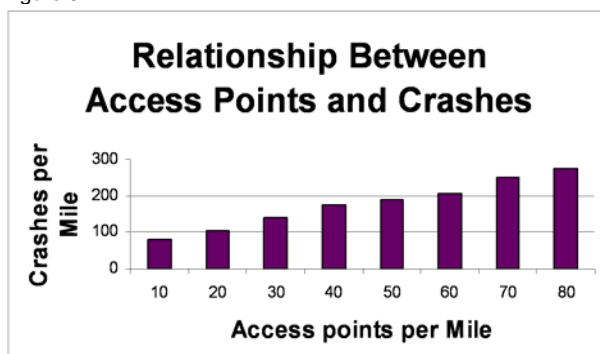
Fatalities are not merely statistics – they represent terrible tragedies. The Grant County Traffic Safety Commission meets quarterly and includes the County highway safety coordinator and representatives from the county highway department, law enforcement, EMS, private citizens, a WisDOT staff engineer, UW Platteville representatives, County health department, and representatives from WI DOT’s SW Region. Their responsibility is to: 1) represent the interests of their constituencies (including health, engineering, enforcement, and citizen groups), and 2) offer solutions to traffic safety related problems that are brought to the Commission.

The Plan Commission identified safety concerns on South Wisconsin Avenue when turning west on Catherine Street, on Catherine Street when turning north on Wisconsin Avenue, as well as truck traffic on residential streets including River Road and Nebraska Street.

5.4.5 ACCESS MANAGEMENT

Transportation system users frequently select routes that maximize their personal mobility and efficiency while, at the local level, property owners frequently seek to maximize access to their personal property. The latter scenario reduces mobility and safety. Studies show a strong correlation between: 1) an increase in crashes, 2) an increase in the number of commercial establishments, and 3) an increase in the total number of driveways per mile.

Figure 5.1

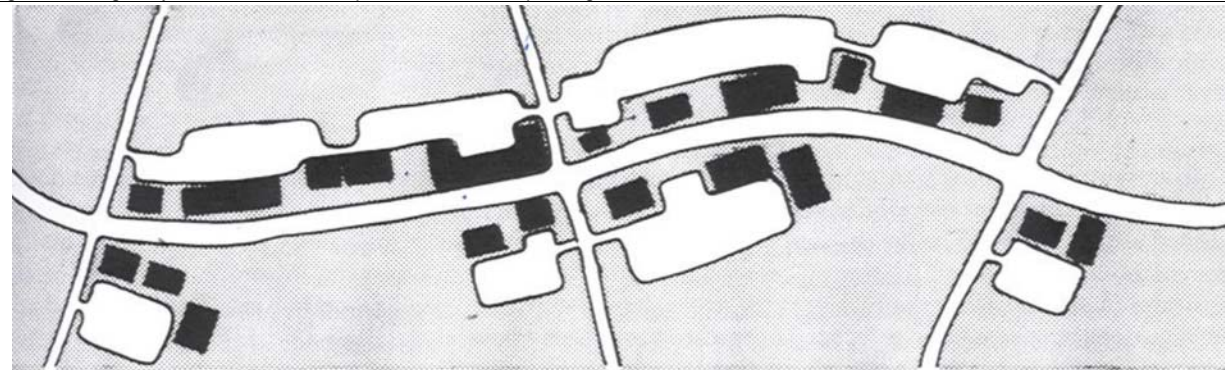


Source: WisDOT

Commercial or industrial development seeks highly visible and accessible properties, preferably on streets with high traffic volumes and, optimally, at an important intersection. If the new business is successful it will change traffic patterns and may disrupt the efficiency of the larger transportation system. Access and development can be better accommodated by creating an area transportation plan for internal circulation and minimizing driveway access points.

The national average for trip generation for a single-family home generates 9.5 trips per day. One new home may not make much difference, but 10 new homes on a cul-du-sac street can have quite an impact on the connecting street's traffic mobility and safety.

Figure 5.2 Highway commercial development with linked parking areas behind stores



Connecting rear parking lots allows customers to drive to many other shops in the corridor without re-entering the highway and interrupting traffic flow. Such arrangements can be required for new development, expansion of existing buildings, and redevelopment. Source: *Rural By Design*, Randall Arendt (1994).

5.4.6 WISDOT ROLE IN TRANSPORTATION PLANNING

Trans 233 is part of the Wisconsin Administrative Code and defines requirements that must be met when subdividing lands abutting the State highway system. The Wisconsin Department of Transportation (WisDOT) is responsible for enforcing Trans 233 to preserve traffic flow, enhance public safety, and ensure proper highway setbacks and storm water drainage.

The rule (as revised by a Wisconsin legislative committee in 2004) applies to landowners who intend to divide land abutting a State highway into five or more lots that are each 1.5 acres or less in size within a five-year period. State highways are defined as all numbered highways including interstate, State and Federal highways (such as I-90, WIS 73 or US 51).

Landowners are encouraged to contact local WisDOT regional office staff when making initial plans for dividing a property. Before landowners expend funds on engineering or incur other related costs, WisDOT staff can conduct an informal "conceptual review." This review provides a landowner input on the safest location is for accessing the State highway system. Once a "final map" is developed to create the new lots, WisDOT staff will review the final map for conformance with the rule. WisDOT staff can connect landowners to the State Department of Administration (DOA) which also reviews subdivision plats.

WisDOT has 20 days to review a subdivision proposal. If the subdivision conforms to Trans 233, WisDOT issues a letter of certification. If the subdivision does not meet the requirements of the rule, an objection letter is issued explaining which parts of the rule are not being met.

Major components of the Trans 233 Rule:

- **Review.** WisDOT reviews all subdivision plats along State highways for conformance with the rule. Along with State highway system segments in rural areas, the rule also applies to segments that extend through a village or city. A "conceptual review" can provide landowners early feedback on a subdivision proposal. Once a final map is provided, WisDOT has 20 days to complete its review.

- **Access.** Direct access to the State highway system from newly created lots is generally not permitted. The owner should determine alternative ways to provide access to the property. The preferred option is for the property to take access off an alternative street. New public streets created by a subdivision are the next preferred alternative. Joint driveways may be allowed if a special exception from the rule is requested and approved. Some developments may require a special traffic study.
- **Drainage.** Drainage is evaluated to help ensure that storm water flowing from a new development does not damage a highway or its shoulders. It is advisable to discuss drainage issues with WisDOT district office staff before submitting a subdivision for review.
- **Setback.** Setbacks are areas abutting a State highway in which buildings cannot be constructed. (This provision does not apply to County highways or town roads. County or town officials should be contacted regarding their restrictions). In general, setbacks are 110 feet from the centerline of the highway or 50 feet from the right-of-way line, whichever is more restrictive.
- **Vision corners.** Vision corners are triangular areas at intersections within which structures, improvements and landscaping are restricted because they can block the ability of motorists to see oncoming vehicles. Vision corners may be required at the time a permit is obtained and possibly sooner.

If a subdivision is not reviewed by WisDOT and is subsequently recorded, a landowner will not receive a driveway or any other permit relating to the highway. The subdivision and property must comply with the rule before a permit is issued. Landowners may be exposed to liability for drainage damage to the highway or damage to the owner's own property from unanticipated diversion or retention of surface water. There can be other adverse consequences relating to financing, the value of the property, the safety of entrance upon and departure from the highway, and the public interest and investment in the highway. Finally, WisDOT cannot issue a utility permit for an uncertified subdivision. Utility companies must obtain a WisDOT permit before doing any work on highway right-of-way. It may not be possible to provide utility service to a property if the service must come from lines on the highway right-of-way.

Other access management tools are still used by WisDOT on longer segments as part of corridor preservation efforts, including § 84.09, § 84.25, or § 84.295 of the Wisconsin Statutes.

- **Purchase for Access Control** (§ 84.09) WisDOT can purchase access rights to alter or eliminate unsafe access points or to restrict or prohibit additional access.
- **Administrative Access Control** (§ 84.25) WisDOT can designate controlled-access highways and "freeze" present access; future alterations would require WisDOT approval.
- **Corridor Preservation Mapping** (§ 84.295) Local governments and WisDOT can work together to map the land needed for future transportation improvements or local governments can incorporate proposed transportation improvements into their adopted land use maps. This mapping would inform the public and potential developers about land that has been preserved for future transportation improvements and preserve the future right-of-way.

The Village of Muscoda currently coordinates with the County and WisDOT when it receives a request for a new development permit.

5.4.7 TRANSPORTATION INFRASTRUCTURE ISSUES

There are places where people have daily transportation options including driving, taking trains, riding buses, bicycling, or walking. In rural communities, most of these options may not be practical or are just not available. Local planning input may seem to have little influence or relation to larger or more varied transportations systems. However, residents of towns and villages – and the elected and appointed officials who represent them – have good reasons to care about local transportation needs such as:

- Mobility needs of the elderly and disabled
- Freight mobility
- Connectivity with the larger transportation system
- Transportation safety
- Agricultural-vehicle mobility
- Recreational transportation uses
- Tourism

- Supporting economic development

In addition to personal vehicles (cars, trucks, etc.) the Planning Commission identified carpooling, tractors/combines/wagons, and bicycles as other types of transportation used in the jurisdiction.

The most satisfactory aspects of Muscodia’s transportation system is the layout of streets, having a designated truck route and having wide streets. The prioritization of transportation issues in Muscodia are ranked below. “1” is the highest priority.

1 – Recreational transportation uses

5 – Transportation to support economic development

1 – Transportation safety

6 – Transportation needs of the elderly and disabled

2 – Freight mobility

8 – Connectivity with the larger transportation system

3 – Agricultural-vehicle mobility

4 – Tourism (including preservation of rural view

Throughout the future, the Village of Muscodia would like to continue general road maintenance.

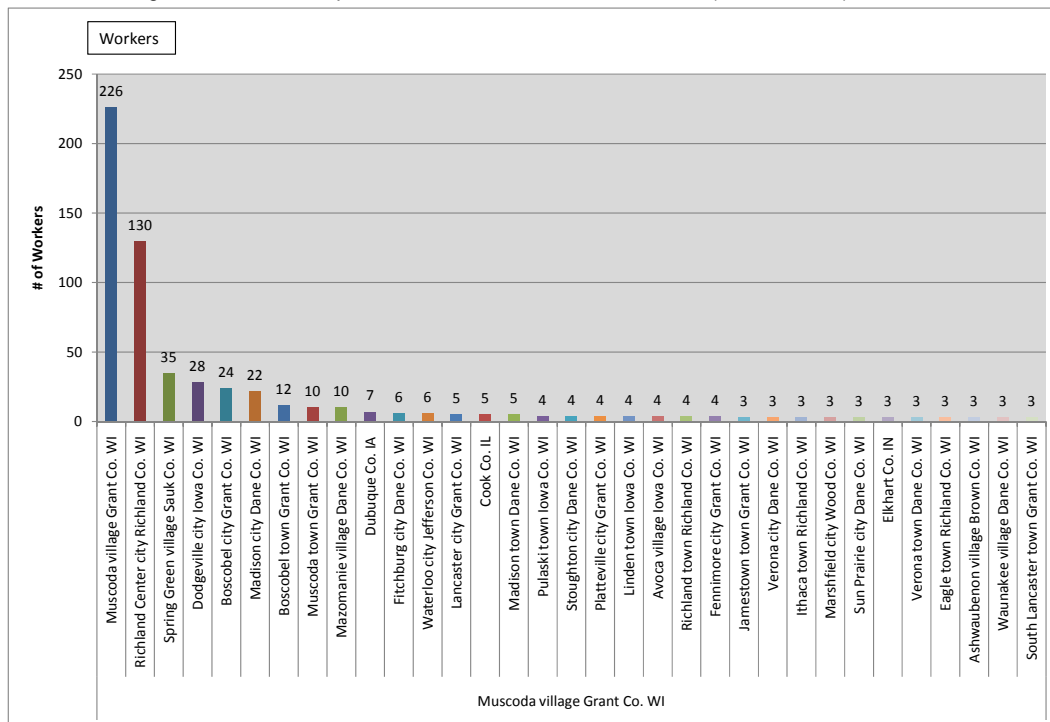
5.5 TRANSPORTATION USERS

This section looks at transportation options for commuters, the elderly and disabled, and those who do not drive. In Wisconsin, there are limited public transportation services available in rural communities.

5.5.1 COMMUTING PATTERNS

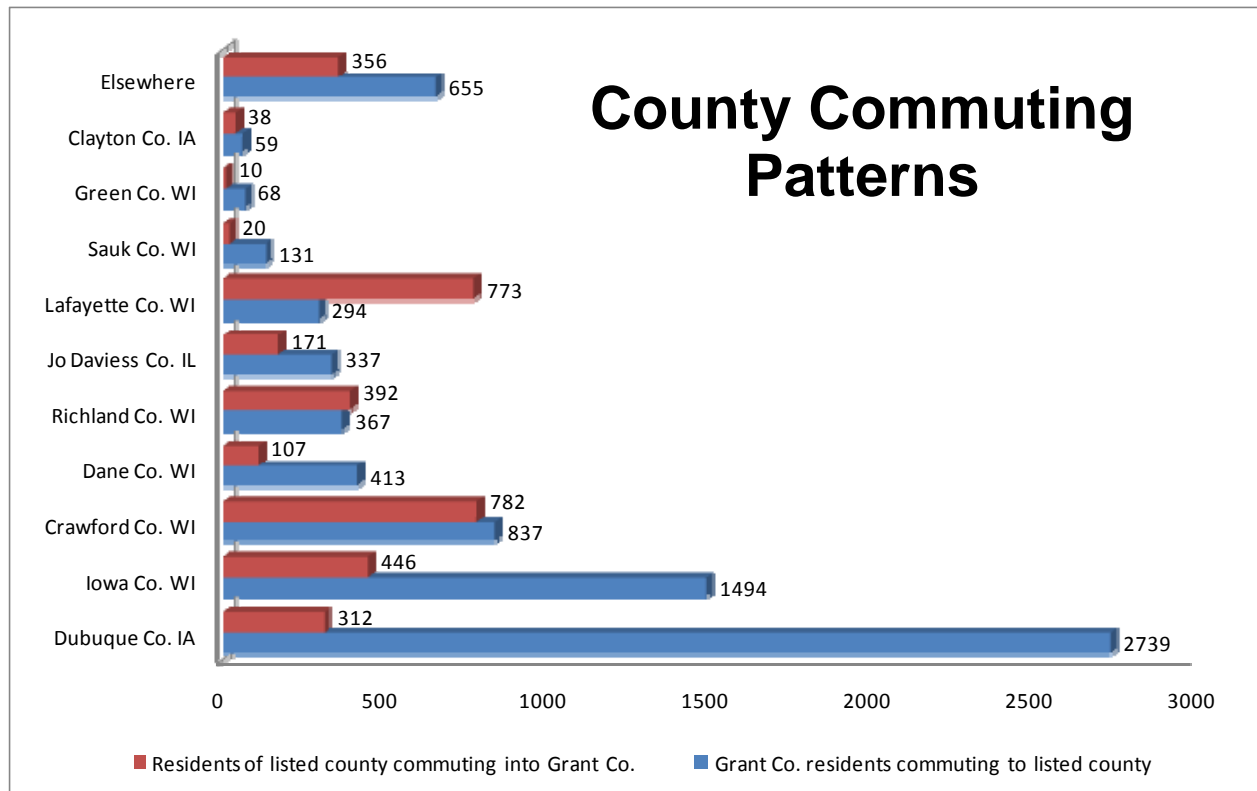
According to Census 2000, 30% of the County’s workforce, or 7,394 residents, commute to another county for work each day. The table below shows the top communities where the Village of Muscodia residents work, according to the 2000 Census.

Table 5.3: Village of Muscodia – Top Communities Where Residents Work (Census 2000)



In the 1990 Census, Dubuque County, Iowa was the number one draw for Grant County residents driving to work. In Census 2000, Dubuque County, Iowa remained at the top, with many workers traveling to the City of Dubuque. One in every three workers who left the County headed for employers in Dubuque County, Iowa. For every eight workers that drove to Dubuque County for employment, one worker from Dubuque drove to Grant County (DWD 2004).

Figure 5.3 2000 Grant County Commuting Patterns



Source: DWD Grant County Workforce Profile 2004, Census 2000

When Grant County residents commute, generally they commute alone. According to Census 2000, 72% of residents drove to work alone, 6% walked to work, and 11.5% carpooled.

5.5.2 WORK CARPOOLING

According to the DWD, 30% of Grant County’s workforce commutes to jobs outside of the County. As noted, the majority of these commuters drive alone. Shared-ride commuters often make informal arrangements to accommodate carpooling. Currently the closest park and ride lot is located just off of Highway 151 in Belmont, Wisconsin.

The Wisconsin Department of Administration (DOA) oversees a Vanpool/Ridesharing program for State and non-state workers commuting to Madison. Grant County is not currently served by a vanpool, but if there were enough interest, a new vanpool could be formed. For more information, contact the Vanpool Office: 1-800-884-VANS or e-mail: vanpool@doa.state.wi.us.

The Village is interested in supporting the creation of a formal or information Park and Ride. Such a facility could be located in the parking lot of the Village Hall or the parking lot by the Laundromat.

5.5.3 TRANSPORTATION FACILITIES FOR THE ELDERLY AND DISABLED

As part of fulfilling Federal transit planning requirements, representatives from Grant County participated in a regional transit planning workshop in 2006, as part of federally required efforts to increase the coordination of transit services. The results were summarized in the Grant County Transit Services Plan. As Figures 5.4-5.6 illustrate, the needs of this age group will become much more significant – at both the local and State level – during

the 20-year window of this plan. The Plan Commission noted that they believe there are enough options for non-driving residents to meet both current and future needs. They also anticipate that currently available transportation options will meet future needs. In the event that transportation service improvements should be made, Muscodá recommended they take place at the Regional level.

Figure 5.4

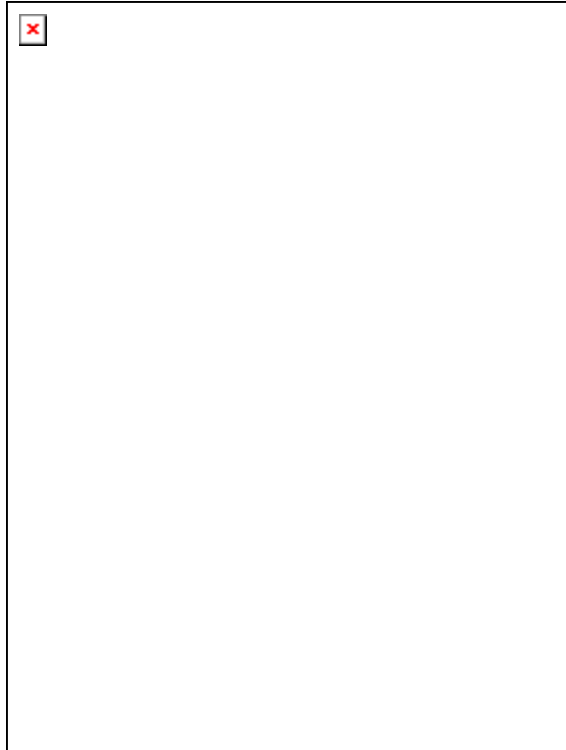


Figure 5.5

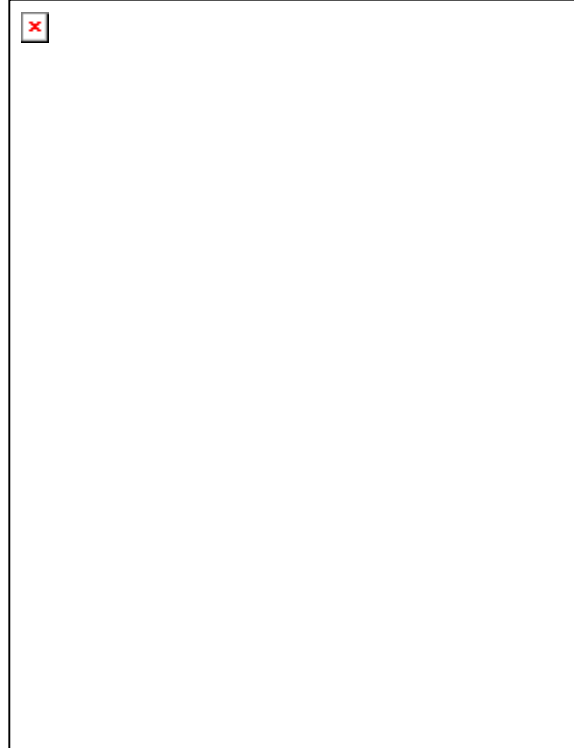
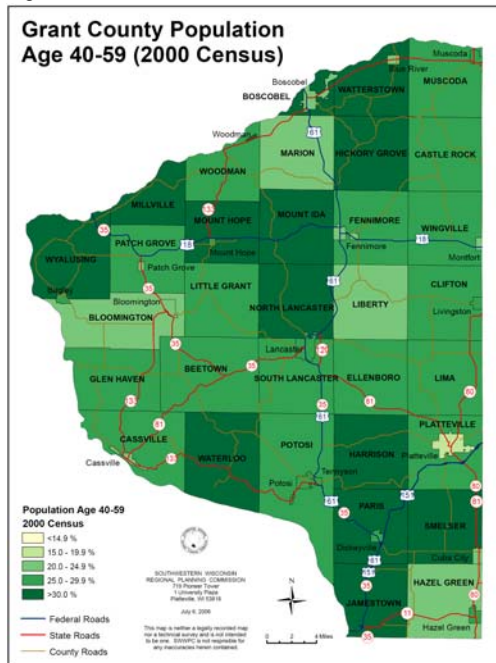


Figure 5.6



The Grant County Center on Aging provides the majority of general services transit trips in the County. Staff identified the following strengths, needs, and barriers:

- **STRENGTHS** – “We have good, reliable, regular and substitute drivers that provide friendly, helpful, and courteous service. They go the extra mile to help their riders in accomplishing their errands for the day. The drivers are trained annually on topics such as defensive driving, passenger assistance, emergency procedures, passenger sensitivity plus more. The administrative staff is very creative in trying to get people to their destinations within the limitations of our transportation guidelines.”
- **NEEDS** – “We are not able to provide transportation for: a) employment unless it fits into existing schedules; b) shopping, except on a one-on-one basis; 3) those who still live in their homes outside of the city/village limits, unless they are on the service route; 4) going to church, especially on Sundays.”

- BARRIERS – “Budget restraints, the size of the County, and the many different work shifts needed for someone to provide the transportation. Sometimes the size of the vehicle prevents our going into rural driveways and the time and fuel costs to go off the “beaten path” is a barrier.”

Along with the Grant County Center on Aging, other County and regional special transportation service providers include the Hodan Center, Inc., Southwest Opportunities Center, Inc., SWCAP’s Work ‘n Wheels loan program, Southern Grant Road Crew, Inc., and the City of Platteville’s Shared Ride Taxi & Meal-Site Van.

In the summer of 2007, the Southwest Wisconsin Transit Team undertook a *Transportation Services Questionnaire* to identify transportation service needs, possible opportunities, and appropriate recommendations to improve transportation services for residents of Southwestern Wisconsin.

5.5.4 BICYCLES AND PEDESTRIANS

Bicycles, pedestrians, and motor vehicles have shared roads and streets for decades. Beginning in 1890 with the “good roads movement,” the activism of bicyclists paved the way for the system of roads that we take for granted today. To help fund improvements, bicycle user fees – from 50-cents to \$1 per bicycle – were assessed in 1901; highway user fees – initially \$1 for each vehicle – were first assessed in 1905.

Today, children under the age of 16, the elderly, and those with disabilities are the greater portion of the public using pedestrian facilities. Many youth, and some commuters, ride bicycles as their regular means of transportation. The limited experience of children, and the limited physical ability of the elderly and disabled, should be considered when making improvements and when new streets are added.

In 2001, Grant County completed a *Grant County Bicycle Improvement Plan* which created a framework for accommodating bicycles on State, County, and town roads and was used to identify routes between communities and to connect communities with popular tourism destinations. According to the Plan, bicycling is an underutilized mode of transportation in Grant County. While over 20% of the commuting population commutes no more than 10 minutes to work, very few choose to commute by bicycle. The small number of bicycling trips can be attributed to impediments such as: traffic conditions, safety concerns, transportation infrastructure and topography.

Key Recommendations from the Plan include:

- Improve bicycle safety along the Great River Road corridor by paving the road shoulders.
- Paved shoulders should be included for County Trunk Highways (CTH) identified in the Plan when the highway is resurfaced.
- Sign popular bike routes with caution signs to raise motorist’s awareness of bicyclists on the highway.
- The needs of bicyclists must be considered in the design and maintenance of the bridges and their approaches.
- Pave the shoulders of the main roads leading out of communities in Grant County to the first major intersection as other road improvements are made.

WisDOT’s updated map indicating on-road County bicycle conditions is included in the Attachments as Map 5.2

5.5.5 RECREATIONAL - ATVs, BICYCLING, AND WALKING

The Platteville-Belmont commuter connector is the only approved trail in Grant County and is in the process of being completed. The Trail runs from Lafayette County into Grant County along U.S. Highway 151. As part of the recent USH 151 project, WisDOT monies were put toward the Belmont-Platteville trail. Corridor enhancements for bicyclists include a bike path underpass at Belmont, just east of the Grant-Lafayette County line, and a two-mile bike path parallel to the highway in Grant County. A local Friends of the Trail Group is working with the DNR, which also contributed funds, local property owners, and others to bring the project to completion, which also contributed funds, and with local property owners and others, to bring the project to completion.

Grant County currently has three proposed trails according to the Wisconsin Department of Natural Resources South Central trails network. The first trail segment is State Highway 23, which is a potential north-south trail route that could link several trails together to create a large system that highlights the unglaciated landscape and culture of southwest Wisconsin. This segment would also connect with the Mississippi River corridor and the states of Illinois and Iowa. The second proposed trail is the St. Croix – Mississippi River corridor. The *Wisconsin*

Bicycle Transportation Plan 2020 identifies a 150-mile-long segment of State Highway 35 as a “priority corridor” that is resulting in wider paved shoulders for bicyclists and walkers. This trail would lie on the western edge of Grant County, following the Mississippi River. The third and final proposed trail is the Prairie du Chien to Madison segment, which would follow the Wisconsin River corridor. The 97-mile corridor is already recommended for improvements in the Lower Wisconsin State Riverway and the *Wisconsin Bicycle Transportation Plan 2020*.

Additionally, Grant County is included in the Dubuque Metropolitan Area Transportation Study (DMATS) area. The DMATS area also includes Dubuque County, Iowa and the City of East Dubuque, Illinois. Currently, efforts are being undertaken to complete a *Tri State Area Integrated Walking, Bicycling, Hiking Network Plan*. The purpose of this Plan is to maximize funding sources, improve safety, provide needed facilities and services, enhance the quality of life, and set new priorities.

While planning street upgrades, the Village will consider additional biking and pedestrian related improvements.

5.6 MODES OF TRANSPORTATION

5.6.1 SHIPPING

According to a 2004 report by TDA, trucks carry 83% of all manufactured freight transported in Wisconsin. More than 77% of all Wisconsin communities are served exclusively by trucks. Grant County is served by a network of highways including:

- STH 11 - 157.56 miles between Kieler, east of Dubuque, and Racine.
- STH 80 – 163.23 miles from Pittsville to the Illinois State line, connecting with IL SR-84 south of Hazel Green.
- STH 81 – 123.81 miles from Cassville to Beloit.
- US 18 – 182.16 miles in Wisconsin, from Milwaukee to the Iowa State line, serving as a major route between Grant County and Madison. The route continues west from the Iowa State line for approximately 861 miles terminating in Orin, Wyoming.
- US 61 – 120.74 miles in Wisconsin from the Iowa State line at Dubuque, Iowa to the Minnesota State line near LaCrosse. The route runs for a total of 1400 miles from New Orleans, Louisiana to Wyoming, Minnesota.
- US 151 – 220.27 miles in Wisconsin, from Manitowoc to Dubuque, and terminating 117 miles southwest near Williamsburg, IA.

5.6.2 AGRICULTURAL-RELATED TRANSPORTATION

Transportation is critical for agriculture, yet ag-related transportation needs and impacts are often overlooked. Ag-related transportation operates on several scales, ranging from moving machinery on the system of local roads to moving commodities both through and to larger communities via truck or rail.

5.6.3 RAIL FREIGHT

Counties in southern Wisconsin have been working together since the 1970s to protect and preserve active rail. In 1978 the Lone Rock to Prairie Du Chien line, which runs along the northern edge of Grant County, was filed for abandonment by the Milwaukee Road. The Wisconsin River Rail Transit Commission (WRRTC) formed in 1980 as a response to this attempted abandonment and saved this rail corridor. This line, which runs from Prairie Du Chien to Madison, runs through Grant County jurisdictions of Muscoda, Blue River, Watterstown, Boscobel, Woodman and Marion.

The Burlington Northern Santa Fe (BNSF) rail line runs along the Mississippi River on the western edge of Grant County. The Communities located along this rail line include Jamestown, Dickeyville, Potosi, Waterloo, Cassville, Glen Haven, Bloomington, and Wyalusing. See Map 5.3 in Attachments for the Grant County Rail Map.

5.6.4 OVER-ROAD SHIPPING

Although commercial vehicles account for less than 10% of all vehicle-miles traveled, truck traffic is growing faster than passenger vehicle traffic according to the Federal Highway Administration (FHWA). This share is likely to grow substantially if demand for freight transportation doubles over the next 20 years, as has been predicted (from

the 2002 report *Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance Report to Congress*).

5.6.5 AIRPORTS

From the County Seat of Lancaster, it is approximately 89 miles (or about 1 hour, 44 minutes) to the Dane County Regional Airport-Truax Field, located five miles northeast of Madison. It is approximately 39 miles (or about 47 minutes) to the Dubuque Regional Airport. General aviation airports in or near Grant County include the Platteville Municipal Airport; the Lancaster Municipal Airport; the Boscobel Municipal Airport; the Cassville Municipal Airport; the Prairie Du Chein Municipal Airport; and the Iowa County Airport (near Mineral Point).

5.6.6 WATER TRANSPORTATION

Grant County lies on the eastern side of the Mississippi River. The Port of Dubuque is located just west of the state line in Dubuque.

The Cassville Car Ferry connects two National Scenic Byways; the Wisconsin Great River Road and the Iowa Great River Road. The Ferry service exists to provide an alternative and viable transportation mode in Southwestern Wisconsin. The Ferry makes trips back and forth across the Mississippi River and is one of the oldest operating car ferries in the State of Wisconsin. In 2003, the *Cassville Ferry Report of Operations and Economic Impact Analysis Study* was conducted to identify both the existing conditions of the ferry as well as the economic impacts of operating the ferry service.

5.6.7 TRANSPORTATION AND ECONOMIC DEVELOPMENT

It is anticipated that four-lane divided improvements to US 151, from Dickeyville to Belmont, will promote economic development by improving access for businesses and area tourist sites. The relationship of transportation and economic development means many things, including the infrastructure for shipment of goods, access to workers, and tourism. This physical infrastructure helps to bring travelers both to and through communities. The Plan Commission agreed, noting that their local transportation did a good job of meeting Village needs as well as met their economic development goals related to agriculture, retail, commerce, shipping, manufacturing, and tourism.

5.7 MAINTENANCE AND IMPROVEMENTS

Citizens value good roads and streets: maintenance of the local transportation system is the largest expenditure for many local governments. Compared to other states, Wisconsin has more local roads, the majority of them paved, and they must be maintained through four seasons. According to Federal Highway Administration (FHWA) data, Wisconsin's per capita spending on local road systems is second only to Minnesota's (the national average is \$123).

5.7.1 GENERAL TRANSPORTATION AIDS

General Transportation Aids (GTA) represent the second largest program in WisDOT's budget and returns to local governments roughly 30% of all state-collected transportation revenues (fuel taxes and vehicle registration fees) - helping offset the cost of County and municipal road construction, maintenance, traffic and other transportation-related costs.

Table 5.4: Grant County General Transportation Aids

Municipality	2007 GTA	Municipality	2007 GTA	Municipality	2007 GTA
City of Boscobel	\$155,588.01	Town of Jamestown	\$100,893.87	Town of Wingville	\$79,150.32
City of Cuba City	\$118,357.12	Town of Liberty	\$94,987.98	Town of Woodman	\$41,891.94
City of Fennimore	\$144,841.44	Town of Lima	\$95,690.61	Town of Wyalusing	\$56,191.41
City of Lancaster	\$217,838.51	Town of Little Grant	\$81,600.03	Village of Bagley	\$19,834.41
City of Platteville	\$361,847.45	Town of Marion	\$75,105.45	Village of Bloomington	\$49,523.41
County of Grant	\$1,215,081.26	Town of Millville	\$33,061.59	Village of Blue River	\$17,338.83
Town of Beetown	\$111,680.19	Town of Mount Hope	\$60,369.21	Village of Cassville	\$62,758.58
Town of Bloomington	\$82,264.68	Town of Mount Ida	\$90,332.62	Village of Dickeyville	\$55,734.07
Town of Boscobel	\$11,450.97	Town of Muscoda	\$63,179.73	Village of Hazel Green	\$65,996.67
Town of Cassville	\$50,893.20	Town of North Lancaster	\$82,036.80	Village of Livingston	\$31,681.52
Town of Castle Rock	\$57,805.56	Town of Paris	\$83,214.18	Village of Montfort	\$28,466.71
Town of Clifton	\$88,398.45	Town of Patch Grove	\$74,136.96	Village of Mount Hope	\$3,190.55

Table 5.4 (cont.) Grant County General Transportation Aids

Municipality	2007 GTA	Municipality	2007 GTA	Municipality	2007 GTA
Town of Ellenboro	\$88,227.54	Town of Platteville	\$76,320.81	Village of Muscoda	\$77,816.68
Town of Fennimore	\$69,522.39	Town of Potosi	\$123,453.99	Village of Patch Grove	\$4,278.44
Town of Glen Haven	\$96,222.33	Town of Smelser	\$97,741.53	Village of Potosi	\$27,984.26
Town of Harrison	\$88,968.15	Town of South Lancaster	\$83,802.87	Village of Tennyson	\$4,721.52
Town of Hazel Green	\$88,075.62	Town of Waterloo	\$78,998.40	Village of Woodman	\$3,788.45
Town of Hickory Grove	\$91,512.81	Town of Watterstown	\$43,658.01		

Source: Wisconsin Department of Transportation

5.7.2 LOCAL ROADS IMPROVEMENTS PROGRAM

The Local Roads Improvement Program (LRIP) assists local governments in improving seriously deteriorating County highways, town roads, and city and village streets. The competitive reimbursement program pays up to 50% of total eligible costs with local governments providing the balance. The program has three basic components: Municipal Street Improvement (MSIP); County Highway Improvement (CHIP); and Town Road Improvement (TRIP). In the 2006-2007 LRIP project cycle, several Grant County municipalities received LRIP funds.

5.7.3 PAVEMENT SURFACE EVALUATION AND RATING

WISLR – the Wisconsin Information System for Local Roads – provides a data management tool for decision-makers. WISLR is an Internet-accessible system that helps local governments and WisDOT manage local road data to improve decision-making, and to meet State statute requirements. With Geographic Information System (GIS) technology, WISLR combines local road data with interactive mapping functionality that allows users to display their data in a tabular format, on a map, or both.

The Wisconsin Local Roads and Streets Council and WisDOT recognized the need and initiated WISLR – the first internet-based local road system of its kind in the United States. Local governments can use WISLR’s querying, analytical, and spreadsheet tools to organize and analyze data. They can also update and edit their data. This combination improves accuracy for both pavement condition rating submittals and road inventory assessment. Refer to Map 5.4 in the Attachments for more information.

By statute, local governments are required to report the pavement condition of roads under their jurisdiction to WisDOT every two years. Local road information, including width, surface type, surface year, shoulder, curb, road category, functional classification, and pavement condition ratings are incorporated into the WISLR system. Access to inventory information has other value too, such as compliance with Governmental Accounting Standards Board Statement 34 (GASB 34), which mandates reporting the value of local roads as infrastructure assets.

5.7.4 PLANNING FOR CAPITAL IMPROVEMENTS

Capital improvements include new or expanded physical facilities that are relatively large, expensive, and permanent. WISLR’s budgeting module can assist local municipalities with budgeting planning for system maintenance and improvements. Using this tool, a Capital Improvement Program (CIP) can be developed to assist in planning for major project costs by creating a multi-year scheduling plan for physical public improvements. This can be incorporated into other budgeting plans, based on the projection of fiscal resources and prioritization of improvements five to six years into the future. The Village is currently working on a CIP that includes transportation-related expenditures. Refer to Chapter 2, Utilities and Community Facilities, for more information on CIPs.

5.7.5 ENVIRONMENT

Thoughtful planning for continued growth can also protect water quality, wildlife habitats, and working farms. Sound management of transportation infrastructure maintenance or expansion may include de-icing procedures and salt reduction; erosion control; storm water management; and wetland mitigation (preservation, creation, or restoration).

5.8 TRANSPORTATION PLANNING

PREVIOUS PLANS RELATED TO GRANT COUNTY’S TRANSPORTATION SYSTEM

Several transportation or transportation-related studies related to Grant County have been completed, including:

- Grant County Plan – Transportation (1971)
- Grant County Plan – Great River Road Area (1972)
- Grant County Outdoor Recreation Plan, 1975-1979 (1975)

- Grant County Functional & Jurisdictional Highway Planning Study (1975)
- The Public Sector and Railroad (1976)
- Grant County Outdoor Recreation Plan, 1979-1984 (1980)
- Rural Public Transportation Feasibility Study for Grant, Green, Iowa, Lafayette, and Richland Counties, WI (May 1982)
- Grant County Functional and Jurisdictional Highway Plan Update (1987)
- Grant County Highway Maintenance and Improvement Study (1989)
- Grant County Six-Year Highway Maintenance & Improvement Program, 1992-1997
- Grant County Outdoor Recreation Plan (1988)
- Grant County Bicycle Improvement Plan (2001)
- Cassville Ferry Report of Operations and Economic Impact Analysis Study (2003)
- U.S. Highway 151 Economic Impact Analysis (2004)
- Grant County Transit Services Plan (2006)
- Southwestern Wisconsin Transit Team (SWTT) Transit Survey (2007)

REGIONAL TRANSPORTATION PLANS

- WisDOT's *Six-Year Highway Improvement Program* (2006-2011) - <http://www.dot.wisconsin.gov/projects/state/sixyear/swr.htm>

The Dubuque Metropolitan Area Transportation Study (DMATS) region, located at the boundary intersections of the State of Iowa, Illinois and Wisconsin, is a tri-state Metropolitan Planning Organization (MPO). As a MPO, the organization receives Federal funds to develop regional transportation plans and programs. The organization works closely with the Iowa Department of Transportation (IADOT), the Illinois Department of Transportation (ILDOT), the Wisconsin Department of Transportation (WisDOT), local governments and transit providers. In Wisconsin, DMATS transportation planning activities encompass Jamestown Township. DMATS Plans include:

- DMATS *Transportation 2031 Long-Range Transportation Plan (LRTP)* - http://www.ecia.org/municipalities/transplanning/dmats/transport_lrtp.html
- DMATS *Transportation Improvement Program (TIP) 2008-2011* (2007) - http://www.ecia.org/municipalities/transplanning/dmats/transport_tip2.html
- DMATS *Regional Intelligent Transportation System (ITS) Architecture Plan* (2005) - http://www.ecia.org/municipalities/transplanning/dmats/transport_its.html

STATE TRANSPORTATION PLANS

- Wisconsin State Airport System Plan 2020 - <http://www.dot.state.wi.us/projects/state/docs/air2020-plan.pdf>
- WisDOT's Five-Year Airport Improvement Plan (October 2002) - <http://www.dot.state.wi.us/projects/state/docs/air-5yr-plan.pdf>
- Wisconsin Bicycle Transportation Plan – 2020 <http://www.dot.state.wi.us/projects/state/docs/bike2020-plan.pdf>
- Wisconsin State Highway Plan – 2020 <http://www.dot.state.wi.us/projects/state/docs/hwy2020-plan.pdf>
- Wisconsin Statewide Pedestrian Policy Plan – 2020 <http://www.dot.state.wi.us/projects/state/docs/ped2020-plan.pdf>
- WisDOT *Connections 2030* (pending) - <http://www.dot.wisconsin.gov/projects/state/2030-maps.htm>

5.9 TRANSPORTATION AGENCIES & PROGRAMS

WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT)

WisDOT administers a variety of State and Federal programs, including:

Highways & Bridges:

- Connective Highway Aids
- County Forest Road Aids
- General Transportation Aids (GTA)
- Lift Bridge Aids
- Local Bridge Improvement Assistance

WISCONSIN DEPARTMENT OF TRANSPORTATION (WisDOT)

4802 Sheboygan Avenue
PO Box 7910
Madison, WI 53707

<http://www.dot.wisconsin.gov/localgov/>

- Local Roads Improvement Program (LRIP)
- Surface Transportation Program – Rural (STP-R)
- Surface Transportation Program – Urban (STP-U)
- Traffic Signing and Marking Enhancement Grants Program
- Surface Transportation Discretionary Program (STP-D)

Public Transportation:

- Federal Discretionary Capital Assistance
- Rural and Small Urban Public Transportation Assistance
- Rural Transportation Assistance Program (RTAP)
- Wisconsin Employment Transportation Assistance Program (WETAP)

Specialized Transit:

- County Elderly and Disabled Transportation Assistance
- Elderly and Disabled Capital Assistance
- New Freedom

Other Aid:

- Airport Improvement Program (AIP)
- Bicycle and Pedestrian Facilities Program
- Congestion Mitigation and Air Quality (CMAQ)
- Freight Rail Infrastructure Improvement Program (FRIIP)
- Freight Rail Preservation Program (FRPP)
- Local Transportation Enhancements (TE)
- Railroad Crossing Improvements
- Rustic Roads Program
- Safe Routes to School
- Transportation Economic Assistance (TEA)

5.10 TRANSPORTATION INFORMATION RESOURCES

In preparing this section, several plans and information resources were consulted, including:

- AirNav, LLC <http://www.airnav.com/airports/us/WI>
- Growing Wisconsin's Economy (WisDOT 2002)
- Land Use & Economic Development in Statewide Transportation Planning (FHWA 1999) <http://www.uwm.edu/Dept/CUTS/lu/lu-all2.pdf>
- Midwest Regional Rail Initiative <http://www.dot.state.wi.us/projects/state/docs/railmidwest.pdf>
- *Rural By Design*, Randall Arendt (APA 1994).
- “Siting rural development to protect lakes and streams and decrease road costs” (Wisconsin Center for Land Use Education) <http://www.uwsp.edu/cnr/landcenter/pubs.html>
- Status of the Nation's Highways, Bridges, and Transit (FHWA, 2002) <http://www.fhwa.dot.gov/policy/2002cpr/>
- TDA (Wisconsin Transportation Development Association) Report – 2004.
- WisDOT - Transportation Planning Resource Guide <http://www.dot.state.wi.us/localgov/docs/planningguide.pdf>
- Wisconsin Airport Land Use Guidebook – 2004 http://www.meadhunt.com/WI_landuse/
- Wisconsin Bicycle Planning Guidance <http://www.dot.state.wi.us/projects/state/docs/bike-guidance.pdf>
- Wisconsin Bicycle Facility Design Handbook <http://www.dot.state.wi.us/projects/state/docs/bike-facility.pdf>
- Wisconsin County/City Traffic Safety Commission Guidelines (WisDOT 1998)
- Wisconsin Crash Facts (2004) <http://www.dot.wisconsin.gov/safety/motorist/crashfacts/>
- Wisconsin Rail Issues and Opportunities Report <http://www.dot.state.wi.us/projects/state/docs/rail-issues.pdf>
- WisDOT - Rustic Roads: <http://www.dot.state.wi.us/travel/scenic/rusticroads.htm>

- WisDOT – Transportation & Environmental Protection:
<http://www.dot.wisconsin.gov/library/research/resources/environment.htm>