

TRANSPORTATION

Introduction

The transportation element greatly impacts all other elements. For example, the direct impact between land use and transportation should be clearly understood to ensure the transportation system will support the planned land use. Placing a commercial development on a local road will require upgrades to the road to support additional traffic and weight requirement. Therefore, where land is developed and how it is used is critical. Understanding the existing transportation system, identifying necessary improvements, and coordinating additions to the system with planned future land use patterns and overall plan goals and objectives will help to ensure that the Village’s future transportation needs are met.

Demographics also play a role in the transportation element. Wisconsin is currently experiencing an increase in population, commuting distance, and in vehicles per household. These are all increasing pressure on the State’s transportation system. In addition, the cost of building and maintaining roads and highways are increasing due to the increase in the price of petroleum and other raw materials. The issue is how to fix the transportation system efficiently and cost effectively.

This plan element will provide an inventory of the Village’s existing transportation system, including roadways, rail, pedestrian, bicycle, transit, air and water systems and associated inter-modal connections. From this inventory, and direction from the community regarding specific transportation needs and desires, specific policy recommendations are developed to guide the Village’s decisions over the next 20 years.

Transportation Element Requirements:

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, 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.

§ 66.1001(2)(c), Wis. Stat.

Transportation System:

- *Transportation options used to move people and products*
- *Levels of jurisdictional authority*
- *Facilities that a user might access to begin, change or switch, and end a trip*
- *Includes:*
 - *Roads*
 - *Transit services*
 - *Rail services*
 - *Bike lanes, paths, and trails*
 - *Air travel*
 - *Pedestrian accommodations*
 - *water travel*

Commute Patterns

According to Table 3.1, 74.0% of Village workers 16 years and over commuted alone to their employment destination in 2000, which was less than the percentages for Pierce County (75.1%) and the State (79.5%). The percentage of workers carpooling from the Village (13.5%) was higher than both the County (11.6%) and the State (9.9%). The average commute time for Village workers over 16 was 28.6 minutes in 2000, which was greater than the County (25.1) and the State (20.8).

Table 3.1: Village of Elmwood commute characteristics (2000)

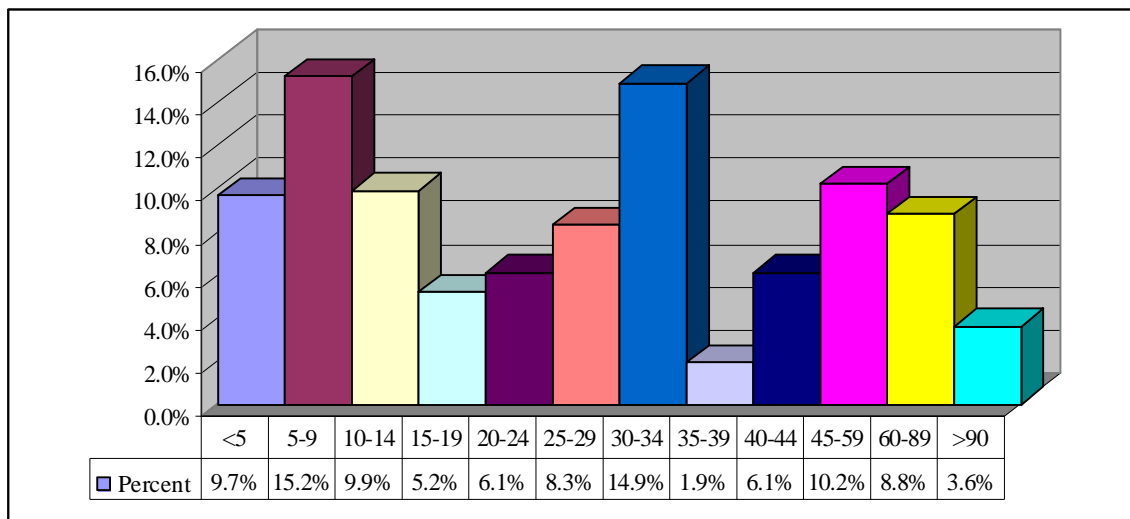
	2000	Percent
Workers 16 years and over	377	100.0%
Car, truck, or van -- drove alone	279	74.0%
Car, truck, or van -- carpoled	51	13.5%
Public transportation (including taxicab)	0	0.0%
Walked/Other means	32	8.5%
Worked at home	15	4.0%
Mean travel time to work (minutes)	28.6	(X)

Source: U.S. Census Bureau, Census 2000

A growing number of residents in western Wisconsin are choosing to commute further in order to take advantage of the employment opportunities in the Twin Cities area. Also, a growing number of employees in the Twin Cities area are moving further away in order to enjoy a more rural character. Increasingly high single-occupant travel patterns may present obstacles for the Village and Pierce County in the future, as roadways will require greater investments and maintenance.

According to The U.S. Census Bureau, the largest percentages of commute times were less than 10 minutes and between 30 and 60 minutes (see Figure 3.1).

Figure 3.1: Village of Elmwood commute times (2000)



Source: U.S. Census Bureau, Census 2000

According to the Community Survey, the 2000 Census data concerning commute times were accurate. Approximately 17% of respondents commuted less than 10 minutes to their place of employment, while other larger percentages commuted between 20-60 minutes (see Table 3.2).

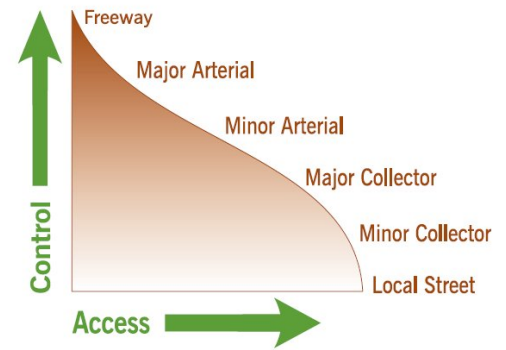
Table 3.2: Average commute time to work

Response	Frequency	Percent
Under 10 min.	26	17.1%
10-19 min.	8	5.3%
20-34 min.	26	17.1%
35-59 min.	18	11.8%
over 1 hour	6	3.9%
No answer	19	12.5%

Source: Village of Elmwood Community Survey (2008)

Functional Classification

A functionally classified road system is one in which streets and highways are grouped into classes according to the character of service they provide, ranging from a high degree of travel mobility to land access functions. At the upper limit of the system (principal arterials, for example), are those facilities that emphasize traffic mobility (long, uninterrupted travel), whereas at the lower limit are those local roads and streets that emphasize access. See the Functional Classification map for locations in the Village; definitions are as follows:



Source: WisDOT

Table 3.3: Village of Elmwood road classifications

Road Classification	Road Name
Principal Arterials: Serve corridor movements having trip length and travel density characteristics of an interstate or interregional nature. These routes generally serve all urban areas with a population greater than 5,000.	None
Minor Arterials: In conjunction with the principal arterials, serve cities, large communities, and other major traffic generators providing intraregional and inter-area traffic movements.	None
Major Collectors: Provide service to moderate sized communities, and other intra-area traffic generators, and link those generators to nearby larger population centers or higher function routes.	State Trunk Highway 72 State Trunk Highway 128 County Trunk Highway G County Trunk Highway P
Minor Collectors: Provide service to all remaining smaller communities, link the locally important traffic generators with their rural hinterland, and are spaced consistent with population density so as to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.	None
Local Roads: Local roads provide access to adjacent land and provide for travel over relatively short distances on an inter-township or intra-township basis.	All other roads not listed above

Source: WisDOT

According to the Community Survey, an overwhelming majority of respondents were satisfied with the road network in the Village (see Table 3.3).

Table 3.3: Satisfaction with road network

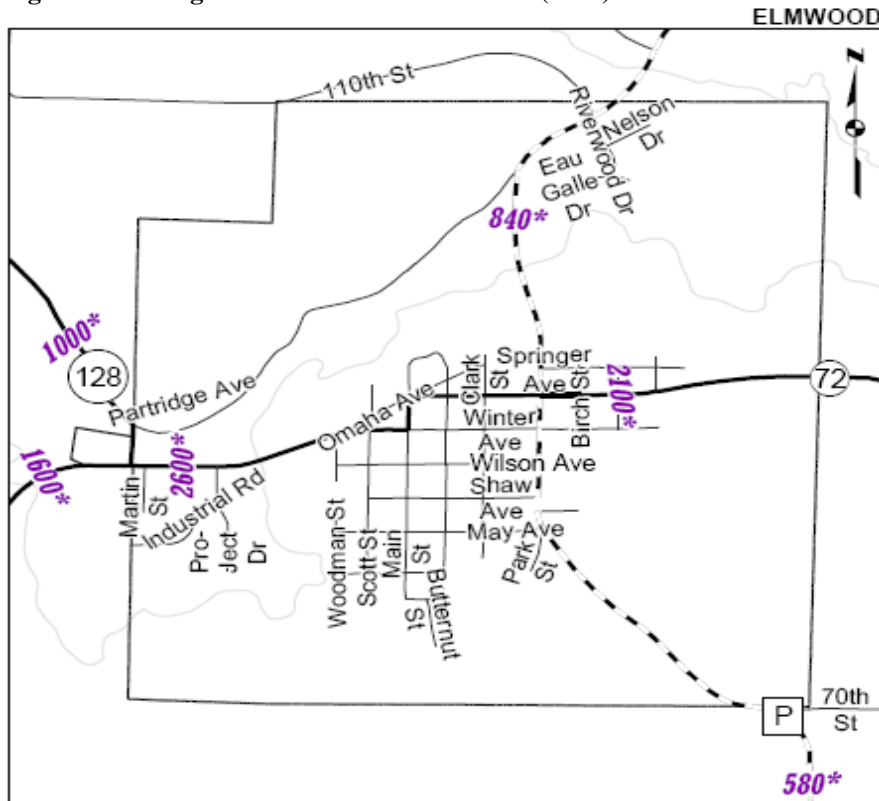
Response	Frequency	Percent
Strongly agree	18	11.8%
Agree	92	60.5%
Disagree	13	8.6%
Strongly disagree	4	2.6%
No opinion	12	7.9%
No answer	13	8.6%

Source: Village of Elmwood Community Survey (2008)

Traffic Counts

Traffic counts are reported as the number of vehicles expected to pass a given location on an average day of the year. These values are called the “annual average daily traffic” (AADT) and are represented on traffic count or traffic volume maps. The AADT is based on a short-term traffic count, usually 48 hours, taken at the location. This count is then adjusted for the variation in traffic volume throughout the year and the average number of axles per vehicle. The short-term counts are collected over a three-year cycle at nearly 26,000 rural and urban locations throughout the state. Figure 3.2 shows counts in the Village from 2006.

Figure 3.2: Village of Elmwood Traffic Counts (2006)



Source: WisDOT (2006)

The Village of Elmwood conducted their own traffic counts on Highway 72 in late September of 2006. The average daily results of those counts on Highway 72 west of Woodman St. were approximately half of the 2,600 recorded in 2006 at the same location by WisDOT. According to WisDOT, counts of 2,200 (1994), 2,500 (1997), 2,700 (2000), 2,600 (2004) were recorded at the same location during the summer months. Based on those trends they are confident about their numbers concerning traffic counts at that location and are not inclined to do any additional counts other than what is already scheduled.

Transit

The Village of Elmwood does not have any existing transit services. The Department of Transportation offers satellite park and ride lots, not served by commuter buses, in Pierce and St. Croix Counties that commuters can meet and ride-share to their destination at the following locations:

Table 3.4: Area park and ride lots

County	Location	Parking Spaces
Pierce	Plum City: US 10/CTH CC	20
Pierce	Prescott: US 10/Pearl St.	58
St. Croix	US 63/STH 64	24
St. Croix	Baldwin: I-94/US 63	36
St. Croix	Roberts: I-94/STH 65	48
St. Croix	River Falls: STH 35/STH 65	124
St. Croix	Hudson: I-94/Carmicheal Rd.	168
St. Croix	Hudson: Old STH 35/Hanley Rd.	74

Source: WisDOT

Residents commuting to destinations in the Twin Cities can take advantage of numerous park and ride lots, provided by Metro Transit, in Washington County that offer commuter bus transportation to Minneapolis and St. Paul as well as connections to other suburban destinations.

Transportation Facilities for the Disabled

The Village of Elmwood does not offer any public transportation services for the elderly or disabled. The results of the Community Survey show that many respondents felt that this is a service that the Village may need to explore in the next twenty years.

Bicycles and Pedestrians

According to the Community Survey, respondents were split on the question of whether the off-street trail system (walking trails, sidewalks, bike paths) met their needs (see Table 3.5). However, the vast majority of respondents either strongly agreed or agreed that additional walking trails, bike lanes, and walking lanes were needed (see Table 3.6). The Proposed Trails map in the appendix details the desired locations for future on and off-street trails in the Village of Elmwood.

Table 3.5: Satisfaction with off-street trail system

Response	Frequency	Percent
Strongly agree	13	8.6%
Agree	55	36.2%
Disagree	48	31.6%
Strongly disagree	14	9.2%
No opinion	18	11.8%
No answer	4	2.6%

Source: Village of Elmwood Community Survey (2008)

Table 3.6: Need for additional off-street trails

Response	Frequency	Percent
Strongly agree	30	19.7%
Agree	61	40.1%
Disagree	23	15.1%
Strongly disagree	9	5.9%
No opinion	24	15.8%
No answer	5	3.3%

Source: Village of Elmwood Community Survey (2008)

Railroads

Burlington Northern Santa Fe operates a line along the Mississippi River and Pierce County’s western border beginning in Prescott. Pacific Union operates a rail line running across St. Croix County and into Menomonie and Eau Claire.

The West Central Wisconsin Rail Coalition is a voluntary group that has been working towards the development of a passenger rail service across west central Wisconsin in an effort to provide balanced and more sustainable forms of transportation. The creation of a passenger rail service could have a profound impact on the Village of Elmwood, since the railroad corridor is about 15 miles away.

Figure 3.3: Regional Railways



Source: WisDOT (2009)

Air Transportation

Menomonie Municipal Airport

The Menomonie Municipal Airport is owned by the City of Menomonie. As of 2008, there were approximately 37 flight operations per day and 26 aircraft were based at the field. Of those operations, 81% were local aviation, 18% transient, and 1% was air taxi operations. The airport has two asphalt runways, one is 5,075 feet long and 75 feet wide and the other is 3,470 feet long and 75 feet wide. It is located approximately 20 miles from the Village of Elmwood.

Red Wing Municipal Airport

The Red Wing Municipal Airport is owned by the City of Red Wing, MN and is located in the Town of Isabelle, just outside of the Village of Bay City, WI. As of 2008, there were approximately 38 flight operations per day and 57 aircraft were based at the field. Of those operations, 41% were local aviation, 53% were transient, 2% were air taxi, and 5% were military operations. The airport has an asphalt runway that is 5,010 feet long and 100 feet wide. It is located approximately 30 miles from the Village of Elmwood.

Chippewa Valley Regional Airport

The Chippewa Valley Regional Airport has existed at its current location since 1946. In 1976, Eau Claire County acquired ownership from the City of Eau Claire. As of 2008, the annual operations were approximately 35,000 (take offs and landings). The airport has two asphalt runways, one is 8,101 feet long and 150 feet wide and the other is 4,999 feet long and 100 feet wide. The airport owns and rents 40 hangars and 6 box hangars to the general public. Land is available for construction of privately-owned hangars. It is located approximately 40 miles from the Village of Elmwood.

Boyceville Municipal Airport

The Boyceville Municipal Airport is owned by the Village. As of 2008, there were approximately 22 flight operations per day and 18 aircraft based at the field. Of those operations, 82% were local operations and 18% were transient. The airport has an asphalt runway that is 3,300 feet long and 60 feet wide. It is approximately 30 miles from the Village of Elmwood.

New Richmond Regional Airport

The New Richmond Regional Airport was officially established in 1964 and is considered one of the fastest growing airports in the Midwest. Over 180 aircraft reside in privately-owned hangars, and is home to ten aviation related businesses and business aircraft. According to the New Richmond Area Economic Development Corporation, the airport contributes over nine million dollars to the New Richmond area economy. The airport has its maximum runway length but plans to make significant improvements to

the runway and lighting fixtures in 2008. They also room have land available for adding hangars and other aircraft-related buildings. It is located approximately 40 miles from the Village of Elmwood.

The Minneapolis-St. Paul International Airport (MSP) is the main airport used by people in the region and is approximately 65 miles from the Village. This airport has about 500,000 landings and takes-offs in a given year and will continue to be available to residents of the Village. River Falls and Prescott each have turf runway airports. The runway length in River Falls is 1,630 feet long and in Prescott it is 1,740 feet long.

State and Regional Transportation Plans

Table 3.7: State and regional transportation plans

Wisconsin State Airport System Plan 2020	This plan determines the number and type of airport facilities around Wisconsin that are needed to meet aviation needs through the year 2020.
West Central Regional Freeway System (2005)	This was a comprehensive study done by WisDOT of the west central freeway system consisting of St. Croix, Pierce, Dunn, Polk, Chippewa, and Eau Claire counties.
WisDOT six year highway improvement program	One of the subprograms under this is the State Highway rehabilitation program which consists of three parts; existing highways, state bridges, and backbone rehabilitation.
Rustic Roads	The Wisconsin legislature created the rustic road system in 1973 to, "preserve what remains of Wisconsin's scenic, lightly traveled country roads for the leisurely enjoyment of bikers, hikers and motorists."
Wisconsin Rail Issues and Opportunities Report	This report gives an over view of the status of the rail system in Wisconsin and addresses issues that will be faced in the future.
Midwest Regional Rail System	This is a massive proposal for creating passenger rail connections across the Midwest; connecting all the major cities.
Wisconsin Bicycle Transportation Plan 2020	Under part of Translinks 21, WisDOT committed to creating a comprehensive bicycle plan.
Wisconsin Pedestrian Policy Plan 2020	The purpose of this plan was to outline statewide and local measure to increase walking and promote pedestrian safety.
Translinks 21	The study developed goals which include the following: Mobility, Choice, Safety, Connectivity, and Efficiency
Connections 2030 (WisDOT)	WisDOT is currently working on this plan that will cover all forms of transportation; including highways, local roads, railroad, air, water, transit, bicycle, and pedestrian, through the year 2030.
Wisconsin State Highway Plan 2020	A strategic plan which addresses current conditions of state highways, future plans, financial tools, and other strategies to use to maintain the State's 12,000 miles of highway.

SWOT Analysis: Transportation

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Highway access • Proximity to airports • Good road condition 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Lack of on-street trails • Lack of off-street trails • Sidewalk condition
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Establish pedestrian lanes and off-street trails • Transportation for the elderly and disabled • Promote ride sharing 	<p>THREATS</p> <ul style="list-style-type: none"> • State and county highways running through the Village • Funding shortfall for road and trail improvements • Increasing price of fuel and road maintenance equipment and supplies

Goals, Objectives, and Implementation

Goal: Create and maintain a safe pedestrian and bicycle network within the Village of Elmwood.

Objectives:

- Provide opportunities for residents to move throughout the Village by means other than automobiles or trucks.
- Encourage walking and biking as ways of experiencing one’s neighborhood and community.
- Reduce the use of fossil fuels.
- Promote the health benefits of walking and biking.
- Visit and evaluate accident sites for signage and visibility.
- Coordinate with surrounding municipalities in developing a biking and walking trail network.

Implementation (Policies and Programs):

- Designate certain local roads for Village bicycle trails.
- Look into public transportation options, especially for senior citizens.
- Fix road signs.
- Keep road signs consistent.
- Place appropriate road signs where agricultural use of roads is high.
- Develop a road sign maintenance program.
- Create a Village Rustic Road Plan.