

6.0 TRANSPORTATION

6.1 INTRODUCTION

The transportation system will provide an efficient and safe movement of persons and goods within and through Bayfield County. This system also is to be environmentally compatible with the surrounding conditions and supportive of economic development. An important component of the transportation system is the integration with land use in achieving long-term improvements in Bayfield County. That is, planning and coordinating land use patterns related to transportation is essential in making the best use of public funds. The transportation system should incorporate well designed, limited access routes, major arterials, minor arterials, collectors, and residential streets, which are directly linked to the proposed land uses. Greater population densities along the major corridors should be encouraged, providing greater accessibility to housing, employment, and commercial/industrial areas. Lower density land uses should be located further away from the major corridors.

Vehicular transit is the dominant form of transportation in Bayfield County. While not a significant form of travel in the county, a limited number of small airports are also found scattered throughout the region.

6.2 ROADWAY CHARACTERISTICS

Bayfield County's roadway network consists of 2,146 miles of roadway (WisDOT 1998). Bayfield County ranks 6th out of 72 Wisconsin counties in terms of overall roadway miles. Several major highways bisect the county, including USH 2, STH 13, USH 63, and STH 27. These are the primary transportation thoroughfares in the county, which also carry the bulk of highway traffic volume. Bayfield County's road network is depicted in Map 6.1 on the following page.

Table 6.1: Bayfield County Total Roadway Mileage

Type of Roadway	Roadway Miles	Percent of Total
State Roads	155	7.2
County Roads	181	8.4
Local Roads	1,769	82.4
Other Roads	41	1.9

Source: Wisconsin Department of Transportation – District 8

Map 6.1 – Road Network

Map 6.2 – Functional Road Classification

Roadways in Bayfield County are categorized using a functional classification system (see Map 6.2). This system classifies roadways based on the level of service that they provide in carrying vehicular traffic. Based on 2001 functional classification system miles, the county roadway system includes:

Table 6.2: Bayfield County Rural Road Miles by Functional Classification

Functional Classification	Roadway Miles	Percent of Total
Principal Arterials	65.63	3.0%
Minor Arterials	78.74	3.7%
Major Collectors	250.58	11.7%
Minor Collectors	156.61	7.3%
Local Roads	1,595.46	74.3%

Source: Wisconsin DOT 2001

6.3 ANNUAL AVERAGE 24-HOUR TRAFFIC

Traffic volumes on Bayfield County roadways increased significantly over the past 35 years. Rural traffic volume calculations are based on 48-hour traffic counts, which are converted to estimates of annual daily traffic by computing a 24-hour average and applying a numeric factor derived from the permanent data recorder program (WisDOT). Traffic counts are generated approximately once every three years. Tables 6.3-6.8 depict AADT for selected sites in Bayfield County.

Table 6.3: Bayfield County Annual Average Daily Traffic, Selected Sites, USH 2 (Rural Areas), 1966-2000

	1	2	3	4	5	
	2000	8,000	5,800	4,900	5,200	6,300
SITE 1: USH 2, west of Iron River, intersection with CTH A	1997	8,000	6,700	4,600	5,000	7,400
	1994	7,000	5,900	5,400	5,400	7,400
SITE 2: USH 2, east of Iron River, intersection with CTH A	1990	6,060	5,050	4,040	4,510	5,800
	1986	4,300	3,980	3,670	4,010	4,840
SITE 3: USH 2, east of Ino	1983	3,880	4,480	3,040	3,380	4,500
	1980	4,760	4,010	2,390	3,730	4,500
SITE 4: USH 2, ½ miles east of intersection with USH 63	1977	4,630	3,750	3,830	4,050	5,340
	1974	4,670	2,980	3,330	2,940	3,690
SITE 5: USH 2, between intersection with USH 63 and STH 13	1971	3,970	2,330	2,240	2,320	3,410
	1968	2,810	2,140	1,990	1,770	2,870
	1967	2,900	2,210	2,060	1,830	3,160
	1966	1,760	1,540	1,700	1,640	2,520

**Table 6.4: Bayfield County Annual Average Daily Traffic,
Selected Sites, USH 63 (Rural Areas) 1966-2000**

	1	2	3	4	5	
SITE 1: USH 63, Town of Cable	2000	3,000	2,200	2,000	2,400	2,100
	1997	3,000	2,000	4,700	2,300	2,300
SITE 2: USH 63, Town of Drummond	1994	3,300	1,790*	1,900	2,300	2,200
	1990	2,320	1,790	1,450	1,540	1,820
SITE 3: USH 63, Town of Grand View, east of Grandview	1986	2,100	1,600	1,450	1,780	2,900
	1983	2,320	1,540	1,230	1,430	1,340
SITE 4: USH 63, Town of Mason, north of junction with CTH E	1980	1,930	1,170	1,160	1,400	1,580
	1977	1,770	1,140	1,250	1,330	1,340
SITE 5: USH 63, Town of Eileen, south of junction with USH 2	1974	1,480	990	910	1,140	1,110
	1971	1,120	930	730	930	1,240
	1968	780	690	550	420	780
	1967	770	660	540	420	760
	1966	650	460	570	600	720

* Data not available, previous year count used.

**TABLE 6.5: Bayfield County Annual Average Daily Traffic,
Selected Sites, STH 13 (Rural Areas), 1966-2000**

	1	2	3	4	5	
SITE 1: STH 13, Town of Port Wing, between Port Wing and Herbster	2000	860	810	680	3,300	3,300
	1997	890	1,100	590	3,900	3,400
	1994	910	910	390*	4,100	3,600
	1990	630	780	390	3,640	3,110
SITE 2: STH 13, Town of Bell, west of Cornucopia	1986	570	710	350	2,960	2,760
	1983	430	510	260	2,640	2,030
SITE 3: STH 13, Town of Bayfield	1980	440	630	190	2,440	2,440
	1977	530	670	360	2,880	2,010
SITE 4: STH 13, south of the City of Bayfield	1974	690	460	260	2,090	1,420
	1971	410	480	190	1,570	820
SITE 5: STH 13, Town of Bayview	1968	320	280	180	1,220	840
	1967	340	300	190	1,390	960
	1966	460	320	120	930	920

* Data not available, previous year count used.

**TABLE 6.6: Bayfield County Annual Average Daily Traffic,
Selected Sites, STH 27 (Rural Areas), 1966-2000**

	1	2
2000	1,200	1,100
1997	770	770
1994	1,000	N/A
1990	490	480
SITE 1: STH 27, Town of Barnes, near intersection with CTH N	1986	710
	1983	540
SITE 2: STH 27, Town of Barnes, north of county line	1980	490
	1977	500
	1974	460
	1971	340
	1968	290
	1967	300
	1966	110

**TABLE 6.7: Bayfield County Annual Average Daily Traffic,
Selected Sites, County Highways, 1966-2000**

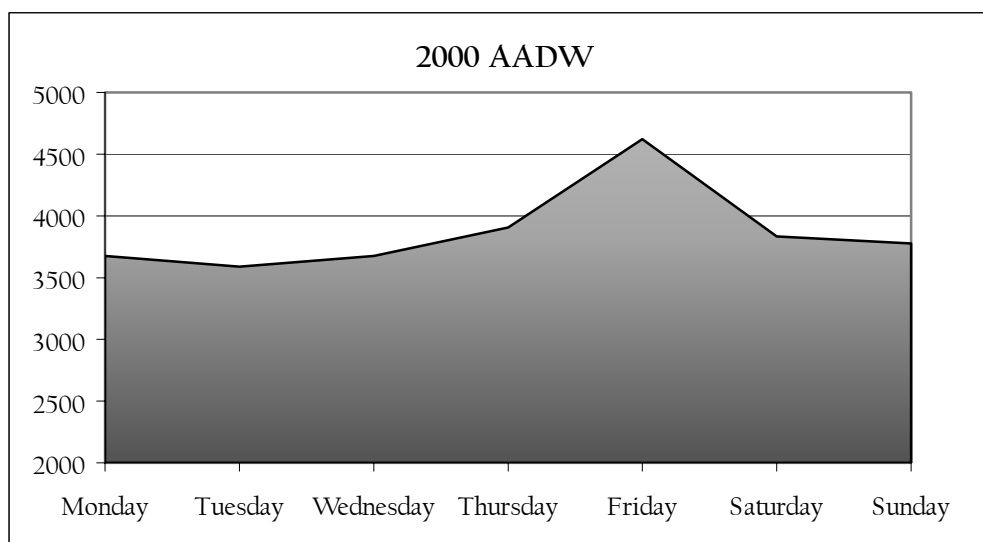
	1	2	3	4	5	6
2000	1,100	1,300	1,300	310	1,000	340
SITE 1: CTH A, Town of Tripp	1997	890	1,300	560	250	880
	1994	750	1,600	660	310	990
SITE 2: CTH H, Town of Iron River	1990	530	1,770	330	310	990
	1986	550	1,820	570	320	940
SITE 3: CTH N, Town of Drummond	1983	570	1,100	610	290	580
	1980	420	1,080	400	200	530
SITE 4: CTH E, Town of Keystone	1977	500	1,510	720	290	600
	1974	350	1,180	480	190	570
SITE 5: CTH C, Town of Bayview	1971	300	1,090	420	220	570
	1968	285	810	245	N/A	420
SITE 6: Old CTH K Road, Town of Russell	1967	285	810	245	N/A	420
	1966	225	340	210	195	340

TABLE 6.8: Bayfield County Annual Average Daily Traffic, Communities, 1967¹-2000

	1	2	3	4	5	
2000	2,000	7,400	6,300	480	3,200	
SITE 1: City of Washburn, 8th Avenue West, north of Pine Street	1997	2,000	6,900	8,100	490	3,300
	1994	740	6,100	7,300	590	3,600
SITE 2: City of Washburn, Bayfield Street	1990	1,670	8,450	6,130	490	2,410
	1986	1,410	7,440	7,850	470	2,190
	1983	1,280	5,500	4,960	440	2,220
SITE 3: City of Washburn, STH 13	1980	1,680	5,340	5,340	430	1,900
SITE 4: Mason, Lincoln Street	1977	960	7,310	6,310	530	1,810
	1974	800	4,350	4,700	N/A	1,730
SITE 5: City of Bayfield, STH 13	1971	840	3,500	3,740	590	1,700
	1968	1,370	3,420	3,640	385	1,110
	1967	1,370	3,770	4,020	385	1,230

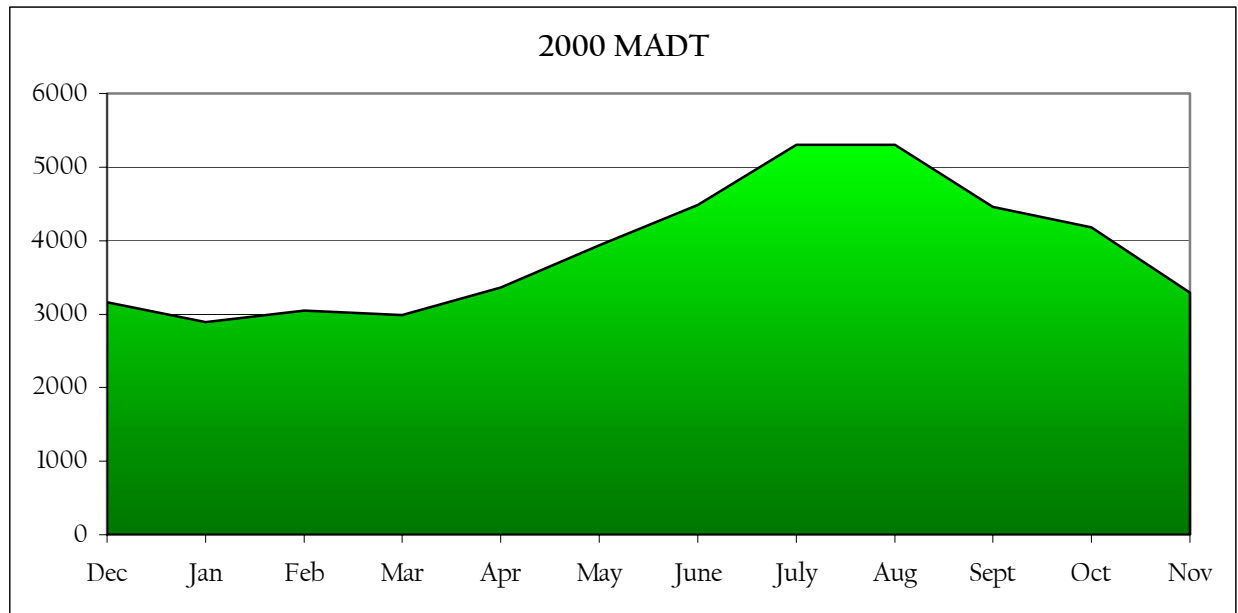
The Wisconsin Department of Transportation collects traffic count information for selected sites using an automatic data recorder permanently mounted in the pavement. In Bayfield County, a permanent recording station was installed in October 1968 on USH 2, approximately 1.5 miles west of CTH E in Ino (STATION 4-0002). This roadway is functionally classified as a Rural Principal Arterial and consists of two lanes. Traffic volume for site 4-0002 is depicted in Figure 6.1 and 6.2.

Figure 6.1: Annual Average Days of the Week Traffic Volume at Station 4-0002



¹ Pre-1967 traffic volume data for selected communities is unavailable.

Figure 6.2: Monthly Average Daily Traffic At Station 4-0002



As indicated in TABLE 6.3, traffic volumes in Bayfield County have increased steadily over the last 30 years. This increase can be attributed to several causes:

- Increase in development in Bayfield County. More homes = more people = additional traffic.
- Increase in non-local/tourist traffic. Bayfield County is a destination location for many non-resident vacationers. Many of these tourists drive from regional metropolitan areas for weekend/holiday trips.
- Increase in automobile dependence. Commuting has become a common choice for residents who wish to live in areas that are more rural and work in the cities and villages. According to 1990 Census figures, nearly 30 percent of Bayfield County workers had work related commutes of 30 minutes or longer.
- Increase in vehicle ownership. Vehicle ownership has transitioned from the single car family to many families having multiple vehicles.

6.4 CORRIDOR CONGESTION

The Wisconsin State Highway Plan 2020 identifies areas of potential congestion on statewide highway corridors if no capacity expansion projects were to take place in the coming 20 years. The report indicates that the majority of Bayfield County's corridors will remain uncongested for the next 20 years assuming no capacity expansion. Possible exceptions include USH 2 and STH 13 from USH2 northward to Washburn. These segments are expected to experience a moderate congestion level barring any capacity improvements. A small segment of USH2 / STH 13 is expected to experience extreme congestion in the absence of capacity improvements. Projected future corridor congestion is depicted in Map 6.3.

Map 6.3 – Corridor Congestion (2020)

6.5 HIGHWAY IMPROVEMENT PROJECTS

Table 6.9 indicates the location, type, and mileage of highway improvement projects extending to the year 2012. The Wisconsin Department of Transportation has identified the USH 2 corridor as a candidate for potential future improvement. USH 2 is identified as a corridor 2020 connector highway, part of a 2,100 mile system of two- and four-lane highways which connect key communities and key regional economic centers to the corridors 2020 backbone routes such as USH 53 (connects major population and economic centers). This potential project is contingent upon environmental analysis and legislative approval and will be re-evaluated in future WisDOT plans.

**TABLE 6.9: Future Highway Improvement Projects in Bayfield County
(Excluding Engineering)**

Year	Highway	Location	Miles	Sponsor
2002	Local Road	Iron River Bridge, Town of Tripp	.000	WisDOT
2002	USH 2	Village of Iron River	6.340	WisDOT
2002	USH 63	Drummond to Grandview	10.150	WisDOT
2003	STH 13	Port Wing	6.320	WisDOT
2003	STH 137	USH 2 – Sajdak Rd	2.980	WisDOT
2003	STH 27	Eau Claire River Bride – Town of Barnes	.000	WisDOT
2003	USH 63	Namekagon River Bridge – 2 mi N of south county line	.000	WisDOT
2002	CTH ‘D’	Pioneer Road-Diamond Lake Road	2.7	Bayfield County*
2002	CTH ‘N’	CTH ‘A’ – USH 63	7.9	Bayfield County*
2002	CTH ‘E’	Wicklund Rd – Hamann Drive	2.8	Bayfield County
2003 ¹	CTH ‘E’	Wicklund Rd – Hamann Drive	2.5	Bayfield County*
2003 ¹	CTH ‘A’	USH 2 – CTH ‘B’	3.8	Bayfield County
2003 ¹	CTH ‘FF’	WCL – CTH ‘B’	1.0	Bayfield County
2004 ¹	CTH ‘J’	Turner Road – STH 13	2.5	Bayfield County
2005 ¹	CTH ‘H’	Hilder Lake – Finger Lake Road	3.4	Bayfield County*
2005 ¹	CTH ‘J’	Turner Road –STH 13 (South)	6.0	Bayfield County*
2006 ²	CTH ‘H’	USH 2 – Eagle Lake Road	6.4	Bayfield County*
2007 ²	CTH ‘G’	Hillside Road – USH 2 (East)	3.1	Bayfield County
2008 ²	CTH ‘D’	CTH ‘M’ – Sugar Road	4.2	Bayfield County
2010 ²	CTH ‘A’	Ruth Lake Road – USH 2	4.3	Bayfield County*
2012 ²	CTH ‘A’	Erickson Road – STH 13	3.0	Bayfield County*

¹Denotes project tentatively approved by Bayfield County Highway Committee

²Denotes project is part of long-range plan, but may be revised or adjusted based on budget at scheduled time of project.

* Funded in part by the Federal Surface Transportation Program

6.6 BAYFIELD COUNTY COMMUTER PATTERNS

Over 40 percent of Bayfield County’s labor force was employed outside of the county. The City of Ashland, Ashland County is the primary destination for outbound commuters. For citizens living and working within Bayfield County, the Cities of Washburn (21% commuters) and Bayfield (13% commuters) are destinations for over one-third of all commuters. The balance of commuter travel in Bayfield County is spread among the smaller towns and villages of the county.

Table 6.10: Bayfield County Commuting Patterns

	Commute To County	Commute From County	Net Commute
Ashland County	1,739	191	-1,548
Douglas County	245	101	-144
Sawyer County	106	120	14
Minnesota	94	5	-89
Elsewhere	142	36	-106
Total	2,326	453	-1,873
Within County	3,343	N/A	N/A

Source: Wisconsin Department of Workforce Development, Wisconsin’s Commuting Patterns, 1994.

6.7 BAYFIELD COUNTY AIR SERVICE

Air travel is not a primary source of transportation in Bayfield County. The county has a limited number of small public airports, and only one airfield (Cable Union Airport) has an asphalt runway surface. While there are several small private airfields scattered throughout the county, these airfields primarily serve private interests (hospital, sea plane, private aircraft). The John F. Kennedy Memorial Airport, a publicly owned and operated facility in Ashland, accommodates regional charter flights and airfreight service. Bayfield County is equidistant from two regional airports, Gogebic Iron County Airport, near the City of Ironwood, Michigan, and the Duluth International Airport in Duluth, Minnesota. Bayfield County airports are listed in Table 6.11.

TABLE 6.II: Bayfield County Airports (Public and Private)

Associated City	Airport Name	Use Type
Cable	Cable Union Airport	Public
Drummond	Eau Claire Lakes Airport	Public
Cornucopia	Cornucopia Field	Private
Iron River	Bayfield County Airport	Public
Drummond	Batten Lake Owen Sea Plane Base	Private
Bayfield	Petit Cache Airport	Private
Washburn	Bayfield County Hospital Heliport	Private
Herbster	Vietmeier Airport	Private
Oulu	Oulu Airport	Private
Washburn	Four Mile Creek Airport	Private
Port Wing	Sischo's Airport	Private
Washburn	Old Dairy Airport	Private

6.8 BAYFIELD COUNTY RECREATIONAL TRAIL SYSTEM

Bayfield County has numerous recreational trail corridors that provide opportunities for hiking, snowmobiling, biking, and other outdoor activities. A more detailed list is provided in Chapter 4.

Bayfield County ATV Trails

Approximately 56 miles of ATV trails that extend from Port Wing to the Tri County Recreational Corridor and connecting with the Valhalla area trails.

Chequamegon National Forest ATV Trails

Valhalla Area Trails. Approximately 54 miles of trail connecting the Valhalla Winter Sports area with the Tri County Corridor and Bayfield County's Battle Axe Trail. All National Forest lands are open to ATV use unless gated or otherwise posted.

The North Country Trail

One of eight national scenic trails in the U.S., the North Country Trail provides opportunities for backcountry travel, hiking, skiing, snowshoeing, and other forms of non-motorized recreation.

Chequamegon Area Mountain Bike Association Trail Network

Extensive off-road bicycle trail network traversing nearly 300 miles of the Chequamegon National Forest, Sawyer County Forest, and Bayfield County Forest lands.

Cross-Country Ski Trails

Extensive cross-county ski trail network which includes: Telemark Ski Trails, American Birkiebiner Ski Trail, Namakagon Ski Trail, Drummond Ski Trail, North End Trails, and Mt. Valhalla Ski Trails.

Snowmobile Trails

There are approximately 550 miles of snowmobile trails within Bayfield County. The extensive trail network traverses the Chequamegon National Forest, Bayfield County Forest, and private lands. The snowmobile trail network in Bayfield County is interlocked with the trails systems of Douglas, Ashland, and Sawyer Counties. Snowmobile routes include portions of local roadway and forest roads.

Bicycle Trails

The Wisconsin Department of Transportation, in cooperation with the Bicycle Federation of Wisconsin (BFW) has identified bicycle routes based on traffic volumes and roadway characteristics. Bicycle routes are depicted in Map 6.4.

Lake Superior Water Trail

A canoe/kayak route through the Apostle Islands.

Map 6.4 – Bicycle Routes

6.9 PUBLIC TRANSPORTATION

The only major source of public transportation in Bayfield County is the Bay Area Rural Transit (BART) system. This system is one of only five operating rural bus transit systems in the State of Wisconsin. The BART system provides on demand commuter type transportation to rural residents and links the outlying communities with the larger populated areas. Funding for the rural transportation system is divided between federal assistance (50%) and local tax base or other unrestricted state and federal funds.

In addition to the BART system, a private taxi service (Bay Area Transport), based in Ashland, provides local and long-distance transit services on a fee basis.

Several public agencies within Bayfield County also provide transportation services to elderly and residents with disabilities for medical, social, employment, and shopping needs.

Local Public Transit

- Bay Area Rural Transit
- Madeline Island Ferry
- Wind sled to Madeline Island (Winter months)

Local Private Taxi/Bus Services

- Bay Area Transport
- Greyhound Bus Lines, Inc. (Service from Ashland)

Transportation Assistance for Individuals with Special Needs (Public & Private)

- Ambu-Vans
- Bay Area Home Health
- Bayfield County Department of Social Services
- Bayfield County Unit on Aging
- Bayfield County Veterans Service
- Community Support Services
- Court Manor Health and Rehabilitation
- Geri-Van
- Northern Lights Manor Nursing Home
- Red Cliff Elderly
- Retired and Senior Volunteer Program

6.10 GREAT LAKES

The Great Lakes and the St. Lawrence River are part of an extensive waterway network linking the Upper Midwest with ports and destinations throughout the world. Waterborne commerce on Lake Superior has had a significant role in economic development of the region. Traditionally, agricultural products, forest resources, and mining products have comprised the bulk of cargos being exported from the Lake Superior basin. Shipping in the basin was facilitated by the construction of large harbors and marinas design to accommodate the large vessels required for this type of activity. The Duluth/Superior Harbor is the closest example of a large-scale harbor

project on the south shore of Lake Superior. Commercial fishing on Lake Superior also created a need for harbor development; consequently, several small to mid-size facilities are found in several coastal communities.

Harbor facilities within Bayfield County are designed primarily to accommodate vessels used for fishing and recreational watercraft. These types of facilities are found in the communities of Bayfield, Washburn, Cornucopia, Port Wing, and Red Cliff, and in the Towns of Washburn and Russell. The City of Washburn still maintains and operates a commercial bulk cargo dock capable of landing cargoes from great lakes freighters.

6.11 RAIL TRANSIT

The railroad industry played a significant role in the history and economic development of Bayfield County. Early logging operations in the county relied upon the railroad to deliver products to processing mills located across the upper Midwest. As logging operations ceased and demand for rail transportation declined, many rail operations were abandoned and/or dismantled. Since that time, demand for rail services has been limited; consequently, today there is no operating railroad in Bayfield County.

6.12 SUMMARY

Bayfield County has an extensive and diverse transportation network consisting of roads, airports, seaports, and trails. The dominant form of transit in the county is the automobile. Air travel is primarily confined to small “recreational” type aircraft, as facilities designed to accommodate commercial aircraft do not exist in the county. Commercial and international air service can be accessed in nearby Duluth, Minnesota. Marine transit is accommodated through several small coastal harbors and marinas. Great lakes travel to and from Bayfield County is primarily limited to recreational watercraft, fishing boats, and small commercial vessels. The Duluth/Superior Harbor provides international and commercial access to great lakes shipping. Rail service, which has been historically significant to the growth and development of Bayfield County, no longer exists within the county.

While use of Bayfield County’s roadway system has increased significantly over the past 30 years, congestion problems have been relatively minor. Based on current and predicted traffic volumes, USH 2 and STH 13 may experience moderate to heavy levels of congestion by the year 2020 if the capacity of these roadways is not expanded.