Chapter Five: Draft.1

Transportation

Background

Oneida County's transportation system includes roads, airports, lakes and rivers, various types of trails, as well as utility corridors. The transportation system supports the movement of people and products within a community and connects to areas beyond. Transportation plays a major role in the efficiency, safety, and overall desirability of the community as a place to live and work.

Issues

Part of the planning process is the identification of issues, which include the following:

Roadway Use Conflicts / Capacity

Recreational vehicles and vehicles pulling various trailers (campers, boats, ATV carriers, etc.) often compete with other traffic on highways in the County. Recreational trail crossings are also a safety concern (ATVs, snowmobiles, etc.).

Impact of Development on Roads

Development occurring on private roads often leads to access concerns, particularly for emergency vehicles. This is partially addressed by some municipalities having driveway ordinances. There can also pressure to build more roads or convert private roads to public roads when development occurs, while local transportation funding is limited.

Transportation Costs

Transportation costs are taking a larger share of household income as energy and car prices fluctuate. Public transit options and other alternative means of travel can address this, especially for the disabled, seniors, youth, or low-income individuals.

Improvement of Road System

There is a need to upgrade or improve the current road system. The primary commuter routes into developed areas of the County, such as Rhinelander or Minocqua, can get congested and passing is not possible. Widening and/or adding lanes or passing lanes to relieve these bottlenecks may need to be studied.

Road Maintenance, Brushing, and Plowing

Regular road maintenance, including roadside brushing and mowing, and winter road maintenance is a common issue due to funding. Some local units perform their own maintenance while others contract for services.

Weight Restrictions

Several years ago, state law changed to allow an extra axle and increase the allowable weight to 98,000 lbs. While stricter regulations decrease economic opportunity, higher weight limits can damage roads.

Parking Needs

As growth in population, commerce and tourism continue to grow, parking needs in the developed areas of the County need to be addressed.

Other Issues

Other topics identified in previous comprehensive plans include:

- Transit needs extend beyond the elderly and disabled to the general public, particularly for employment.
- Bike route and trail development supports transportation, recreation, and tourism.
- Air and rail service for businesses and economic development.
- There was a loss of rail service east of Rhinelander.
- Continued cooperation among many various entities is needed for effective transportation.
- There is a need to plan for emerging vehicle technologies such as electric vehicles.
- Financing transportation is a concern.

Previous Plans and Studies

Federal Transportation Plans

The Infrastructure Investment and Jobs Act (IJA), most known as the Bipartisan Infrastructure Law (BIL) is the current federal level transportation policy and spending program for fiscal years 2022-2026. Other federal legislation that frames transportation planning includes the National Environmental Protection Act (NEPA); the Americans with Disabilities Act (ADA); and the Clean Air Act.

State Transportation Plans

Connect 2050. Connect 2050 is the Wisconsin Department of Transportation's (WisDOT) long-range transportation plan for the state. Adopted in 2022, the plan addresses all forms of transportation over a 20-year planning horizon: highways, local roads, air, water, rail, bicycle, pedestrian, and transit. It replaces Connections 2030.

State Trails Network Plan, 2003

This 2001 document (revised in 2003) clarifies the Wisconsin Department of Natural Resources' (WDNR) role and strategy in the provision of all types of trails. The plan identifies a series of potential trail corridors that would link existing trails, public lands, natural features, and communities.

Regional Comprehensive Plan

Regional Livability Plan (2015). Transportation is one of four elements included in the Regional Livability Plan (RLP), adopted by the North Central Wisconsin Regional Planning Commission in 2015. The Transportation Assessment Report identifies trends and issues facing transportation. Three issues were identified: the modes of transportation to work, the age of drivers in the region, and high transportation maintenance costs. The RLP's transportation goals are:

- Provide and improve transportation access to people of all ages and abilities to ensure lifelong mobility and accessibility.
- Fund the maintenance and expansion of the transportation system.
- Enhance the regional economy by supporting airports and freight rail.

Regional Bicycle and Pedestrian Plan, 2018

The plan assesses existing conditions related to bicycling and walking, identifies other potential trail and route user groups, identifies routes, and describes policies and programs to assist local governments in improving bicycling and walking in North Central Wisconsin. The plan contains the following four region-wide goals: mobility, functionality, safety, and connectivity. This means that destinations should be connected to each other with trails that are safe and easy to use.

County Transportation Plans

Oneida - Vilas County Locally Developed, Coordinated Public Transit - Human Services Transportation Plan 2019-2023 Oneida County developed this five-year plan, which analyzes service gaps and needs in public transit and human services transportation and proposes strategies and funding sources to address the gaps and needs.

Local Transportation Plans

City of Rhinelander Bicycle and Pedestrian Plan 2019 The focus of this plan is to improve bicycling and walking throughout the City of Rhinelander. This plan focuses on guidelines for planning bicycle and pedestrian facilities, with general design and funding information included. This plan also examines existing conditions for biking and walking and suggests routes and improvements.

Inventory and Trends

Oneida County has a road network, rail lines and yards, a public airport, and private landing strips. This section describes the road network, traffic volumes, commuting patterns, network users, and other modes of transportation. See Map 5-1: Transportation.

Road Network

The County's Highway Department is responsible for the network of County Highways throughout the county. The county also has a joint Oneida and Vilas County Transit Committee and a Traffic Safety Committee. Analysis of the road system's traffic patterns, review of traffic counts, study of accident reports, discussion with individuals at the local, county, and state levels, and finally, a field survey of the roads can assist in providing possible recommendations relevant to the system.

Roadway Classifications

Oneida County's roadway network has about 1,685.7 miles of public highways and streets. Roads are classified in two ways: 1) by jurisdiction and 2) by function. The jurisdictional classification indicates who owns or is responsible for the roadway. The functional classification identifies the role or function the roadway plays in moving traffic.

Jurisdictional Classification

Within a jurisdictional framework, the County's roads fall into three major classifications: federal (USH) and state (STH) highways, county highways (CTH) and City, Village, or Town streets and roads, which are called local roads. There are no interstate highways (ISH) in Oneida County.

Cities, Towns, and Villages maintain jurisdiction over the greatest mileage of the County's road system (1,351.4 miles) with about 80% of the total mileage. County trunk highways make up the next largest category with 171.2 miles, or just over 10% of the system, followed by federal highways (94 miles, or 5.6% of the system). Finally, State Highways comprise 69.3 miles, or 4.1% of the system. Table 5-1 lists the mileage breakdown for the County's road network by jurisdictional classification. There are additional non-public roads in the County not listed here.

Table 5-1: Road Milage by Jurisdictional and Functional Class				
	Arterial	Collector	Local	Total
Federal	94.0	0.0	0.0	94.0
State	59.9	9.3	0.0	69.3
County	5.9	163.8	1.4	171.2
Local	13.6	250.6	1,087.2	1,351.4
Total	173.4	423.8	1,088.6	1,685.7
Source: WisDOT				

Functional Classification

A functional classification system groups streets and highways into classes according to the character of service they provide. The current functional classification system used in Wisconsin consists of five classifications that are divided into urban and rural categories. Functional classifications are used to determine eligibility for federal aid. For purposes of functional classification, federal regulations define urban as places of 5,000 or more population, so the rural classifications apply in municipalities with populations below this threshold. Descriptions of each functional class are as follows:

- Principal Arterials serve corridor movements having trip length and travel density characteristics of an interstate of interregional nature. These routes generally serve all urban areas greater than 5,000 population or connect major centers of activity and the highest traffic volumes and the longest trip desires.
- Minor Arterials, in conjunction with principal arterials, serve cities, large communities, and other major traffic generators, providing intracommunity continuity and service to trips of moderate length, with more emphasis on land access than principal arterials.
- Major Collectors provide service to moderate-sized communities and other inter-area traffic generators and link those generators to nearby larger population centers or higher function routes.
- Minor Collectors collect traffic from local roads and provide links to all remaining smaller communities, local important traffic generators, and higher function roads. All developed areas should be within a reasonable distance of a collector road.
- Local Roads comprise all facilities not on one of the higher systems. They serve primarily to provide direct access to abutting land and access to the higher order of systems. Local streets offer the highest level of access, but the lowest level of mobility for automobiles.

Oneida County's principal arterials include USH-8, USH-45, USH-51, most of STH-32, and STH-70, with most of STH-47 acting as a minor arterial. Major collectors include STH-47 northwest of Woodruff and STH-32 east of Three Lakes, and all remaining CTHs, and over 250 miles of local roads are either major or minor collectors. Almost all local roads are owned by local units of government. See Map 5-1: Transportation and Table 5-1 for details.

The distribution of roads within the functional categories falls within current state guidelines. The guidelines suggest that principal and minor arterials combined should be between 6 and 12%, collectors between 10 to 28%, and local roads between 65 to 75% of the total system. The functional classifications in Table 5-1 fit within these guidelines, except local roads, which are only slightly under (64.6%).

Surface Conditions

To assess the condition of the county's roadways, the Oneida County Highway Department uses the WISLR (Wisconsin Information System for Local Roads) system developed by the University of Wisconsin Transportation Information Center for measuring the condition of their roadways. The rating system is called PASER, which stands for Pavement Surface Evaluation and Rating. Although there are different scales for concrete, asphalt, sealcoat, gravel, and unimproved roads, they are generally based on a scale ranging between "1" (very poor condition) to "10" (excellent condition). Every other year the road network is rated, and that rating is used for the determination of improvements. See Table 5-2.

Table 5-2: Pavement Surface Rating		
Rating	Miles	Percent of Total
Very Poor	0.0	0.0%
Poor	17.0	10.0%
Fair	48.8	28.6%
Good	32.9	19.3%
Very Good	52.8	31.0%
Excellent	19.0	11.1%
Total	170.5	100.0%
Source: WisDOT; NCWRPC		

The riding surface of the County Highway system is currently in good condition with the majority (61.4%) being rated as having good, very good, or excellent surface condition. About 28.6% of roads are in fair condition, and 10% are either not rated or in poor or very poor condition. Note

that this is only referring to surface conditions, and not the road base, which can be affected by wetness, frost action, and expansive or weak soils that affect a road's lifespan.

Proposed Highway Improvements

WisDOT's current State Transportation Improvement Program (STIP) identifies improvements to state and federal highways between 2023 and 2028. The County Highway Department prepares its own roadway management plan identifying needed improvements on County highways. These improvements are subject to change based funding and needs. Proposed improvements to the County's highway system are shown in Table 5-3.

Table 5-3: Oneida County Highway Improvement Program					
Year	Highway	From	To	Milage	Type of Improvement
2023	STH-17	USH-8	Stevens St	3.19	Pavement Replacement
2023	USH-8	Tracy Rd	N McCord Rd	2.93	Resurface
2023	USH-8	USH 8 and 45 Intersection		0.40	Pavement Replacement
2023	USH-8	N Rifle Rd	STH 47	3.20	Pavement Replacement
2023	USH-51	Lake Katherine Bridge		0.05	Bridge Maintenance
2024	STH-17	Stevens St	Pollyanna Rd	1.07	Pavement Replacement
2024	USH-8	CTH-G	CTH-P	4.46	Pavement Replacement
2024	USH-51	Manitou Park	Minocqua Lake Bridge	0.43	Pavement Replacement
2025	USH-51	USH-8	Bearskin Bridge	7.15	Resurface
2025	USH-51	Front St	3rd Ave	1.74	Resurface
2026	USH-8	STH-47	CTH-G	1.44	Pavement Replacement
2026	USH-51	Minocqua Bridge	Front St	0.39	Resurface
2027-2028	STH-32	Whitefish Lake Inlet		0.01	Culvert Replacement
2027-2028	USH-8	Gatewood Heights Rd	N Rifle Rd	10.81	Resurface
2027-2028	USH-45	USH-8	STH-32	16.45	Resurface
2027-2028	STH-32	Old 32 Rd	Oneida Co. Line	3.57	Resurface
Source: WisDOT					

Trucking

There are two types of WisDOT designated truck routes within Oneida County: Designated Long Truck Routes and 65-foot Restricted Truck Routes. The Designated Long Truck Routes are USHs 8, 45 and 51 and STHs 17, 47, and 70. STH 32 east of US 45 and STH 47 west of USH 51 are 65-foot Restricted Truck Routes. Local issues such as safety, weight restriction, and noise impacts play significant roles in the designation of local truck routes.

County highways connect the County's rural areas with the designated state truck routes and serve an important role in linking the County's agricultural and forestry resources to the Region's major highways and economic centers. All county highways are generally open to truck traffic. The County uses seasonal weight limits to minimize damage.

Traffic

Annual Average Daily Traffic (AADT) counts for selected locations in Oneida County are shown on the Transportation Map. The counts come from WisDOT's regular traffic counting program selected to give a general feeling for the traffic levels throughout the County. The selected counts do not necessarily reflect the peak traffic location of a given road. Average Annual Daily Traffic counts are calculated 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. Traffic in Oneida County ranges from a few cars a day on remote town roads to more than 20,000 on USH 51 in Minocqua during the tourist season.

Traffic Counts

Traffic volume is an indicator of roadway use and WisDOT maintains a traffic count program. There are several sites where counts are conducted in the county. Table 5-4 below displays the annual average daily traffic counts (AADTs) for 2012 and 2022 for 18 selected locations in Oneida County. Note that the most recent traffic counts for these locations are mapped out on the Transportation Map in addition to many other traffic count locations.

Between 2012 and 2022, daily traffic levels increased throughout Oneida County, with only 4 of the 18 traffic count locations listed in Table 5-4 experiencing a decrease in traffic volume. According to the County's previous Comprehensive Plan, traffic levels have been increasing since 2010. The largest percentage increase in traffic volumes between 2012 and 2022 occurred at the USH 45 between Javen Rd and STH 32 East location, where daily traffic volume increased by over 69 percent. However, this location's 2012 count was abnormally low compared to other

years of traffic counts in the same location. It is worth noting that three of four decreases in traffic counts in Table 5-4 occurred in the City of Rhinelander.

| Table 5-4: Traffic Counts				
Traffic Count Location	**Community**	**2012**	**2022**	**% Change**
STH 17 North of Lincoln Co. Line	Crescent	2,000	2,300	15%
USH 51 South of CTH Y	Hazelhurst	6,100	7,100	16%
STH 47 North of CTH D East	Lake Tomahawk	4,500	5,400	20%
USH 51 South of STH 70	Minocqua	18,800	21,000	12%
USH 8/USH 45 Btwn USH 45 N & S	Monico	4,700	4,000	-15%
USH 45 North of CTH C West	Piehl	1,500	2,000	33%
STH 17 NE of CTH W	Pine Lake	6,600	8,800	33%
STH 47 Btwn CTH K & Meadow Dr Rhinelander	Rhinelander	6,900	6,800	-1%
USH 8 Btwn STH 47 & S River Rd	Rhinelander	10,900	9,500	-13%
STH 17 Btwn Stevens St & Shepard Lake Rd	Rhinelander	8,800	11,900	35%
Stevens St Btwn Phillip St & Timber Dr	Rhinelander	10,000	5,800	-42%
USH 45 Btwn CTH B East & CTH B West	Schoepke	3,200	3,300	3%
STH 17 South of CTH D West	Sugar Camp	5,000	6,800	36%
USH 45 Btwn Javen Rd & STH 32 East	Three Lakes	1,300	2,200	69%
USH 51 South of CTH N	Woodboro	4,900	7,100	45%
USH 8 NE of CTH N & E Of Shady Rest Rd	Woodboro	5,800	6,100	5%
STH 70 Btwn Mercer Lake Rd & Duvall Ct	Woodruff	4,600	6,000	30%
USH 51 Btwn Lemma Creek Rd & STH 47	Woodruff	14,300	15,800	10%
Source: WisDOT				

Commuting Patterns

County-to-county worker flow data compiled by the U.S. Census is a convenient way to analyze commuting patterns, see Table 5-5 and Figure 5-1. Oneida County is a net exporter of workers. An estimated 9,367 workers leave the County for work on a regular basis, while 6,400 enter the County for work. This creates a net loss of about 2,967 workers. An estimated 8,063 workers live and work in Oneida County. Counties that attract the most Oneida County workers are Vilas (1,550), Marathon (997), and Lincoln (761), and they are coincidentally the same top three Counties whose residents commute to work in Oneida County with 1,487, 447, and 839 workers, respectively.

Table 5-5: Oneida County Commuting Patterns, 2021			
County	Working in Oneida County, Living in Listed County	Living in Oneida County, Working in Listed County	Net Gain/Loss of Workers
Oneida County	8,063		N/A
Vilas County	1,487	1,550	-63
Lincoln County	839	761	78
Marathon County	447	997	-550
Langlade County	247	170	77
Forest County	243	197	46
Portage County	221	331	-110
Wood County	205	429	-224
All Other Counties	2,711	5,112	-2,401
Source: U.S. Census-on-the-Map			

Figure 5-1: Commuter Inflow and Outflow, 2021
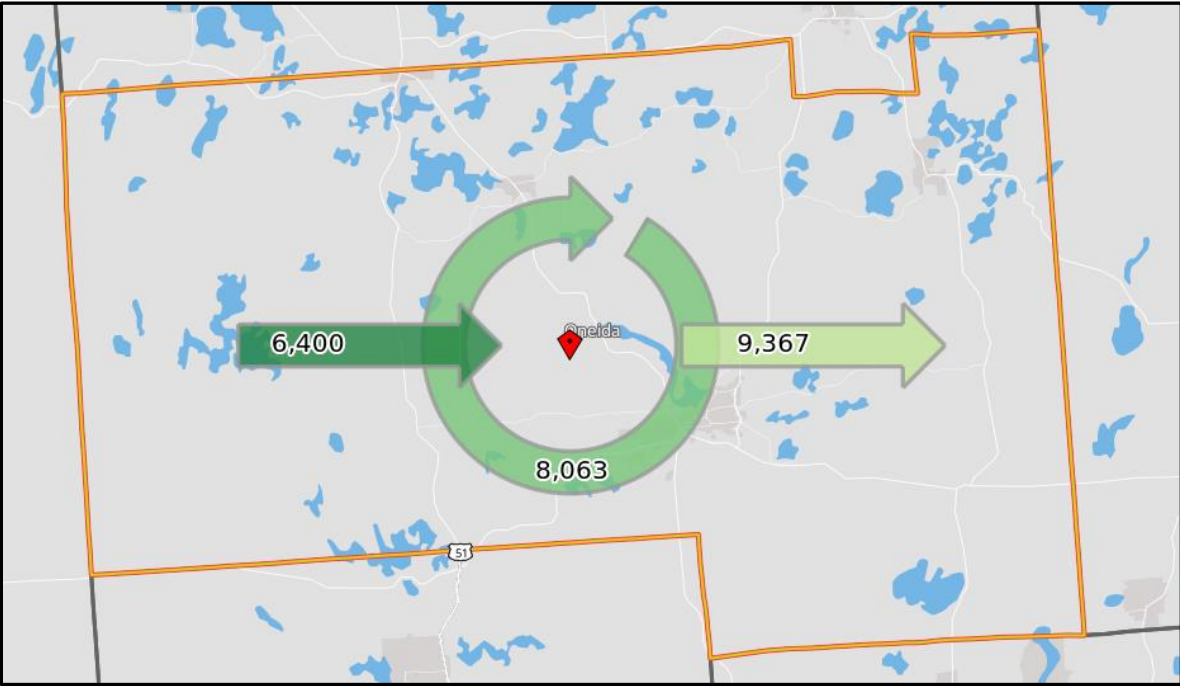
Source: U.S. Census-on-the-Map, 2021

Scenic Byways

In 2017, WisDOT designated the Nicolet-Wolf River Scenic Byway as the state's fifth scenic byway, which consists of a 145-mile route that utilizes state highways 32, 52, 55, and 70 across Forest, Langlade, Oneida, and Vilas Counties. Scenic byways are tourism-oriented, rather than commuter- or trucker-oriented, but they contribute to the local economy by promoting tourism and are important to consider when evaluating transportation facilities.

Rustic Roads

The Rustic Road program is a state program administered by WisDOT. Roads accepted into the program remain under local jurisdiction. To qualify, roadways must have outstanding natural features such as rugged terrain, native vegetation, and wildlife or other cultural or historic qualities that set the road apart. Oneida County has two rustic roads:

- Route 58: 9.6 miles of Blue Lake Road and Mercer Lake Road between STH-70 and USH-51.
- Route 59: 4.5 miles of Sutton and Camp Pinemere Roads between Blue Lake Road and STH-70.

Rustic Road designation allows local governments to maintain the road in a rustic state if safety and drivability are maintained. Rustic Roads may be narrower or have more vegetation in the right-of-way than other roads. Maintenance is at local discretion with no oversight from the state. There are no direct financial incentives or penalties from the state in this program, however, WisDOT provides and maintains the Rustic Road signs.

Park and Ride

Park and Ride locations allow commuters to carpool and save on transportation costs. While there are no official locations in Oneida County, the nearest designated park and ride facility is located at USH 51 and CTH S south of Tomahawk in Lincoln County.

Alternative Forms of Transportation

Transit & Transportation Systems for Persons with Disabilities

The Oneida County Department on Aging in Rhinelander provides information on volunteer transportation services for those that are elderly and for those with disabilities. According to their website, the addition of more transportation services is being investigated. Rides are provided for shopping, medical appointments, or to other locations as needed. Existing options are listed below:

- Northwoods Transit Connections provides public transportation countywide.
- Rapid Cab provides taxi service in Rhinelander.
- Various hospitals and employers provide transportation by request.
- School buses transport students (note there are no intercity bus routes that serve Oneida County).

Bicycle and Pedestrian Facilities

The Oneida County Biking and Walking Trails Council, Inc. (OCBWTC) is a private non-profit organization that plans and develops trails, bike lanes, and sidewalks. Their website has an up-to-date map of the County's trails. Map 4-3 of this Plan also depicts the County's trail system. Trails are planned in a way where Rhinelander acts as a hub with trails and routes reaching out like spokes to other destinations such as Minocqua, Woodruff, Three Lakes, the Bearskin Trail, and others, extending beyond the County's borders.

Oneida County and its local units have slowly expanded designated bike routes on highways and offroad trails over time. Sidewalks exist in Rhinelander and other town centers such as Minocqua-Woodruff and Three Lakes, which can also benefit those using scooters and wheelchairs. Basic types of pedestrian and bicycle facilities include shared roadways, improved shoulders, bike lanes, and off-road shared use paths. WisDOT design manuals should be consulted for appropriate specifics.

Rail

Watco Holdings, Inc. operates the Fox Valley & Lake Superior Rail System (FOXY) on tracks running east to west through the southern and middle portion of the County. Recently, the track between Rhinelander and Crandon to the east was taken out of service, but Watco is retaining it for possible future use. Freight can be loaded or unloaded at the rail yard in downtown Rhinelander, and service is also provided to industrial sites west of the City. There is no passenger rail service available in Oneida County.

Airports

The Rhinelander-Oneida County Airport (RHI) is the only commercial airport in Oneida County, and it is also categorized as a non-hub primary commercial service airport. It offers daily scheduled flights to the Minneapolis-St. Paul International Airport (MSP) using Delta Connection, which is operated by Skywest Airlines. There is also the Lakeland Airport/Noble F. Lee Memorial Field, which is cooperatively owned and operated by the Towns of Woodruff and Minocqua in Oneida County along with the Towns of Arbor Vitae and Lac du Flambeau in Vilas County. The

facility is located within the Town of Arbor Vitae in Vilas County. Finally, there is The Three Lakes Municipal Airport, which has a lighted grass runway but is closed in the winter. This facility is classified as a basic utility airport for smaller aircraft. There are also several private landing strips and heliports located throughout the County.

Water Transportation

There are no harbors or ports within Oneida County, so there is no significant water transport of passengers or freight. Today, tubing, boating, and sailing are popular forms of recreational transportation in and around Oneida County. Chapter 2 has a detailed breakdown of surface water bodies in the County that may be used for recreation.

Other Modes of Travel

There is significant use of a variety of miscellaneous other vehicles within Oneida County including snowmobiles, all-terrain vehicles (ATVs), horses, cross-country skis, and others. However, these forms of travel are usually not recognized as modes of transportation, but rather as forms of recreation. As such, these alternative forms of travel will not be addressed extensively in this chapter. However, it is important to be aware of interactions between recreational forms of travel and more traditional transportation systems. For example, snowmobiles have an extensive network of their own trail routes that often parallel or cross public highways. They may also utilize right-of-way from other modes of transportation or utility corridors for routes.

Goals, Objectives, & Policies

Goal 1: To provide an integrated, efficient, and economical transportation system that affords mobility, convenience, and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens, while maintaining the rural character of the County. Investigate implementation of policies which can help enhance, encourage, and maintain the viability of the airport for passenger, freight, and private use.

Objectives:

- Maintain the efficiency, safety, and functionality of the County's existing transportation system, which links the urban center with outlying towns, adjacent communities and the region.
- Encourage a balanced transportation network that provides a choice in the type of mode (i.e., car, bus, bike, walking, etc.) easy transfer between modes and transportation opportunities for those without use of an automobile.
- Achieve close coordination between development of transportation facilities and land use planning, land development and rural character preservation.
- Preserve the scenic value along select roadways to enhance and protect the County's rural character.
- Minimize the negative impacts of proposed transportation facility expansions.

Policies:

- Work with the Department of Transportation (WisDOT), the North Central Wisconsin Regional Planning Commission (NCWRCP) or private Engineering Firms to ensure that the County's transportation system is coordinated with surrounding regional systems and that the County's interests are well served when major transportation facilities or programs are proposed.
- Work with WisDOT on corridor preservation for all federal and state highways.
- Plan for extension of County highways and other major arterials as necessary to complete connections, provide for appropriate routes for trucks and emergency vehicles and serve planned development areas.
- Preserve scenic views by limiting off-premise advertising along selected highways.
- Consider future road locations, extensions, or connections when reviewing development plans and proposals.

- Work with local governmental units to plan for a network of interconnected roads in planned development areas to control highway access, preserve rural character, and improve access to these areas.
- Space roadway access according to minimum standards to increase safety and preserve capacity.
- Consider upgrading where land uses generate heavy traffic on roads that have not been constructed or upgraded for such use, including seasonal uses.
- Because commercial and residential development increases traffic on roads, the county should consider assisting towns with implementing road impact fees for new development projects that place a burden on or require upgrading of town roads.
- Work with towns to update and implement Town Roadway Management Plans to provide for the appropriate maintenance of town roads.
- Encourage traditional neighborhood designs (TND) to support a range of transportation choices.
- Support coordination and consolidation of specialized transit by a variety of agencies that serve the County's elderly and handicapped residents.
- Support the development of a tri-county transit system with Forest and Vilas counties.
- Support implementation of a County park-and-ride plan and establishment of park-and-ride lots.
- Continue support of the Rhinelander / Oneida County Airport.
- Support the Oneida County Biking and Walking Trails Council bike route and trail plan and subsequent updates.
- Support expanded bike accommodations on County Highways with resurfacing/reconstruction projects and additional off-road bike trails.
- Continue to encourage Canadian National (CN) Railroad to maintain quality rail service to Oneida County and the City of Rhinelander.