

RECOMMENDATIONS

INTRODUCTION

Much of the analysis in this report was intended to measure the validity of previously made recommendations. Two largely hypothetical land use scenarios, previously discussed, and the existing plans or current trend were measured against the adopted goals, objectives, and policies to provide a clear differentiation in each scenario's effect on urban development and associated costs.

The reestablishment of the long range transportation model for the Oshkosh area was used to measure a number of previously proposed projects, as well as to measure the existing and future adequacy of the entire highway system. The following is a compilation of recommendations including land use, highway projects, transit system and other modal recommendations, as well as recommendations for additional study.

LAND USE

Land use recommendations include the implementation of adopted land use policies, as published in *Long-Range Transportation/Land Use Plan for the Fox Cities, Oshkosh and Fond du Lac Urban Areas: Goals, Objectives and Policies*, (adopted January, 1995), *Long-Range Transportation/Land use Plan for the Fox Cities, Oshkosh and Fond du Lac Urban Areas: Addendum*, (adopted February, 1996), and the *Long Range Transportation/Land Use Plan for the Oshkosh Urbanized Area (October, 2005)*. The recommendation for the Current Plans Scenario allowed for analysis to occur in a realistic and fairly quantitative arena in conjunction with the sewer service area planning process. A major vehicle for the implementation of the adopted policies rests in the sewer service area planning and amendment process.

TRANSPORTATION

The overall goal of the transportation program is to achieve a safe, efficient, accessible, and environmentally sound transportation system that provides mobility for all segments of the population and supports the economy of the region. As stated in *Corridors 2020*, WisDOT's State Highway Plan, "the development of an improved, efficient highway network can enhance the economic vitality of our state in the 21st century by creating an attractive environment in which business, industry, agriculture and tourism can grow." The recommendations of this plan are intended to meet these goals through the fulfillment of the underlying structure of goals, objectives and policies, while meeting the needs of the Oshkosh area as projected under the recommended land use scenario.

The following recommendations stem both from this long range planning effort and the recommendations of other efforts as confirmed in this process. The City of Oshkosh comprehensive plan recommendations are included as confirmed or altered through the analysis in this document. WisDOT's six year program, and WisDOT's longer range planning program are addressed or noted in this plan. Recommendations for transportation modes other than automobile are also made, generally in terms of implementation of the adopted policies.

Highway Projects. . Exhibit 71 is a listing of recommendations that originated from the 1979 Oshkosh highway network plan, the Oshkosh TIPs, WisDOT six year programs and longer range planning process, the 2005 Comprehensive Plan for the City of Oshkosh, project amendments to those plans and this update.

The projects are categorized as expansion (E) or preservation (P) projects and (B) if the facility is on a bike route. While all of the projects are capacity expansion projects, in analyzing them as expansion versus preservation projects as part of this evaluation, a distinction is drawn between new street expansions or significant modifications to existing roadways and minor modifications (including parking removal) to achieve increased capacity. The latter instance would be considered preservation even though the project may involve total reconstruction of the pavement.

The highway project recommendations included in the listing are also shown on a map of the area, [Exhibit 72](#), following the listing. The number at the beginning of each listing corresponds to the numbers noted on Exhibit 71.

EXHIBIT 71

STREET AND HIGHWAY RECOMMENDATIONS

- 1)** (E) Network Facility: **USH 41** Facility Segment: STH 26 to MPAB.
Jurisdiction: WisDOT.
Implementation Date: Short 0- 15 years.
Proposed Project: Reconstruct to 6 lanes from STH 26 to the Metropolitan Planning Area Boundary.
Cost: \$200,000,000
- 2)** (E)(B) Network Facility: **USH 45** Facility Segment: Waukau Ave to Ripple Ave.
Jurisdiction: Winnebago County
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Reconstruct USH 45 as 4 lanes from Waukau Avenue to Ripple Avenue.
Cost: \$1,752,000
- 3)** (E)(B) Network Facility: **USH 45** Facility Segment: Jackson St to Algoma Blvd.
Jurisdiction: Winnebago County
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Relocation of USH 45 south of the UW-Oshkosh campus.
Cost: \$8,350,000
- 4)** (E) Network Facility: **USH 45/CTH T INTERCHANGE** Facility Segment: CTH T to Ryf Rd .
Jurisdiction: Winnebago County
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Construction of an interchange at the intersection of USH 45 and CTH T.
Cost: \$4,593,000

- 5) (E) Network Facility: **STH 21** Facility Segment: USH 41 to Oshkosh Ave.
Jurisdiction: WisDOT.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Reconstruct
Cost: \$776,000
- 6) (E) Network Facility: **STH 44** Facility Segment: Wisconsin Street Lift Bridge.
Jurisdiction: WisDOT.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Reconstruct as 4 lanes with accommodations for bicycles and pedestrians.
Cost: \$19,138,000
- 7) (E) Network Facility: **STH 44** Facility Segment: Wisconsin Street to Fox River Bridge.
Jurisdiction: WisDOT.
Implementation Date: : Short Range 0 – 15 years.
Proposed Project: Reconstruct
Cost: \$2,675,000
- 8) (E) Network Facility: **STH 76** Facility Segment: USH 41 to STH 15
Jurisdiction: WisDOT.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct STH 76 as 4 lanes from USH 41 to STH 15.
Cost: \$2,186,000
- 9) (E) Network Facility: **STH 21 FREEWAY CONVERSION** Facility Segment: USH 41 to West External
Jurisdiction: WisDOT.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Freeway conversion of STH 21 from USH 41 to West External which includes a free flow interchange with USH 41, frontage roads north and south of STH 21 over USH 41, and an interchange at STH 21 and Oakwood Road.
Cost: \$18,450,000
- 10) (E)(B) Network Facility: **CTH A** Facility Segment: CTH Y to MPAB.
Jurisdiction: Winnebago County
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Further study of a 4-lane facility from CTH Y to the Metropolitan Planning Area Boundary (Oshkosh to Neenah).
Cost: \$3,250,000
- 11) (E) Network Facility: **CTH GG** Facility Segment: CTH A to STH 76.
Jurisdiction: Winnebago County
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct to 4 lanes.
Cost: \$12,480,000

- 12)** (E)(B) Network Facility: **CTH I** Facility Segment: Ripple Ave. to Fisk Ave.
Jurisdiction: City of Oshkosh, Winnebago County.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct to 4 lanes.
Cost: \$975,000
- 13)** (E)(B) Network Facility: **CTH Y** Facility Segment: STH 76 to CTH A.
Jurisdiction: Winnebago County
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct to 4 lanes.
Cost: \$2,825,000
- 14)** (E) Network Facility: **BOWEN STREET** Facility Segment: Ceape Avenue to Sterling Avenue. Jurisdiction: City of Oshkosh.
Implementation Date: Short Range 0 -15 years.
Proposed Project: Reconstruct facility within existing right-of-way to 48 feet with 4 lanes.
Cost: \$1,750,000
- 15)** (E)(B) Network Facility: **FERNAU AVENUE** Facility Segment: STH 76 to Vinland St.
Jurisdiction: City of Oshkosh, Town of Oshkosh.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct new facility on new right-of-way.
Cost: \$4,750,000
- 16)** (P)(B) Network Facility: **FISK AVENUE** Facility Segment: USH 41 to CTH I.
Jurisdiction: Winnebago County, City of Oshkosh.
Implementation Date: Short Range 0 -15 years.
Proposed Project: Study for access control and capacity needs.
Cost: \$2,350,000
- 17)** (E) Network Facility: **IRVING AVENUE** Facility Segment: Wisconsin Street to Hazel St. Jurisdiction: City of Oshkosh.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct to 4 lanes.
Cost: \$1,850,000
- 18)** (P) Network Facility: **MAIN STREET** Facility Segment: New York Avenue to Murdock Avenue Jurisdiction: City of Oshkosh.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Further study of a 4 lane facility
Cost: \$650,000

- 19)** (P) Network Facility: **NEW YORK AVENUE** Facility Segment: High Avenue to Hazel Street.
Jurisdiction: City of Oshkosh.
Implementation Date: Short Range 0 -15 years.
Proposed Project: Reconstruct
Cost: \$800,000
- 20)** (E)(B) Network Facility: **OAKWOOD ROAD** Facility Segment: CTH E to STH 21.
Jurisdiction: City of Oshkosh, Town of Algoma.
Implementation Date: Short Range 0 -15 years.
Proposed Project: Construct to 4 lanes
Cost: \$1,403,000
- 21)** (E) Network Facility: **OHIO STREET** Facility Segment: Witzel Avenue to South Park Avenue.
Jurisdiction: City of Oshkosh.
Implementation Date: Short Range 0 -15 years.
Proposed Project: Construct as 4 lanes with turn lanes at intersections.
Cost: \$850,000
- 22)** (E) Network Facility: **SNELL ROAD** Facility Segment: CTH A to Vinland Rd.
Jurisdiction: City of Oshkosh.
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construct to 4 lanes.
Cost: \$1,758,000
- 23)** (E)(B) Network Facility: **VINLAND ROAD** Facility Segment: Smith Street to Snell Road.
Jurisdiction: City of Oshkosh, Town of Oshkosh
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Completion of a new 4-lane facility to accommodate bicycles and pedestrians with regard to residential and industrial development.
Cost: \$2,350,000
- 24)** (E)(B) Network Facility: **WASHBURN STREET** Facility Segment: STH 21 to Witzel Ave. Jurisdiction: City of Oshkosh, Town of Algoma.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Construct 4-lane urban section.
Cost: \$4,206,000
- 25)** (E)(B) Network Facility: **WASHBURN STREET** Facility Segment: Dickinson Ave. to 20th Ave. Jurisdiction: City of Oshkosh, Town of Algoma.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Construct 4-lane urban section.
Cost: \$1,110,000

- 26)** (E) Network Facility: **WESTFIELD STREET** Facility Segment: Witzel Ave to 9th Ave.
Jurisdiction: City of Oshkosh.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Construct new facility on new right-of-way.
Cost: \$750,000
- 27)** (E) Network Facility: **WEST SIDE ARTERIAL** Facility Segment: STH 91 to STH 21.
Jurisdiction: Winnebago County
Implementation Date: Long Range 15 – 30 years.
Proposed Project: Construction of a west side arterial parallel to USH 41 with an interchange at STH 21
Cost: \$11,500,000
- 28)** (E)(B) Network Facility: **9TH AVENUE** Facility Segment: Oakwood Road to Linden Oaks Dr.
Jurisdiction: City of Oshkosh, Town of Algoma.
Implementation Date: Short Range 0 – 15 years.
Proposed Project: Widen to accommodate bicycles and pedestrians within the plan horizon.
Cost: \$980,000
- 29)** (E)(B) Network Facility: **20TH AVENUE** Facility Segment: Oakwood Road to Oregon St
Jurisdiction: City of Oshkosh, Town of Algoma.
Implementation Date: Short Range 0 – 15years.
Proposed Project: Widen to accommodate bicycles and pedestrians within the plan Horizon.
Cost: \$3,220,000

Corridor Preservation. As noted in the 2005 Comprehensive Plan for the City of Oshkosh, sound preservation and access control policies and standards to adequately address the land use/traffic carrying capacity relationships of arterial extensions. Two corridors needing specific attention are the Fernau Avenue east/west corridor on the north side and the Fisk Avenue east/west corridor on the far south side of the Urbanized Area.

Fernau's importance stems from its critical location relative to the USH 41/USH 45 interchange and the ability to achieve direct access from the North Industrial Park to USH 41 with minimum disruption to the evolving development pattern. Protecting this corridor (already officially mapped) and implementing at the earliest possible date are desirable.

Fisk Avenue presents opportunities for reducing existing trip dislocations and minimizing disruptions from truck movements related to the South Industrial Park. While the need for implementation is longer range to be staged with development, preserving adequate right-of-way for the future is desirable.

A third area of future development impact is to the northwest, west of USH 41, in the USH 45 corridor, formerly the STH 110 corridor. This facility will ultimately be rerouted through Oshkosh to the south of the University of Wisconsin – Oshkosh campus from Jackson Street to Algoma Boulevard.

Another corridor that needs further consideration is STH 26 from USH 41 toward Rosendale. The facility shows capacity problems by 2035, but should be reevaluated after USH 151 is constructed as 4 lanes between Waupun and Fond du Lac.

The construction of a westside arterial to alleviate northbound and southbound traffic on the west side of the Urbanized Area, parallel to USH 41, is also recommended. The facility segment which is proposed from STH 91 to STH 21 should also include an interchange with STH 21.

Intelligent Information Systems (ITS). An ITS Strategic Deployment Plan was developed in May of 2001 for the Oshkosh, Fox Cities and Green Bay Urbanized Areas. All of these Urbanized Areas lie within the USH 41 corridor, the primary transportation facility in northeast and east central Wisconsin. It is also recommended that the Fond du Lac Urbanized Area participate in the coordination and development of a regional ITS architecture/network. The proposed architecture and coordination improvements which were included within that plan are also listed within this plan as recommendations. These recommendations include:

- Coordination between participating agencies
- Defining transportation needs and problems
- Facilitate an ITS technical team
- Develop a User Service Plan
- Development of a Regional ITS Architecture
- Technology identification and assessment
- Develop an Incident Management Plan
- Enhance reference markers
- Installation of over-height detection systems for commercial vehicles
- Deployment of additional road weather information systems
- Development of a Regional Virtual Traffic Operations Center
- Installation of portable changeable message signs
- Installation of closed-circuit television cameras
- Installation of permanent changeable message signs
- Traveler information broadcast via radio and television
- Advanced adaptive traffic signal coordination
- Advanced vehicle location/computer aided dispatch for emergency vehicles
- Advanced scheduling/dispatch system for paratransit service

Transit. As the Oshkosh Transit System (OTS) continues to operate at a level favorable to other mid-sized transit systems throughout the State, the only recommendation to expand existing service is to have Route #9 go on Westowne Avenue after leaving the Aurora Health Center, once Westowne Avenue is extended through to the west frontage road (North Washburn Street). This would allow the bus to go south on the frontage road to Witzel Avenue, which would serve an area and local businesses which are not currently served.

Due to recent fuel increases, it is inevitable that OTS will need to increase its current fare of \$0.50 to offset additional expenses. Increasing fares greatly outweighs the cut of service.

It is also recommended that OTS purchase a van with a wheelchair securement to assist fixed route buses that may have both wheelchair securements utilized. This van could also be utilized to cover gaps in paratransit service and provide trips to future expansion areas.

OTS has traditionally been a leader within the state with regards to the coordination of transit and paratransit services, especially for the elderly and disabled. This coordination of services has not only occurred within the OTS service area, but throughout the Oshkosh Urbanized Area and Winnebago County. It is recommended that OTS continue its coordination efforts with Winnebago County and other public and private transportation providers in the Oshkosh area. Such efforts should be directed toward providing the most efficient and effective services possible to the transit dependent population, as well as providing appropriate services to discretionary riders where potential warrants.

It is the recommendation of the East Central Wisconsin Regional Planning Commission (ECWRPC) that the Oshkosh Urbanized Area along with the other Urbanized Areas within the ECWRPC planning region (the Fox Cities and Fond du Lac Urbanized Areas) play a role in the examination of Regional Transit Authority (RTA) benefits to the region. Local leaders should examine the potential development of state legislation permitting the creation of an RTA, and initiate the formation of an RTA comprised of municipalities throughout the ECWRPC region pending legislative action. The State of Wisconsin does not currently have legislation which allows the development of an RTA, an entity with the ability to collect taxes to be utilized for transit operation. The formation of such legislative language has been a substantial transportation issue throughout the state in recent years. From a regional perspective, USH 41 is the primary transportation corridor extending from the Green Bay Urbanized Area, through the Fox Cities and Oshkosh Urbanized Areas, and to the Fond du Lac Urbanized Area.

Intercity Transit. It is recommended that the City work with the transportation providers and reconsider the location of intercity bus connections in the Oshkosh area. Currently intercity buses must travel from the USH 41 corridor to the downtown bus terminal, as well as the terminal at Witman Airport. A study should consider a location nearer to USH 41, with access provided by the Oshkosh Transit System fixed routes. With appropriate linkage to the fixed route system, passenger convenience would not be threatened by such a move. A location in the USH 41 corridor would provide more convenience and shorter trip lengths to passenger bus lines, and perhaps enable coordination with tour lines or other carriers. From a land use perspective, a bus terminal would be considered an appropriate land use in the highway corridor.

Bicycle and Pedestrian. It is not anticipated that existing highways will be retrofitted to accommodate bicycles without the occurrence of a reconstruction project. It is recommended that bicycle and pedestrian travel be considered in the design stages of all highway projects. Accommodations should be appropriate to traffic volumes, parking and other physical conditions, safety for both the bicyclist or pedestrian and the auto driver. The following are recommended guidelines for such facilities:

All new street construction and reconstruction projects located on roadways identified as bike routes should be designed to be in compliance with AASHTO Standards for such routes.

All new 4-lane urban sections intended to function as collectors or arterials should be constructed to a minimum curb-to-curb width of 56'. This would include an outside (curbside) lane of 14' and an interior lane of 12'.

All existing 4-lane urban sections constructed to a width of 48' should be re-striped so that the outside (curbside) lane is 13' in width and the interior lane is 11'. They should be expanded to comply with the 52' minimum width at the time they are slated for reconstruction.

All new 2-lane neighborhood collectors designed to accommodate on-street parking should have a minimum curb-to-curb width of 40'.

When existing 2-lane collectors are upgraded, they should be built to a minimum standard which allows 14' for shared driving/biking lanes and 14' for shared parking/biking lanes. Lanes used strictly for motor vehicles should be 12' in width.

Reconstruction of all rural collectors and arterials should include a striped and paved shoulder at least 5' in width adjacent to a 12' lane and 6' in width adjacent to an 11' lane. If speeds are in excess of 40 MPH paved shoulders should be at least 6'.

Whenever possible, a minimum width of 16' should be provided on the exterior lane of all bridge decks at the time of their construction to accommodate bicycles. Even better, a 6' striped bike lane should be provided if it is possible to provide a 12' travel lane for motor vehicles. A sidewalk should be provided on at least one side and preferable both sides of the roadway. If feasible, these guidelines should be adhered to at the time existing bridge decks are replaced.

Convenient access to the on-road bike route system should be available from off-road bicycle/pedestrian paths.

Appropriate striping to define (and emphasize) bicycle movements should be undertaken on bike routes in those areas where significant vehicular turn movements and other points of congestion and conflicts between the bicycle and the motor vehicle occur.

Appropriate diagonal striping with diamond markings should be considered on a case-by-case basis to better define shared bike/on-street parking lanes.

A minimum width of 10' and preferably 12' should be used as the standard for all off-road bicycle/pedestrian paths.

All urban sections constructed of concrete should have an integrated curb/gutter section a minimum of 5' wide to the pavement joint.

Site plans should be reviewed to ensure pedestrian access to and between buildings included in the plan. Subdivisions should be reviewed to ensure appropriate pedestrian and bicycle facilities, including connections within the development and access to the subdivision from existing development.

Freight. A joint Fox Cities and Oshkosh Freight Advisory Committee (FAC) was formed to discuss freight-related issues. A survey of FAC participants was also conducted to gain input on future policies and recommendations. Indications from this advisory committee were that existing accessibility is good in the Oshkosh area.

Recommendations which were formulated from this process include:

- Address significant congestion and safety zone areas.
- Construct an interchange along USH 41 between the Breezewood/Bell interchange and the STH 76 interchange
- Provide improved access for the Breezewood exit

Water Transport. The Fox River navigation and lock system is proposed to be refurbished to reestablish the waterway connection from Lake Winnebago to Green Bay. The potential exist to utilize the waterway for freight transport as well as tourism and recreational activities. A navigation safety improvement program should be developed that identifies the stakeholders impacted by the system and includes short and long term operation cost and needs.

Street and Highway Congestion Management Strategies. Although the Oshkosh Urbanized Area does not have many congestion issues or infrastructure deficiencies, the Oshkosh MPO has identified a number of congestion management strategies for the future. These strategies include:

Capacity Expansion. One of the most obvious congestion management strategies is capacity expansion. Capacity expansion can alleviate current and future congestion.

Transportation Systems Management. Traffic signals, turn lanes, prohibiting turns, signal timing, and other forms of traffic controls can alleviate congestion by efficiently moving traffic. One such device that should be examined within the Oshkosh Urbanized Area is timing mechanisms for trains. These systems can be used to notify drivers when and where a train is anticipated to be at a particular crossing. This would allow vehicles to cross the railroad prior to the train's arrival to an intersection, rather than coming to an intersection and have to stop for a train unexpectedly.

Roundabouts. Roundabouts are extremely efficient in moving volumes of traffic in a safe and efficient manner by reducing speeds and reducing the number of yields and potential incidents between vehicles.

Use of Alternative Modes of Transportation. Obviously the majority of traffic is comprised of single occupancy vehicles. This increases traffic volumes and congestion. The use of alternative modes of transportation to the automobile will reduce traffic volumes.

Elimination of On-Street Parking. The elimination of on-street parking greatly reduces the volume of traffic on a given facility. It also reduces crashes between vehicles which are trying to park or re-enter the facility and vehicles which are trying to travel through the facility.