

# Transportation System Improvement Recommendations

## ***Street and Highway System***

The growth forecasts for the Chippewa-Eau Claire Metropolitan Planning Area (MPA) are interrelated with the transportation system improvements currently programmed or planned for the urban area. The projected expansion of urban area development to the 2030 planning area boundary also requires increasing the capacity of the urban street and highway system to accommodate increased traffic volumes. The urban arterial and collector road network increased by approximately 26% since 1995 with the inclusion of approximately 50.2 miles of existing rural arterials and collectors to the urban system. Roadway capacity expansions are identified for approximately 19.8 miles of the existing arterial and collector system to accommodate the anticipated growth in traffic volumes. An additional 24.6 miles of new roadway construction will further expand the capacity of the urban arterial and collector road system.

The collective impact of the COMMITTED and PLANNED roadway improvement projects on reducing future traffic congestion and improving roadway safety within the planning area provides substantial support for the following street and highway system improvement recommendations:

- A. The identified COMMITTED projects, programmed to be implemented through the year 2010, should continue to be developed and completed within the programmed time frame. These projects will add almost 102 lane miles of additional capacity to the existing urban road system. They are illustrated on Map 31 and include the following:
1. The expansion of the USH 12 bridge over the Chippewa River.
  2. The completion of the STH 29 Bypass of Chippewa Falls.
  3. The reconstruction of Park Avenue to four lanes from Jeffers Street to Peterson Lane.
  4. The completion of the USH 53 Bypass of Eau Claire.
  5. The reconstruction of STH 93 to four lanes from I-94 to Cedar Road.
  6. The extension of Galloway Street from Moore Street to Brookline Street.
  7. The extension of Seymour Cray Sr. Boulevard from CTH "I" to STH 178.
  8. The construction of Commercial Boulevard from CTH "OO" to Melby Road.

B. The PLANNED projects, identified for implementation within the 2030 planning time frame, should receive priority for implementation as funding becomes available for them. The PLANNED projects will further improve traffic flow and safety, and add over 35 new lane miles of additional capacity to the urban road system. They are depicted on Map 33 and include the following:

1. The reconstruction of Birch Street to four lanes from Starr Avenue to Pine Street.
2. The reconstruction of STH 37/85 to four lanes from the eastbound on-ramp of I-94 to the intersection of STH 37 and 85.
3. The reconstruction of CTH "AA" to four lanes from Gateway Drive to House Road.
4. The reconstruction of the STH 29/124 interchange to an at-grade two-lane roundabout.
5. The reconstruction of USH 12 to four lanes from Winchester Way to Shultz Road.
6. The reconstruction of CTH "T" to four lanes from Alpine Road to old STH 29.
7. The construction of a new diamond interchange at USH 53 and Bridgewater Avenue.
8. The reconstruction of USH 12 to six lanes from Vine Street to the North Crossing.
9. The closure of the Spring Street bridge over Duncan Creek to vehicular traffic.
10. The reconstruction of CTH "S" to four lanes from the USH 53 interchange to STH 178.
11. The reconstruction of CTH "X" to four lanes from STH 29 to CTH "K".
12. The construction of Gateway Drive as a four-lane from Hamilton Avenue to 3<sup>rd</sup> Street East.
13. The construction of Alexander Street as a two-lane from E. South Avenue to old STH 29.

C. The remaining deficient street and highway segments that have not been addressed by either programmed or planned improvement projects should continue to be monitored and evaluated for the application of appropriate corrective measures to mitigate the capacity problems identified. Improvements for the identified segments may include actions ranging from on-street parking restrictions to access controls to capacity expansions. The remaining deficient roadway segments that warrant further consideration for improvement are depicted on Map 34 and include the following:

1. Washington/Harding Streets from Farwell Street to Margaret Street.
2. Golf Road from STH 93 to London Road.
3. North Crossing (STH 312) from USH 12 to I-94.
4. Hastings Way from STH 312 to Melby Street.
5. Woodward Avenue from STH 124 to Colome Street.

- D. Transportation System Management actions to improve vehicle flow can be applied at selected locations to increase the safety and efficiency of the road system. These actions should be evaluated for their impact and applied where they are determined to improve traffic conditions at specific locations.

**Traffic signals** can be installed at intersections where heavy volumes of traffic exist in two conflicting directions or where there exists little or no gap between vehicles on a major roadway and vehicles cannot enter the major roadway. Although installation of a traffic signal at an appropriate location may decrease the capacity of a major arterial which has no stop at that intersection, it should increase the capacity of the intersecting street, and by reducing conflicts, increase the safety and efficiency of the entire network.

**Roundabouts** are an increasingly acceptable form of traffic management at intersections. They incorporate safety features, while accommodating the continuous movement of traffic. Roundabouts move traffic safely and efficiently through an intersection because of lower speeds, fewer conflict points, and easier decision making for drivers.

**Conversion to one-way streets** generally decreases the number of vehicular conflicts at intersections because there are no turning movements from the opposite lane. The capacity of one-way streets also is substantially greater than two-way streets. Use of one-way streets can increase street capacity in congested areas and improve network efficiency. However, total vehicle miles may also be increased because motorists must sometimes travel out of their way to reach their destinations.

**Removal of on-street parking** greatly increases the capacity of a street, thus improving traffic flow and improving safety in congested areas. However, unless adequate alternative parking or suitable transit service is available, removal of on-street parking may cause adverse reactions from affected local businesses and residents.

Varying the price and time limits of parking is also an important method of controlling traffic. For example, by increasing price and time limits for parking in a particular area, traffic may be reduced.

**Traffic channelization** involves using islands, pavement markings or other means to direct traffic onto specific paths on roadways. This technique increases roadway capacity and, at intersections, can be used to reduce turning conflicts. When used in combination with signalized turning arrows, traffic channelization is especially effective in facilitating turning movements and improving traffic flow.

**Turn restrictions** are a valuable method of improving traffic flow where turning movements impede through traffic and space limitations make

individual turning lanes unfeasible. Left turn restrictions are most effective when there are a larger number of left turns at an intersection or when through traffic is so heavy the left turns become hazardous or impede progress in the intersection. Right turn restrictions are often used to reduce vehicle/pedestrian conflicts.

**Street reconstruction**, where narrow intersections or street segments constrict traffic flow, may be the only way to increase its capacity. Cost of reconstruction, however, generally exceeds what is considered a "low cost" improvement.

- E. Transportation Demand Management actions to reduce peak period vehicular travel can be implemented, where feasible, to assist in reducing traffic congestion and improving air quality.

**Rearranging employee work hours** and student school hours so that they do not coincide with peak period traffic reduces traffic congestion in mornings and evenings and distributes it more evenly throughout the day. Work/school rescheduling is especially useful where large traffic generators are concentrated in a relatively small area. Flexible scheduling, however, often meets with employee resistance and may inhibit carpooling.

**Ridesharing** usually takes the form of carpooling, where participants take turns using their own vehicles and/or pay the driver; and vanpooling, where the van is owned by an organization such as the employer and riders pay for the ride. Ridesharing is most effective when people travel from nearly the same origin to nearly the same destination.

Ridesharing reduces the number of vehicle miles traveled without greatly reducing mobility. With fewer vehicles on the highway system, traffic flow and parking demand are reduced. Fewer vehicle miles driven also means less energy consumption and air pollution.

Communities can promote ridesharing by urging automobile drivers to carpool, informing employers of ways to encourage employees to carpool and initiating a matching service for individuals wishing to carpool.

Development and upgrading of **bicycle and pedestrian facilities** encourages increased use of these modes and decreases the number of motor vehicles on the road system. On-street and off-street bikeways can be signed or constructed, bicycle parking facilities can be installed near major trip generators, promotional campaigns stressing bicycling or walking as an alternative can be initiated, and pedestrian facilities such as walk lights, overpasses/underpasses, malls and skywalks can be constructed where pedestrian traffic is heavy.

**Auto restricted zones** discourage vehicles from traveling through specified zones, primarily in the central business district, and decreases congestion in the area by routing traffic around the congested area. If these zones are reconstructed with a pleasing appearance and pedestrian amenities, they can encourage pedestrian travel and improve the quality of the environment in the area. Often, however, the capacity of the surrounding roadway is insufficient to handle additional traffic and major reconstruction projects are necessary.

## ***Public Transit System***

The Eau Claire Transit (ECT) System *Transit Development Plan and Long Range Plan Element*, completed in 2003, developed recommendations to guide both the near-term and long-range operation of the transit system. That plan and its findings and recommendations are incorporated by reference as part of this broader long-range transportation plan for the MPA. The following summary will briefly describe the service goals and improvement recommendations identified for the Eau Claire Transit System.

The Eau Claire Transit System Plan identified four service goals with supporting objectives and performance standards to guide both the development and implementation of the plan. These goals direct the transit system to:

1. Provide safe, effective mobility options throughout the community.
2. Provide cost-efficient and effective transit service to the community.
3. Maintain a strong ridership base and look for opportunities to increase ridership.
4. Increase participation in and influence on planning decisions in Eau Claire.

Given this direction, the plan was developed to address short-term, mid-term and long-term service changes. The short-term plan recommended several changes in routing, night time and weekend service, a transition from a flag stop system to designated bus stops, an increase in marketing efforts, establish bus shelter standards, and increased participation and influence in the City's planning and development decisions that impact transit service delivery. These short-term recommendations addressed operational changes that required immediate attention to reduce the fiscal burden of the system, and are fairly easily implemented.

The mid-term service plan continued to support the need for ECT to participate in the City's planning and development process, pursue initiatives to reduce paratransit costs, implement fare increases, evaluate the potential to provide a higher level of service to the City of Altoona, complete the capital improvements for a relocated downtown transit center, and consider the potential for providing service on Sunday. These mid-term recommendations acknowledge the need

for further analysis and a longer time period to determine the feasibility of implementation.

The long-term service plan for the ECT recommended the continued participation of the transit system in the long range planning and urban development of the City. It further recommended the evaluation of the potential to expand transit service to the Village of Lake Hallie and City of Chippewa Falls. The long-term service plan also recommended the evaluation of the potential for the construction of a mini transit hub located at the Oakwood Mall.

The Chippewa Falls Shared-Ride Taxi (SRT) System faces the same funding predicament as similar subsidized demand-response systems throughout the state. As demand increases, the subsidized cost share increases. The municipality reacts by increasing fares and limiting service to maintain budget constraints. These actions can often negatively impact the productivity of the system and reflect poorly on overall performance. Unfortunately, there are no simple solutions to address the cost-efficiency of providing demand-response public transportation. Limitations in federal and state public transit funding programs shift more of the financial burden for municipal transit systems to local funding sources. A broadened base of local revenue support is needed to address local transit needs. In addition to the standard local sources of municipal funds and user fees, increased marketing efforts could be pursued to increase ridership and to develop public/private partnerships with local employers and retailers who recognize the community value of the transit system and are willing to participate in a cost sharing venture that contributes to community livability.

## ***Specialized Transportation***

The funding and programmatic limitations of specialized transportation services are not unique to the Chippewa-Eau Claire MPA. Special transportation providers statewide are seeking increased funding and efficiencies of service to try to accommodate the unmet needs of special transportation users. Specialized transportation services within the planning area are coordinated through service contracts, cooperative agreements and countywide transportation coordinating committee activities. Improved special transportation services will require increased levels of funding and increased efficiencies through improved cooperation and coordination between special transportation providers. The newly reauthorized federal transportation act, SAFETEA-LU, will require the development of public transit/human services transportation plans to help ensure the coordination and efficient delivery of specialized transportation services.

## ***Bicycle Facilities***

The bicycle transportation component of the long range transportation plan contains recommendations for improvements to the proposed bikeway system that would add 31 miles of paved shoulders to the rural road network, increase the capacity on 88 miles of urban streets to accommodate a wide curb lane/bike lane, and develop 41 miles of new bike paths. Recommendations were also made for improved roadway maintenance and the installation of bicycle-safe storm drainage grates and rubberized railroad crossings. Recommended improvements to supporting facilities included adding bicycle parking facilities, and developing a bikeway system map.

The recommendations contained in the bicycle transportation component focus not only on the development and maintenance of a bikeway system and supporting facilities, but also address the programmatic concerns of bicycle safety education and law enforcement.

## ***Pedestrian Facilities***

Sidewalk improvements are normally incorporated with street and highway construction/reconstruction projects and as such should be planned for and financed as part of a street project. A more diligent adherence to municipal sidewalk policies is recommended to ensure the uniform installation and maintenance of sidewalks throughout the urban area. Particular attention should be focused on areas of high pedestrian/vehicular traffic to ensure that the appropriate pedestrian safety mechanisms are in place. These may include signed and marked walkways through areas of joint pedestrian/vehicle usage, adequate timing of walk lights at signalized intersections, and special pedestrian facilities such as bridges, overpasses, and underpasses to safely facilitate pedestrian crossings.

Improvements to the rural road system to address vehicular safety and travel needs also provide an improved level of safety for joint usage by bicyclists and pedestrians. The same recommendations to widen travel lanes and add paved shoulders to improve road conditions for vehicular travel also improve the facility for use by bicyclists and pedestrians on lower traffic volume roads.

## ***Access to Air Transportation Facilities***

The only potential problem affecting highway access to the Chippewa Valley Regional Airport will be alleviated with the completion of the USH 53 Bypass and the extension of Melby Street. Current congestion and safety problems on USH 53 have justified the need for the major highway improvement. The completion

of this project in 2006 will eliminate any potential problem with access to the airport resulting from traffic congestion on USH 53. The connecting arterial street system should continue to be maintained as conditions warrant.

Adjoining land use activities can have a significant impact on airport operations. Development activities around the airport should be regulated to maintain the operational effectiveness of the airport.

## ***Freight Rail Transportation***

The deficiencies identified for the freight rail system in the planning area revolve around the impacts of at-grade rail/street crossings on the safety and operational efficiency of both transportation systems. The fact that the majority, 73%, of the most recent and most serious car/train collisions occurred on local streets would appear to warrant further investigation into the adequacy of the warning devices installed at these low traffic volume crossings.

In addition to the re-evaluation of the adequacy of railroad crossing warning devices, the preferred elimination of at-grade crossings, where possible, would further contribute to the safety and operational efficiency of both the rail and road systems. A recommendation for the consolidation of rail usage on approximately 2.5 miles of dual tracks from Chippewa Falls south into the Village of Lake Hallie would provide for the elimination of one set of tracks through abandonment. The two sets of tracks follow separate, but parallel, routes from approximately Bridge Street to Pederson Road (40th Avenue). The consolidation of rail service on the westerly set of tracks would permit the abandonment of the easterly set of tracks along this 2.5 mile segment and, thereby, eliminate four at-grade rail crossings at Woodward Avenue, Main Street, Wisconsin Street and Garden Street. However, the City of Chippewa Falls has indicated the preferred use of the westerly rail line for a bike/pedestrian facility for the same safety concerns with the number of at-grade street intersections on the easterly rail line. A consolidation of these two rail lines will support similar actions already taken that removed one set of the dual tracks from Pederson Road (40th Avenue) south to Birch Street in Eau Claire. The abandoned southern segment has been developed as a bicycle trail. The 2.5 mile westerly segment is recommended for inclusion as part of the planned bikeway system for the MPA.

Land use planning and development activities play an important role in determining how well the transportation system functions. Development patterns influence transportation system usage and can conflict with the intended purpose of the transportation facility. Land uses that require rail service should be located within close proximity to existing rail lines to avoid costly and disruptive rail line extensions. To preserve the integrity of the existing rail system, new development should be planned and designed to avoid or minimize the need for additional at-grade street/rail line crossings.

## ***Intercity Passenger Transportation***

The impact of a broad range of economic forces have limited the modal options available to residents of the MPA for intercity travel. The convenience and accessibility of the automobile has made it the most heavily preferred choice to accommodate these travel needs. The limited and inconvenient intercity bus service currently available through Greyhound Bus Lines further restricts travel options. Similarly, the limited routing of the regional air passenger carrier places a greater demand on highway travel. The continued growth of automotive travel will place a greater emphasis on the safety and efficiency of the state's highway system. To keep pace with the growth in highway travel, the state's highway system will require increased efforts to preserve the system and provide the necessary improvements. Improved year-round maintenance activities and preservation treatments, along with added capacity where needed, are recommended for the statewide highway system. Major intercity corridors passing through the planning area that are recommended for improvement include I-94 and USH 53. Other important intercity routes that have identified improvement needs include STH 93, STH 85/37, and USH 12.

In addition to facility improvements to increase highway safety and efficiency, timely travel information would significantly enhance trip planning activities and enable intercity travelers to make more informed travel decisions. This activity also needs to be coordinated on a statewide basis and it is recommended that the state continue to pursue improvements to the development and delivery of timely and relevant travel information to assist the motoring public with intercity travel.

Long-range state and local plans have identified the feasibility of reestablishing intercity passenger rail service to the Chippewa-Eau Claire MPA as a supplement to the implementation of the Midwest Regional Rail Initiative, under consideration at the federal level. This initiative has garnered strong local support and should continue to be pursued as a viable intercity passenger travel option.

The Chippewa Valley Regional Airport Authority has continued to pursue improvements to the airport in an effort to attract additional air passenger service. These efforts should be continued to expand upon intercity passenger travel options currently available to prospective air travelers.

## ***Freight Transportation***

The predominance of trucking in the freight shipping industry is reflected in the freight movement activities in the MPA. The importance of a sound street and highway system is vital to the efficiency of truck freight shipping. The street and highway improvement recommendations developed earlier in this chapter

address the primary infrastructure needs of truck freight movement in the planning area. In addition to the recommended internal road improvements, intercity corridor improvements to I-94, USH 53, STH 93, STH 85, STH 37, and USH 12 are essential to maintaining connectivity in the movement of freight throughout the state and country. The intercity infrastructure improvement recommendations apply to both the movement of people and goods.

An additional recommendation to improve freight movement within the planning area would be the designation and signing of truck routes to more efficiently guide truck shipments to destinations within the MPA. Further investigation is also recommended into the feasibility of an inter-modal facility to link truck and rail freight shipments within the planning area.

## ***Land Use***

The connection between land use and the transportation system serving the metropolitan planning area is self-evident in the influence each has exerted in contributing to the expansion and development of the other. The development of either one serves as a catalyst for the growth of the other. As a land use, the present transportation infrastructure (roads and rail lines) occupies almost one-fourth of the developed land area within the planning area, second only to residential development. This system will continue to grow, although not at the same rate, as the urban area continues to expand.

The land use and growth management issues identified in Chapter III of this report can also be viewed as a summary deficiency analysis for the negative effects of uncoordinated and uncontrolled development. The six overlapping growth management issues impacting both land use patterns and the transportation system are summarized through the discussions on urban sprawl, the cost-efficiency of providing public services, environmental protection, public safety, social equality, and jurisdictional rivalry.

It is appropriate at this point to reiterate the goals and objectives identified in Chapter VI of this report that address the land use/transportation connection and to recommend adherence to these guidelines for promoting effective land use planning and growth management in concert with an efficient transportation system.

### ***Goal III      Coordinate the provision of transportation facilities and services with land use development plans and policies.***

*Objectives:*    A. Provide a transportation system which encourages growth patterns consistent with regional and local land use policies and plans.

- B. Preserve and protect the functional utility of the highway system by coordinating land use with the proper degree of access control.
- C. Consider transportation plans in developing and administering zoning and subdivision regulations.
- D. Encourage growth in those areas that can be served by existing or planned transportation facilities and discourage development that is not compatible with existing or planned transportation facilities.
- E. Promote the development of concentrated commercial, industrial and institutional employment areas that incorporate shared parking areas and appropriate access control.
- F. Encourage the continuation of a coordinated and cooperative land use/transportation planning process between municipalities and governmental agencies participating in the MPO.
- G. Facilitate the creation and adoption of land use/transportation planning policies which consider ecosystem sustainability and the protection of critical natural resources.

***Goal IV      Increase participation in and influence on land use planning  
(Transit Plan) and development decisions in the City of Eau Claire.***

- Objectives:*
- A. Promote a higher-density development within the urban core of Eau Claire.
  - B. Ensure that the design of new subdivisions, offices, and commercial centers within ECT's service area will include access for transit vehicles and accessible walkways from potential bus stops.

***Environmental Justice Considerations***

This Long Range Transportation Plan update and the transportation system improvement recommendations presented in this chapter, are in compliance with the environmental justice considerations enumerated in Title VI of the Civil Rights Act of 1964; the National Environmental Policy Act of 1969; Section 109 (h) of Title 23; the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; the Transportation Equity Act for the 21<sup>st</sup> Century; and other applicable U.S. DOT statutes and regulations. These

regulations pertaining to environmental justice can be summarized in the following three fundamental environmental justice principles:

- To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

To ensure that the Chippewa-Eau Claire MPO is able to effectively adhere to these principles, the following actions have been taken to comply with the environmental justice considerations (refer to Environmental Justice Analysis on page 20 and accompanying Maps 8 through 11):

- The MPO has enhanced its analytical capabilities through the application of expanded census data bases and geographic information systems (GIS) technology. In cooperation with urban area municipalities, the MPO is able to maintain more accurate and up-to-date land use information that is incorporated into the transportation planning process. The MPO, in cooperation with WisDOT, has updated and improved its traffic modeling capabilities to identify transportation system deficiencies and to evaluate the traffic impacts of improvement alternatives. The MPO also relies on the local knowledge and input of local municipalities in identifying and addressing the concerns of minority and low-income populations.
- By applying the improved analytical capabilities identified previously, the MPO is better able to identify the residential location of minority and low-income populations in relationship to places of employment, education, medical services, child care, shopping, public transit service, and the travel patterns of the urban population on the street and highway system. The mapping of the recommended transportation system improvement projects, as well as public transit routing, also enables the MPO to evaluate their potential impact on the minority and low-income populations in the urban area. The results of this evaluation provides the MPO with the confidence that the recommended transportation projects and services developed in the plan do not represent disproportionately high and adverse impacts on the urban area's minority and low-income populations. In fact, the identified urban-wide improvements to transportation-related air quality, safety, and mobility provided through the implementation of the

plan's recommendations, indicate an overall benefit to the entire urban population.

- The MPO's actions to facilitate a participatory public involvement process are addressed in detail in its Public Involvement Plan, which is reviewed annually and updated as necessary. In addition to the direct public involvement actions employed by the MPO in its planning and programming process, the MPO also relies on the public involvement processes of its member units of government and transportation providers and partners to ensure the public the opportunity for input into the transportation decision-making process.

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