

CHAPTER 7 – ENVIRONMENTAL REVIEW, MITIGATION & LIVABILITY STRATEGIES

INTRODUCTION

This chapter provides mapped inventories of the agricultural, natural, and recreational resources within the metropolitan planning area (Appendix B). The purpose of these inventories is to provide a baseline of existing conditions for use during project coping and environmental assessment as required by the National Environmental Policy Act (NEPA) of 1969. Anticipated projects are mapped in relation to the resources described as well as to disadvantaged populations. This chapter documents compliance with these requirements.

Federal law requires considering environmental mitigation activities in developing transportation plans, in addition to new consultation requirements with federal and state natural resource, land management, environmental protection and other agencies.

Metropolitan planning regulations state in 23 CFR 450.322 (f.) (7) that the plan shall include, at minimum:

“A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State and Tribal land management, wildlife and regulatory agencies. The MPO may establish reasonable time frames for performing this consultation.”

The MPO's role in examining issues related to environmental mitigation is to scan system level issues – this is not a project level environmental impact document, which requires field work and specific analysis under the National Environmental Policy Act (NEPA). The planning regulations require system level or regional analysis to look at cumulative effects of all projects from a high level which may streamline project level analysis to the extent they may act as “an early warning system” to both transportation and resource agencies of issues which may need to be considered in later project level analysis to assure that the planning and programming process as a whole considers what the long term environmental mitigation issues are for the region.

Since this high level view is the intent of the MPO planning requirements, the legislation and regulations specifically exempt consideration of planning factors and environmental mitigation at the Plan or TIP phase from judicial review. Judicial review, however, is the function of the NEPA project level analysis, a level of analysis that the MPO has no direct role in but to review and comment like any other interested party.

This high level view may inform the NEPA process, but it is quite distinctly different from it by design and intent, since project engineering design decisions are typically not known at the planning stage. However, earlier awareness of potential issues from a high level system view may better alert implementing agencies of need to consider issues at the project stage when

the project is designed – such as presence or absence of historic sites or possible locations of potential contamination areas that may require some form of mitigation. The project stage when engineering begins, plans are being prepared and a NEPA-style project level analysis is required, may be subject to judicial review.

GENERAL PLAN REVIEW

Through a multi-year process of data gathering, alternatives analysis, modeling, and agency and public review, the LRTP developed a list of multi-modal transportation recommendations to meet the anticipated growth and subsequent mobility demands. The analysis stages included review of county and municipal land use and transportation infrastructure improvement plans, State transportation plans, as well as Wisconsin Department of Natural Resources (WisDNR) defined environmentally sensitive areas.

The WisDNR guidelines describe environmentally sensitive areas as “Major areas that are unsuitable for the installation of waste water treatment systems because of physical or environmental constraints. Areas to be considered for exclusion from the sewer service area because of the potential for adverse impacts on the quality of the waters of the state from both point and non-point sources of pollution include, but are not limited to, wetlands, shorelands, floodways and floodplains, steep slopes, highly erodible soils and other limiting soil types, groundwater recharge areas, and other such physical constraints.” (NR 121.05(1)(g)2.c.).

This plan is an update to the LRTP adopted in 2006. The plan does not include significant changes in highway project recommendations from that plan. Transportation model runs do not show any significant deficiencies in addition to those addressed in 2006. A full update of the LRTP will be conducted after 2010 census data is available, with adoption anticipated in 2016. The recommendations included in this plan were reviewed relative to identified environmentally sensitive areas.

The identification of environmentally sensitive areas are intended to provide for the long term protection of wildlife habitat and recreation areas; reduce runoff and erosion damage along lakes and rivers; preserve the quality of surface and groundwater; guide development to protect environmentally sensitive areas; prevent excessive non-point source pollution; and reduce public utility costs. In addition to all regulated wetlands greater than five acres, delineated on the Wisconsin Wetland inventory maps, all areas within the FEMA delineated 100-year flood hazard zones, and all areas of 20% or greater slope were considered in the alternatives analysis. Inventories of prime farmlands, by Soil Conservation Services standards, were reviewed, and farmland preservation program protections, mainly through exclusive agricultural zoning, were found to be minimal within the planning area.

The significant presence of historical, architectural and archeological properties in the MPO area has been identified and recorded by the State Historical Society of Wisconsin. While the publication of identified archeological sites is not included in this document, a review of proposed projects relative to the sites' locations has occurred, and none of those identified are impacted by the proposed transportation projects. Historical Society staff is also certain the area contains many undiscovered prehistoric and early historic sites.

MITIGATION STRATEGIES

The NEPA process includes an ordered approach to mitigation and involves understanding the affected environment and assessing transportation effects throughout project development. Effective mitigation starts at the beginning of the NEPA process and continues through as large part of the alternatives development and analysis process. Mitigation can be defined by the order of process sequencing as:

- 1) Avoiding the impact altogether.
- 2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- 3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- 4 Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- 5) Compensating for the impact by replacing or providing substitute resources or environments.

A discussion of region wide policies on environmental impact and mitigation of potential impacts of plan recommendations took place at the environmental consultation meeting in March of 2010. The generally accepted rule of: (1) avoid impacts, (2) minimize impacts, and (3) mitigate impacts, can be applied at this level of planning, in terms of identifying areas of potential environmental impacts in the development of a project recommendation.

Planning for more specific environmental mitigation strategies for the long range timeframe can be challenging. Some strategies, such as access controls, can reduce the pressure for development and can be discussed at the long range planning level. Others such as wetland mitigation can have implications for a project that is 15 or 20 years out, or has not reached the environmental assessment or preliminary design. Wetland banking, is a practice of WisDOT for use in mitigation relative to state highway projects. The MPO, as an advisory body, does not have authority to partake in wetland banking for local projects.

Some planning level mitigation strategies, generally favoring lower impact improvements follow:

Land management strategies can address the rate and character in which development expands in the urbanizing area, and resulting demand for utility and transportation services. Issues such as urban sprawl, cost-efficient provision of urban services, environmental protections, public safety, and environmental justice, are discussed in Chapter 9: Environmental Justice. The Marathon County Comprehensive Plan promotes and encourages compact development in the urban areas, as well as accommodations for bicycle, pedestrian, and transit transportation modes. In terms of natural resources, these policies mitigate the effects of growth and development by using less land, generating fewer vehicle miles traveled (VMT), and encouraging alternative travel mode options which reduce harmful emissions.

Operational and management strategies are means to mitigate issues such as congestion or safety on major construction or reconstruction projects. There are times when something as simple as modified lane-striping can better channel traffic and reduce crashes in a corridor, or better define the separation of bicycle and motorized vehicles. Other strategies are more technically complex, such as many Intelligent Transportation System (ITS) approaches.

MPO OPERATIONAL AND MANAGEMENT STRATEGY POLICIES

The Wausau MPO will, to the maximum extent practicable:

- Recommend capacity expansion to mitigate traffic congestion only after considerations of other alternatives, such as access management, ITS, operations or congestion management, intersection modification, and traffic signal timing are addressed.
- Consider transportation system management strategies in the planning for arterial roads to improve traffic flow, maximize capacity, and increase overall system efficiency and safety.

Access management strategies for the planned projects included in the Long Range Plan is largely determined by the implementing communities. Controlling access with access roads, combined access points, or limiting access to public streets can protect the capacity of the highway well beyond that of a highway with multiple private accesses, reducing the need for expansion or replacement. Access management strategies are best incorporated into the initial project planning and design, to avoid costly purchase of right of way and access rights.

Intelligent Transportation Systems (ITS) is a very broad term, covering everything from synchronized signal systems to changeable message signs to automated vehicle locator systems on buses and paratransit vehicles to traffic monitoring centers, all with the intent of improving traffic flow, communication, and ultimately the safety of the transportation system. Currently, WisDOT uses mobile changeable message signs in advance of construction areas to warn and/or redirect traffic, but to date, regular congestion has not reached the level that any more permanent ITS actions are needed to address it. Wausau Area Transit (Metro Ride) has considered, but has not been able to justify the expense of automated vehicle locator (AVL) equipment in fixed route or paratransit vehicles.

Operations can also play a role in mitigating the impacts of growth and development. Transportation planning and operating agencies generally share the goal of enhancing system performance, and can mutually benefit from stronger linkages. Some of those linkages include data sharing, performance measures, funding and resource sharing, and regional ITS architecture. Through such coordination and collaboration among State and local governments, MPOs, highway and transit agencies, other stakeholder organizations, and the general public greater efficiencies and cost savings may occur along with better understanding of each others' roles, and improved ability to address short- and long-term needs. Some operations management strategies are used in the urbanized area, such as data sharing between stakeholders, and the on-going membership of operations personnel on the Technical Advisory Committee. The MPO has yet to adopt specific performance indicators but those may set the foundation that future comparisons can build on.

Congestion management has not been a critical issue in the Wausau area. Some site specific congestion does occur, but to date it has not been a driving force in transportation decision making. Some typical congestion management strategies, such as carpooling, public transportation options, park and ride, and flexible scheduling do occur on some level, typically for other reasons (private programs, as public services, or general commuting desires).

Intersection Modification/Traffic Signal Timing can be low-cost and effective methods of addressing congestion issues. It is understood that intersections are frequently the first place that congestion and safety issues become apparent. Improvements such as signal timing and turn lane accommodation can improve traffic flow and address congestion issues to an extent. These strategies are typically addressed by local jurisdictions when safety issues or initial congestion issues arise, prior to the need or available funding to address capacity expansion.

CONSULTATION DOCUMENTATION

The Wausau MPO has conducted consultation and system level analysis of the relationship between 2035 Long Range Transportation Plan projects and various natural features and resources. Formal consultation included a meeting that was held in March of 2010. A summary of that meeting is included in Appendix B.

Each invited party was provided with a packet which explained the purpose of the meeting and gave a summary of the existing plan and of the process for plan update. Topics of discussion included the existing consultation process, potential impacts of proposed projects, and methods of addressing mitigation of those impacts. The same agencies were notified of the draft plan's availability for their review and comment.

The agencies that attended the consultation meeting, USEPA and WisDNR, noted that they were happy with the existing process for environmental consultation, as well as the working relationship with the MPO.

LIVABILITY STRATEGIES

Livability in transportation is about using the quality, location, and type of transportation facilities and services available to help achieve the community's goals such as access to good jobs, affordable housing, quality schools, and safe streets. This includes addressing road safety and capacity issues through better planning and design, maximizing and expanding new technologies such as intelligent transportation systems (ITS), and using travel demand management (TDM) approaches in system planning and operations. It also includes developing public transportation that enhances economic development, and offers residents and workers the full range of transportation choices like bikeways, pedestrian facilities, transit, and roadways—into a truly intermodal, interconnected system.

Sustainable transportation provides mobility and access to meet development needs without compromising the quality of life of future generations. A sustainable transportation system is safe, healthy, and affordable, while limiting emissions and use of new and nonrenewable resources. It meets the needs of the present without harming resources or the environment. It also considers the long-term economic health of a community.

Comprehensive planning focuses growth in existing communities to avoid sprawl; and supports compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices. Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, housing choices and preserve and enhance natural and cultural resources; while promoting public health.

In order to accomplish these ideas, the Federal Highway Administration (FHWA) has developed six Livability Principles:

Provide more transportation choices. Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Promote equitable, affordable housing. Expand location and energy efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Enhance economic competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.

Support existing communities. Target funding toward existing communities through strategies like transit oriented, mixed-use development, and land recycling to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

Coordinate policies and investment. Align policies and funding to remove barriers to collaboration, funding, and increase the accountability and effectiveness of all levels of government to plan for future growth.

Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable rural, urban, and suburban neighborhoods.

The Marathon County Comprehensive Plan has elements that address the livability and sustainability that can be incorporated into the transportation and land use recommendations of this plan. The implementation of these strategies would propel the Wausau MPO area to a desirable place for economic development and growth in the future. The following are recommendations incorporating elements of sustainability and livability:

- Provide, encourage, and foster provisions of a variety of transportation options to increase mobility and enhance accessibility;
- Develop coordinated bicycle and pedestrian facility networks;
- Continue to provide cost-effective and convenient public transportation services;

- Continue to support transportation services for the elderly and persons with disabilities;
- Fully utilize the limited rail access available in the area;
- Maximize utilization of existing investments in transportation infrastructure and services;
- Provide for safe and efficient movement of truck traffic while minimizing negative impacts;
- Maintain a thoroughfare system that ensures the safe and efficient movement of people and goods;
- Coordinate transportation infrastructure improvements and services with land development and revitalization efforts;
- Foster cooperation and coordination of transportation system planning and investments.