

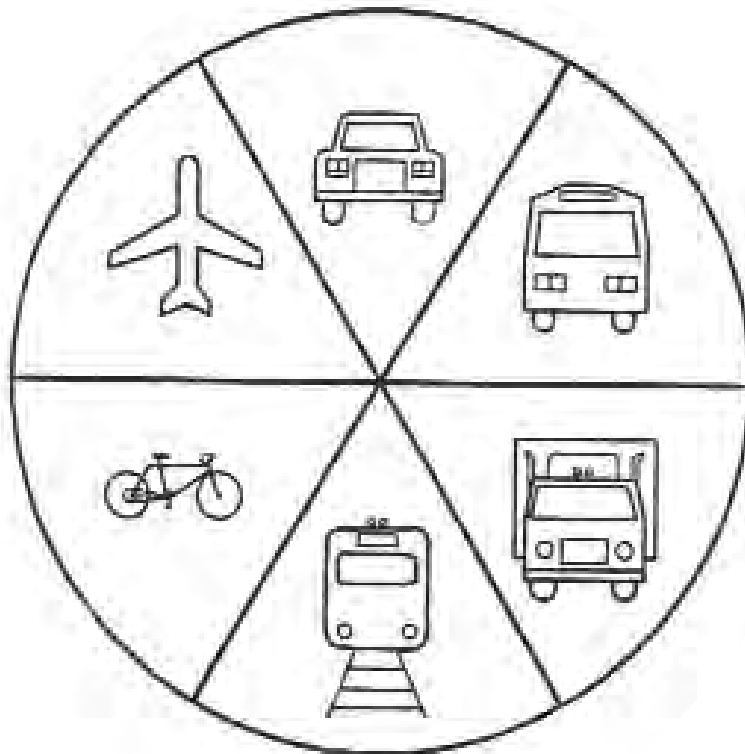


Fond du Lac MPO

Long-Range TRANSPORTATION/LAND USE PLAN

Fond du Lac Urbanized Area

OCTOBER 2005



Long-Range
TRANSPORTATION/LAND USE PLAN
Fond du Lac Urbanized Area

Prepared for the
FOND DU LAC METROPOLITAN PLANNING ORGANIZATION (MPO)

By the:
EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION

October, 2005

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ABSTRACT

TITLE: LONG-RANGE TRANSPORTATION/LAND USE PLAN FOR THE
FOND DU LAC URBANIZED AREA

AUTHOR: East Central Wisconsin Regional Planning Commission Staff

SUBJECT: Report on long-range transportation/land use planning process for
the Fond du Lac, Wisconsin Urbanized Area to the year 2035.

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This report was prepared to meet the requirement of the Transportation Equity Act for the 21st Century (TEA 21) of 1998 for a long-range transportation/land use plan and is consistent with the U.S. Code, Title 23 Section 134 and in accordance with joint Federal Highway Administration and Federal Transit Administration Metropolitan Planning Rule in the Code of Federal Regulations, Title 23, Part 450 and Title 49, Part 613, effective November 29, 1993. This planning effort is concurrent with the five-year update of the sewer service area plans for the Fond du Lac Urbanized Area, which comprises the regional land use plan.

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION

This report has been prepared to meet the requirements of the Transportation Equity Act for the 21st Century (TEA-21) for long-range transportation and land use in metropolitan areas. The East Central Wisconsin Regional Planning Commission has been designated by the Fond du Lac Metropolitan Planning Organization (MPO) to carry out the urban transportation planning process.

The primary purpose for the plan is to insure coordination between land use and transportation planning within the Fond du Lac Metropolitan Planning Area. The need for integrated multimodal transportation planning and the development of a continuing process of consideration for alternative modes of travel is also discussed. A major focus of the study is the establishment of the long-range transportation modeling process, which is a valuable tool in decision-making on transportation issues in the Fond du Lac area.

This executive summary is arranged with headings corresponding to the full plan document chapters to ease any needed search for detailed information.

ADOPTED GOALS, OBJECTIVES, AND POLICIES

The passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 required all Metropolitan Planning Organizations (MPOs) to update and adopt long-range transportation plans which conformed to ISTEA's metropolitan planning requirements. ISTEA's requirements emphasized multimodal transportation, a strong transportation/land use interrelationship and an expanded public involvement process.

Then in 1998, the Transportation Equity Act for the 21st Century (TEA-21) replaced ISTEA. The overall differences between the two include increased funding levels and a budgetary clause that guarantees promised funding for transportation projects.

An extensive issues identification process involving representatives of governmental agencies, area officials, environmental groups, developers, business groups, civic organizations, minority advocates, and interested citizens, took place in 2004. Participants in the issues session, and those unable to attend, were invited to join the on-going Technical Advisory Committee (TAC) in the review and development of goals, objectives, and policies.

The goals and objectives pertinent to the long range planning process are as follows:

Transportation

In 2035, the Fond du Lac Urbanized Area will have a safe and effective transportation network which provides options for the mobility needs of all people, goods, and services.

To attain this goal, the following issue categories have been identified:

- *Streets and Highways**
- *Transit**
- *Freight**
- *Bicycle and Pedestrian**
- *Safety**

The goals, objectives, and policies related to these issue categories can be viewed within the Adopted Goals, Objectives, and Policies chapter of the planning document. Their relation to the TEA-21 planning factors is also discussed. A further analysis of specific issues and how they would be impacted by various development scenarios is discussed within the Alternative Analysis chapter.

Land Use

The policies assembled pertaining to land use intend to encourage efficient, orderly, and planned land use development patterns consistent with sound environmental management practices. The land use element provides direction and integrates four sub-element functional plans which have direct impacts on future land use. These functional areas are Environmental Resources and Open Space, Growth Management, Urban Service Delivery, and Economic Viability.

Like the transportation policies, the primary intent of the land use policies is to guide land use decisions, particularly in terms of sewer service area actions. A secondary use of the policies falls within the planning process, itself. These adopted transportation and land use policies are used to comparatively analyze the land use scenarios, to be discussed later.

The following land use sub-elements have been defined:

- *Environmental Resources and Open Space**
- *Growth Management**
- *Urban Service Delivery**
- *Economic Viability**

The goals and objectives related to these sub-elements can be viewed with the Adopted Goals, Objectives, and Policies chapter of the planning document.

EXISTING CONDITIONS

The Fond du Lac area has experienced a general process of slow, steady growth. While the urban core, an area of contiguous urban development, has expanded, scattered developments throughout the urbanized area have increased in recent decades.

Overall, the study area, including the City of Fond du Lac, Village of North Fond du Lac, and portions of the towns of Byron, Empire, Fond du Lac, Friendship, and Taycheedah increased from 49,469 persons in 1970 to 57,479 in 2000, or roughly 16 percent in 30 years. The number of households, on the other hand, increased by 51 percent in the same time period, as household sizes decreased and as baby boomers reached the household formation stage.

The Fond du Lac Area Transit Service (FDLAT) is a stable and efficient service in the core area. JOBTRANS, a demand responsive shared-ride taxi service is available through FDLAT. Eligible trips must have an origin or destination within the City of Fond du Lac or Village of North Fond du Lac and be at least 1,000 feet outside of the FDLAT service area. Also, significant coordination efforts have been undertaken to provide service to the elderly and disabled unable to utilize the fixed route system. Handi-Van offers lift equipped van service to these individuals. Curb to curb service is only available to individuals which meet ADA eligibility requirements. A school tripper also services the high school through a contract with a private provider.

The continuation of federal funding for the operation of transit systems has been in question for the past decade, however, as part of the recent reauthorization bill Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of August 2005, federal funding level increases have been proposed for transit.

LAND USE PLAN

The land use plan for the Fond du Lac area is based upon and integrated with the sewer service area planning process. *The Fond du Lac Sewer Service Area Plan* was adopted by the East Central Wisconsin Regional Planning Commission in 1992, and updated June 5, 2001. For the purposes of the long-range transportation/land use plan, three land use scenarios were developed: Full Build, Compact, and Current Plans (2035) Scenarios.

The Full Build Scenario depicts how development will occur over time to the point where all undeveloped land within the urbanized area is developed out pacing current development trends. The horizon year for this scenario is anticipated to be beyond the plan horizon. The Compact Scenario is extremely similar using the same population forecast. The difference is that development within this scenario would be more dense and compact, with more mixed land use. The amount of developed acreage within the urbanized area would be substantially smaller than the Full Build Scenario. Agricultural and supporting rural land uses would still be existent with the urbanized area. The horizon year for this scenario would be the same as the Full Build Scenario. Finally, the Current Plans Scenario depicts what the urbanized area is proposed to be in the year 2035. This is the desired scenario for development within the urbanized area. This scenario depicts how development will occur based on local land use plans, current demographics, and existing infrastructure.

ALTERNATIVE ANALYSIS

Two types of analysis were executed in this study. First, the three scenarios were measured against the adopted policies.

The other form of analysis in this planning process used the transportation model to consider alternatives for addressing the existing and projected highway network deficiencies. Deficiencies are determined by dividing the existing or projected traffic volumes by the design capacity of a street or highway. The vehicle to capacity (V/C) ratio can be expressed as level of service (LOS) A, B, C, D, E, or F and reflect various levels of traffic congestion.

SAFETY AND MULTIMODAL CRASH ANALYSIS

Safety is an important aspect of transportation/land use planning. According to the Federal Highway Administration (FHWA), an estimated 42,643 Americans were killed in traffic crashes in 2003. This figure does not include alternative modes fatalities. Along with the loss of life, these incidents also cost our society roughly \$231 billion or about \$830 per American. To reverse this trend, the planning process can play a key role in improving safety hazards and help reduce the number of incidents, injuries, and fatalities.

By including all aspects of transportation safety in the planning process - engineering, education, enforcement, and emergency medical response, units of government are able to make safer and more efficient transportation improvement choices. It is also important to examine safety on a comprehensive scale by including all forms of transportation (automobile, transit, bicycle, pedestrian, rail, etc.) and how they interact system-wide. By examining current conditions and trends, future hazards and incidents can be reduced, if not prevented.

The Fond du Lac MPO recognizes the importance of safety within the planning process and has conducted an in-depth analysis of multimodal crashes throughout the Urbanized Area to assist in the transportation decision-making process.

RECOMMENDATIONS

The three largely hypothetical land use scenarios 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 establishment of the long range transportation model for the Fond du Lac area was used to measure a number of proposed impacts, as well as to measure the existing and future adequacy of the entire highway system. The following is a summary 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.

Transportation

The recommendation for the implementation of adopted policies also applies to the transportation policies.

-USH 41 is the primary facility serving the Fond du Lac area. Analysis shows that the highway will likely be operating at or over capacity. WisDOT and the MPO should plan to expand the capacity of the facility from 4-lanes to 6-lanes through the Fond du Lac MPO over the long term.

-USH 151 has been identified as the second most important facility serving the Fond du Lac area. The bypass, currently under construction, has raised concerns for the MPO. WisDOT and the MPO should plan for grade separations at proposed local road intersections. MPO staff should prepare an arterial development plan to identify future parallel routes and areas needed for the long-term conversion from at-grade signalized intersections to grade separated interchanges or exchanges to eliminate cross-traffic safety concerns with USH 151. Long term

access safety improvements on USH 151 should include the intersections with STH 175, Martin Road, both CTH V intersections (south and east), and CTH T.

-**STH 23** is ranked as the third most important route serving the Fond du Lac area. STH 23 east to Plymouth is scheduled to be expanded to 4-lanes in 2013. The MPO should continue to work with WisDOT to identify additional safety improvements that can be made as part of the project. As an example, preferred plans for the expansion of STH 23 east includes a grade-separate jug-handle interchange with CTH K.

WisDOT and the MPO should plan and program the expansion of STH 23 west, to a 4-lane facility from Rolling Meadows Drive to Town line Road. In addition to creating economic development opportunities, the expansion of STH 23 west will also accommodate projected future traffic on the facility.

List of specific modal recommendations follow:

- 1) Network Facility: **USH 151.**
Facility Segment: CTH D to STH 175.
Proposed Project: Construct the 4 lane divided highway bypass from CTH D to STH 175.
- 2) Network Facility: **USH 151 BYPASS GRADE SEPARATION**
Facility Segment: USH 151 Bypass
Proposed Project: Officially map all intersections with the USH 151 Bypass to eliminate at-grade cross traffic, similar to USH 45.
- 3) Network Facility: **USH 41**
Facility Segment: Townline Road to Lost Arrow Road
Proposed Project: Reconstruction of USH 41, Widening to 6 lanes.
- 4) Network Facility: **USH 41**
Facility Segment: CTH OO to the North County Line (NCL)
Proposed Project: Pavement Replacement on USH 41 from CTH OO to the North County Line.
- 5) Network Facility: **USH 41 FREEWAY CONVERSION**
Facility Segment: Kohlman Road and Pioneer Road.
Proposed Project: Reconstruct structures to meet Interstate height and width standards.
- 6) Network Facility: **USH 41 FREEWAY MODERNIZATION**
Facility Segment: WCL and FVW Railroad Structure Reconstruction
Proposed Project: WCL and FVW Railroad Structure Reconstruction
- 7) Network Facility: **USH 45 (MAIN STREET)**
Facility Segment: Western Ave to Scott St.
Proposed Project: Reconstruct USH 45 from Western Ave to Scott St.

- 8) Network Facility: **STH 175 (VAN DYNE ROAD)**
Facility Segment: Village of North Fond du Lac to the North County Line (NCL)
Proposed Project: Resurface STH 175 from the Village of North Fond du Lac to the North County Line.
- 9) Network Facility: **STH 175**
Facility Segment: USH 41 to USH 45
Proposed Project: Resurface STH 175 from Fond du Lac to USH 151.
- 10) Network Facility: **STH 23 (WEST JOHNSON STREET)**
Facility Segment: Townline Road to USH 41.
Proposed Project: Reconstruct facility as a 4 lane highway.
- 11) Network Facility: **STH 23 (EAST JOHNSON STREET)**
Facility Segment: From CTH K to the east out of the MPO area, as part of the 4 lane project between Fond du Lac and Plymouth.
Proposed Project: Reconstruct to a 4-lane expressway with bike and pedestrian facilities.
- 12) Network Facility: **CTH K**
Facility Segment: USH 151 to CTH V.
Proposed Project: Reconstruct CTH K as a 4 lane facility from USH 151 to CTH V.
- 13) Network Facility: **CTH T (ESTERBROOK ROAD)**
Facility Segment: STH 23 to CTH OO.
Proposed Project: Reconstruct the stretch from STH 23 to CTH OOO to a four lane facility and construct a new 4 lane facility from CTH OOO to CTH OO.
- 14) Network Facility: **CTH T**
Facility Segment: STH 23 to Esterbrook Rd.
Proposed Project: Reconstruct CTH T as a 4 lane facility from STH 23 to Esterbrook Rd.
- 15) Network Facility: **CTH T**
Facility Segment: National Ave to CTH K.
Proposed Project: Reconstruct CTH T as a 4 lane facility from National Ave to CTH K.
- 16) Network Facility: **CTH V**
Facility Segment: CTH VV to USH 45.
Proposed Project: Reconstruct to 4 lanes.
- 17) Network Facility: **CTH V**
Facility Segment: CTH K to National Ave.
Proposed Project: Reconstruct to 4 lanes.
- 18) Network Facility: **CTH VV (PIONEER ROAD)**
Facility Segment: Military Road to USH 45
Proposed Project: Reconstruct Pioneer Road as a 4 lane facility.

- 19) Network Facility: **CTH VV**
Facility Segment: Military Rd. to CTH 000.
Proposed Project: Reconstruct CTH VV as a 4 lane facility from Military Rd. to CTH 000.
- 20) Network Facility: **CTH VV UNDERPASS**
Facility Segment: Morris St. to Hickory St.
Proposed Project: Reconstruct 4 lane underpass.
- 21) Network Facility: **6th STREET (USH 45)**
Facility Segment: Fond du Lac Ave to Main St.
Proposed Project: Reconstruct 6th Street as a 4 lane facility from Fond du Lac Ave to Main St.
- 22) Network Facility: **JOHNSON STREET (STH 23)**
Facility Segment: Pioneer Rd. to Prairie Rd.
Proposed Project: Intersection safety improvements - AES
- 23) Network Facility: **LAKESHORE DRIVE RAILROAD OVERPASS**
Facility Segment: Connection between USH 45 and STH 175 (Winnebago St.)
Proposed Project: Construction of an overpass over the Canadian National rail lines.
- 24) Network Facility: **MASCOUTIN VALLEY TRAIL EXTENSION**
Facility Segment: CTH VV TO CTH VVV.
Proposed Project: Extend the Mascoutin Valley Trail from CTH VV to CTH VVV.
- 25) Network Facility: **PLANK TRAIL EXTENSION**
Facility Segment: USH 151 to MPAB.
Proposed Project: Extend the Plank Trail from USH 151 to the Metropolitan Planning Area Boundary.
- 26) Network Facility: **PRAIRIE ROAD**
Facility Segment: Morningside Drive to CTH T.
Proposed Project: Construct with attainment of right of way.
- 27) Network Facility: **WILD GOOSE/PRAIRIE TRAIL CONNECTOR**
Proposed Project: Construct a 1.6 mile connector trail to link the Wild Goose and Prairie Trails.
- 28) Network Facility: **WILD GOOSE TRAIL EXTENSION**
Facility Segment: CTH VV to CTH VVV
Proposed Project: Construct a 0.75 mile extension to the Wild Goose Trail from CTH VV to CTH VVV.

The Fond du Lac Area Transit System operates at a favorable level compared to transit systems of similar size throughout the state. Recommendations for transit include:

- Convert one hour routes to 30 minute routes, especially during peak hours.
- Expand service to efficiently serve the Urbanized Area population

- Research the benefits of a Regional Transit Authority (RTA) with other communities along the USH 41 corridor.
- Coordination of efforts with other area transit providers, as well as major employers.

It is the recommendation of the East Central Wisconsin Regional Planning Commission (ECWRPC) that the Fond du Lac Urbanized Area along with the other Urbanized Areas within the ECWRPC planning region (the Fox Cities and Oshkosh Urbanized Areas) play a role in the examination of 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 a Regional Transit Authority (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.

It is also recommended that bicycle and pedestrian travel be considered in the preliminary planning, scoping and design stages of all projects. Accommodations should be appropriate to traffic volumes, parking and other physical conditions, and safe for bicyclists, pedestrians, and auto drivers. Recommended guidelines can be found in the recommendations section of this report.

An Intelligent Transportation System (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 para-transit service

ENVIRONMENTAL ANALYSIS

This planning effort includes an analysis of the overall environmental, social, and economic effects of the metropolitan transportation plan. The environmental assessment scoping process was initiated concurrently with the issue identification phase of the planning process. The issues were established through special committees and were subject to public review. Multimodal transportation, the connectivity of transportation and land use, and the potential environmental effects of these planning goals and objectives were addressed to meet the requirements established by TEA-21.

The environmental analysis chapter in this report evaluates the potential environmental impact of goals, objectives, and recommendations contained in the long range land use/transportation plan. The assessment of potential environmental effects addresses economic, social, and natural resource impacts. Environmental justice, which seeks to ensure that access to transportation systems and the transportation planning process is available to all, regardless of race or socioeconomic status, is also discussed within this chapter.

FINANCIAL ANALYSIS

The financial analysis, also required by TEA-21, is intended to show that funding is reasonably available to implement the recommendations of the plan. The Financial Plan section of this document includes a compilation of state and federal highway funds which are currently available to the Fond du Lac area jurisdictions. Local funding level projections are based on historic spending levels. The anticipated needs are estimated based on WisDOT's Urban Corridors Study, a pavement inventory and output from the Wisconsin Information System for Local Roads (WISLR), and proposed project needs from previous studies. Over the life of the plan, needs are projected at \$485 million, while anticipated funding is estimated at \$745 million over the 30 year plan horizon.

The anticipated revenue reflects fairly high historic spending that includes the STH 23 (Johnson Street) and USH 151 projects. State projects generally increases local spending as new connectors and improvements are made near the project. The anticipated funding allows flexibility to plan for potential major projects like grade separations and expansion.

INTRODUCTION

INTRODUCTION

PURPOSE

This report has been prepared to meet the requirements of the Transportation Equity Act of 1998 (TEA-21) for long-range transportation and land use in metropolitan areas. The East Central Wisconsin Regional Planning Commission (ECWRPC) has been designated by the Fond du Lac Urbanized Area Metropolitan Planning Organization (MPO) to carry out the urban transportation planning process.

The larger purpose for the plan is to insure coordination between land use and transportation planning within the Fond du Lac Metropolitan Planning Area. TEA-21 also stresses the need for integrated multimodal transportation planning and the development of a continuing process of consideration for alternative modes of travel.

CERTIFICATIONS

East Central, designated as the staff for the MPO for the Fond du Lac Urbanized Area, certifies that the metropolitan planning process is addressing the major transportation and related issues in these areas in conformance with all applicable requirements of:

- (1) 23 U.S.C. 134 and 49 U.S.C. 5303-5306;
- (2) Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506 (c) and (d));
- (3) Title VI of the Civil Rights Act of 1964 and the Title VI assurance executed by the State of Wisconsin under 23 U.S.C. 140 and 29 U.S.C. 794;
- (4) Section 1101 of the Transportation Equity Act for the 21st Century (Pub. L. 105-178) regarding the involvement of disadvantaged business enterprises in FHWA and FTA funded planning projects (Sec 105 (f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23); and
- (5) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and U.S. DOT regulations "Transportation for Individuals with Disabilities" (49 CFR parts 27, 37 and 38).

TEA-21 PLANNING FACTORS

As part of the planning process and pursuant to TEA-21, MPOs developing transportation plans and programs are required, at a minimum, to consider 7 factors identified within that legislation. The list of the factors on the next page is integral to and embedded within the goals and objectives that provide direction through the long range planning process. These mandated planning considerations will be addressed in the next chapter, Adopted Goals, Objectives and Policies, as well as the Alternative Analysis chapter.

TEA-21 requires the long range plan consider:

1. Support the economic vitality of the metropolitan planning area, especially by enabling global competitiveness, productivity and efficiency.
2. Increase the safety and security of the transportation system for motorized and non-motorized users.
3. Increase the accessibility and mobility options available to people and for freight.
4. Protect and enhance the environment, promote energy conservation, and improve the quality of life.
5. Enhance integration and connectivity of the transportation system, across and between modes, for people and freight.
6. Promote efficient system management and operation.
7. Emphasize the efficient preservation of the existing transportation system.

STUDY AREA

The Fond du Lac study area map is shown in Exhibit 1. The study area contains the City of Fond du Lac, the Village of North Fond du Lac, and portions of the towns of Byron, Empire, Friendship, Fond du Lac, and Taycheedah. The study area encompasses approximately 100.5 square miles and includes those areas potentially influenced by the expansion of urban development over the long-term. Other areas are used for particular analysis throughout the report. The Transportation Analysis Zone (TAZ) area (Exhibit 89) is used in transportation modeling. The Metropolitan Planning Area Boundary (MPAB) is used in the financial analysis as required by TEA-21. However, the study area shown in Exhibit 2 is the largest area discussed in this plan. Other areas are defined in their appropriate section.

BACKGROUND & PROCESS

The long-range transportation/land use planning process currently being undertaken by East Central is a process that has been conducted for many years, although this is the first plan for the Fond du Lac Urbanized Area. This plan will cover a 30-year planning horizon. The planning process was conducted in four phases. The four phases include:

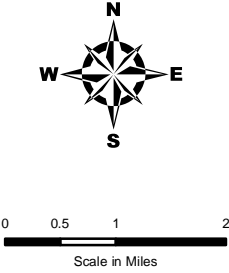
Phase 1. Goals, Objectives and Policies. In this phase the goals and objectives were drafted by the Fond du Lac MPO to address issues regarding land use and transportation within the Urbanized Area. These goals and objectives also satisfy the seven planning factors required by TEA-21.

Phase 2. Development of Alternatives. Following the development of the goals and objectives, staff, working with an open committee structure, developed alternative land use policies (scenarios) to guide land use development and corresponding transportation improvements. Each scenario also assesses the feasibility of alternative transportation modal choices.

EXHIBIT 1 FOND DU LAC AREA

- MUNICIPALITY BOUNDARIES
- RAILROADS
- INCORPORATED CITY/VILLAGE

Source: Fond du Lac County provided 2004 centerline, hydrology, municipality boundaries, and railroad data.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

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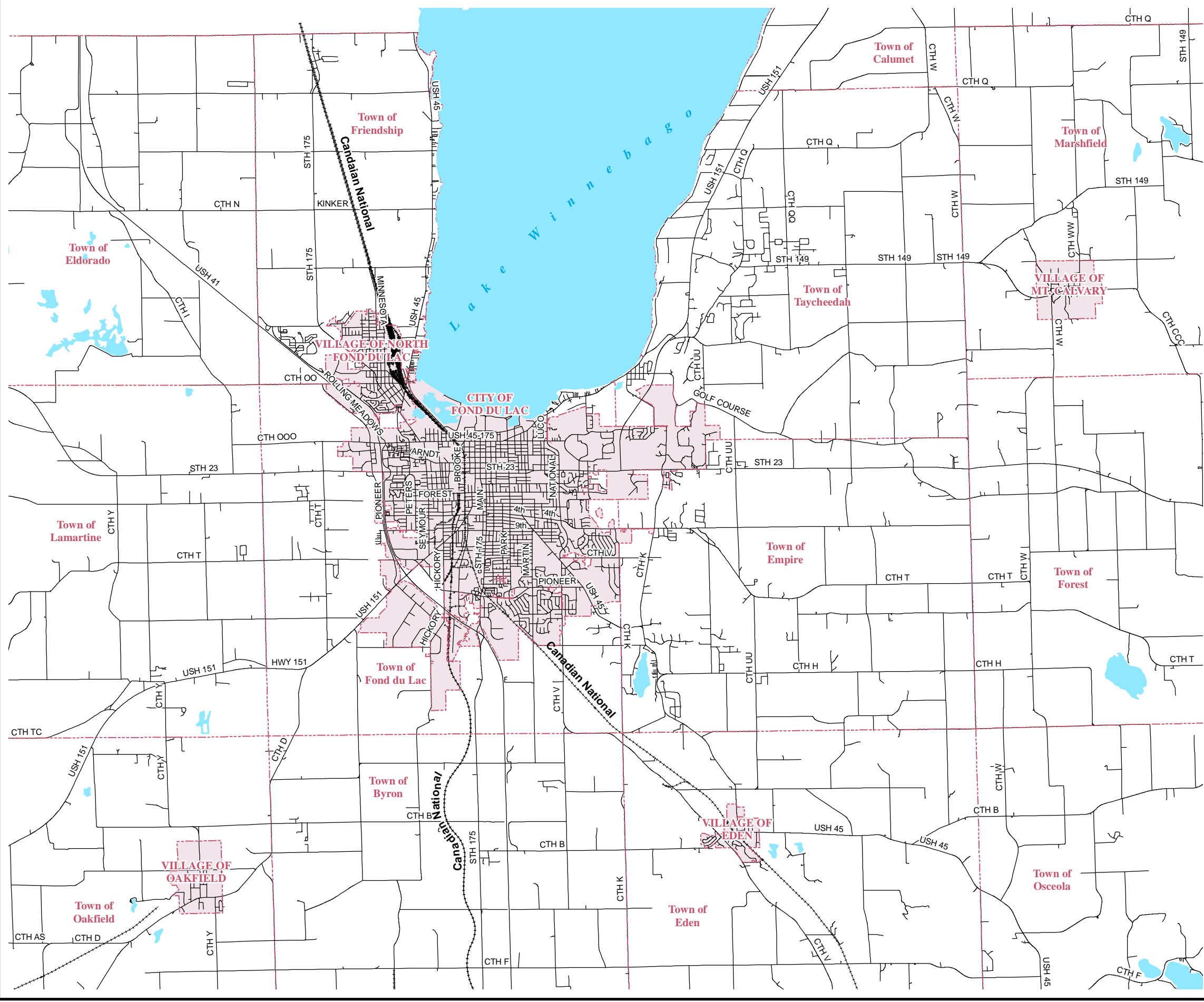
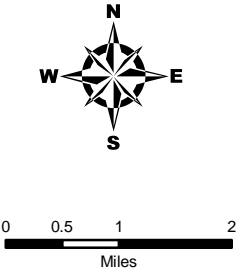


EXHIBIT 2 FOND DU LAC METROPOLITAN PLANNING ORGANIZATION PLANNING AREAS

- 2000 ADJUSTED URBANIZED AREA
- 2000 METROPOLITAN PLANNING AREA
- MUNICIPALITY BOUNDARIES

Source: WisDOT and ECWRPC provided the 2000 MPO and adjusted urbanized areas. Fond du Lac County provided 2004 centerline, municipality boundaries, railroad, and hydrology data.



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Phase 3. Testing and Evaluation of Alternatives. Using the travel demand model and other appropriate qualitative techniques, the alternative land use/transportation scenarios were evaluated, assessing the degree to which they enhance or detract from the overall goals and objectives. These assessments were developed by staff and reviewed by the long range plan committee.

Phase 4. Plan Selection and Adoption. Using the findings of the evaluation phase, staff, working with the long range plan committee, selected a set of policies, or a composite of individual policies pulled from several scenarios, to structure the recommended single set of coordinated policies which comprise the plan and guide development of specific land use patterns and modal options. This recommended plan was presented in public forums and before the TAC to gain a final set of public reactions before consideration by the Fond du Lac MPO Policy Board.

A major focus of this plan is the establishment of a transportation model in the Fond du Lac area. A base year of 2000 was used to input demographic, transportation, and land use data into the model. Using this data, the model is able to generate outputs for existing and future development scenarios. This is a beneficial tool in identifying future infrastructure deficiencies and helping local units of government make informed, efficient, cost-effective, and practical planning decisions.

CURRENT LONG-RANGE PLANNING EFFORT

Service Area Plans: An update to the Fond du Lac Sewer Service Area Plan was completed in June of 2001, with an update tentatively scheduled for 2006. These plans consider the land area needed to accommodate sewered development for each municipality within the urban areas for a given horizon year, and delineate a growth area boundary for each urban area. These development area boundaries, as well as the population projections, are key to the long-range transportation/land use planning process.

ADOPTED GOALS, OBJECTIVES AND POLICIES

ADOPTED GOALS, OBJECTIVES AND POLICIES

Passage of ISTEA in 1991 required all Metropolitan Planning Organizations (MPOs) to update and adopt long-range transportation plans which conformed to ISTEA's metropolitan planning requirements. ISTEA's requirements emphasized multimodal transportation, a strong transportation/land use interrelationship and an expanded public involvement process. Then in 1998, the Transportation Equity Act for the 21st Century (TEA-21) replaced ISTEA. The overall differences between the two include increased funding levels and a budgetary clause that guarantees promised funding for transportation projects.

In 2000, the City of Fond du Lac and several neighboring municipalities reached urbanized area status, by exceeding a population of 50,000 people. This status now requires the Fond du Lac Urbanized Area to conduct this mandated long range transportation/land use planning process. The East Central Wisconsin Regional Planning Commission has been designated by the Fond du Lac Metropolitan Planning Organization (MPO) to carry out the urban transportation planning process.

In 2003, the Fond du Lac MPO began identifying key transportation and land use issues, along with goals and objectives, to address these issues within the urbanized area. Input from the public was also taken into consideration. Issues within the urbanized area, along with goals, objectives, and policies which address the seven long-range planning factors of TEA-21 were adopted by the Fond du Lac MPO in 2004. These issues, goals, objectives, and policies and how they relate to the planning factors are listed below. Issues, goals, objectives, and policies identified by the Fond du Lac MPO may address more than one planning factor.

Planning Factor #1: Economic Vitality

Support the economic vitality of the metropolitan planning area, especially by enabling global competitiveness, productivity and efficiency.

MPO ISSUES:

Economic Viability, Growth Management, Freight, Urban Service Delivery

GOAL #1:

TO PROMOTE AND ENCOURAGE THE LOCATION OF KEY COMMERCIAL AND/OR BUSINESS ENDEAVORS IN AN EFFORT TO STIMULATE THE ECONOMY OF THE DEVELOPMENT SITE(S), AND THE REGION AS A WHOLE.

OBJECTIVE #1:

To encourage incubator development.

POLICIES:

- A. A community's geographic amenities, physical development, architectural characteristics, cultural and historic attributes, and local desires in growth and development decisions should guide urban growth.
- B. Designs and plans for new development should preserve open spaces for public use, complement the existing landscape, and conserve energy and natural resources.

- C. Urban redevelopment activities should weigh environmental, health and safety factors against associated costs and benefits.

GOAL #2:

TO ENCOURAGE AN ORDERLY AND PLANNED PATTERN OF COMMUNITY GROWTH AND DEVELOPMENT EMPHASIZING THE NEED FOR MULTI-JURISDICTIONAL COOPERATION AND COORDINATION.

OBJECTIVE #1:

To further define growth patterns, encouraging further regionalization and coordination as a means for providing services efficiently and effectively.

POLICIES:

- A. The supply of land allocated for urban development should approximate the current and future needs as determined from population, employment and land use projections which have been developed in conjunction with adopted comprehensive or urban service area plans.
- B. Community development plans should be coordinated in multi-jurisdictional urban areas.
- C. Urban sprawl in the form of unplanned development which is non-contiguous, low density, scattered and inefficiently served should be discouraged.
- D. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- E. The proliferation of major public infrastructure facilities should be discouraged.
- F. Intermunicipal agreements should be promoted for the provision of joint services.
- G. More uniform facility design and service standards should be encouraged for multiple jurisdiction development areas.

GOAL #3:

TO ENSURE THE APPROPRIATE TYPES AND LEVELS OF FREIGHT TRANSPORTATION SERVICE ARE PROVIDED AND ENHANCED FOR THE ENTIRE REGION IN A SAFE, EFFICIENT, AND PRO-ACTIVE MANNER.

OBJECTIVE #1:

To protect and enhance rail service along the mainline corridor, providing access to industries and distribution centers.

POLICIES:

- A. Major commercial and industrial areas should be provided with readily accessible transportation systems.
- B. Joint terminals and common pick-up and delivery services should be encouraged where efficient and practical for the transport companies concerned.

- C. The location of rail terminals should be determined cooperatively by public and private interests.
- D. Existing rail service should be maintained according to standards set forth in the Wisconsin Rail Plan.
- E. The disruption and dislocation of neighborhoods, households, businesses, industries and public and institutional buildings by construction of new or reconstruction of existing transportation facilities should be minimized.
- F. Railway and highway grade crossings should be eliminated in high traffic areas and properly signalized in other areas.

GOAL #4:

TO PROVIDE SERVICES IN AN EFFICIENT AND ECONOMICAL MANNER BY ENCOURAGING INTERGOVERNMENTAL AGREEMENTS AND TO ADDRESS POTENTIAL CONTROVERSIES ARISING FROM SERVICE DELIVERY.

OBJECTIVE #1:

To foster cooperation and coordination in the provision of services where efficiency, equity, and economies of scale can be obtained.

POLICIES:

- A. The use of existing public facilities and services should be maximized in the allocation of future urban growth.
- B. Designing of new and upgraded transportation and utility facilities with capacities sufficient to respond to existing demand levels and to the additional demand generated by planned development should be encouraged.
- C. A full range of essential urban services and facilities should be provided to urban development areas.
- D. Major infrastructure extensions should be staged to coincide with community growth rates.
- E. Utilities serving individual developments should be extended consistent with community water and wastewater system plans.
- F. Provision of public facilities and services should be coordinated with the location and timing of new development.
- G. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- H. Intermunicipal agreements should be promoted for the provision of joint service.
- I. More uniform facility design and service standards should be encouraged for multiple jurisdiction development areas.

- J. The number of wastewater treatment plants should be minimized to avoid duplication of facilities, institute economies of scale and lessen environmental degradation.

Planning Factor #2: Safety and Security

Increase the safety and security of the transportation system for motorized and non-motorized users.

MPO ISSUE:

Safety

GOAL:

TO REDUCE THE POTENTIAL FOR TRAFFIC ACCIDENTS AND PROVIDE FOR SAFE TRANSPORTATION OF GOODS AND PEOPLE THROUGHOUT THE REGION.

OBJECTIVE #1:

To provide a safe and secure transportation system and living environment.

POLICIES:

- A. The level of access control should be appropriate to the function of the highway.
- B. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- C. Accident-producing facility deficiencies should be accorded a high priority for correction.
- D. Design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
- E. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.
- F. Safe speed limits and laws dealing with drunk driving should be employed near transportation-related construction sites.
- G. Driver education programs should be designed not only to train new drivers but also to improve the techniques of present drivers.
- H. Educational programs should be expanded to include pedestrian, motorcycle and bicycle safety and the safe use of public transportation.
- I. Railway and highway grade crossings should be eliminated in high traffic areas and properly signalized in other areas.
- J. Enforcement of "rules of the road" which pertain to safe bicycling and walking should be increased.

- K. Efforts to alert motorists to the presence of bicyclists and pedestrians on designated routes should be undertaken.

OBJECTIVE #2:

To seek alternative solutions to hazardous transportation related conditions.

POLICIES:

- A. To ensure safe movement of hazardous material, infrastructure improvements should conform to guidelines set by local emergency services and state and federal regulations.
- B. Transportation facilities should be located and designed to minimize exposure of people to harmful and/or annoying air, water or noise pollution levels.
- C. Health threats from toxic substances in the environment should be reduced.

Planning Factor #3: Accessibility and Mobility

Increase the accessibility and mobility options available to people and for freight.

MPO ISSUE:

Transit, Pedestrian and Bicycle, Freight, Streets and Highways

GOAL #1:

TO DEVELOP A MULTI-JURISDICTIONAL PUBLIC TRANSIT SYSTEM THAT PROVIDES A MULTITUDE OF CHOICES AND SERVICES FOR ALL CITIZENS OF THE REGION IN A COST-EFFECTIVE, EFFICIENT, AND INTEGRATED MANNER.

OBJECTIVE #1:

To pursue the recommendations of the Midwest Rail Initiative.

POLICIES*:

- A. Integrate existing transit facilities to create multi-modal connections to improve rail system access.
- B. Promote regional rail service as a viable alternative to other modes of transportation.
- C. Local governments should recognize public transportation as a basic public service.
- D. Support economic development near rail stations.

*These policy statements have been compiled in accordance with *Midwest Regional Rail System: EXECUTIVE REPORT*. September 2004.

OBJECTIVE #2:

To enhance the transit system as dictated by demographic shift and urban growth.

POLICIES:

- A. Intercity public transportation should serve all populous areas of the region.

- B. Local governments should recognize public transportation as a basic public service.
- C. Public transportation should be related to travel patterns within an urban area.
- D. Transportation services within an urban area should be coordinated to increase efficiency and avoid overlap and duplication of service. Coordination should encompass public and private transportation services and include such travel demand management programs as ride-sharing, employee van pools, subsidized transit passes, park and ride lots, etc.
- E. Public transportation should provide a level of service that is safe, convenient, comfortable and affordable.
- F. Public transportation should be provided in all urban areas using delivery systems appropriate to the density of development. Delivery systems include both fixed-route and demand-responsive services employing various sized buses, vans and taxis.

OBJECTIVE #3:

To promote land use development which encourages efficient transit service, including infill and more compact development patterns.

POLICIES:

- A. Transportation facilities should be designed to promote compact development. New transportation facilities should not be extended for new subdivisions until existing subdivisions are fully developed.
- B. The transportation system should be planned in support of current land use and desired patterns of future development.
- C. Local governments should promote land use patterns and sited design standards which can be efficiently served by public transportation.
- D. Public transportation should be provided in all urban areas using delivery systems appropriate to the density of development. Delivery systems include both fixed-route and demand-responsive services employing various sized buses, vans and taxis.

GOAL #2:

TO CREATE A PHYSICAL AND CULTURAL ENVIRONMENT WHICH ENCOURAGES TRAVEL BY FOOT OR BICYCLE IN BOTH URBAN AND RURAL AREAS BY MAKING THESE MODES OF TRANSPORTATION SAFE, CONVENIENT AND ATTRACTIVE ALTERNATIVES TO MOTORIZED TRAVEL THROUGH THE PROVISION OF ADEQUATE ACCOMMODATIONS, EDUCATION AND ENFORCEMENT AND MORE COMPACT LAND USE PATTERNS BY LOCAL GOVERNMENTAL ENTITIES.

OBJECTIVE #1:

To consider bicycle and pedestrian facilities as a part of highway projects, while retrofitting existing facilities.

POLICIES:

- A. Bicycle and pedestrian-related improvements should be integrated into the planning, design, and construction of all appropriate highway and street improvement projects.
- B. Conflicts between motor vehicles and bicycles and pedestrians should be minimized.
- C. Enforcement of "rules of the road" which pertain to safe bicycling and walking should be increased.
- D. Efforts to alert motorists to the presence of bicyclists and pedestrians on designated routes should be undertaken.
- E. Natural and man-made corridors should be utilized for bicycle/pedestrian trails.
- F. Educational programs should be expanded to include pedestrian and bicycle safety.

GOAL #3:

TO ENSURE THE APPROPRIATE TYPES AND LEVELS OF FREIGHT TRANSPORTATION SERVICE ARE PROVIDED AND ENHANCED FOR THE ENTIRE REGION IN A SAFE, EFFICIENT, AND PRO-ACTIVE MANNER.

OBJECTIVE #1:

To protect and enhance rail service along the mainline corridor, providing access to industries and distribution centers.

POLICIES:

- A. Major commercial and industrial areas should be provided with readily accessible major transportation systems.
- B. Joint terminals and common pick-up and delivery services should be encouraged where efficient and practical for the transport companies concerned.
- C. The location of rail terminals should be determined cooperatively by public and private interests.
- D. Existing rail service should be maintained according to standards set forth in the Wisconsin Rail Plan.
- E. The disruption and dislocation of neighborhoods, households, businesses, industries and public and institutional buildings by construction of new or reconstruction of existing transportation facilities should be minimized.
- F. Railway and highway grade crossings should be eliminated in high traffic areas and properly signalized in other areas.

GOAL #4:

TO PROVIDE AN EFFICIENT AND ACCESSIBLE STREET AND HIGHWAY SYSTEM WHICH WILL MEET THE SHORT AND LONG-RANGE NEEDS, INTERESTS AND OBJECTIVES OF THE REGION'S CITIZENS AND COMMERCIAL ENTITIES IN A COST-EFFECTIVE MANNER.

OBJECTIVE #1:

To maintain and enhance strategic access to major highways for safe and efficient traffic management.

POLICIES:

- A. The level of access control should be appropriate to the function of the highway.
- B. The highway system should be designed to adequately accommodate projected future highway travel growth and the potential modal choices necessary for the efficient movement of goods and people.
- C. Street and highway design standards should be based on functional class criteria set forth in WisDOT's *Design Manual*.
- D. Adequate financial resources for upkeep and renewal of existing highways to prevent accelerated deterioration should be a high priority in the budgetary process.
- E. Low-cost improvements such as channelization, signalization, removal of parking, etc. should be the first measure considered to maintain an adequate level of service on highway facilities.
- F. Regulations concerning the use of highways should be strictly enforced, including those which prevent the deterioration of structures and the highway surface.
- G. Appropriate access control measures should be established for existing and future routes functionally classified or proposed as principal or minor arterials.
- H. Traffic control signals within the urbanized area should be coordinated or timed to facilitate the efficient flow of traffic.
- I. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- J. Accident-producing facility deficiencies should be accorded a high priority for correction.
- K. Design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
- L. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.

OBJECTIVE #2:

To maximize opportunities for alternative sources of revenue.

POLICIES:

- A. Mechanisms for extracting fees for offsite improvements necessitated by large scale developments should be adopted.

- B. Less reliance on the property tax and increased use of alternative revenue systems should be encouraged to finance necessary services.
- C. The cost of extending infrastructure and services should be directed to those directly benefiting.
- D. Cost recovery methods for local jurisdictions should be promoted to address growth and development expenditures.
- E. All rural and urban local units of government should be assured the opportunity to obtain technical information and assistance necessary to finance, evaluate, and provide public services more economically.
- F. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- G. Intermunicipal agreements should be promoted for the provision of joint services.

OBJECTIVE #3:

To consider life-cycle costing for infrastructure as a more efficient use of resources.

POLICIES:

- A. Recognize that the cost/year is the true cost of a product, not the initial cost.
- B. Determine cost of bridges, roads, or other infrastructure on the basis of per year cost, factoring in the entire estimated lifespan.
- C. Incorporate long term expenditures and costs into the decision making process when evaluating bids for projects.

OBJECTIVE #4:

To examine the needs of USH 41 frontage roads, specifically Rolling Meadows Drive and Pioneer Road.

- A. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- B. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.
- C. Accident-producing facility deficiencies should be accorded a high priority for correction.
- D. Development of new or expanded highway corridors should only be considered after a determination that alternative transportation modes and/or routes cannot address the need to:
 - 1. Alleviate significant safety hazards
 - 2. Relieve communities of heavy through traffic burdens
 - 3. Conserve energy in highway use

4. Stimulate economic development
5. Provide a framework for future planned land use

Planning Factor #4: Environmental

Protect and enhance the environment, promote energy conservation, and improve the quality of life.

MPO ISSUE:

Environmental Resources and Open Space

GOAL:

TO PROTECT THE ENVIRONMENT AND MANAGE NATURAL RESOURCES IN AN ECOLOGICALLY SOUND MANNER WHILE PROVIDING SUFFICIENT PUBLIC OPEN SPACE TO MEET THE RECREATIONAL NEEDS OF ALL RESIDENTS THAT IS CONSISTENT WITH PROTECTING AND PRESERVING NATURAL RESOURCES.

OBJECTIVE #1:

To protect and preserve environmentally sensitive areas, air quality, and water resources.

POLICIES:

- A. The development of environmentally sensitive areas should be discouraged.
- B. The natural environment should be recognized as an integrated system of interacting and finite land, water and air resources to protect the health and stability of this system.
- C. Shoreland, floodplain and wetland areas should be protected as essential components of the hydrologic system and their scenic and recreational value preserved.
- D. The disturbance of environmentally sensitive areas by utilities and transportation facilities construction should be minimized.
- E. Critical natural areas should be preserved and protected from development and other adverse impacts.
- F. Adjacent land uses which adversely impact sensitive areas should be restricted or mitigated.
- G. The interrelationship of adjacent landscape types should be recognized to avoid dividing the natural units or breaking important linkages.
- H. Air pollution abatement programs and air quality regulations should be supported.
- I. Geographically coordinated abatement strategies should be encouraged.
- J. The public should be provided with information on air quality programs and specific air quality problems.

- K. The increased use of transportation modes that are more efficient and environmentally sound than the private automobile should be encouraged.
- L. Noise pollution should be reduced and noise sources isolated.
- M. The quality and supply of groundwater should be protected as the principal source of water supply and encourage water conservation programs.
- N. The use of natural drainage patterns and measures should be promoted to enhance water quality.
- O. Wetlands should be preserved as an essential component of the hydrologic system.
- P. The risk of groundwater contamination should be reduced in aquifer recharge areas.
- Q. Lakeshore and streambank erosion should be minimized.
- R. Construction site erosion should be controlled and urban stormwater runoff reduced.
- S. Non-point source pollution abatement programs should be supported.
- T. The adverse water quality impacts of agricultural runoff should be minimized.
- U. Significant natural areas should be preserved as public open space.

Planning Factor #5: Integration and Connectivity

Enhance integration and connectivity of the transportation system, across and between modes, for people and freight.

MPO ISSUES:

Streets and Highways, Freight, Growth Management, Transit, Pedestrian and Bicycle

GOAL #1:

TO PROVIDE AN EFFICIENT AND ACCESSIBLE STREET AND HIGHWAY SYSTEM WHICH WILL MEET THE SHORT AND LONG-RANGE NEEDS, INTERESTS AND OBJECTIVES OF THE REGION'S CITIZENS AND COMMERCIAL ENTITIES IN A COST-EFFECTIVE MANNER.

OBJECTIVE #1:

To maintain and enhance strategic access to major highways for safe and efficient traffic management.

POLICIES:

- A. The level of access control should be appropriate to the function of the highway.
- B. The highway system should be designed to adequately accommodate projected future highway travel growth and the potential modal choices necessary for the efficient movement of goods and people.

- C. Street and highway design standards should be based on functional class criteria set forth in WisDOT's *Design Manual*.
- D. Adequate financial resources for upkeep and renewal of existing highways to prevent accelerated deterioration should be a high priority in the budgetary process.
- E. Low-cost improvements such as channelization, signalization, removal of parking, etc. should be the first measure considered to maintain an adequate level of service on highway facilities.
- F. Regulations concerning the use of highways should be strictly enforced, including those which prevent the deterioration of structures and the highway surface.
- G. Appropriate access control measures should be established for existing and future routes functionally classified or proposed as principal or minor arterials.
- H. Traffic control signals within the urbanized area should be coordinated or timed to facilitate the efficient flow of traffic.
- I. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- J. Accident-producing facility deficiencies should be accorded a high priority for correction.
- K. Design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
- L. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.

GOAL #2:

TO ENSURE THE APPROPRIATE TYPES AND LEVELS OF FREIGHT TRANSPORTATION SERVICE ARE PROVIDED AND ENHANCED FOR THE ENTIRE REGION IN A SAFE, EFFICIENT, AND PRO-ACTIVE MANNER.

OBJECTIVE #1:

To protect and enhance rail service along the mainline corridor, providing access to industries and distribution centers.

POLICIES:

- A. Major commercial and industrial areas should be provided with readily accessible major transportation systems.
- B. Joint terminals and common pick-up and delivery services should be encouraged where efficient and practical for the transport companies concerned.
- C. The location of rail terminals should be determined cooperatively by public and private interests.

- D. Existing rail service should be maintained according to standards set forth in the Wisconsin Rail Plan.
- E. The disruption and dislocation of neighborhoods, households, businesses, industries and public and institutional buildings by construction of new or reconstruction of existing transportation facilities should be minimized.
- F. Railway and highway grade crossings should be eliminated in high traffic areas and properly signalized in other areas.

OBJECTIVE #2:

To build and maintain safe highway facilities that tolerate heavy loads and increasing traffic volumes.

POLICIES:

- A. The highway system should be designed to adequately accommodate projected future highway travel growth and the potential modal choices necessary for the efficient movement of goods and people.
- B. Adequate financial resources for upkeep and renewal of existing highways to prevent accelerated deterioration should be a high priority in the budgetary process.
- C. Regulations concerning the use of highways should be strictly enforced, including those which prevent the deterioration of structures and the highway surface.
- D. Efficient truck routing should be oriented to the freeway, expressway and high-level arterial network to facilitate truck traffic and to reduce conflicts with autos.

GOAL #3:

TO ENCOURAGE AN ORDERLY AND PLANNED PATTERN OF COMMUNITY GROWTH AND DEVELOPMENT EMPHASIZING THE NEED FOR MULTI-JURISDICTIONAL COOPERATION AND COORDINATION.

OBJECTIVE #1:

To further define growth patterns, encouraging further regionalization and coordination as a means for providing services efficiently and effectively.

POLICIES:

- A. The supply of land allocated for urban development should approximate the current and future needs as determined from population, employment and land use projections which have been developed in conjunction with adopted comprehensive or urban service area plans.
- B. Community development plans should be coordinated in multi-jurisdictional urban areas.
- C. Urban sprawl in the form of unplanned development which is non-contiguous, low density, scattered and inefficiently served should be discouraged.

- D. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- E. Intermunicipal agreements should be promoted for the provision of joint services.
- F. More uniform facility design and service standards should be encouraged for multiple jurisdiction development areas.

GOAL #4:

TO DEVELOP A MULTI-JURISDICTIONAL PUBLIC TRANSIT SYSTEM THAT PROVIDES A MULTITUDE OF CHOICES AND SERVICES FOR ALL CITIZENS OF THE REGION IN A COST-EFFECTIVE, EFFICIENT, AND INTEGRATED MANNER.

OBJECTIVE #1:

To pursue the recommendations of the Midwest Rail Initiative.

POLICIES*:

- A. Integrate existing transit facilities to create multi-modal connections to improve rail system access.
- B. Promote regional rail service as a viable alternative to other modes of transportation.
- C. Local governments should recognize public transportation as a basic public service.
- D. Support economic development near rail stations.

*These policy statements have been compiled in accordance with *Midwest Regional Rail System: EXECUTIVE REPORT*. September 2004.

OBJECTIVE #2:

To enhance the transit system as dictated by demographic shift and urban growth.

POLICIES:

- A. Intercity public transportation should serve all populous areas of the region.
- B. Local governments should recognize public transportation as a basic public service.
- C. Public transportation should be related to travel patterns within an urban area.
- D. Transportation services within an urban area should be coordinated to increase efficiency and avoid overlap and duplication of service. Coordination should encompass public and private transportation services and include such travel demand management programs as ride-sharing, employee van pools, subsidized transit passes, park and ride lots, etc.
- E. Public transportation should provide a level of service that is safe, convenient, comfortable and affordable.

- F. Public transportation should be provided in all urban areas using delivery systems appropriate to the density of development. Delivery systems include both fixed-route and demand-responsive services employing various sized buses, vans and taxis.

OBJECTIVE #3:

To promote land use development which encourages efficient transit service, including infill and more compact development patterns.

POLICIES:

- A. Transportation facilities should be designed to promote compact development. New transportation facilities should not be extended for new subdivisions until existing subdivisions are fully developed.
- B. The transportation system should be planned in support of current land use and desired patterns of future development.
- C. Local governments should promote land use patterns and site design standards which can be efficiently served by public transportation.
- D. Public transportation should be provided in all urban areas using delivery systems appropriate to the density of development. Delivery systems include both fixed-route and demand-responsive services employing various sized buses, vans and taxis.

GOAL #5:

TO CREATE A PHYSICAL AND CULTURAL ENVIRONMENT WHICH ENCOURAGES TRAVEL BY FOOT OR BICYCLE IN BOTH URBAN AND RURAL AREAS BY MAKING THESE MODES OF TRANSPORTATION SAFE, CONVENIENT AND ATTRACTIVE ALTERNATIVES TO MOTORIZED TRAVEL THROUGH THE PROVISION OF ADEQUATE ACCOMMODATIONS, EDUCATION AND ENFORCEMENT AND MORE COMPACT LAND USE PATTERNS BY LOCAL GOVERNMENTAL ENTITIES.

OBJECTIVE #1:

To consider bicycle and pedestrian facilities as a part of highway projects, while retrofitting existing facilities.

POLICIES:

- A. Bicycle and pedestrian-related improvements should be integrated into the planning, design, and construction of all appropriate highway and street improvement projects.
- B. Conflicts between motor vehicles and bicycles and pedestrians should be minimized.
- C. Enforcement of "rules of the road" which pertain to safe bicycling and walking should be increased.
- D. Efforts to alert motorists to the presence of bicyclists and pedestrians on designated routes should be undertaken.

- E. Natural and man-made corridors should be utilized for bicycle/pedestrian trails.
- F. Educational programs should be expanded to include pedestrian and bicycle safety.

Planning Factor #6: Efficiency

Promote efficient system management and operation.

MPO ISSUES:

Streets and Highways

GOAL:

TO PROVIDE AN EFFICIENT AND ACCESSIBLE STREET AND HIGHWAY SYSTEM WHICH WILL MEET THE SHORT AND LONG-RANGE NEEDS, INTERESTS AND OBJECTIVES OF THE REGION'S CITIZENS AND COMMERCIAL ENTITIES IN A COST-EFFECTIVE MANNER.

OBJECTIVE #1:

To maintain and enhance strategic access to major highways for safe and efficient traffic management.

POLICIES:

- A. The level of access control should be appropriate to the function of the highway.
- B. The highway system should be designed to adequately accommodate projected future highway travel growth and the potential modal choices necessary for the efficient movement of goods and people.
- C. Street and highway design standards should be based on functional class criteria set forth in WisDOT's *Design Manual*.
- D. Adequate financial resources for upkeep and renewal of existing highways to prevent accelerated deterioration should be a high priority in the budgetary process.
- E. Low-cost improvements such as channelization, signalization, removal of parking, etc. should be the first measure considered to maintain an adequate level of service on highway facilities.
- F. Regulations concerning the use of highways should be strictly enforced, including those which prevent the deterioration of structures and the highway surface.
- G. Appropriate access control measures should be established for existing and future routes functionally classified or proposed as principal or minor arterials.
- H. Traffic control signals within the urbanized area should be coordinated or timed to facilitate the efficient flow of traffic.
- I. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.

- J. Accident-producing facility deficiencies should be accorded a high priority for correction.
- K. Design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
- L. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.

OBJECTIVE #2:

To maximize opportunities for alternative sources of revenue.

POLICIES:

- A. Mechanisms for extracting fees for offsite improvements necessitated by large scale developments should be adopted.
- B. Less reliance on the property tax and increased use of alternative revenue systems should be encouraged to finance necessary services.
- C. The cost of extending infrastructure and services should be directed to those directly benefiting.
- D. Cost recovery methods for local jurisdictions should be promoted to address growth and development expenditures.
- E. All rural and urban local units of government should be assured the opportunity to obtain technical information and assistance necessary to finance, evaluate, and provide public services more economically.
- F. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- G. Intermunicipal agreements should be promoted for the provision of joint services.

OBJECTIVE #3:

To consider life-cycle costing for infrastructure as a more efficient use of resources.

POLICIES:

- A. Recognize that the cost/year is the true cost of a product, not the initial cost.
- B. Determine cost of bridges, roads, or other infrastructure on the basis of per year cost, factoring in the entire estimated lifespan.
- C. Incorporate long term expenditures and costs into the decision making process when evaluating bids for infrastructure improvements.

OBJECTIVE #4:

To examine the needs of STH 41 frontage roads, specifically Rolling Meadows Drive and Pioneer Road.

- A. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- B. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.
- C. Accident-producing facility deficiencies should be accorded a high priority for correction.
- D. Development of new or expanded highway corridors should only be considered after a determination that alternative transportation modes and/or routes cannot address the need to:
 - 1. Alleviate significant safety hazards
 - 2. Relieve communities of heavy through traffic burdens
 - 3. Conserve energy in highway use
 - 4. Stimulate economic development
 - 5. Provide a framework for future planned land use

Planning Factor #7: Preservation

Emphasize the efficient preservation of the existing transportations system.

MPO ISSUES:

Growth Management, Streets and Highways

GOAL #1:

TO ENCOURAGE AN ORDERLY AND PLANNED PATTERN OF COMMUNITY GROWTH AND DEVELOPMENT EMPHASIZING THE NEED FOR MULTI-JURISDICTIONAL COOPERATION AND COORDINATION.

OBJECTIVE #1:

To promote development in areas where infrastructure is in place or near.

POLICIES:

- A. Urban development should occur in areas served by adequate public facilities and services.
- B. Urban development should be encouraged at densities adequate to sustain reasonable urban service costs.
- C. Urban development should only take place in designated urban service areas.
- D. Community comprehensive plans should be adopted prior to the extension of urban services.
- E. Vacant developable lands within existing urban areas should first be infilled, then development staged outward from the existing development limits.
- F. New subdivision development should be encouraged within existing urbanized areas or as an expansion of existing urban areas concurrent with the provision of necessary facilities and services.

- G. The use of existing public facilities and services should be maximized in the allocation of future urban growth.
- H. Utilities serving individual developments should be extended consistent with community water and wastewater system plans.
- I. Provision of public facilities and services should be coordinated with the location and timing of new development.
- J. Major infrastructure extensions should be staged to coincide with community growth rates.

GOAL #2:

TO PROVIDE AN EFFICIENT AND ACCESSIBLE STREET AND HIGHWAY SYSTEM WHICH WILL MEET THE SHORT AND LONG-RANGE NEEDS, INTERESTS AND OBJECTIVES OF THE REGION'S CITIZENS AND COMMERCIAL ENTITIES IN A COST-EFFECTIVE MANNER.

OBJECTIVE #1:

To maintain and enhance strategic access to major highways for safe and efficient traffic management.

POLICIES:

- A. The level of access control should be appropriate to the function of the highway.
- B. The highway system should be designed to adequately accommodate projected future highway travel growth and the potential modal choices necessary for the efficient movement of goods and people.
- C. Street and highway design standards should be based on functional class criteria set forth in WisDOT's *Design Manual*.
- D. Adequate financial resources for upkeep and renewal of existing highways to prevent accelerated deterioration should be a high priority in the budgetary process.
- E. Low-cost improvements such as channelization, signalization, removal of parking, etc. should be the first measure considered to maintain an adequate level of service on highway facilities.
- F. Regulations concerning the use of highways should be strictly enforced, including those which prevent the deterioration of structures and the highway surface.
- G. Appropriate access control measures should be established for existing and future routes functionally classified or proposed as principal or minor arterials.
- H. Traffic control signals within the urbanized area should be coordinated or timed to facilitate the efficient flow of traffic.
- I. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.

- J. Accident-producing facility deficiencies should be accorded a high priority for correction.
- K. Design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
- L. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.

OBJECTIVE #2:

To maximize opportunities for alternative sources of revenue.

POLICIES:

- A. Mechanisms for extracting fees for offsite improvements necessitated by large scale developments should be adopted.
- B. Less reliance on the property tax and increased use of alternative revenue systems should be encouraged to finance necessary services.
- C. The cost of extending infrastructure and services should be directed to those directly benefiting.
- D. Cost recovery methods for local jurisdictions should be promoted to address growth and development expenditures.
- E. All rural and urban local units of government should be assured the opportunity to obtain technical information and assistance necessary to finance, evaluate, and provide public services more economically.
- F. Overlapping urban service areas, facility and system capacities and service capabilities should be discouraged.
- G. Intermunicipal agreements should be promoted for the provision of joint services.

OBJECTIVE #3:

To consider life-cycle costing for infrastructure as a more efficient use of resources.

POLICIES:

- A. Recognize that the cost/year is the true cost of a product, not the initial cost.
- B. Determine cost of bridges, roads, or other infrastructure on the basis of per year cost, factoring in the entire estimated lifespan.
- C. Incorporate long term expenditures and costs into the decision making process when evaluating bids for infrastructural projects.

OBJECTIVE #4:

To examine the needs of USH 41 frontage roads, specifically Rolling Meadows Drive and Pioneer Road.

- A. Vehicle conflicts should be reduced through roadway and intersection design appropriate for the desired level of service.
- B. Appropriate marking, signing, and protection devices should be installed where justified by design speed and accident exposure rate.
- C. Accident-producing facility deficiencies should be accorded a high priority for correction.
- D. Development of new or expanded highway corridors should only be considered after a determination that alternative transportation modes and/or routes cannot address the need to:
 - 1. Alleviate significant safety hazards
 - 2. Relieve communities of heavy through traffic burdens
 - 3. Conserve energy in highway use
 - 4. Stimulate economic development
 - 5. Provide a framework for future planned land use

EXISTING CONDITIONS

EXISTING CONDITIONS

LAND USE

An inventory of the existing land use was completed in April of 2003. This inventory provided a foundation for both the sewer service area plan and this land use/transportation plan. The results of the inventory are depicted in Exhibit 3 and 4. The area used in this analysis is that shown earlier in this report as the study area in Exhibit 2.

Land Use and Development

Historical land use trends and existing land use characteristics are basic to determining future land use/transportation relationships. Throughout the years, the Fond du Lac study area has experienced significant changes in urban land use patterns as shown in Exhibits 3 and 4. While the urban core (contiguous urban development) has expanded, the planning area also experienced an increase in urban scattered development. This trend was evident throughout the Towns of Byron, Fond du Lac, Empire, Friendship, and Taycheedah. During the 1970's, various state and local land use trends and environmental regulations were adopted, which impacted these land use trends and provided for more compact and dense development. By the 1990's, significantly less scattered urban development was occurring. This trend continues today. The changing density of development has also had an impact on land consumption.

City of Fond du Lac

The City of Fond du Lac is located primarily within the center of the Metropolitan Planning Area, along the southern shore of Lake Winnebago in east central Wisconsin. In 2003, the City of Fond du Lac covered approximately 11,278 acres. Of this area, residential development accounted for roughly 28 percent, 8 percent for commercial use, 5 percent for industrial use, and 15 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population of the City of Fond du Lac was 42,856.

Since 1990, most residential growth has occurred in the southeastern portion of the city. Major commercial areas within the city are located downtown on Main Street and along West Johnson Street (Highway 23). Recent commercial growth has also occurred on East Johnson Street (Highway 23), on both sides of the new Highway 151 overpass. Highway 151 is currently under construction and will bypass the City of Fond du Lac to the south and east. Commercial growth is expected to continue along a variety of main traffic arterials within the city.

The Fond du Lac Southwest Industrial Park is the primary industrial area located in the southwest portion of the city along Pioneer Road, Military Road, and Hickory Street with direct access to the Highway 41 Interchange. Throughout the years, this industrial area has expanded and a 65 acre expansion to this area is currently under development. This expansion is located to the west of Highway 41 and just north of the future Highway 151. Some lots have rail access as well. This development is a tax increment finance (TIF) district.

Another major industrial area within the city limits is the Fond du Lac West Industrial Park which is located in the northwest portion of the city just south of the Village of North Fond du Lac. This 18 acre industrial area which is to the south of West Scott Street and to the west of North Rolling Meadows Drive is within a ½ mile of the Highway 41 Interchange. This industrial area is also a tax increment finance (TIF) district.

A future industrial park is also being planned in the southern portion of the city along Highway 41. This 276 acre area was purchased by the City of Fond du Lac with anticipated industrial development occurring between 2005 and 2010.

Village of North Fond du Lac

In 2003, the Village of North Fond du Lac covered approximately 1,272 acres. Of this area, residential development accounted for roughly 31 percent, 6 percent for commercial use, 2 percent for industrial use, and 29 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for the Village of North Fond du Lac was 4,731.

Since 1990, most residential growth has occurred directly to the west of the village. Major commercial areas within the village are located in the eastern and southwestern portions of the village. A 96 acre development to the north of County Highway OO, between U.S. Highway 41 and State Highway 175, is currently under development for both commercial and industrial use. This area is a tax increment finance (TIF) district.

Town of Byron

In 2003, the part of the Town of Byron within the Metropolitan Planning Area covered approximately 2,506 acres. Of this area, residential development accounted for roughly 3 percent, less than 1 percent for both commercial and industrial uses, and 4 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for this part of the Town of Byron was 1,582.

Town of Empire

In 2003, the part of the Town of Empire within the Metropolitan Planning Area covered approximately 8,094 acres. Of this area, residential development accounted for roughly 11 percent, less than 1 percent for both commercial and industrial uses, and 5 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for this part of the Town of Empire was 2,687.

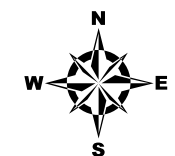
Town of Fond du Lac

The Town of Fond du Lac is located entirely within the Metropolitan Planning Area. In 2003, the Town of Fond du Lac covered approximately 12,355 acres. Of this area, residential development accounted for roughly 8 percent, roughly 1 percent for both commercial and industrial uses, and 7 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for the Town of Fond du Lac was 2,182. The major commercial area within the Town of Fond du Lac is located along the southwestern border with the City of Fond du Lac. This is also where the majority of the town's industrial development is as well.

EXHIBIT 3 FOND DU LAC AREA EXISTING LAND USE 2003

- SINGLE FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- GROUP QUARTERS
- MOBILE HOME PARKS
- COMMERCIAL
- WHOLESALE TRADE
- SERVICE
- COMMERCIAL/INDUSTRIAL MIX
- MANUFACTURING
- QUARRIES
- PUBLIC INSTITUTIONAL
- WATER FEATURES
- PARKS/RECREATION
- WOODLANDS
- WETLANDS/RESOURCE PROTECTION
- AGRICULTURAL
- VACANT/UNDEVELOPED
- TRANSPORTATION/UTILITIES
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING BOUNDARY

Source: 2002 Base data provided by Fond du Lac County.
ECWRPC provided the existing land use, 2003. WisDOT and
ECWRPC provided 2000 metropolitan planning boundary.



0 0.5 1 2
Scale in Miles

This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By
EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005

EXHIBIT 4

2003 LAND USE CHARACTERISTICS
(Total Acres by Land Use Classification)

Urban Area Municipality	Single Family Residential	Multi-Family Residential	Farmsteads	Mobile Home Parks	Commercial	Industrial	Quarries	Institutional Facilities	Transportation	Utilities and Communications	Non-Irrigated Cropland	Irrigated Cropland	Other Agricultural Land/Pasture	Water Features	Recreational Facilities	Planted Woodlands	General Woodlands	Open Other Land	Total
City of Fond du Lac	2,811	323	1	34	858	592	5	876	1,713	134	970	0	3	252	1,086	38	360	1,222	11,278
Village of North Fond du Lac	291	8	1	93	70	25	0	53	367	13	171	0	2	14	45	0	14	105	1,272
Town of Byron	38	0	27	0	2	2	0	1	90	0	1,698	0	24	16	14	111	162	321	2,506
Town of Empire	846	0	38	0	37	15	0	65	400	4	4,053	0	116	123	8	232	914	1,243	8,094
Town of Fond du Lac	851	0	99	0	124	140	0	35	877	50	7,207	0	163	156	104	26	1,114	1,409	12,355
Town of Friendship	292	1	20	83	52	14	9	3	327	2	3,120	0	55	27	45	15	196	523	4,784
Town of Taycheedah	1,370	4	31	0	39	29	78	18	559	4	6,581	0	182	75	34	55	876	1,422	11,357
Study Area Total	6,499	336	217	210	1,182	817	92	1,051	4,333	207	23,800	0	545	663	1,336	477	3,636	6,245	51,646

Source: ECWRPC, 2004

Town of Friendship

In 2003, the part of the Town of Friendship within the Metropolitan Planning Area covered approximately 4,784 acres. Of this area, residential development accounted for roughly 8 percent, roughly 1 percent for commercial use, less than 1 percent for industrial use, and 7 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for this part of the Town of Friendship was 2,459.

Town of Taycheedah

In 2003, the part of the Town of Taycheedah within the Metropolitan Planning Area covered approximately 11,357 acres. Of this area, residential development accounted for roughly 12 percent, less than 1 percent for both commercial and industrial uses, and 5 percent for roads and other transportation facilities. The remaining acreage is in low intensity uses. In 2003, the estimated population for this part of the Town of Taycheedah was 3,786.

Demographics

Changes in population characteristics are the key factor in determining land use and transportation demands. Population growth or decline, are obvious indicators of change. However, age of population, fertility rates and migration are factors which can have major impacts. Exhibit 5 shows the historic population changes of the governmental units within the Fond du Lac study area. The study area has experienced steady growth between 1950 and 2003.

EXHIBIT 5

POPULATION CHARACTERISTICS (Total Population)

Jurisdiction	1950	1960	1970	1980	1990	2000	2003	% Change 1990-2000
City of Fond du Lac	29,936	32,719	35,515	35,863	37,755	42,203	42,856	11.78%
Village of North Fond du Lac	2,291	2,549	3,286	3,844	4,302	4,557	4,731	5.93%
Town of Byron	1,079	1,102	1,300	1,681	1,634	1,550	1,582	-5.14%
Town of Empire	904	1,180	1,730	2,359	2,485	2,620	2,687	5.43%
Town of Fond du Lac	2,471	3,851	3,896	3,001	2,310	2,027	2,182	-12.25%
Town of Friendship	1,429	1,837	2,350	2,321	2,210	2,406	2,459	8.87%
Town of Taycheedah	1,736	2,147	2,692	3,227	3,383	3,666	3,786	8.37%
Study Area Total	38,767	44,283	49,469	50,615	52,445	57,479	60,283	9.60%

Source: U.S. Census Bureau, 1950-2000: DOA, 2003

Household formation rates provide a demand factor for new housing units. Household size provides a basis for estimating the number of residential units required. Exhibit 6 shows the historic number of households for the jurisdictions in the planning area. Total households have expanded steadily through the 1970 to 2000 period. This steady increase is due to a declining household size (Exhibit 7) coupled with the high household formation rate during the 1970's.

EXHIBIT 6

HOUSEHOLD CHARACTERISTICS (Number of Households)

Jurisdiction	1970	1980	1990	2000
City of Fond du Lac	11,075	13,104	14,637	16,638
Village of North Fond du Lac	965	1,320	1,615	1,789
Town of Byron	325	482	505	538
Town of Empire	399	644	784	910
Town of Fond du Lac	1,035	994	846	789
Town of Friendship	742	819	841	971
Town of Taycheedah	653	915	1,083	1,319
Study Area Total	15,194	18,278	20,311	22,954

Source: U.S. Census Bureau, 1970 - 2000

EXHIBIT 7

HOUSEHOLD CHARACTERISTICS (Persons per Household)

Jurisdiction	1970	1980	1990	2000
City of Fond du Lac	3.13	2.64	2.49	2.38
Village of North Fond du Lac	3.40	2.91	2.66	2.53
Town of Byron	4.00	3.49	3.24	2.88
Town of Empire	4.01	3.44	3.04	2.88
Town of Fond du Lac	3.45	3.02	2.73	2.57
Town of Friendship	3.17	2.83	2.63	2.48
Town of Taycheedah	3.89	3.38	2.94	2.78
Study Area Total	3.58	3.10	2.77	2.64

Source: U.S. Census Bureau, 1970 - 2000

Increased employment has been the primary factor for urban development within the Fond du Lac Urbanized Area. Exhibit 8 shows employment by economic sector for the study area. As indicated in the year 2000, the service sector was nearly double the second largest category, which was manufacturing.

An analysis of the commuting patterns for the Fond du Lac area sheds light onto the demographic characteristics of the region (Exhibit 9). In total, just over 4,500 more people live in Fond du Lac County and commute to other counties than live in other counties and commute to Fond du Lac County. Dodge (4,401), Winnebago (2,721) and Washington (2,057) counties account for the greatest number of outward bound commuters. These counties directly border Fond du Lac County, and in general are places where jobs are just as or slightly more prevalent.

In terms of inward bound commuters, Winnebago (2,544), Dodge (1,852) and Green Lake (1,803) Counties stand out.

EXHIBIT 8

EMPLOYMENT CHARACTERISTICS (Employees by Sector)

Year	Manufacturing	Trade	Service	Wholesale	Commercial	Other	Total
1980	6,602	1,800	7,953	766	4,431	1,877	23,429
1990	7,226	1,786	9,682	1,095	5,164	1,365	26,318
2000	8,264	1,940	16,160	1,332	6,100	2,581	36,377

Source: U.S. Census Bureau 1980-1990: DOA 2003

EXHIBIT 9

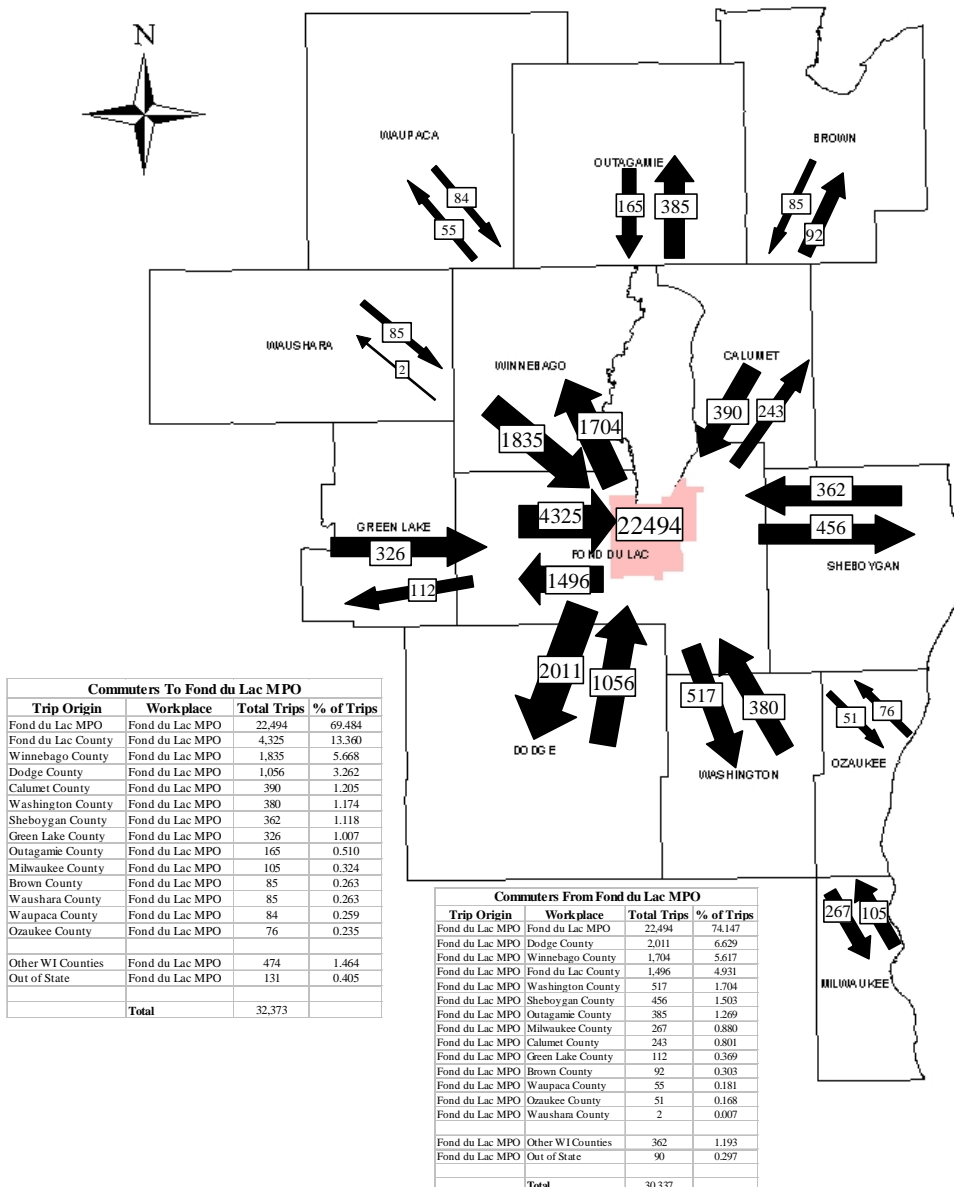
FOND DU LAC COUNTY COMMUTING PATTERNS, 2000

County	Commuting from.....	Commuting to.....	Gain or Loss	% Commuting from.....	% commuting to.....
Adams	22	2	20	<1%	<1%
Brown	119	132	-13	<1%	<1%
Calumet	494	614	-120	1.1%	1.2%
Columbia	53	65	-12	<1%	0.1%
Dane	108	121	-13	<1%	<1%
Dodge	1,852	4,401	-2,549	4.0%	8.7%
Fond du Lac	36,585	36,585	0	79.8%	72.6%
Green Lake	1,803	755	1,048	3.9%	1.5%
Langlade	3	0	3	<1%	0.0%
Manitowoc	73	79	-6	<1%	<1%
Marathon	11	5	6	<1%	<1%
Marquette	194	10	184	<1%	<1%
Menominee	0	0	0	0.0%	0.0%
Milwaukee	109	594	-485	<1%	1.2%
Oconto	25	13	12	<1%	<1%
Outagamie	215	568	-353	<1%	1.1%
Ozaukee	90	180	-90	<1%	<1%
Portage	8	15	-7	<1%	<1%
Shawano	21	8	13	<1%	<1%
Sheboygan	530	980	-450	1.2%	1.9%
Washington	541	2,057	-1,516	1.2%	4.1%
Waukesha	63	368	-305	<1%	<1%
Waupaca	114	82	32	<1%	<1%
Waushara	277	24	253	<1%	<1%
Winnebago	2,544	2,721	-177	5.5%	5.4%
Total	45,854	50,379	-4,525	100%	100%

Source: U.S. Census Bureau, 2000

Daily Workplace Commuters

Fond du Lac MPO



Source: Wisconsin Department of Transportation (WisDOT), 2005

TRANSPORTATION NETWORK

This section assesses the existing conditions of the transportation system in the Fond du Lac Metropolitan Area. Each mode of transportation is inventoried in this section to provide a starting point in the analysis, as well as an assessment of existing deficiencies. Highway movement of passengers and freight, transit, bicycle, and pedestrian modes are addressed.

Highway

The existing highway network in the Fond du Lac Urbanized Area has generally kept pace with growth in population, employment, and the significant increase in auto trips. While the growth in population has been modest, traffic volumes have increased dramatically. In this sense the Fond du Lac Urbanized Area reflects the national trend, which is based on a number of factors. Vehicle ownership has continued to increase. This was largely a result of an increasing incidence of two career families. In addition to these necessitating two vehicles for work trips, it creates a residual need for teens to be responsible for much of their own trip making, frequently resulting in a third, or fourth vehicle in the household.

Another factor which has contributed to the increase in vehicle use is the dispersion of land uses. Unlike the compact, mixed use neighborhood development characteristic of pre-1960 development, residential development is now more commonly on larger lots in subdivisions which are solely residential in nature, and likely miles from employment centers and shopping. The lower density reduces the efficiency and effectiveness of public transit and produces trip lengths which are not conducive to bicycle and pedestrian modes. Many of these areas also do not have facilities to safely serve bicycle or pedestrian travel modes. The end result is more, longer trips, reflected in the increase in the statistic of vehicles miles traveled (VMT).

Travel Model

A transportation model has been developed for the Fond du Lac Urbanized Area. This model functions as a powerful tool in the analysis of future scenarios and can be used to test proposed improvements. Another function of the model is to examine the deficiencies in the existing system. The model uses demographic data, such as population, dwelling units, employment, and number of vehicles; to generate traffic volumes on the urban functionally classified system, all freeways, principal and minor arterials, and collector streets (Exhibit 10). Because the transportation modeling area extends outside of the urbanized area, rural functional classification is pertinent here as well (Exhibit 11). A comparison to actual traffic counts validates the model's accuracy. By running the model in this base year, or current condition, several outputs supply a picture of how the system is functioning and where the deficiencies exist.

Deficiencies

The existing deficiency analysis for the Fond du Lac Urbanized Area describes the current road network deficiencies as of 2005. Deficiencies are derived by applying the number of vehicles to the physical capacity of the road. Currently, the Fond du Lac Urbanized Area is experiencing very few network deficiencies, as is evident from Exhibit 12. Deficiencies are occurring primarily on a few key urban corridors, yet are still relatively mild. Few deficiencies occur in the center of the urbanized area. Rather, most are found on the periphery of the City of Fond du

Lac, and in particular at the intersections of major thoroughfares, such as those with USH 41 or USH 151.

Johnson Street/STH 23. As a major thoroughfare which provides access to key commercial and retail centers, Johnson Street has road deficiencies at the present time (2005). These deficiencies seem to be isolated to the western portions of the road, near USH 41. The majority of the thoroughfare, as it runs through the City of Fond du Lac, is currently operating without any deficiencies, except at a few intersections.

In the Town of Fond du Lac, deficiencies tend to occur on the portion of Johnson Street/STH 23 extending from USH 41 to Townline Road.

The portion of Johnson Street immediately surrounding the USH 41 overpass also experiences deficiencies. Being the junction of two of the biggest thoroughfares within the urbanized area and having close proximity to major shopping centers results in increased traffic, and thus deficiencies.

The portion of Johnson Street from University Avenue to the new USH 151 bypass is potentially deficient by 2035.

USH 151. Like Johnson Street, USH 151, is experiencing deficiencies. In this case, the highway has two deficient areas—one in the south and one in the north. Southern deficiencies generally extend from Townline Road to CTH D. The northern portion, located in the Town of Taycheedah, appears to be potentially deficient from the USH 151 bypass to the intersection with STH 149 by 2035.

Rolling Meadows Drive. Rolling Meadows Drive is experiencing only one potential deficiency. The portion of the road that is of concern exists just south of Industrial Parkway and ends at the intersection with Rickmeyer Drive. This section of the road provides access for large retailers, car dealerships, and several smaller strip malls.

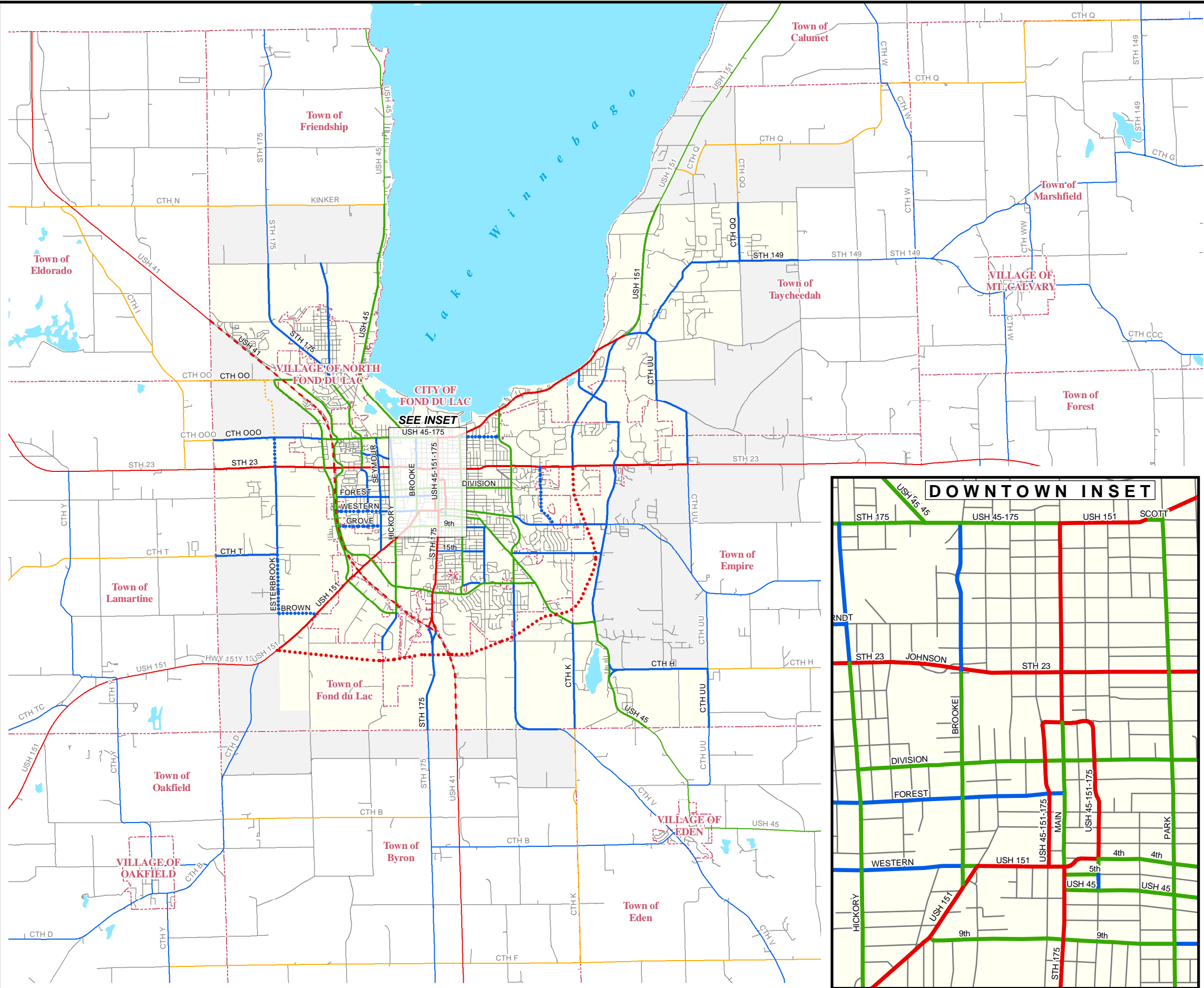
Pioneer Road. Nearly all of Pioneer Road is experiencing deficiencies.

Park Avenue. All deficiencies on Park Avenue, a north-south corridor, occur south of Johnson Street and are classified as potentially deficient. Portions of the road experiencing potential deficiencies are the following: from Johnson Street to Ledgeview Avenue, from Merrill Avenue to Division Street, and from Gillett Street to First Street.

Scott Street. Scott Street is another street in the Fond du Lac Urbanized Area experiencing deficiencies. In this case, all segments of concern are classified as potentially deficient and exist west of Main Street. Specifically, the deficient areas only occur on the stretch of road that runs concurrent with STH 175 and/or USH 45, which empty onto the road from the north. The first two segments occur where Scott Street and STH 175 occur and are both block-long deficiencies. One spans from Van Dyne Road to Seymour Street, while the other spans from Vermont Street to Hickory Street.

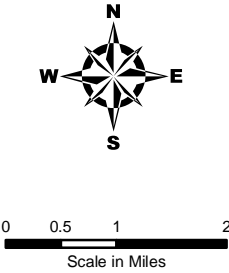
When USH 45 merges with Scott Street/STH 175, two more portions of Scott Street appear to be potentially deficient. These occur from USH 45 to Military Road and from Macy Street to Main Street.

EXHIBIT 10 FOND DU LAC AREA URBANIZED FUNCTIONAL CLASSIFICATION SYSTEM



- URBAN PRINCIPAL ARTERIAL - OTHER
- URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS
- URBAN MINOR ARTERIAL
- URBAN COLLECTORS
- URBAN PLANNED PRINCIPAL ARTERIAL - OTHER FREEWAYS
- URBAN PLANNED COLLECTORS
- RURAL PRINCIPAL ARTERIAL - OTHER
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- RURAL PLANNED MINOR COLLECTOR
- LOCAL ROADS
- MUNICIPALITY BOUNDARIES
- 2000 ADJUSTED URBANIZED AREA
- 2000 METROPOLITAN PLANNING AREA

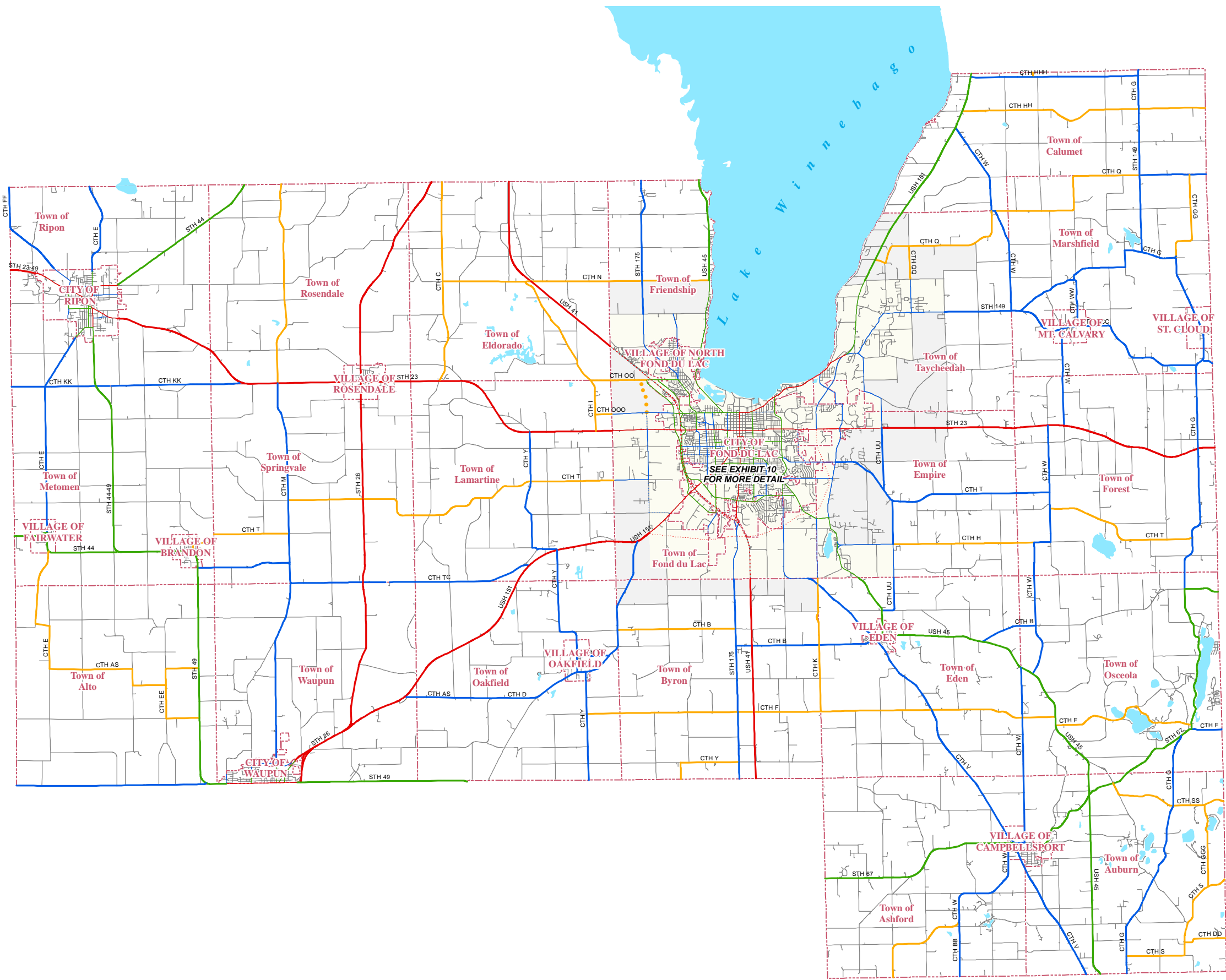
Source: WisDOT & ECWRPC provided 2004 Proposed Functional Classification System, and 2000 Metropolitan Planning and adjusted urbanized areas. Fond du Lac County provided 2004 centerline, hydrology, and municipality data.



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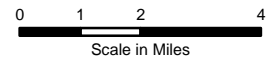
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EXHIBIT 11 FOND DU LAC COUNTY RURAL FUNCTIONAL CLASSIFICATION SYSTEM



- RURAL PRINCIPAL ARTERIAL - OTHER
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- RURAL PLANNED MINOR COLLECTOR
- URBAN PRINCIPAL ARTERIAL - OTHER
- URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS
- URBAN MINOR ARTERIAL
- URBAN COLLECTORS
- URBAN PLANNED PRINCIPAL ARTERIAL - OTHER FREEWAYS
- URBAN PLANNED COLLECTORS
- MUNICIPALITY BOUNDARIES
- 2000 ADJUSTED URBANIZED AREA
- 2000 METROPOLITAN PLANNING AREA

Source: WisDOT & ECWRPC provided the 2004 functional classification and the 2000 adjusted urbanized area. Fond du Lac County 2004 provided centerline, hydrology, and municipality data.



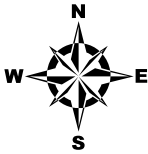
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EXHIBIT 12
FOND DU LAC AREA
EXISTING ROAD NETWORK
DEFICIENCIES-2005

- SEVERELY DEFICIENT
- DEFICIENT
- POTENTIALLY DEFICIENT
- APPROACHING
- TRAVEL MODEL NETWORK
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

Source: ECWRPC and WisDOT provided travel model network and deficiencies, 2005. ECWRPC and WisDOT provided 2000 metropolitan planning area. Fond du Lac County provided 2004 centerline, hydrology, and municipality data.



0 0.5 1 2
Scale in Miles

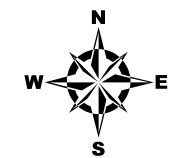
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EXHIBIT 13 FOND DU LAC AREA TRANSIT SYSTEM FIXED ROUTES

- ★ TRANSIT CENTER
- TRANSIT ROUTES
- - - MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

Source: Fond du Lac Transit and ECWRPC provided 2005 transit route data. WisDOT and ECWRPC provided 2000 metropolitan planning area. Fond du Lac County provided 2004 centerline, hydrology, and municipality boundaries.



0 0.5 1 2
Scale in Miles

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Transit

History. Public transportation within the City of Fond du Lac has existed in one form or another since the 1880's. The original forms of transit were mule-drawn carriages and streetcars, and some electric streetcars which operated on steel track systems. By the 1930's, hard-tired buses were the primary mode of transit. During the 1920's, the Neenah-Fond du Lac trolley line also operated between the City of Fond du Lac and the Fox Valley.

Bus service, as it exists today, began in 1944. Between 1944 and 1958, bus service within the City of Fond du Lac was operated by numerous private firms. Then in 1958, the Fond du Lac Bus Company was established, acting as the sole provider of bus service in the Fond du Lac area. Due to escalating costs and steady decreases in ridership, the Fond du Lac Bus Company ceased operations in 1967.

Then in August of 1968, the Fondy Area Bus Cooperative was formed, with the financial assistance of local citizens and businesses, to provide public transit service. By 1970, the City of Fond du Lac assisted with subsidies to cover losses of the bus company and began to discuss the issue of public ownership. On the November 7th, 1972 ballot, a referendum question pertaining to the public ownership of the local bus company was included. After the huge local support of the referendum and recommendations made by consultants, the City of Fond du Lac purchased the Fondy Area Bus Cooperative on December 20th, 1972. Urban bus routes began operation under the Fond du Lac Area Transit System on January 15th, 1973. State operating support was obtained in 1975 and federal operating support was obtained by 1979.

Past Planning Efforts. The Americans with Disabilities Act of 1990 (ADA) requires bus systems to provide complimentary paratransit service for those persons who cannot utilize the fixed route system due to a disability. The Fond du Lac Area Transit System offers specialized door to door transit service to persons with disabilities and the elderly.

Ridership. Since 1973, the Fond du Lac Area Transit System has transported over 10 million passengers, with a peak ridership year of 1981 with over 456,000 passengers. Approximately 191,000 passenger trips occurred in the year 2004.

JOBTRANS. JOBTRANS is a demand responsive, shared ride taxi service available through the Fond du Lac Area Transit System (FDLAT). Eligible trips for this service have an origin or destination within the City of Fond du Lac or Village of North Fond du Lac, but outside of the fixed route service area or more than 1,000 feet from a bus route. Fares for the JOBTRANS service are \$4.00 for adults (\$3.25 with a FDLAT Monthly Pass) and \$2.00 for children (under age 6), the elderly, and the disabled. The service hours for JOBTRANS are the same as the fixed route system. This service is contracted through a local cab company.

Handi-Van. For those unable to use the fixed route transit system, the Fond du Lac Area Transit System offers lift equipped van service. This curb to curb service only serves individuals which are eligible under the Americans with Disabilities Act (ADA) of 1990. This service is contracted by the City of Fond du Lac with a private provider. This service operates anywhere within the Fond du Lac Area Transit System service area and during the same hours, as required by the ADA. Going beyond these requirements, Handi-Van also offers evening service to those that are ADA eligible. Although ADA allows a transit system to charge twice the full cash fare as a fixed route system for paratransit service, Handivan fares are \$1.50 a ride.

School Tripper. The Fond du Lac Area Transit System offers one bus route, contracted through a private provider, to the High School at school start and dismissal times. Other schools, including the junior high schools, are served by fixed route buses (Exhibit 13).

EXHIBIT 14

RIDESHIP HISTORY FOR FIXED ROUTE AND PARATRANSIT

Year	Revenue Passengers
1993	332,172
1994	325,832
1995	383,004
1996	385,615
1997	347,672
1998	347,146
1999	327,270
2000	302,868
2001	284,764
2002	254,907
2003	167,764

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 15

2001 RIDERSHIP BY AGE GROUP

Ridership Survey Age of Riders – Fixed Route Only						
Age 10 or Under	11-15	16-18	19-29	30-45	46-64	65-Over
1%	5%	4%	15%	26%	28%	22%

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 16

2002 RIDESHIP BY AGE GROUP

Ridership Survey Age of Riders – Fixed Route Only					
<6	6-11	12-18	19-64	65-Over	Disabled (Any Age)
1%	0%	26%	35%	16%	22%

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 17

1996 TRIP PURPOSE DISTRIBUTION – FIXED ROUTE SYSTEM

Trip Purpose	Percentage
Work	32
School	23
Medical/Dental	6
Social/Recreational	9
Shopping	18
Personal Business	10
Other	2

Source: Fond du Lac Area Transit System, 2004

Costs and Revenues.

EXHIBIT 18

TRANSIT EXPENSES AND REVENUES

Year	Expenses	Operating Revenues
1998	\$1,395,583	\$210,893
1999	\$1,416,605	\$203,807
2000	\$1,493,247	\$205,679
2001	\$1,523,763	\$180,384
2002	\$1,579,059	\$183,253
2003	\$1,404,044	\$204,500
2004 (estimated)	\$1,448,101	\$227,362

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 19
TRANSIT FARES

	2000	2001	2002	2003
Cash				
Adult	\$1.00	\$1.00	\$1.00	\$1.10
Youth	\$0.90	\$0.90	\$0.90	\$1.00
School	\$0.90	\$0.90	\$0.90	\$1.00
Elderly (off peak hours)	\$0.50	\$0.50	\$0.50	\$0.55
Handivan				
Day	\$1.00	\$1.00	\$1.00	\$1.50
Evening	\$3.00	\$3.00	\$3.00	\$4.00
Saturday	\$1.00	\$1.00	\$1.00	\$1.50
JobTrans				
Adult	\$3.00	\$3.00	\$3.00	\$4.00
Child (<6)	\$1.50	\$1.50	\$1.50	\$2.00
Elderly (>=65) and Disabled	\$1.50	\$1.50	\$1.50	\$2.00
Pass				
Adult	\$34.00	\$34.00	\$34.00	\$38.00
Youth	\$32.00	\$32.00	\$32.00	\$32.00
School Tripper	\$26.00	\$26.00	\$26.00	-
Elderly and Disabled	\$22.00	\$22.00	\$22.00	-
Day Pass	\$2.75	\$2.75	\$2.75	\$3.00
Youth Summer Pass (20 rides)	-	\$6.00	\$6.00	-
Tokens				
Adult (19-64)	10 for \$8.00	10 for \$8.00	10 for \$8.00	\$10.00
Youth (6-18)	10 for \$7.50	10 for \$7.50	10 for \$7.50	\$9.00
Elderly and Disabled	10 for \$5.00	10 for \$5.00	10 for \$5.00	-

Source: Fond du Lac Area Transit System, 2004

Bus Fleet. The Fond du Lac Area transit System owns a variety of buses, vans, and other vehicles which provide fixed route service, contracted service, and other support purposes. All of these vehicles have been purchased with WisDOT funding.

EXHIBIT 20

FIXED ROUTE BUS FLEET

Vehicle #	Year	Make	Model	# of Seats	WC Lift	Price New	Date Added
903	1999	BlueBird	CSRE 3204	29	Yes	\$205,386	3/8/1999
904	1999	BlueBird	CSRE 3204	29	Yes	\$205,386	3/8/1999
905	2000	BlueBird	CSRE 3204	29	Yes	\$201,008	2/23/2000
906	2000	BlueBird	CSRE 3204	29	Yes	\$201,008	2/23/2000
907	2001	BlueBird	CSRE 3204	29	Yes	\$209,180	9/1/2000
908	2001	BlueBird	CSRE 3204	29	Yes	\$209,180	9/1/2000
909	2001	BlueBird	CSRE 3204	29	Yes	\$209,180	9/1/2000

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 21

FDLAT OWNED BUT CONTRACTED HANDIVANS

Vehicle #	Year	Make	Model	# of Seats	WC Lift	Price New	Date Added
937	1998	Ford	Aerotech	15	Yes	\$64,750	7/23/1998
938	1998	Ford	Aerotech	15	Yes	\$64,750	7/23/1998
939	2002	Ford	Aerotech	15	Yes	\$77,982	3/12/2002
940	2002	Ford	Aerotech	15	Yes	\$82,846	3/5/2002
941	2003	Ford	Aerotech	15	Yes	\$79,250	11/20/2003

Source: Fond du Lac Area Transit System, 2004

EXHIBIT 22
SUPPORT VEHICLES

Vehicle #	Year	Make	Model	# of Seats	WC Lift	Price New	Date Added
902 (Fixed Route)	1996	Ford	Champion	14	Yes	\$50,578	10/24/1996
932 (Maintenance)	2002	Ford	Goshen	10	Yes	\$57,180	5/23/2002

Source: Fond du Lac Area Transit System, 2004

Intercity Transit

Intercity transit is provided to the Fond du Lac Urbanized Area by both Lamers and Greyhound Bus lines. From Fond du Lac, southbound destinations include Milwaukee and Chicago and northbound destinations include Oshkosh, Appleton, New London, Clintonville, Marion, Tigerton, Wittenberg, Green Bay, Antigo, Rhinelander, Minocqua, and Wausau. The Greyhound terminal is located at CPR Communications. Lamers' ticket sales are located at CPR Communications and the terminal is located at Hardee's.

Bicycle and Pedestrian

Several options are available for bicyclists and pedestrians (Exhibits 23 and 24). Within the City of Fond du Lac, designated bike routes are in place. These bike routes run concurrent with the street network and are not separate facilities, but rather are placed on streets where the width can accommodate both bicycle and automobile traffic. These bike routes extend the length and breadth of the city.

In addition, the Fond du Lac Urbanized Area has several recreational trails that are designated for use primarily by bicyclists and pedestrians. At the southwest corner of Fond du Lac, near Rolling Meadows Drive, the Wild Goose State Trail, situated along the former Chicago and Northwestern railroad corridor, is operated by the DNR and is a multi-use recreation trail. This trail extends south to Juneau, in Dodge County.

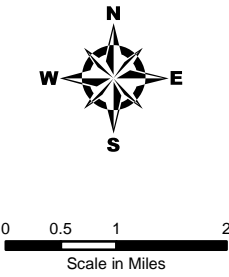
The Peebles Recreational Trail begins in the northeastern portions of the urbanized area, beginning at Lakeside Park. This trail consists of crushed limestone and is open for hiking, biking, and cross country skiing. Eventually, this trail will be linked with the Prairie Trail.

The Prairie Trail follows the general path of the new USH 151 bypass, and extends from Martin Road, in the southern reaches of the urbanized area, to CTH QQ, in the Town of Taycheedah.

**EXHIBIT 23
FOND DU LAC AREA
NON-MOTORIZED
TRANSPORTATION
FACILITIES**

- EXISTING FACILITIES
- PROPOSED FACILITIES
- MUNICIPALITY BOUNDARIES
- RAILROAD TRACKS
- 2000 METROPOLITAN PLANNING AREA

Source: Fond du Lac County provided 2005 centerline, hydrology, railroad, and municipality data. Fond du Lac County, the City of Fond du Lac and ECWRPC provided non-motorized transportation facilities. WisDOT & ECWRPC provided the metropolitan planning boundary, 2000.



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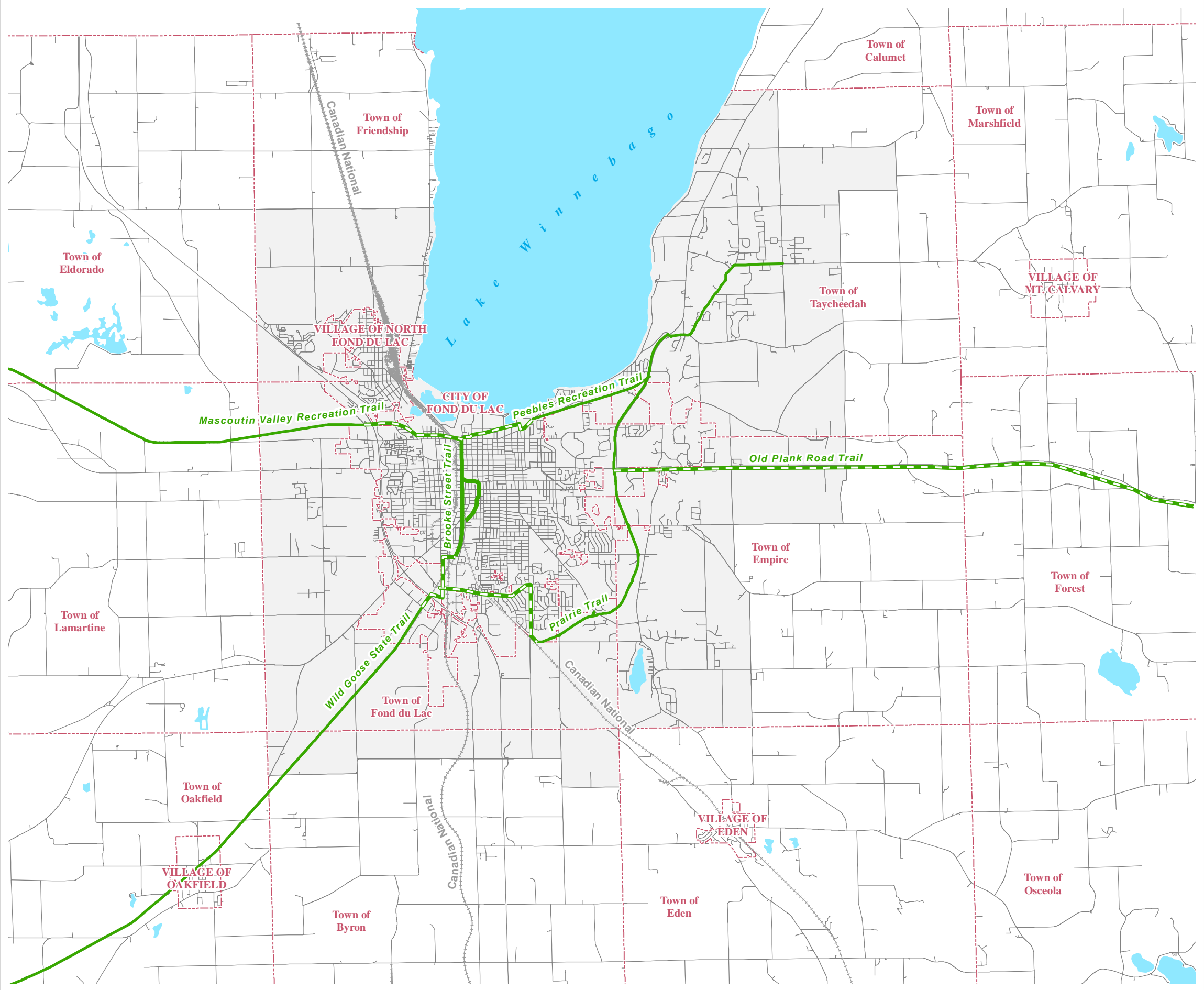
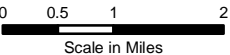
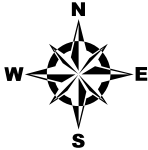


EXHIBIT 24 FOND DU LAC AREA BIKE ROUTES

- CITY BIKE ROUTES
- CITY/COUNTY BIKE ROUTES
- FUTURE BIKE ROUTES
- MUNICIPALITY BOUNDARIES
- RAILROAD TRACKS
- 2000 METROPOLITAN PLANNING AREA






Source: Fond du Lac County provided 2005 centerline, hydrology, railroad and municipality data. Fond du Lac County and the City of Fond du Lac provided non-motorized transportation facilities and bike routes. WisDOT & ECWRPC provided the metropolitan planning boundary, 2000.



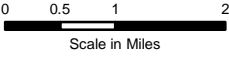
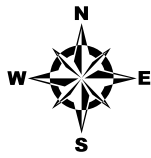
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EXHIBIT 25 FOND DU LAC AREA FREIGHT ROUTES AND TERMINALS

-  FREIGHT TERMINAL
-  FREIGHT ROUTES
-  RAILROAD TRACKS
-  MUNICIPALITY BOUNDARIES
-  2000 METROPOLITAN PLANNING AREA

Source: ECWRPC provided freight terminal data, 2005. City of Fond du Lac & ECWRPC provided freight route data, 2004. Fond du Lac County provided 2004 centerline, hydrology, railroad, and municipality data. WisDOT & ECWRPC provided 2000 metropolitan planning area.



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Freight Movement

Truck. Exhibit 25 depicts the designated truck routes and rail lines, and the existing truck terminals in the Fond du Lac area. Fond du Lac has seen growth in import and export commodity tonnages in relation to the ECWRPC counties and adjacent counties (Exhibits 26 - 29). Import tonnages (21.4 percent growth) have grown slightly faster than export tonnages (17.4 percent growth). Exhibits 30 and 31 show the top ten commodity imports and exports for Fond du Lac County.

EXHIBIT 26

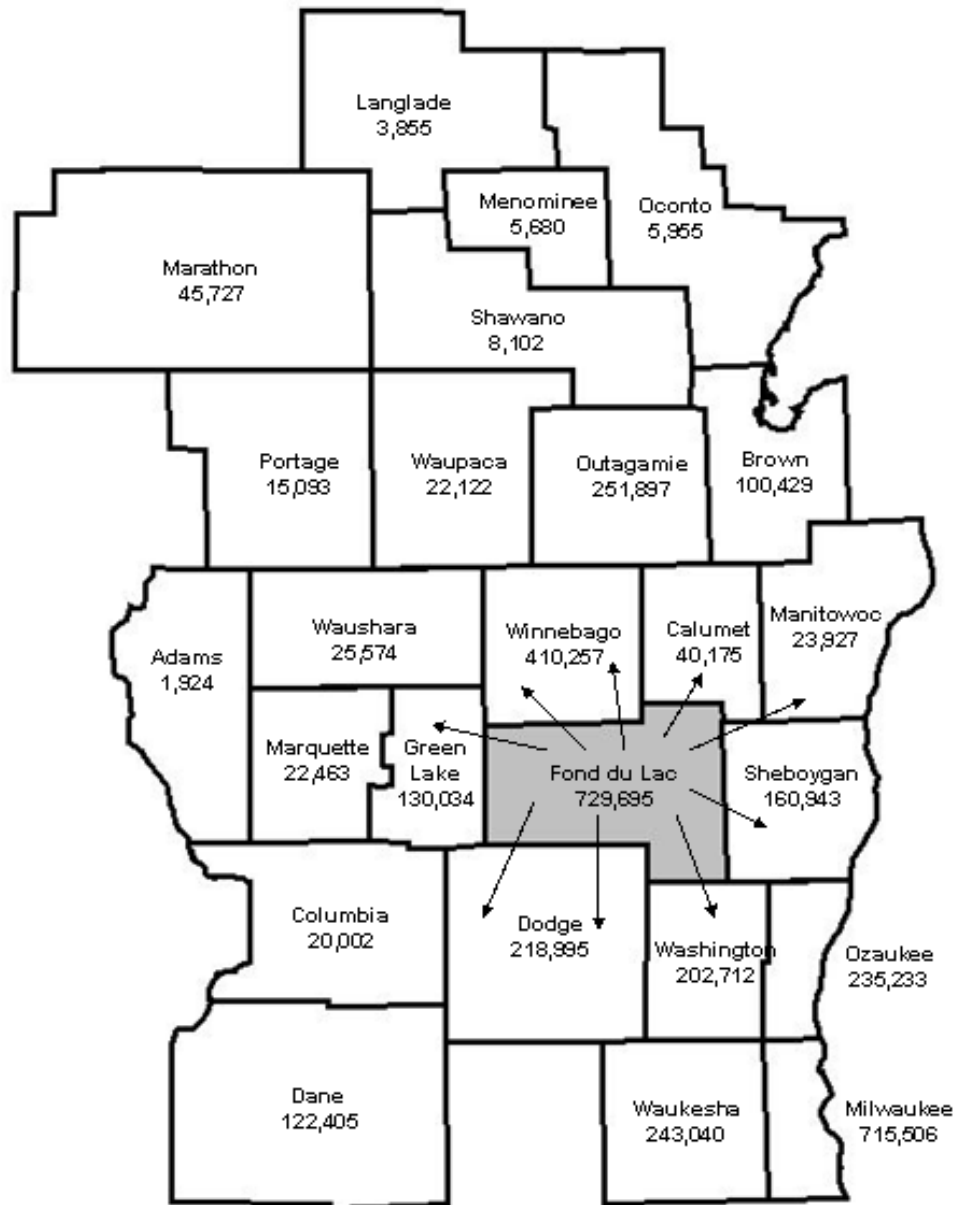
COMMODITY TONNAGES EXPORTED BY FOND DU LAC COUNTY TO ECWRPC COUNTIES AND ADJACENT COUNTIES

County	1996	2003	Change (%)
Adams	1,649	1,924	16.7%
Brown	85,587	100,429	17.3%
Calumet	34,367	40,175	16.9%
Columbia	17,228	20,002	16.1%
Dane	103,276	122,405	18.5%
Dodge	189,583	218,955	15.5%
Fond du Lac	605,022	729,695	20.6%
Green Lake	108,450	130,034	19.9%
Langlade	3,356	3,855	14.9%
Manitowoc	20,137	23,927	18.8%
Marathon	38,381	45,727	19.1%
Marquette	19,672	22,463	14.2%
Menominee	5,060	5,680	12.3%
Milwaukee	589,223	715,506	21.4%
Oconto	5,190	5,955	14.7%
Outagamie	217,085	251,897	16.0%
Ozaukee	202,308	235,233	16.3%
Portage	12,800	15,093	17.9%
Shawano	6,986	8,102	16.0%
Sheboygan	132,357	160,943	21.6%
Washington	176,557	202,712	14.8%
Waukesha	210,281	243,040	15.6%
Waupaca	18,628	22,122	18.8%
Waushara	20,415	25,574	25.3%
Winnebago	355,989	410,257	15.2%
Total/Ave. Change	3,181,583	3,763,707	17.4%

Source: WisDOT 2004, 2005

EXHIBIT 27

2003 TRUCK COMMODITY TONNAGES EXPORTED BY FOND DU LAC COUNTY TO ECWRPC COUNTIES AND ADJACENT COUNTIES



Source: WisDOT 2004, 2005

EXHIBIT 28

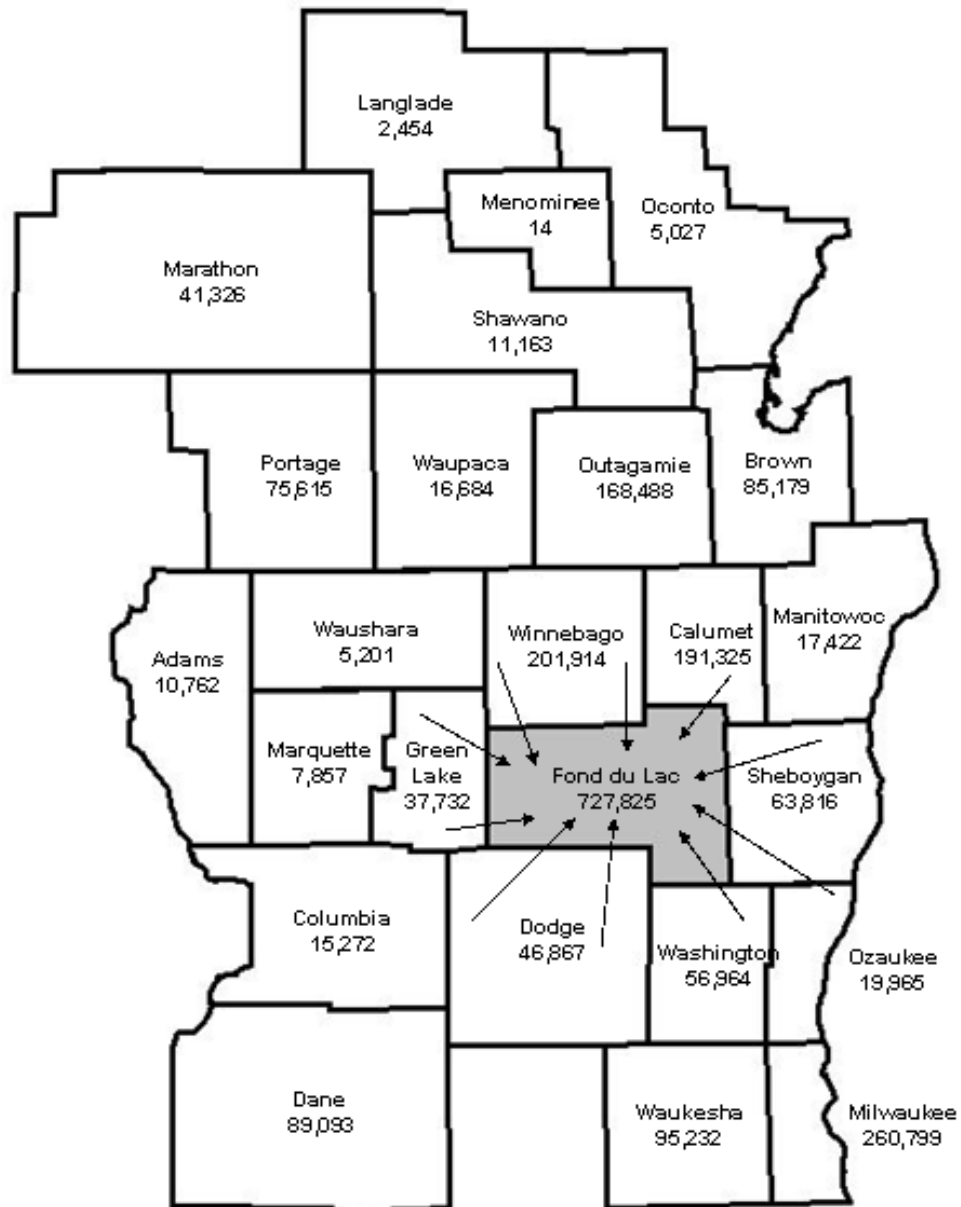
COMMODITY TONNAGES IMPORTED BY FOND DU LAC COUNTY
FROM ECWRPC COUNTIES AND ADJACENT COUNTIES

County	1996	2003	Change (%)
Adams	9,128	10,762	17.9%
Brown	69,489	85,179	22.6%
Calumet	166,667	191,325	14.8%
Columbia	12,579	15,272	21.4%
Dane	74,045	89,093	20.3%
Dodge	38,042	46,867	23.2%
Fond du Lac	605,022	727,825	20.3%
Green Lake	30,105	37,732	25.3%
Langlade	2,010	2,454	22.1%
Manitowoc	14,386	17,422	21.1%
Marathon	32,925	41,326	25.5%
Marquette	6,183	7,857	27.1%
Menominee	11	14	27.3%
Milwaukee	210,107	260,799	24.1%
Oconto	4,029	5,027	24.8%
Outagamie	143,680	168,488	17.3%
Ozaukee	15,785	19,965	26.5%
Portage	67,897	75,615	11.4%
Shawano	9,172	11,163	21.7%
Sheboygan	52,655	63,816	21.2%
Washington	44,613	56,964	27.7%
Waukesha	79,662	95,232	19.5%
Waupaca	13,485	16,684	23.7%
Waushara	4,502	5,201	15.5%
Winnebago	178,361	201,914	13.2%
Total/Ave. Change	1,886,536	2,255,999	21.4%

Source: WisDOT 2004, 2005

EXHIBIT 29

2003 TRUCK COMMODITY TONNAGES IMPORTED BY FOND DU LAC COUNTY FROM ECWRPC COUNTIES AND ADJACENT COUNTIES



Source: WisDOT 2004, 2004

EXHIBIT 30

2003 TOP TEN COMMODITY EXPORTS BY TONNAGE

Commodity	Tons
LUMBER OR WOOD PRODUCTS	56,511
FABRICATED METAL PRODUCTS	94,379
PETROLEUM OR COAL PRODUCTS	108,356
WASTE OR SCRAP MATERIALS	127,497
MACHINERY - OTHER THAN ELECTRICAL	151,123
CLAY, CONCRETE, GLASS OR STONE PRODUCTS	362,978
FARM PRODUCTS	672,529
FOOD OR KINDRED PRODUCTS	1,097,703
SECONDARY TRAFFIC	1,233,659
NONMETALLIC MINERALS, EXC. FUELS	1,828,663

Source: WisDOT 2004, 2005

EXHIBIT 31

2003 TOP TEN COMMODITY IMPORTS BY TONNAGE

Commodity	Tons
PRIMARY METAL PRODUCTS	86,788
LUMBER OR WOOD PRODUCTS	97,453
FARM PRODUCTS	128,450
PULP, PAPER OR ALLIED PRODUCTS	163,441
CHEMICALS	266,482
PETROLEUM OR COAL PRODUCTS	287,631
SECONDARY TRAFFIC	397,680
CLAY, CONCRETE, GLASS OR STONE PRODUCTS	400,700
FOOD OR KINDRED PRODUCTS	532,213
NONMETALLIC MINERALS, EXC. FUELS	599,370

Source: WisDOT 2004, 2005

Rail. Railroads have undergone significant changes over the last thirty years and are the primary private sector provider of transportation infrastructure. Abandonment of line segments occurred in the Fond du Lac area by the Milwaukee Road and the Chicago North Western (CNW). As part of the Milwaukee Road bankruptcy, lines in the Fox Cities were purchased by the Soo Line. The Soo Line, in turn, sold its holdings north of Milwaukee, and one line into the Chicago market, to a newly formed company, Wisconsin Central Limited (WCL). Shortly thereafter CNW sold its holdings between Green Bay and Milwaukee to a newly formed Fox River Valley (FRV), and ITEL subsidiary, which also held the Green Bay & Western (GB&W) as a subsidiary. Next, the WCL purchased the ITEL holdings in the FRV and GB&W, forming Fox Valley & Western (FV&W) as a subsidiary. This left the Fond du Lac area with one rail carrier.

Early in 2001, Canadian National acquired Wisconsin Central. Canadian National has moved to consolidate trackage where feasible and where not otherwise needed for operations. The impact of the CN investments in rail infrastructure has been a closer working relationship with local governments and the accomplishments of coordinated infrastructure improvements that did not happen earlier.

Exhibit 25 excludes some existing lines which have been abandoned as part of Wisconsin Central Limited's consolidation modifications following the purchase of the Fox River Valley and Green Bay and Western Lines. Major switching yards are evident on the map, while minor yards are not. To date, yard facility improvements have been concentrated in the North Fond du Lac yard.

Airport. The Fond du Lac County Airport is located just west of the City of Fond du Lac in the Town of Fond du Lac. The use of this facility is primarily local private use for general aviation purpose.

LAND USE PLAN

LAND USE PLAN

INTRODUCTION

The land use plan for the Fond du Lac area is based upon and integrated with the sewer service area planning process. The Fond du Lac Sewer Service Area Plan was adopted by the East Central Wisconsin Regional Planning Commission on June 5, 2001. This planning process allocates growth areas within local jurisdictions to meet projected needs for sewered development over the next 25 years. The growth area needs are based on county population projections developed by Wisconsin Department of Administration (DOA). East Central disaggregates the county population to the town, village, and city level and then prepares employment projections based upon labor force participation and commuting patterns. This methodology, explained in Appendix A, provides a consistent data set and a coordinated urban planning process. Like the transportation/land use plan, the sewer service area plans are updated every five years.

The three land use plan alternatives described as scenarios in this report were all based upon the sewer service area planning process. This process developed control totals for population and employment projections and growth forecasts. The Fond du Lac Urbanized Area is projected to grow at a moderate but steady rate through the future 2035 planning horizon as depicted in Exhibit 32. Population is expected to increase by over 16,000 people in the study area between 1990 and 2035. Employment is projected to reach a level of over 51,000 employees, an increase of over 15,000 jobs. Approximately 49 percent of jobs are expected to be in the service sector, while retail (15.6 percent) and manufacturing (18.8 percent) account for a much smaller share.

EXHIBIT 32

POPULATION PROJECTIONS FOR THE FOND DU LAC STUDY AREA

Urban Area Municipality	1990	2000	2005	2010	2015	2020	2025	2030	2035
City of Fond du Lac	37,755	42,203	43,273	44,619	45,918	47,210	48,306	49,204	50,434
Village of North Fond du Lac	4,302	4,557	4,780	4,961	5,138	5,316	5,473	5,609	5,785
Town of Byron	1,634	1,550	1,606	1,630	1,651	1,670	1,680	1,683	1,697
Town of Empire	2,485	2,620	2,765	2,868	2,968	3,069	3,158	3,235	3,334
Town of Fond du Lac	2,310	2,027	2,337	2,457	2,578	2,700	2,813	2,917	3,042
Town of Friendship	2,210	2,406	2,507	2,584	2,658	2,732	2,794	2,845	2,915
Town of Taycheedah	3,383	3,666	3,850	3,988	4,122	4,257	4,375	4,476	4,608
Study Area Total	55,523	59,029	61,118	63,107	65,033	66,954	68,599	69,969	71,815

Source: U.S. Census Bureau, 1990, 2000; ECWRPC 2004

EXHIBIT 33

EMPLOYMENT PROJECTIONS FOR THE FOND DU LAC STUDY AREA

Sector	2000	Share	2035	Share
Manufacturing	8,264	23%	9,718	19%
Service	14,944	43%	25,448	49%
Commercial/Retail	6,100	17%	8,049	16%
Wholesale	1,340	4%	1,660	3%
Trade	1,952	6%	4,487	9%
Other Employment	2,596	7%	2,293	4%
Total Employment	35,196	100%	51,655	100%

Source: ECWRPC, 2005

Once the population and employment projections were established through the service area planning update, land use growth forecasts were prepared for the year 2020. The growth acreage is listed in Exhibit 34 includes a need for almost 1,557 acres of residential development to the year 2020 and 563 acres of commercial and industrial land needs. Total urban area growth acreage is projected to need approximately 2120 acres.

EXHIBIT 34

FORECAST LAND USE ACREAGE NEEDS FOND DU LAC URBANIZED AREA 2020

Acreage Needs	Town of Friendship	Village of North Fond du Lac	Town of Fond du Lac	City of Fond du Lac	Town of Empire	Town of Taycheedah	Town of Calumet	Town of Byron*	Total
Residential	118.8	151.9	0	1063.67	48.6	141.13	32.82	--	1556.92
Commercial/Industrial	48	152.4	48	272.62	12	24	6	--	563.02
Total	166.8	304.3	48	1336.29	60.6	165.13	38.82	--	2119.9

*Town of Byron not included in Fond du Lac area SSA

Source: ECWRPC 1999

LAND USE ALTERNATIVES

The land use alternatives are described by three scenarios and include Full Build Scenario, Compact Scenario and Current Plans Scenario for the year 2035 (the selected alternative). These scenarios are illustrated in Exhibits 36, 45 and 49 in this section. The scenarios depict the representative land use growth through the year 2035 and beyond. The analysis used in this planning process is intended to illustrate the difference between the effects of varied land use policies and growth patterns over time.

Because of the slow and steady growth rate, projections for the next approximately 30 years do not create a large enough difference in land usage to adequately illustrate the true long term effects of

land use policy directions on transportation needs, although analyzing the three above mentioned scenarios will be a useful in making practical and efficient transportation and land use planning decisions.

The full build and compact scenarios use nearly the same control total for projected population, dwelling units, employment and vehicles. A slight variation in totals occurs because of varying household size in different minor civil divisions (MCDs). For the purpose of transportation planning, the Fond du Lac study area is divided into smaller geographic units known as Transportation Analysis Zones (TAZs), as seen in Exhibit 89 in Appendix B. These TAZs contain specific existing and projected socio-economic data sets for each scenario. The trips rates listed below in Exhibit 35 are used to generate trip outputs for the noted trip types in all three model scenarios.

EXHIBIT 35

AUTO OCCUPANCY RATES BY TRIP TYPE

Trip Type	Trip Rate
Work	1.17
Shopping	1.62
School	1.48
Non-Home Based	2.55
External Trips	1.47

Source: WisDOT 2005

Full Build Scenario. The Full Build Scenario proposes what the urbanized area would look like if the entire urbanized area is developed (Exhibit 36). Based on current rates of growth it is anticipated that this occurrence could be 100 years or more down the road. It is projected that this scenario would include roughly 267,000 people, 101,000 households, and roughly 100,000 students. Persons per household would average roughly 2.65 persons, while there would be approximately 3 households per acre.

In terms of employment, the urbanized area would consist of roughly 185,000 employees. A breakdown of employment sector estimates is listed below in Exhibit 37. Employees per person would average 0.69, while employees per household would average roughly 1.84.

EXHIBIT 37

EMPLOYEES BY SECTOR FULL BUILD SCENARIO

Sector	Employees
Retail	48,703
Service	55,704
Manufacturing	60,951
Wholesale	5,991
Trade	8,508
Other	5,246
Total	185,103

Source: ECWRPC 2005

With regards to land use acreage, it is assumed that all vacant and undeveloped land within the urbanized area would be developed in some capacity. Exhibit 38 provides a breakdown of projected land use acreages by land use type for the Full Build Scenario. It is also noted that resource protection areas are not included within the urban developed acreage total, due to the fact that these totals will remain constant throughout all scenarios and are not classified as developable acreage.

EXHIBIT 38

ACREAGE BY LAND USE TYPE FULL BUILD SCENARIO

Land Use Type	Acreage
Residential	33,566
Parks and Recreation	1,290
Retail	4,358
Service	5,267
Manufacturing	4,385
Wholesale	320
Trade	1,240
Other	5,717
Resource Protection*	5,101
Total Urban Developed Acres	56,143

* Acreage not included within the total.

Source: ECWRPC 2005

Employees per acre density is clearly dominated by the wholesale sector with nearly 19 employees per acre projected, followed by manufacturing, retail, service, trade, and other.

EXHIBIT 39

DENSITIES BY EMPLOYMENT SECTOR FULL BUILD SCENARIO

Employment Sector	Employees per Acre
Retail	11.18
Service	10.58
Manufacturing	13.90
Wholesale	18.71
Trade	6.86
Other	0.92

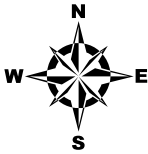
Source: ECWRPC 2005

All of this projected socioeconomic data allows the model to generate a variety of different trip types within the transportation network, including person trips, auto trips, and truck trips. By using the trip generation rates noted earlier within this chapter and the socioeconomic data, it is projected that roughly 1.3 million person trips would occur on the transportation network within this particular scenario within a 24 hour period. This equates to roughly 5 trips per person, per day on the transportation network.

EXHIBIT 36
FOND DU LAC AREA
FULL BUILD SCENARIO

- URBAN
- SUBURBAN
- MUNICIPALITY BOUNDARIES

Source: ECWRPC provided full build scenario information, 2005.
Fond du Lac County provided 2004 centerline, hydrology, and
municipality data.



0 0.5 1 2
Scale in Miles

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EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005

EXHIBIT 40

PERSON TRIP OUTPUTS FULL BUILD SCENARIO

Person Trip Type	# of Person Trips
Home-Based Work Trips	204,431
Home-Based Shopping Trips	195,045
Home-Based School Trips	104,276
Home-Based Other Trips	359,395
Non-Home Based Trips	435,907
Total	1,299,054

Source: ECWRPC 2005

Out of the 1.3 million person trips, it is projected that about 973,000 would occur by automobile usage. Automobile trips include internal trips, trips which have an origin and destination both within the travel model network, along with external to internal trips, those that originate outside the model yet have a destination within the network, and external to external trips, those that have an origin and destination outside the network, but travel through it. Exhibit 41 breaks down the auto trips by trip type for the Full Build Scenario.

EXHIBIT 41

AUTO TRIP OUTPUTS FULL BUILD SCENARIO

Trip Type	# of Auto Trips
Home Based Work Trips	174,931
Home Based Shopping Trips	120,524
Home Based School Trips	70,505
Home Based Other Trips	141,134
Non-Home Based Trips	296,712
Total Internal Auto Trips	803,806
External to External	37,297
External to Internal	131,928
Total EE/EI Auto Trips	169,207
Total Auto Trips	973,013

Source: ECWRPC 2005

Truck trips also account for a substantial number of trips generated within the transportation network. It is projected that approximately 56,000 internal truck trips will be generated on the Fond du Lac Urbanized Area transportation network on a given day for the Full Build Scenario, most of which will be single unit trucks. By including external to internal truck traffic and external to external truck traffic, over 74,000 truck trips would occur on the network.

EXHIBIT 42

INTERNAL TRUCK TRIP OUTPUTS FULL BUILD SCENARIO

Truck Trip Type	# of Trips
Single-Unit	41,799
Combination	14,495
Total Trucks	56,294

Source: ECWRPC 2005

EXHIBIT 43

TOTAL TRUCK TRIP OUTPUTS FULL BUILD SCENARIO

Trip Type	# of Trips
External to Internal	11,965
External to External	5,908
Internal to Internal	56,294
Total Truck Trips	74,167

Source: ECWRPC 2005

Therefore, by adding the projected total of auto trips and truck trips, it is anticipated that there would be over 1 million trips occurring within the Fond du Lac Urbanized Area on a given day for the Full Build Scenario.

EXHIBIT 44

TOTAL TRIP GENERATION OUTPUTS FULL BUILD SCENARIO

Trip Type	# of Trips
Auto	973,013
Truck	74,224
Total	1,047,237

Source: ECWRPC 2005

With regards to total daily vehicles miles traveled, the travel demand model forecasts that this would total roughly 6,303,982 miles traveled per day on the transportation network, with trucks accounting for about 502,990 miles.

In terms of total daily vehicles hours traveled, the travel demand model estimates that this would come out to be 472,939 hours traveled per day on the transportation network, with trucks accounting for about 37,100 hours. These projected statistics are staggering and would have a severe impact on the existing transportation network within the urbanized area. The average vehicle speed on the transportation system would be roughly 13 miles per hour. The majority of the existing transportation network would be deficient in some capacity. Deficiencies will be discussed within the Alternative Analysis Chapter.

EXHIBIT 45 FOND DU LAC AREA COMPACT SCENARIO

- URBAN
- AGRICULTURE
- MUNICIPALITY BOUNDARIES

Source: ECWRPC provided compact scenario information, 2005.
Fond du Lac County provided 2004 centerline, hydrology, and municipality data.



0 0.5 1 2
Scale in Miles

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Compact Scenario. In order to illustrate a more efficient land use alternative, the Compact Scenario (Exhibit 45) was compiled. This land use scenario maximizes the use of land in a compact and contiguous development pattern. The analysis of the Compact Scenario measures the relationship of this denser land use pattern to the present landscape, effects on the environment and on the existing transportation system. In this case land uses would be mixed, employment densities would be slightly higher, residential development would be denser averaging roughly 10 households per acre, and much of the Metropolitan Planning Area would remain as agriculture with supporting rural land uses.

Demographic projections in terms of population, the number of households, total employment, and student enrollment would be roughly the same as the Full Build Scenario. Employment by sector would differ, due to the difference in land use acreage and densities.

EXHIBIT 46

EMPLOYEES BY SECTOR COMPACT SCENARIO

Sector	Employees
Retail	29,616
Service	85,147
Manufacturing	37,021
Wholesale	7,404
Trade	11,106
Other	14,808
Total	185,102

Source: ECWRPC 2005

Under a Compact Scenario, the Fond du Lac Urbanized Area would develop in a manner that implements an efficient use of land. Specifically, the land use patterns maximize the use of land by utilizing compact and contiguous development. Infill development will be promoted and enforced before any peripheral sprawl is allowed. This scenario assumes a greater number of people in a smaller amount of area and preserves the majority of farmland and other developed land, in exchange for more dense developments. Land use acreage by land use type for the Fond du Lac Urbanized Area is broken down in Exhibit 47. It is noted that resource protection areas are not included within the urban development acreage total, due to the fact that these totals will remain constant throughout all scenarios and are not classified as developable acreage.

EXHIBIT 47

ACREAGE BY LAND USE TYPE COMPACT SCENARIO

Land Use Type	Acreage
Residential	10,071
Parks and Recreation	3,642
Retail	1,181
Service	2,760
Manufacturing	1,931
Wholesale	931
Trade	2,172
Other	857
Resource Protection*	5,101
Total Urban Developed Acres	23,545

* Acreage not included within the total.

Source: ECWRPC 2005

Employees per acre density for the Fond du Lac Urbanized Area is clearly dominated by the service sector. Employee density by sector is listed in Exhibit 48.

EXHIBIT 48

EMPLOYEE DENSITY BY SECTOR COMPACT SCENARIO

Employment Sector	Employees per Acre
Retail	25.08
Service	30.85
Manufacturing	19.17
Wholesale	7.95
Trade	5.11
Other	17.27

Source: ECWRPC 2005

As in the Full Build Scenario, this projected socioeconomic data allows the model to generate a variety of different trip types within the transportation network, including person trips, auto trips, and truck trips. By using the same auto occupancy rates noted earlier and socioeconomic data forecasts, it is projected that the number of person, auto, and truck trips under the Compact Scenario for the Fond du Lac study area would closely resemble those from the Full Build Scenario. However, the vehicle miles and hours traveled would greatly differ. It is estimated within the Compact Scenario, a total of 4,189,869 miles traveled would occur within the Urbanized Area in a 24 hour period, with trucks accounting for roughly 385,000 miles. In terms of hours traveled, this would total roughly 252,842 hours, with trucks accounting for roughly 22,000 hours. The average speed within the network would be roughly 17 mile per hour.

However, when the auto occupancy rates are adjusted for the future based on density under this particular scenario, the number of person trips, vehicle miles traveled, and hours traveled by automobile is greatly reduced. The future trip generation rates are shown in Exhibit 49.

EXHIBIT 49

FUTURE AUTO OCCUPANCY RATES BY TRIP TYPE

Trip Type	Trip Rate
Work	2.34
Shopping	3.24
School	2.96
Non-Home Based	5.10
External Trips	2.94

Source: WisDOT 2005

By using these rates, the number of automobile trips would be reduced from roughly 973,000 to 500,956 over a 24 hour period within the Fond du Lac study area. Denser land use patterns and street and highway deficiencies caused by congestion would trigger an increase in the use of alternative modes of transportation (biking, walking, transit, etc.). Since auto trips would be greatly reduced, therefore reducing congestion, the number of truck trips and truck trip rates would not be greatly affected.

Vehicle miles and hours traveled would also be greatly reduced due to the reduction in the number of automobiles on the network. With regards to total daily vehicles mile traveled, the Fond du Lac travel demand model forecasts that this would total roughly 2,798,356 miles traveled per day on the transportation network, with trucks accounting for 373,917 miles. The total daily miles traveled with the future auto occupancy rates for this scenario is roughly two-thirds of the total for the Compact Scenario with the base year trips rates. Truck trip mileage is down slightly due to denser land use patterns.

In terms of total daily vehicles hours traveled, the model estimates that this would come out to be 106,914 hours traveled per day on the transportation network, with trucks accounting for about 14,595 hours. Total hours traveled for this scenario would be nearly half of the projected hours traveled for the Compact Scenario with base year auto occupancy rates, while hours traveled by truck would be approximately cut by one-third. Due to the reduction in traffic and congestion on the system, the average vehicle speed for this scenario would be roughly 26 miles per hour.

Current Plans Scenario for 2035. (Selected Alternative) A Current Plans Scenario (Exhibit 50) is also examined which considers growth as it has actually occurred to the present, and with continued application of adopted policies into the future to 2035. The evaluation will compare the general consequences of the other two extreme models of development to this more reality-based scenario. The Current Plans Scenario is based on present development patterns and future projections grounded in sewer service area planning, local plans, the travel demand model, and adopted land use and transportation policy. The map does not depict the entire acreage projected earlier in this section. Excess acreage which allows for market choice is removed as it inflates the actual acreage needs. The detailed analysis of this scenario will measure the development's effects relative to the policies adopted earlier in the planning process and previously discussed in this document.

One of the tools used to depict what land use will look like in the year 2035 was to compile a proposed land use map (Exhibit 51) of the Urbanized Area based upon local comprehensive plans. The Town of Byron was the only municipality without a land use plan and town zoning was used for this purpose. Although the horizon years for these plans vary, the plans were helpful in projecting land use trends for the year 2035. Under the Current Plans Scenario, the actual amount of land consumed is less than the total proposed by the local communities, particularly in the manufacturing category. Suburban and exurban development are left in place.

General demographics related to this scenario include: a population of roughly 73,000 people, 31,000 households, 51,000 employees, 0.71 employees per person, 1.69 employees per household, and 21,000 students. Persons per household would average roughly 2.38, while households per acre would be just over three at 3.08. A breakdown of employment sector projections is listed in Exhibit 52.

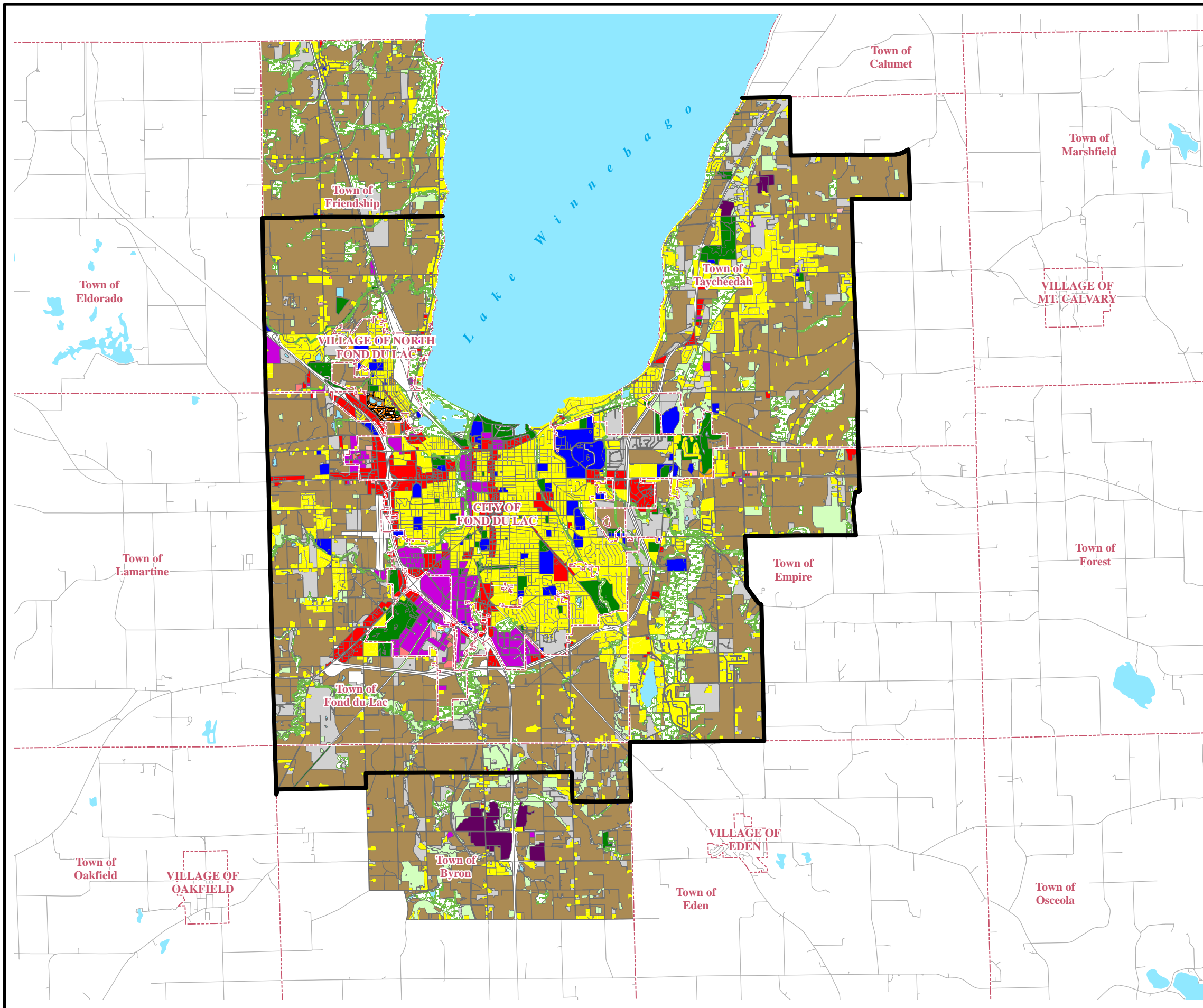
EXHIBIT 52

EMPLOYEES BY SECTOR CURRENT PLANS (2035) SCENARIO

Sector	Employees
Retail	8,049
Service	25,448
Manufacturing	9,718
Wholesale	1,447
Trade	3,923
Other	2,006
Total	50,591

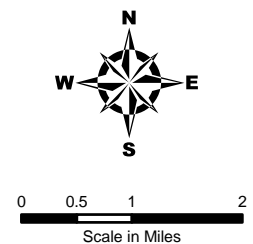
Source: ECWRPC 2005

EXHIBIT 50 FOND DU LAC AREA CURRENT TREND SCENARIO LAND USE - 2035



- SINGLE FAMILY RESIDENTIAL
- MULTI FAMILY RESIDENTIAL
- MOBILE HOME PARKS
- COMMERCIAL
- WHOLESALE TRADE
- SERVICE
- MANUFACTURING
- QUARRIES
- PUBLIC INSTITUTIONAL
- WATER FEATURES
- PARKS/RECREATION
- WOODLANDS
- WETLANDS
- AGRICULTURE
- VACANT/UNDEVELOPED
- TRANSPORTATION/UTILITIES
- 2000 METROPOLITAN PLANNING BOUNDARY
- MUNICIPALITY BOUNDARIES

Source: Proposed land use provided by the City of Fond du Lac, Village of North Fond du Lac, Town of Fond du Lac, Town of Empire, Town of Friendship, Town of Taycheedah, and ECWRPC. Zoning data for the Town of Byron provided by Fond du Lac County. Hydro base data provided by Fond du Lac County, 2004.



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EXHIBIT 51 FOND DU LAC AREA PROPOSED LAND USE

- SINGLE FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- COMMERCIAL
- COMMERCIAL/INDUSTRIAL MIX
- MANUFACTURING
- QUARRIES
- PUBLIC INSTITUTIONAL
- WATER FEATURES
- PARKS/RECREATION
- WETLANDS/RESOURCE PROTECTION
- AGRICULTURE/VACANT/UNDEVELOPED
- TRANSPORTATION/UTILITIES
- 2000 METROPOLITAN PLANNING BOUNDARY
- MUNICIPALITY BOUNDARIES

Source: Proposed land use provided by the City of Fond du Lac, Village of North Fond du Lac, Town of Fond du Lac, Town of Empire, Town of Friendship, Town of Taycheedah and ECWRPC. Zoning data for the Town of Byron provided by Fond du Lac County. Fond du Lac County provided 2004 centerline, municipality, and hydrology data.



0 0.5 1 2
Scale in Miles

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With regards to land use acreage, projected acreages by land use type are based upon current rates of growth. Projected acreages for the year 2035 are listed in Exhibit 53. It is also noted that resource protection areas are not included within the urban developed acreage total, due to the fact that these totals will remain constant throughout all scenarios and are not classified as developed acreage.

EXHIBIT 53

ACREAGE BY LAND USE TYPE CURRENT PLANS (2035) SCENARIO

Land Use Type	Acreage
Residential	9,931
Parks and Recreation	-- *
Retail	741
Service	3,990
Manufacturing	846
Wholesale	70
Trade	804
Other	5,660
Resource Protection**	5,101
Total Urban Developed Acres	22,042

*Park/Rec acres are included in the Service Acres

** Acreage not included within the total.

Source: ECWRPC 2005

Employees per acre density is clearly dominated by the wholesale sector with over 20 employees per acre projected, followed by manufacturing, retail, service, trade, and other, as seen in Exhibit 54.

EXHIBIT 54

DENSITIES BY EMPLOYMENT SECTOR CURRENT PLANS (2035) SCENARIO

Employment Sector	Employees per Acre
Retail	10.86
Service	6.38
Manufacturing	11.49
Wholesale	20.58
Trade	4.88
Other	0.35

Source: ECWRPC 2005

City of Fond du Lac. The east and south sides of the City of Fond du Lac experience the greatest changes under the proposed land use, most notably single family and commercial land uses. In particular, the area immediately surrounding the intersection of Johnson Street and the USH 151 bypass (currently under construction) is proposed to be used for commercial purposes. More generally, the entire area west of the USH 151 bypass is proposed as single-family residential. Single family residential land use is also proposed east of the USH 151 bypass, specifically the land north of Johnson Street and south of Ducharme Parkway.

On the south edge of Fond du Lac, the most prominent land use change is proposed on the land northeast of the intersection of USH 151 bypass and USH 41. In addition, new industrial lands are proposed near the current industrial section, with boundaries from Military Road to Main Street. This proposed industrial area will extend even further southward, to the boundaries of the City, and beyond.

To the north, in a section of the city that is almost completely surrounded by the Village of North Fond du Lac, multi-family residential land uses are proposed, a change from the current agricultural uses.

Village of North Fond du Lac. Proposed land use changes for the Village of North Fond du Lac are primarily in the industrial realm. Within the boundaries of the jurisdiction, the land immediately east of USH 41 and north of Winnebago Street/CTH OO is proposed for industrial uses. No other significant land use changes are proposed for the Village of North Fond du Lac.

Town of Fond du Lac. Under the proposed land use, the Town of Fond du Lac can expect to see the largest changes in industrial land use classification, in addition to changes in single-family residential and commercial properties. Most of these shifts in land use are set to take place immediately adjacent to either USH 41 or the new USH 151 bypass. Lastly, a shift to industrial land use is proposed for the areas north of USH 151 (traditional route) and directly west of USH 41.

Similar to industrial land use, single-family residential land classifications are proposed to see a substantial increase. The largest area of proposed reclassification lies between CTH OOO and USH 151, extending on both sides of Esterbrook Road. A smaller, yet still mentionable reclassification is proposed for the lands adjacent to USH 151 bypass from STH 175 to the border of the township, which is concurrent with CTH K.

Lands classified as commercial will increase under the proposed land use plan. The corridor along business USH 151, immediately before and after the bypass splits off, is proposed to be classified as commercial. A corridor of similar nature is proposed for STH 23, extending from USH 41 to the western border of the town. In addition, commercial land uses are proposed in the triangle of land created by the intersections of USH 41, USH 151 bypass, and STH 175.

Specifically, the area directly south of the USH 151 bypass and west of STH 175 is proposed to be reclassified from agricultural lands to industrial lands. The sliver of land north of the USH 151 bypass and south of the City of Fond du Lac's industrial park is also proposed as industrial lands in the Town of Fond du Lac.

Town of Taycheedah. Proposed land use changes in the Town of Taycheedah are largely single-family residential in nature. The Town proposes an infill of single-family residential classified lands that bridge the gap between existing residences that are there today. Essentially, one large

contiguous block of land, extending from Johnson Street/STH 23 along CTH UU, then STH 149, and eventually hugging CTH OO is proposed to be classified for residential purposes. For the most part, this land lies on or just behind the Niagara Escarpment.

Town of Empire. Like the Town of Taycheedah, proposed land use for the Town of Empire will see the most changes in the area of single-family residential. The land on the western portion of the township may experience a reclassification from agricultural to single-family residential. These residential lands will be focused along the extent of CTH K and USH 45 that lie within the boundaries of the town.

Town of Friendship. The Town of Friendship would see large tracts of land reclassified to both industrial and single-family residential uses under the proposed land use plan. Some commercial lands are proposed along the USH 41 corridor. The majority of proposed industrial lands lie in close proximity to the three major thoroughfares that traverse the town—USH 41, USH 45, and STH 175.

One area of industrial reclassification lies just southwest of USH 41, behind the proposed commercial lands. The second large tract of proposed industrial land lies in the wedge of land between STH 175 and USH 45, extending from Franklin Avenue at the south, to Subway Road to the north.

Single-family residential areas are proposed for the land immediately northwest of the Village of North Fond du Lac, between USH 41 and STH 175. Also, single-family residential will be extended further west along the USH 45 corridor, which hugs the shoreline of Lake Winnebago.

Town of Byron. The Town of Byron does not lie completely within the Fond du Lac Metropolitan Planning boundary. The proposed land use changes for the Town of Byron are only proposed for areas outside of the boundary. Nevertheless, a discussion is still useful as the land use decisions in the rural area will inevitably have some affect on the urbanized area.

A large tract of land, formerly classified for agricultural purposes, has been proposed as industrial. This land has immediate access to both USH 41 and STH 175. This tract of land lies several miles south of the industrial lands already in existence and also planned in the City and Town of Fond du Lac.

Again, all of this projected data allows the model to generate a variety of different trip types within the transportation network, including person trips, auto trips, and truck trips. By using the trip generation rates noted earlier within this chapter and the socioeconomic data, it is projected that roughly 330,000 person trips would occur on the transportation network within this particular scenario within a 24 hour period. This equates to roughly 5 trips per person, per day on the transportation network.

EXHIBIT 55

PERSON TRIP OUTPUTS CURRENT PLANS (2035) SCENARIO

Person Trip Type	# of Person Trips
Home-Based Work Trips	53,209
Home-Based Shopping Trips	52,262
Home-Based School Trips	25,452
Home-Based Other Trips	94,908
Non-Home Based Trips	102,788
Total	328,619

Source: ECWRPC 2005

Out of the 328,619 person trips, it is projected that about 203,000 would occur by automobile usage. Automobile trips include internal trips, trips which have an origin and destination within the travel model network, along with external to internal trips, those that originate outside the model yet have a destination within the network, and external to external trips, those that have an origin and destination outside the network, but travel through it. Exhibit 56 breaks down the auto trips by trip type for the Current Trend (2035) scenario.

EXHIBIT 56

AUTO TRIP OUTPUTS CURRENT PLANS (2035) SCENARIO

Trip Type	# of Auto Trips
Home Based Work Trips	45,668
Home Based Shopping Trips	32,344
Home Based School Trips	17,222
Home Based Other Trips	37,388
Non-Home Based Trips	70,029
Total Internal Auto Trips	202,651
External to External	37,297
External to Internal	131,928
Total EE/EI Auto Trips	169,225
Total Auto Trips	371,876

Source: ECWRPC 2005

Truck trips also account for a substantial number of trips generated within the transportation network. It is projected that approximately 15,000 internal truck trips will be generated on the Fond du Lac Urbanized Area transportation network on a given day for the Current Trend (2035) Scenario, most of which will be single unit trucks. By including external to internal truck traffic and external to external truck traffic, over 33,000 truck trips would occur on the network.

EXHIBIT 57

INTERNAL TRUCK TRIP OUTPUTS CURRENT PLANS (2035) SCENARIO

Truck Trip Type	# of Trips
Single-Unit	11,300
Combination	4,084
Total Trucks	15,384

Source: ECWRPC 2005

EXHIBIT 58

TOTAL TRUCK TRIP OUTPUTS CURRENT PLANS (2035) SCENARIO

Trip Type	# of Trips
External to Internal	11,965
External to External	5,908
Internal to Internal	15,384
Total Truck Trips	33,257

Source: ECWRPC 2005

Therefore, by adding the projected total of auto trips and truck trips, it is anticipated that there would be over 400,000 trips occurring within the Fond du Lac Urbanized Area on a given day for the Current Trends scenario.

EXHIBIT 59

TOTAL TRIP GENERATION OUTPUTS CURRENT PLANS (2035) SCENARIO

Trip Type	# of Trips
Auto	371,876
Truck	33,257
Total	405,133

Source: ECWRPC 2005

With regards to total daily vehicles miles traveled, the travel demand model forecasts that this would total 2,244,743 miles traveled per day on the transportation network in 2035, with trucks accounting for about 205,387 miles. In terms of total daily vehicles hours traveled, the travel demand model estimates that this would come out to be 69,188 hours traveled per day on the transportation network, with trucks accounting for about 6,118 hours.

These projected statistics have a moderate impact on the existing transportation network within the urbanized area. The average vehicle speed on the transportation system would be roughly 32 miles per hour. Portions of the existing transportation network are expected to be deficient in some capacity by 2035. Deficiencies will be discussed within the Alternative Analysis Chapter.

ALTERNATIVE ANALYSIS

ALTERNATIVE ANALYSIS

INTRODUCTION

This section analyzes the three previously discussed land use scenarios relative to adopted goals, objectives, and policies for both transportation and land use. To facilitate this analysis, each of the scenarios was represented in a different compilation of the socioeconomic projections. The specific data compilation for each of the scenarios can be found in Appendix B. Each of the scenarios is measured as to its compliance with the goals, objectives, and policies previously discussed in this document. The following text describes the highlights of the policy analysis.

LAND USE

Land use goals, objectives and policies adopted in 2004 address four areas: growth management, urban service delivery, environmental resources, and open space. Discussion of the scenario analysis under each of these topic areas follows:

Growth Management

Allocated Growth. This objective promotes a balanced allocation of land, compatibility, and appropriate mix of land uses to provide accessibility to residents. As the basis for the compilation of the future population growth is based on the sewer service planning process, it fits well, in theory, with the policies under this objective. By definition, the land allocated for urban development approximates the current and future needs as determined from population, employment and land use projections developed in conjunction with adopted comprehensive or urban service area plans. How well that process supports the policies related to the encouragement of higher density, mixed use development, is in question. Since the land allocations in the sewer service area planning process are generally based on the average density of the last five years of development in each jurisdiction, compact development is not necessarily promoted. In fact, the current process may actually work against this policy, as communities developing at lower densities are allocated more acreage per projected dwelling unit than communities developing at higher densities. However, since the majority of development in the area does occur within the sewer service area, the Current Plans Scenario is more effective in managing growth than is depicted by the Full Build Scenario.

Planned Urban Communities. The Current Plans Scenario may not fully meet the stated policies encouraging dense development, but the sewer service area planning process has served to steer development toward infill areas for sewer extension purposes. Also, efforts in the preservation of natural and man-made features of the region have been effective. The analysis shows that a compact development situation would better accomplish these desires through the use of strong regulation and drastically lower land consumption, while the full build growth scenario would not meet any of these policies.

Efficient Development. The compact development scenario rates highly against the policies under this objective. Infrastructure costs are lower if significantly less concrete and pipe are needed. Denser development is inherently more conducive to efficient serviceability by alternative modes of transportation than scattered, low density development which discourages alternative modes. With low density development, pedestrian and bicycle travel is no longer convenient. Public transportation becomes inconvenient and very expensive, as vehicles must travel longer distances to pick up fewer people traveling to more dispersed destinations.

Within the context of this non-real world compact development scenario is a full variety of housing types and locations. As it is illustratively drawn, little low density development exists other than farms, a few scattered rural lots, and a limited number of large urban lots. While this may be more efficient, freedom of choice is limited, not necessarily by style, price, or prestige, but indeed by density. The Full Build Scenario, on the other hand offers limitless urban or suburban choice, but overtly defies the policy of discouraging urban sprawl; unplanned development which is non-contiguous, low density scattered, and inefficiently served. Over time, a rural environment no longer exists. Farmers and individuals desiring a truly rural environment are pushed out beyond the study area.

Community Character Preservation. The preservation of community character is encouraged by the adopted policies in terms of preserving and enhancing central business districts, using a coordinated scheme of preservation, renewal, and removal to maintain a viable land use mix, preservation of unique amenities, and attention to urban waterfront use and preservation. While it is understood that these policies are not necessarily inherent in any of the scenarios, the difference lies in distribution of resources. A less dense community would need to commit more of its resources to serving less efficient development, with consequently fewer resources available to maintain and enhance existing land uses. A community with more dense land use would have less infrastructure to build and maintain.

Rural Land Development. This objective is aimed at preventing the intermingling of rural and urban land uses. Rural development should be allowed only if it does not disturb agriculture or open space uses. One policy specifically states that rural subdivision development should be restricted in urban planning areas until long-term urban services are provided. The compact development more closely follows these policies, while even the Current Plans Scenario has little control over the pattern of rural development. In the Full Build Scenario, large tracts of rural land do not exist.

Urban Service Delivery

Economical Public Facilities. The provision of public services is undoubtedly more economical in denser development. As discussed earlier, whether sewer pipes or transit service, it costs more to go a longer distance to service fewer people.

Cooperative Provision of Services. While the relationship between the two extreme scenarios is similar to that for 'economical public facilities', above, the Current Plans Scenario is ranked higher than in the previous objective because of the promotion and existence of intergovernmental agreements in the sewer service districts, as well as some other public service areas, such as libraries.

Equitable Service Delivery. A differentiation between the scenarios in terms of equitable service delivery is impossible with the given information. While one may be obviously more efficient, equitability is an administrative issue that could be handled in a range of manners under any scenario.

Effective Sewerage Systems. In terms of centralization of sewerage treatment, the more contiguous development of the Compact Scenario lends itself to a more effective system. The effects of sewer service regulation, however, do encourage alternative analysis and system design based on cost-effectiveness, giving the Current Plans Scenario a fairly high rating. The scattered growth of the remaining scenario, however, encourages non-sewered development, likely system failure, and the lack of a cost-effective manner for fixing such problems.

Environmental Resources

Water Quality Protection. The unregulated assumption built into the Full Build Scenario, gives way to the inherent risk of water quality deterioration, contrasted with the Current Plans Scenario which assumes at least the current Department of Natural Resources regulations protect wetlands and shorelands, and control construction site erosion. The compact development simply disturbs less land, including sensitive rural wetlands, and does not create as much construction site erosion.

Air Quality Protection. The analysis of the air quality implications was largely examined in terms of projected emissions from the transportation model runs. Consistently, based on VMT, a more compact development ranks better. Also, a denser land use pattern will encourage increased use of alternative transportation modes such as transit, carpooling, bicycle use, and walking. The prevalence of longer trip lengths under the Current Plans scenario more closely resembles the Full Build Scenario.

Environmentally Sensitive Area Protection. Under current regulations, environmentally sensitive areas are fairly well protected from development and contamination. Such regulations would be assumed to not be in place under the Full Build Scenario, and the scattering of development would likely cause damage. A more tightly urbanized pattern would not be using as much land and would be less likely to threaten sensitive areas, causing less challenge to protective regulations.

Wildlife Habitat Management. Land use illustrated in the Full Build and Current Plans Scenario may not have a devastating effect on wildlife, however, it could result in the fragmentation of habitats or corridors. While the Current Plans Scenario has significant scattered development, there are regulations in place to protect wildlife habitat to a large degree. Also, the somewhat lower density of urban development could be more conducive to urban wildlife proliferation than a higher density urban pattern. The Compact Scenario does not disturb as much habitat and generates less traffic on rural highways reducing the threat to animal mobility.

Food and Fiber Production. The primary difference between the scenarios in terms of food and fiber production is land consumption. In the Current Plans and Compact Scenario, food and fiber production still takes place within the study area. In the Full Build scenario, no land is available for such uses. The viability of farming is additionally threatened by increases in land values, land use conflicts, and safety concerns, coupled with a decrease in the availability of productive farmland caused by scattered residential, commercial, and industrial growth. Under development pressure, property taxes on farmland can increase to a point which discourages continued farming, and results in a domino effect loss in productive land. The farmland preservation program, in an attempt to curb this loss, rewards farmers for keeping land in farming with tax credits. In reality, if the demand exists and the developer is offering the right price, the temptation still exists to use the inflated value of the farmland as a retirement program, particularly when development is already making farming difficult. For that reason, the Current Plans Scenario does not fair well in this relative analysis.

Solid Waste Management. With regard to solid waste management, the Full Build Scenario does not fair well due to higher costs for transportation of solid waste, as well as increased potential for land use conflicts which complicate and drive up costs of disposal site location. Land use conflicts can largely be avoided through land use planning and zoning regulations assumed to exist in the other two scenarios. Compact development stifles land use conflicts of this type by leaving more opportunities available for proper and efficient facility siting.

Open Space

Recreational Opportunity. A hierarchy of park sites, from neighborhood to regional parks, is needed to adequately serve an urban area. While scattered development could reduce accessibility to some residents, appropriate park development is possible under all of the land use patterns, granted community needs are properly assessed and accordingly addressed. The lesser population densities inherent in scattered development also makes it difficult to economically justify the provision of neighborhood parks, which should be spaced within a safe and convenient walking distance of residential development.

Preservation Areas. This objective not only calls for the preservation of uniquely significant areas, but also for the public use and enjoyment of those areas. Full build growth could pose a threat to such areas. In fact, the attractiveness of these areas could lead to their development and destruction. The preservation of these areas and public access rests on the willingness and ability of responsible governmental entities to purchase, or otherwise control use and access of the preservation areas as appropriate. History has demonstrated that there is less commitment to invest in the protection of these resources in areas of scattered development.

Urban Recreation Needs. Urban recreation needs could be addressed under any of the scenarios. However, with a general diluting of resources in all service areas, an urban sprawl situation could create difficulty in siting and developing adequate urban park facilities. Fragmentation of land in rural area and the higher land values for undeveloped land brought about by urban sprawl can also complicate and increase costs of acquisition and development of environmental corridors and the provision of open space for outdoor recreational activities.

Cost Effective Recreation. Providing all types of services to a population that is widely dispersed over a larger area can not be as cost effective as serving a more reasonably compact population. The adopted policies related to cost effective recreation discourage duplication of recreational facilities and programs and call for coordination between jurisdictions. While such coordination may be possible under scattered development, it is more complex and therefore more expensive. Concentrated growth areas would have more easily defined and consistent recreational needs that could simplify coordination efforts.

Attractive Communities. Again with the concentration of resources over a smaller area, dollars for beautification programs could be more concentrated and have stronger impact on the attractiveness of a community. Similar to the community character preservation objective, a stronger identification of residents with a centralized community will increase local support for such projects. The Full Build scenario increases the potential for land use conflicts, resulting in reduced visual continuity and overall community attractiveness. The planned redevelopment of waterfront properties in Fond du Lac, from older industrial use to multi-family residential development and parkland closely follows the policies in the current plan.

TRANSPORTATION

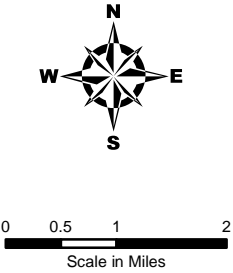
The data depicted in Appendix B was used as input to the transportation model for street and highway analysis of the scenarios. The computer model provides a fairly quantitative analysis in relation to the adopted transportation policies. Exhibits 60 - 62 show the projected deficiencies of the existing highway plus committed projects network under the three scenario's demographic projections. Deficiencies are defined as all segments which function at level of service D, E, or F.

EXHIBIT 60
FOND DU LAC AREA
CURRENT PLAN SCENARIO
ROAD NETWORK
DEFICIENCIES-2035*

*The travel model network contains the existing and the committed network.

- SEVERELY DEFICIENT
- DEFICIENT
- POTENTIALLY DEFICIENT
- APPROACHING
- TRAVEL MODEL NETWORK
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

Source: ECWRPC and WisDOT provided travel model and deficiencies, 2005. ECWRPC and WisDOT provided 2000 metropolitan planning area. Fond du Lac County provided 2004 centerline, hydrology, and municipality boundaries.



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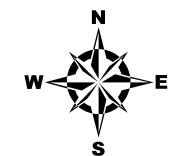
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EXHIBIT 61 FOND DU LAC AREA FULL BUILD SCENARIO ROAD NETWORK DEFICIENCIES*

*The travel model network contains the existing and the committed network.

- SEVERELY DEFICIENT
- DEFICIENT
- POTENTIALLY DEFICIENT
- APPROACHING
- TRAVEL MODEL NETWORK
- - - MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

Source: ECWRPC and WisDOT provided travel model network and deficiencies, 2005. ECWRPC and WisDOT provided 2000 metropolitan planning area. Fond du Lac County provided 2004 centerline, hydrology, and municipality boundaries.



0 0.5 1 2
Scale in Miles

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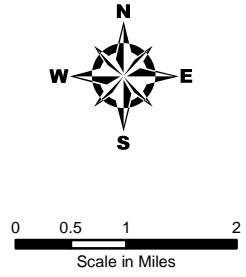
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EXHIBIT 62 FOND DU LAC AREA COMPACT SCENARIO ROAD NETWORK DEFICIENCIES-2005*

*The travel model network contains the existing and the committed network.

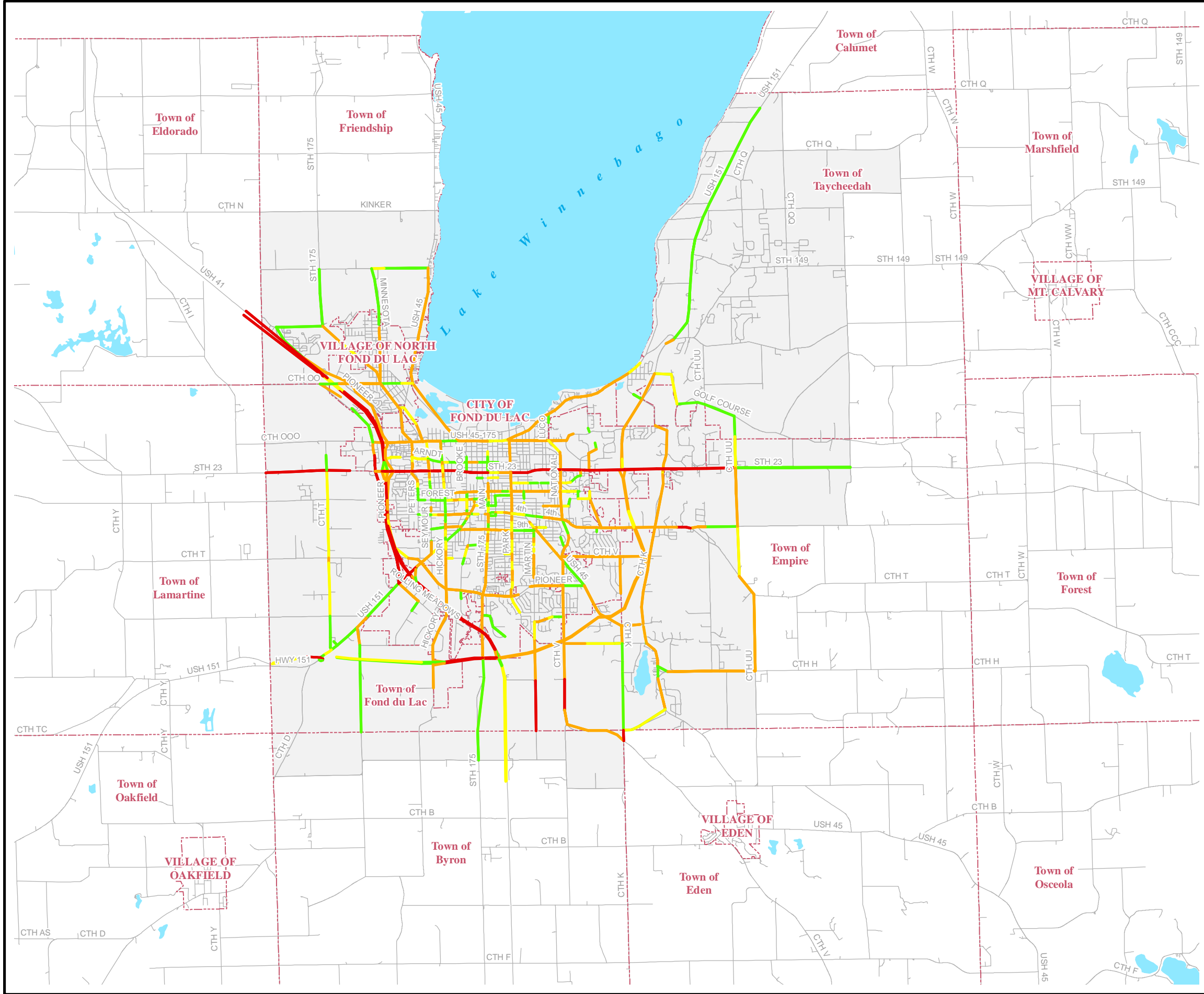
- SEVERELY DEFICIENT
- DEFICIENT
- POTENTIALLY DEFICIENT
- APPROACHING
- TRAVEL MODEL NETWORK
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

Source: ECWRPC and WisDOT provided travel model network and deficiencies, 2005. ECWRPC and WisDOT provided 2000 metropolitan planning area. Fond du Lac County provided 2004 centerline, hydrology, and municipality data.



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Integrated Planning. Requirements of the Transportation Equity Act for the 21st Century (TEA-21) are the basis for the policies under this objective. TEA-21 requires the update of long range transportation/land use plans every five years. These plans are to address the needs of existing and future development within a 20 to 30 year horizon and require the input of local citizens. In practice, the arena in which these plans are produced promotes compatibility between local, regional and state policies and plans, as well as between public and private transportation services. While this objective, pertaining more to the process than the product, does not realistically allow for comparison between the scenarios, the Current Plans Scenario is a product of an integrated planning process in the urban area under existing regulations.

Maximum System Effectiveness for all Residents. While the Current Plans Scenario does a reasonably good job of meeting the transportation needs of all residents, the somewhat dispersed land use creates challenges for public transportation for the economically disadvantaged, as well as the elderly, persons with disabilities, and other non-drivers. Efforts to meet such needs are currently being made through a coordinated effort of rural and urban services. For reasons similar to those deterring public transit use, bicycle and pedestrian modes are also deterred by dispersed land uses, and additionally by a shortage of safe and effective facilities. The Current Plans Scenario has some control over density and contiguity of development as the sewer service planning effort does base a municipality's sewer service acreage allocation on the density of the development in the previous five years. This process therefore allows continued low density development in the towns where such development has occurred in the past, having the effect of expanding the area which cannot be effectively or efficiently served by public transportation. A denser than status quo scenario would better serve those who are economically disadvantaged. The analysis demonstrates that the Compact Scenario would be more conducive to service by public transportation, and likewise encourage bicycle and pedestrian trip-making. If, indeed, development had occurred in this manner since 1960, public transportation would be servicing a more substantial role in urban trip making and the economically disadvantaged would be on a more even playing field, in terms of access to employment and services. On the other hand, the Full Build Scenario strains the ability of public transportation to economically serve those without access to an automobile. The increasing trip lengths also discourage auto owners from using public transportation for some of their trips.

An Efficient Street and Highway System. While a future transportation network is not being developed for each of the three land use scenarios at this time, a comparison can be made between each scenario's ability to function with the existing network plus the committed projects. Again, exhibits 60 - 62 show the projected deficiencies of the existing highway plus committed projects network under the three scenario's demographic projections.

Three types of emissions are monitored within the Urbanized Area. Carbon Monoxide (CO) is an invisible, poisonous gas given off in the burning of fossil fuels. The other two, Nitrous Oxide (NO) and Hydrocarbons (HC) combine to form ozone. Another form of ambient air pollutant that is of concern to the U.S. Environmental Protection Agency is particulate matter, or PM-2.5. The annual arithmetic mean for PM-2.5 cannot exceed 15 micrograms per cubic meter of air and the 24 hour average cannot exceed 65 micrograms per cubic meter of air. The Fond du Lac area is within the attainment standards for all monitored pollutants at this time. Efforts must be made to avoid exceeding these standards and maintain attainment status. It could also be noted that the Environmental Protection Agency (EPA) is currently reviewing the standards used in determining attainment status. A change in these standards could potentially cause a change in the area's status.

The traffic volumes produced by each scenario are loaded on the network to analyze deficiencies, and to compare the location and magnitude of those deficiencies between the scenarios. Exhibits 60 - 62 display all highway segments which operate at or below LOS D for the respective scenario. The model does not account for probable increases in the use of alternative modes when densities are higher and trip lengths are shorter. Such considerations could moderate the slightly higher strain experienced on the streets in the downtown under the Compact Scenario.

The Current Plans Scenario and the Full Build Scenario, with their more dispersed patterns of both employment and residential land uses, create more deficiencies on the outlying highways. The excessive short-comings under these scenarios, especially the Full Build Scenario, display a harshly inefficient use of the network.

Safety. Scattered development produces longer trips on higher speed facilities which generally results in more accidents. Higher speeds generally result in higher cost accidents as well, both in terms of property damage and personal injury. It is expected that problem areas would be addressed in a traffic operations program under any scenario, but at least in theory, this would be a more challenging effort under the Full Build Scenario. Safety and a multimodal crash analysis will be discussed in the next chapter.

Minimum Environmental Disruption. The results of the model analysis of these scenarios show significant difference in environmental impact between the three. For the sake of control, all three were modeled on the same highway network, the existing network plus committed projects. In examining the model output it becomes obvious that scattered development requires longer trips which result in higher VMT, higher carbon monoxide, and particulate emissions, and an apparent need for more lane miles. The higher demand for lane miles means more construction and more surface runoff which, if not properly managed, contributes to water pollution. Perhaps most significantly, denser development promotes the provision and use of more efficient and effective public and private transit services. The reduction of single occupant vehicle trips would further reduce emissions.

Compatibility with Land Use Patterns. The key difference between the scenarios in terms of land use compatibility concerns agricultural land uses. Since more prime agricultural land would be developed in the Full Build Scenario, significant demand for local roads to access the development as well as eventual increased capacity needs on the arterial system would occur, in many cases consuming additional prime agricultural land. The scenario which best supports the policy of minimizing the amount of land used in roadways is the Compact Scenario, with lower capacity needs in outlying areas and less need for local road development. The Current Plans scenario fairs relatively low because of the apparent need for roadway construction to serve new development areas and because of existing difficulties in effectively reserving right-of-way for proposed transportation facilities.

Conservation of Energy. The previously discussed propensity toward increased transit ridership, ridesharing, bicycling, etc. under the Compact Scenario would contribute to energy conservation. Generally improved levels of service (LOS) on the highway network under that situation would result in less delay for drivers and reduced emission levels.

Multimodal Interaction

-Freight Transportation. In each scenario USH 41 provides the primary link between Fond du Lac and freight origins and destinations. Also, all three scenarios would allow for

the development of highway related uses in proximity to the corridor. One policy under this objective pertains to minimizing conflicts between truck and auto traffic. Increased volumes on USH 41 under the Full Build Scenario would increase these conflicts.

-Public Transportation. One of the strongest determinants of the productivity and efficiency of a public transportation system is population density. An exception to this could be an outlying destination frequented by transit dependent persons, but in general, lower density, scattered development is not conducive to this type of transit. Other types of public transit are more appropriate in lower density, or even in rural, areas. Demand responsive service responds only to requested trips, and therefore does not incur constant costs. In many rural areas, public transportation is offered at a much lower service level. Often scarce resources provide only weekly opportunities to travel to the central city, likely on a very inflexible schedule. Generally, the service level provided is dictated by density and the related trip generation potential. The aging of the population over the planning period will increase the dependence on public transportation, worsening this difficult situation.

-Bicycle and Pedestrian Travel. Shorter trip lengths and safe walking and riding conditions promote pedestrian and bicycle tripmaking. The policies under this objective promote the consideration of these modes in the planning and design stages for highway and street improvement projects, site design and considerations, the provision of appropriate amenities at destinations, and education and enforcement of rules of the road. The Compact Scenario has significantly higher potential for increased bicycle and pedestrian travel. Some difficulty still lies in dealing with the infrastructure which has developed to date with strong bias toward the automobile. Opportunities for retrofitting to serve these other modes effectively will likely only occur as highway expansion or reconstruction projects are required, and a full network of bicycle facilities will be slow in coming based on current trends.

SCENARIO COMPARISON TRAVEL MODEL OUTPUT

Current Plans (2035) Scenario Deficiencies

Under the Current Plan Scenario, projections for 2035 reveal a number of road network deficiencies in the Fond du Lac area. The deficiencies range in severity, increasing in severity from Potential to Deficient to Severely Deficient, as is evident in Exhibit 60. All severity levels are present in the Fond du Lac area road network, although most occur on the west edge of the City of Fond du Lac, specifically USH 41 and its frontage roads, as well as STH 23/Johnson Street, an east-west corridor that runs the entirety of the urban area. The following is a discussion concerning deficiencies that will potentially exist for the Fond du Lac Urbanized Area under the Current Plans Scenario for 2035.

An effort has been made to arrange deficiencies to follow major transportation corridors, which is where the vast majority of deficiencies are projected to be. Nevertheless, there are few outlier deficiencies that exist and are discussed at the end of this section.

Corridor Deficiencies

USH 41. USH 41 is a freeway that acts as a major arterial for the Fond du Lac Urbanized Area, providing rapid access to the immediate area as well as to Oshkosh and the Fox Cities to the north and Milwaukee to the south. This freeway is projected to experience the greatest amount of deficiencies for the Fond du Lac Urbanized Area under the Current Plans Scenario. This route is the area of greatest concern for the Fond du Lac Urbanized Area.

Severe deficiencies are expected for almost the entire urbanized area, stretching from Townline Road in the north to the southern boundaries of the Fond du Lac Urbanized Area. The exception is the portion from Military Road/USH 151 to Hickory Street, where only potential deficiencies are likely. On and off ramps to the freeway are not exempt from deficiencies. All ramps associated with deficient stretches of USH 41 are also deficient. Coupled with severe deficiencies for the highway itself makes for a route that will most likely not operate effectively.

Rolling Meadows Drive. Rolling Meadows Drive acts as the western frontage road for USH 41 spanning from CTH 00 to the north and Hickory Street to the south. The road functions primarily as access for industrial and commercial uses, and is classified as an urban minor arterial. The Current Plans Scenario projects a moderate amount of deficiencies, the majority of which are in commercial and/or industrial areas.

The segment from Industrial Avenue to Johnson Street is projected to be potentially deficient in the northern half, and deficient in the southern half. A portion of the drive just south of Johnson Street is expected to be potentially deficient. The drive then remains free of deficiencies until Rogersville Road, where potential deficiencies are expected up to Military Road/USH 151. No other deficiencies are projected for Rolling Meadows Drive east of Military Road.

Pioneer Road. Like Rolling Meadows Drive, Pioneer Road acts as the eastern frontage road for USH 41 for the majority of its length. Extending from Melody Lane in the Village of North Fond du Lac to USH 45 on the southeast corner of the City of Fond du Lac, Pioneer Road, an urban minor arterial, sweeps across a great extent of the urbanized area. Under the Current Plans Scenario, Pioneer Road is expected to experience a moderate amount of deficiencies by 2035, primarily around key intersections and adjacent to areas of key retail, commercial, and industrial establishments.

Specifically, the portion just north of Johnson Street is projected to be potentially deficient. This segment lies just west of the largest retail mall in the Fond du Lac Urbanized Area. In addition, a small portion just south of Johnson Street will be severely deficient. This segment serves many restaurants, large retailers, and convenience stores, which may add to the congestion levels. All other sections of Pioneer Road are not projected to experience any deficiencies under the Current Plans Scenario.

Johnson Street-STH 23. Johnson Street is an urban principal arterial that cuts through the entire urban area, from USH 41 and beyond, to the west, and the soon to be completed USH 151 and beyond to the east. Johnson Street, as it is called in the City of Fond du Lac, is also known as STH 23 outside the city. Johnson Street will likely experience deficiencies on both its western and eastern reaches, with the middle section being relatively free of deficiencies under the Current Plans Scenario.

Beginning in the west, STH 23 is projected to experience severe deficiencies from Townline Road to USH 41. This span of the corridor is primarily rural in origin, although many housing developments exist on the country roads that empty onto the highway.

The interchange with USH 41 proves to be another area for projected deficiencies under the Current Plans Scenario. The entire stretch from Rolling Meadows Drive to Brooke Street will

likely experience deficiencies, primarily in the deficient to severely deficient classification. These deficiencies may be related to the current and planned land uses. This area provides access to the mall to the north, and restaurants, large retailers, strip malls, and other commercial establishments to the south.

The eastern set of deficiencies will likely begin at University Avenue, which provides access to the University of Wisconsin-Fond du Lac and to Fond du Lac High School, among other things. Severe deficiencies are expected up to the intersection with the USH 151 bypass, and after that a portion of Johnson Street will likely be potentially deficient.

USH 151 corridors. This corridor, as of 2035, will be relocated to the bypass. Currently, USH 151 goes through the city, beginning on Military Road, turning east onto Western Avenue, then north onto Macy Street and Main Street. At Scott Street, the route turns east, and eventually branches northward onto Winnebago Drive in the Town of Taycheedah. The new alignment breaks east of USH 151 in the Town of Lamartine, near CTH D. This bypass heads east, just south of the City of Fond du Lac, eventually turning north, hugging the eastern boundaries of the city, finally rejoining with the old route at Winnebago Drive, in the Town of Taycheedah.

Following the old route first and beginning in the south, deficiencies and severe deficiencies begin at Townline Road and end after the USH 151 bypass, extending over 1 mile in length. Deficiencies throughout almost the entire City of Fond du Lac are absent, with the next reappearing after the junction with Scott Street, where Winnebago Drive veers northward. The entire segment from Park Avenue, in the City of Fond du Lac to Brookhaven Beach Road in the Town of Taycheedah is likely to experience at least some form of deficiency, primarily in the potentially deficient to deficient range.

The USH 151 bypass will remain relatively free of deficiencies, with a few exceptions. The southern junction with the old USH 151 is projected to have severe deficiencies just to the west of the intersection. The intersection with USH 41 proves to garner deficiencies as well. Specifically, both lanes just west of the intersection are projected to experience potential deficiencies under the Current Plans scenario. The last set of deficiencies occurs just north of Johnston Street/STH 23, where potential deficiencies are projected until Golf Course Road.

Scott Street. Scott Street, as it is called in the City of Fond du Lac, is called CTH 000 in the rest of the urbanized area. In addition, STH 175 and USH 45 run with Scott Street in the western portion of the City, until Main Street. This street is classified as an urban principal arterial for the segments of concern. Deficiencies on Scott Street are projected to occur on a large proportion of the street which lies west of Main Street. The portion of Scott Street immediately surrounding USH 41 is projected to experience potential deficiencies. A lull in deficiency exists until Van Dyne Road. From Van Dyne Road to Main Street, some deficiency is likely under the Current Plans Scenario. They will likely range from being potentially deficient to deficient.

Other Deficient Segments

Peters Avenue. Peters Avenue runs north/south and provides access to commercial, institutional and residential areas. In its entirety, the avenue is likely to experience potential deficiencies from Scott Street to Johnson Street.

Hickory Street. Hickory Street extends from Scott Street/CTH 000 to the north and runs past USH 41 to the south. This street is classified as an urban minor arterial. Northern portions of the street provide access to residential and commercial areas, whereas in the south the road accesses industrial areas. Only the southern portion of Hickory, which lies in the industrial areas, is expected to experience deficiencies. For the most part, the deficiencies will be potential, likely stretching from Pioneer Road to USH 41.

Main Street. Main Street is an urban principal arterial that extends through the entire city of Fond du Lac, from Lake Winnebago to USH 41. The majority of Main Street is not projected to have any deficiencies, yet two block-long segments of the street are projected to experience potential deficiencies. The northernmost deficiency may occur between Fifth Street and Sixth Street/STH 45. The second deficiency could occur between Tenth Street and Eleventh Street. Main Street functions as both STH 45 and STH 175 in the northernmost segment, and STH 175 in the southern segments.

Park Avenue. Park Avenue, an urban principal arterial, is similar to Main Street due to the fact that it acts as a route from the northern most regions of the City of Fond du Lac, to the southernmost portions of the entire urban area. The avenue may experience several deficiencies, all of which are classified as potentially deficient. The first segment begins at Johnson Street and ends at Rees Street, spanning two city blocks. The other segment spans one block, from Gillett Street to First Street.

Full Build Scenario Deficiencies

Projected deficiencies under the Full Build Scenario, seen in Exhibit 61, are much more prevalent and more widespread when compared to the Current Plans Scenario. The Full Build Scenario assumes all land within the study area is developed. Under this scenario, it is apparent that much of the current road network for the Fond du Lac metropolitan planning area is insufficient.

For the most part, these deficiencies will occur on major corridors that transect the Urbanized Area and were intended to act as a means of traversing the area in the quickest and most efficient route. Unfortunately, many of these routes, once relatively uncongested, safe and effective paths to key locations in the area, will be cluttered and congested with a heavy amount of traffic under the Full Build Scenario.

A case by case analysis of these key corridors will be provided in the next section and will reveal the difficulties that will face the Fond du Lac Urbanized Area if completely developed. First, specific corridors of travel will be identified and briefly described. Then projections as created from the Full Build deficiency scenario will be described. This scenario will reveal the three conditions of concern: potentially deficient, deficient, and severely deficient, as they appear on the road network.

Corridor Deficiencies

USH 41. As one of the key linkages connecting the Fond du Lac Urbanized Area to other urbanized areas such as Oshkosh and Fox Cities to the north, and Milwaukee and Chicago to the south, USH 41 serves a large role in the transportation network. With two lanes of traffic going both north and south, the highway is one of only a few other routes in the area to transport rapidly by motor vehicle. Creating a Full Build Scenario for the Fond du Lac area reveals that the current infrastructure of USH 41 will probably be insufficient in terms of serving the needs of the traffic that uses this route. In fact, almost the entirety of the

USH 41 corridor will be classified as severely deficient, or at the very least deficient. Although the entire highway will not be classified as deficient, the alarmingly large proportion of deficient areas to sufficient areas will inevitably create a route that is insufficient for any vehicle traveling through the Urbanized Area on the highway. The key problem areas will be explained in greater detail to illustrate the insufficiencies.

With the exception of one small segment, the entire 9.5 mile stretch of USH 41 as it extends through the Fond du Lac metropolitan planning region is projected to experience severe deficiencies. This is true for both the southbound and northbound lanes. The segment of USH 41 immediately adjacent to the USH 151 bypass interchange is expected to experience only potential deficiencies, although this is still not an optimal level. USH 41 is a transportation corridor that was designed to provide a rapid means of transport for individual motorists as well as freight. Under the Full Build Scenario, the current infrastructure of the highway will most likely be insufficient in providing efficient transportation. Rather, unsafe, congested, and traffic logged journeys on the highway are to be expected.

The on and off ramps cannot be left out of the analysis, for they provide strategic points of access to and from the freeway and play an integral role in the functioning of the highway. The vast majority of on and off ramps are projected to be deficient or severely deficient, thus adding to the overall problems likely for the USH 41 corridor in the Full Build Scenario.

The highway, by itself, does not fully explain this key corridor in the Fond du Lac Urbanized Area. The two frontage roads—Pioneer Road and Rolling Meadows Drive—supplement the capacity of USH 41 and provide access to business, industrial, and residential areas that coincide with the highway.

Pioneer Road. Pioneer Road, with one lane traveling in each direction, acts as the eastern frontage road for USH 41 for a great deal of its length. Not until Hickory Street does it veer away from the highway and take on an east-west alignment. At that point, it takes on the job of handling much of the traffic traveling in those directions for the southern portion of Fond du Lac. The troubled areas of Pioneer Avenue are not isolated to either its north-south stretch or its east-west stretch. Rather, the entirety of Pioneer Avenue is projected to experience deficient traffic conditions.

Beginning in the north, severe deficiencies are expected to occur around the Village of North Fond du Lac, specifically from the Melody Lane to Edgewater Drive. The remainder of the extent of Pioneer Road, culminating at Fond du Lac Street/USH 45 will likely experience deficiencies.

Rolling Meadows Drive. Rolling Meadows Drive is the counterpart to Pioneer Road, acting as the western frontage road to USH 41. Like Pioneer Road, Rolling Meadows Drive is projected to experience severe deficiencies in addition to deficiencies under the Full Build Scenario. The majority of the road is expected to be deficient. Severe deficiencies can be expected from Johnson Street to Military Road/USH 151. The southernmost portion of the road will most likely experience potential deficiencies.

STH 23-Johnson Street. Johnson Street could be viewed as one of the most important east-west corridors in the City of Fond du Lac, and perhaps for the entire urbanized area. Deficiencies span the breadth of the STH 23/Johnson Street Corridor, with essentially the entire corridor expected to experience severe deficiencies.

USH 151-Military Road-Scott Street-Winnebago Drive. It was noted above that STH 23/Johnson Street was perhaps the most important east-west corridor for the Fond du Lac Urbanized Area. With the completion of the USH 151 bypass, a new and rapid means of getting from the west side to the east side of the city—one without traffic lights, driveways, and stopping and starting—may begin to challenge this statement. The impact that the completion of the bypass will have is significant, raising questions about where centers of residence, commerce, and industry will and should be located. The impact of the bypass is not fully predictable, but whenever looking to the future of the transportation network in the Fond du Lac Urbanized Area, this new corridor is something that should never be overlooked—rather it should be contextualized into every analysis of traffic patterns. Heavy amounts of traffic will be traveling south and/or east to access the freeway, causing burdens on prior sufficient roadways. These are just a few potential impacts of this enormous infrastructural project for the Fond du Lac Urbanized Area.

Using projections derived from expected land use and socioeconomic conditions in the areas surrounding this large transportation project, predictions as to the deficiencies that may occur on the USH 151 bypass have been generated. From the point where the bypass veers east from traditional USH 151, severe deficiencies are expected to occur right at the access ramps and extend for over 4 miles until the intersection with USH 41. For the remainder of the bypass, in general, the bypass will be deficient. The ramps associated with the USH 151 bypass have not gone unaffected, with most expected to be deficient or severely deficient.

In light of this, under the Full Build Scenario, the USH 151 bypass, which was built in an effort to provide a quick, safe, and effective route of access for the Fond du Lac Urbanized Area is expected to be congested, unsafe, and deficient in its entirety. The traditional route of USH 151 is not expected to fair much better, as will be illustrated in the next section.

Beginning in the south, at the border of the Fond du Lac Metropolitan Planning Area boundary, severe deficiencies will likely occur all the way to Pioneer Road. Through the city of Fond du Lac, the highway will most likely experience intermittent portions of potential deficiencies. Once the business USH 151 route merges with Scott Street, deficiencies are likely until the juncture with the bypass. Severe deficiencies are expected for most of the northern stretch of USH 151, as it extends into the Town of Taycheedah.

STH 175-Scott Street-Main Street. The STH 175 corridor is essentially a north-south corridor for the entire Fond du Lac urbanized area. STH 175 is a highway that is parallel with USH 41 for most of its extent and is a less rapid option to get to essentially the same state-wide destinations. While in the Fond du Lac area, it winds through the City of Fond du Lac, running concurrent with Scott Street on its east-west journey, and eventually with Main Street for its north-south extent. This corridor is expected to experience deficiencies in a variety of places, over the extent of most of the urbanized area.

The majority of the STH 175 route is expected to experience deficiencies. Exceptions include the downtown business district, where deficiencies will likely be potentially deficient, and just south of the USH 151 bypass, where severe deficiencies are likely.

Hickory Street. The Hickory street north-south corridor begins in the north at Scott Street and extends southward through the Urbanized Area, becoming Hickory Road in the Town of Fond du Lac. Expected deficiencies are rather bi-polar on this route, most occurring either on the north end or the south end, but virtually none in the middle.

On the north end, the portion from Johnson Street to Division Street will most likely experience deficiencies for the vast majority of the stretch. On the southern end, deficiencies are likely from Arlington Avenue until Scott Road, in the Town of Fond du Lac. The portion immediately south of Scott Road is likely to have severe deficiencies.

Park Street. Although the Park Street corridor only provides north-south access for the City of Fond du Lac, as opposed to the greater urban area and beyond, deficiencies are projected to be prevalent and thus a discussion is necessitated. For the majority of the road, at least some form of deficiency can be expected. These deficiencies will range between potentially deficient to deficient.

Division Street. Much like Park Street, Division is a corridor for only the City of Fond du Lac. Nonetheless, this thoroughfare is projected to experience deficiencies under a Full Build Scenario. This street has a continuous stretch of deficiencies beginning at Hickory Street and ending at University Drive.

Forest Avenue. Forest Avenue is projected to experience deficiencies primarily on the western portions of its length. The 1 mile stretch between Pioneer Road and Hickory Street will be intermittently classified as potentially deficient. From Hickory Street to Main Street, the avenue will mostly be deficient, with a few blocks with potential deficiencies or no deficiencies at all.

Western Avenue-Fourth Street-CTH T. This corridor runs primarily east-west, beginning at Pioneer Road and extending almost to the Fond du Lac metropolitan planning boundary. Beginning at Hickory Street, Western Avenue is projected to be classified as deficient until Military Road. The portions that run through the central area of Fond du Lac are most likely to experience potential deficiencies. Eastern portions of this corridor will most likely be deficient or severely deficient.

CTH Q-Lakeview Road-STH 149-CTH UU-CTH T. This corridor is a collection of mostly rural roads and highways that link together in such a way that they span almost entirely the northernmost and southernmost reaches of the eastern half of the Fond du Lac urbanized area. This corridor is expected to experience several large areas of substantial and severe deficiencies under the Full Build Scenario. Under a Full Build Scenario, an unlimited number of single family residences would be permitted to be constructed in rural areas, potentially taxing the rural road network and resulting in these deficiencies. Northern portions of this corridor are projected to be potentially deficient or deficient. The central and southern portions are most likely to experience severe deficiencies.

Common Trends

It would be impossible, if not redundant, to describe every single deficiency that is projected to occur in the Full Build Scenario. Rather, by describing the key corridors, a good understanding of the predicted state of the Fond du Lac urbanized area's road network under the Full Build Scenario can be grasped. Nevertheless, some key trends need to be noted and reinforced.

First, almost the entire network is expected to experience at least some level of deficiency, especially the extreme western sections, such as the USH 41 corridor and the many roads that feed into it. These deficiencies are so dense and severe that traffic movement along this corridor could be potentially paralyzed periodically.

Second, under a Full Build Scenario, the entire Fond du Lac urbanized area is not restrained in terms of where development could occur. This helps explain the projected deficiencies on many rural roads and highways. As many people begin to build single family residences on roads designed for light use such as agricultural and other rural needs, these once adequate routes could become overburdened by the increase in traffic brought along with their new residents.

Lastly, the historic downtown area of Fond du Lac seems to have less expected deficiencies than many other areas of the city. With the movement of commerce and retail to the west by USH 41 and perhaps to the south and east by USH 151 bypass, the pull of the central city could be replaced by the pull of the freeway.

Compact Scenario Deficiencies

With a higher concentration of people using the existing road network, the vast majority of the entire Fond du Lac road network is projected to be deficient in the Compact Scenario (Exhibit 62). Compact development could produce a situation where the capacity of the roads to serve the public in an efficient manner may not be able to meet the needs of the new urban dwellers. As a result, the roads could become congested and overused. People may become frustrated with the difficulties in driving and may opt for alternative transportation modes. Higher rates of public transportation and increases in bicycling and walking to destinations could become more prevalent in this scenario.

SAFETY AND MULTIMODAL CRASH ANALYSIS

SAFETY AND MULTIMODAL CRASH ANALYSIS

INTRODUCTION

Safety is an important aspect of transportation/land use planning. According to the Federal Highway Administration (FHWA), an estimated 42,643 Americans were killed in traffic crashes in 2003. This figure does not include alternative modes fatalities. Along with the loss of life, these incidents also cost our society roughly \$231 billion or about \$830 per American. To reverse this trend, the planning process can play a key role in improving safety hazards and help reduce the number of incidents, injuries, and fatalities.

By including all aspects of transportation safety in the planning process - engineering, education, enforcement, and emergency medical response, units of government are able to make safer and more efficient transportation improvement choices. It is also important to examine safety on a comprehensive scale by including all forms of transportation (automobile, transit, bicycle, pedestrian, rail, etc.) and how they interact system-wide. By examining current conditions and trends, future hazards and incidents can be reduced, if not prevented.

The Fond du Lac MPO recognizes the importance of safety within the planning process and has conducted an in-depth analysis of multimodal crashes throughout the Urbanized Area to assist in the transportation decision-making process.

VEHICLE INTERSECTION CRASH ANALYSIS

Fond du Lac intersection crash locations (Exhibits 63 and 64) were identified through the analysis of data provided by the Wisconsin Department of Transportation (WisDOT). Staff plotted approximately 4,500 reported accidents that occurred in the Fond du Lac Urbanized Area from 2001-2004.

Intersections were analyzed on a case by case basis, with crashes that occurred within .02 miles (105 feet) from the intersection being included in the total crashes for the intersection. A total of 20 crashes was used as the threshold for identifying these intersections, or an average of 5 crashes per year.

Important to note are the difficulties that arose with the intersections at USH 41. Isolating individual crashes to specific ramps proved to be difficult in most cases due to data constraints. A best attempt was made to describe the general deficiencies of these intersections. Intersection totals were compiled for the intersection as a whole; estimates were made in regards to specific ramps and ramp intersections. These estimates are based upon individual analysis of crashes and thus are intended only to provide a means to better understand the smaller portions of the intersection as a whole.

The following is a list of the identified intersections, in alphabetical order:

1. **Arndt Street and Brooke Street—*City of Fond du Lac***
Of the 21 reported accidents, the primary cause of accidents at this intersection

appear to be the failure to obey traffic signs, in this case stop signs control the intersection. Seventy-six percent of accidents were reported as a failure to yield, or essentially the running of a traffic sign, while an additional 19 percent were caused by a disregard of traffic controls. This is also evident by the nature the collision, where 90 percent were reported as at an angle, where one car hits the other from the side. A total of 16 injuries occurred at this intersection.

2. **Arndt Street and Hickory Street—*City of Fond du Lac***

With 22 reported accidents, this intersection is riddled with accidents possibly stemming from the inability to stop—be it by weather conditions or by driver failure. Stop signs are in place at this location 18 of 22 accidents (81 percent) were reported at an angle, a good indicator that a traffic signal has been ignored/missed. Forty-five percent were caused by a failure to yield, while another 41 percent were caused by a disregard for traffic controls. In terms of weather, 41 percent occurred during inclement weather, be in wet or snowy conditions. A total of 7 injuries occurred at this intersection. Two accidents involved alcohol.

3. **Arndt Street and Peters Avenue—*City of Fond du Lac***

Twenty accidents were reported at this intersection. After analyzing the accident reports, no one factor stood out as a potential cause for the accidents. Rather, a mixed bag of conditions affected each accident on a case by case basis. Among them, 30 percent were angle crashes, 25 percent involved inattentive drivers, 25 percent had a failure to yield, 25 were percent rear ends, and 20 percent sideswipes. One accident reported involvement with a pedestrian. A total of 22 injuries occurred at this intersection. One accident involved alcohol.

4. **Division Street and Macy Street—*City of Fond du Lac***

This intersection experienced a total of 36 crashes. Macy Street runs concurrent with HWY 45-151-175 at this point. In terms of cause of crashes, they seem to be primarily centered around not obeying traffic controls, thus entering the intersection when not allowed. This was particularly evident in the evening, when the traffic signals go from fully operational to flashing. This is seen by the 69 percent of accidents classified as angle, or from the side. 39 percent of accidents involved a disregard of traffic controls, while 25 percent were caused by a failure to yield. The intersection's location in the downtown district, with its concentration of drinking establishments, had an impact on crash rates. 39 percent of crashes occurred at night, of which 14 percent of all crashes were alcohol related. Twenty-two injuries occurred at this intersection.

5. **Division Street and Main Street—*City of Fond du Lac***

Most of the 23 accidents that occurred at this intersection could be attributed to the downtown location and its associated parallel parking, frequent traffic signals, pedestrian encounters, and alcohol establishments. Among the accidents, 35 percent were rear-ends, 30 percent were angle crashes, and 22 percent involved a failure to yield. Three crashes involved pedestrians, while 3 involved alcohol. Eleven injuries occurred at this intersection.

6. **Johnson Street and Rolling Meadows Drive—*Town of Fond du Lac***

This intersection contained 57 crashes in the 4 year period. As a multi-lane intersection with traffic signals, the majority of crashes appear to stem from the difficulty of navigating through the intersection with its turn lanes, traffic lights, etc. 28 percent of accidents were caused by a failure to yield, 21 percent involved an inattentive driver, 14 percent had a disregard of traffic controls, and 9 percent were caused from following too closely. In addition, the types of accidents focused primarily on two types—47 percent were angle crashes and 33 percent were rear ends. Twenty-five percent of accidents occurred in inclement weather (13 wet, 1 snow). One accident involved alcohol, and a total of 29 injuries resulted from crashes at this intersection.

7. **Johnson Street and USH 41—*Town & City of Fond du Lac***

This intersection is a bit more complicated. USH 41, a multi-lane highway, is over passed by Johnson Street/STH 23 and accessed by four ramps. This intersection contained a total of 80 crashes. Of them, 26 percent were caused by inattentive drivers, 14 percent by disregarding traffic controls, and 8 percent due to a failure to yield. Crash types were primarily rear ends (40 percent) and angle crashes (26 percent). Two accidents involved alcohol. A total of 35 injuries occurred at this intersection.

In terms of specific ramp characteristics, there were several things that stood out. It is estimated that the southbound USH 41 ramps, as a whole, account for 65 percent of all crashes involving ramps. More specifically, the southbound USH 41 entrance ramp is estimated to account for almost 45 percent of all ramp related accidents in the intersection. In addition, the intersection of Johnson Street/STH 23 with USH 41 at the northbound ramps accounted for an estimated 15 percent of ramp related crashes at the intersection.

8. **Johnson Street and Pioneer Road—*City of Fond du Lac***

With 90 accidents, this intersection is similar to Johnson's intersection with Rolling Meadows Drive. The multi-lane intersection with traffic signals and turn lanes coupled with the high volume of traffic is most probably responsible for the accidents at this intersection. Thirty-two percent of accidents were a failure to yield, 23 percent were caused by inattentive drivers, and 13 percent were caused by following too closely. The two most frequent accident types were rear ends and angle crashes, both with 37 percent. 23 percent occurred at nighttime or dusk, while 19 percent occurred during inclement weather (14 wet, 1 mud, 1 snow, 1 ice). Four accidents involved alcohol, and a total of 58 injuries occurred at this location.

9. **Johnson Street and Peters Avenue—*City of Fond du Lac***

The 43 accidents that occurred at this intersection appear to be related to the traffic signals that are in place, and the subsequent stop-and-start traffic that it necessitates. Through most of 2001, the intersection was controlled by stop signs, while today stop lights are in place. 35 percent of accidents were caused by an inattentive driver, 23 percent had a failure to yield, and 14 percent involved crashes into the traffic signals themselves, as opposed to another car. Crash types were mainly rear ends, with 42 percent and angle crashes, with 35 percent. Three accidents involved alcohol. A total of 21 injuries occurred at this intersection.

10. **Johnson Street and Seymour Street—*City of Fond du Lac***

A total of 27 accidents occurred at this intersection, which is controlled by traffic signals. The majority of accidents appear to be caused by mistakes made on the driver's part. For instance, 26 percent involved a failure to yield, 26 percent were caused by inattentive driving, and 19 percent were caused by a disregard of traffic controls. Accidents were primarily rear ends (22 percent) and angle crashes (41 percent). One accident involved alcohol, and 11 injuries occurred at this intersection.
11. **Johnson Street and Hickory Street—*City of Fond du Lac***

Of the 42 accidents that occurred at this intersection, which is controlled by stop lights, it appears as if most were a result of driver error while navigating the intersection. This is evident from the statistics: 29 percent involved inattentive drivers, 23 percent involved following too closely, 23 percent had a failure to yield. In addition, 36 percent were angle crashes and 31 percent were rear ends. The safety of bikers and pedestrians at this intersection is in question, with 2 accidents involving bikes, and 1 involving a pedestrian. Three accidents were related to alcohol. A total of 36 injuries occurred at this intersection.
12. **Johnson Street and Main Street—*City of Fond du Lac***

With 132 accidents, this intersection contains the greatest number of crashes for the entire Fond du Lac Urbanized Area. It is difficult to pinpoint one specific cause for these accidents—rather, the complexity of the intersection is to blame. High traffic volumes and multi-lane facilities of both intersecting streets, in addition to traffic signals and turning lanes make this intersection quite complicated. The statistics tell the same story. 30 percent involved a failure to yield, 20 percent involved inattentive drivers, 14 percent involved improper turns, 12 percent involved following too closely, and 8 percent had a disregard of traffic controls. In addition, the nature of the crashes were 37 percent angle crashes, 27 percent rear ends, and 10 percent side swipes. In terms of driving conditions, 21 percent occurred in inclement weather (27 wet, 8 snow), and 23 percent occurred in low light conditions. Ten accidents involved alcohol, and 1 involved a bike. A total of 54 injuries occurred at this intersection.
13. **Johnson Street and Park Avenue—*City of Fond du Lac***

This intersection experienced 38 crashes. Two causes seem to be the root of the accidents—the first being driver error and the other being weather conditions. In terms of driver error, 26 percent of accidents were caused by a failure to yield, 18 percent involved inattentive driver(s), and 11 percent involved a disregard of traffic controls. Accident types were primarily rear ends (37 percent) and angle crashes (34 percent). Eleven percent of accidents involved a crash with a traffic sign, and not another vehicle. In terms of weather, 34 percent happened during inclement weather (9 wet, 4 snow), and 11 percent of accidents involved driving too fast for conditions. Four accidents involved alcohol, 2 involved bikes, and 20 injuries occurred at this intersection.
14. **Johnson Street and National Avenue—*City of Fond du Lac***

The majority of the 24 accidents that occurred at this intersection appear to be associated with driver difficulties in traversing the signalized intersection, primarily

through driver error. Forty-six percent of crashes were caused by a failure to yield, 17 percent from inattentive drivers, 8 percent listed a disregard for traffic controls, while 8 percent were driving too fast for conditions. Twenty-one percent occurred during inclement weather (5 wet, 3 snow), and 25 percent occurred at night. Two crashes involved alcohol, and a total of 8 people were injured at this intersection.

15. Johnson Street and Prairie Road—*City of Fond du Lac*

The 25 crashes of this intersection appear to be related to the failure of the stop signs to control traffic. With 84 percent of crashes involving a failure to yield. Eighty-four percent of crashes occurred at an angle. Fifteen injuries occurred at this intersection.

16. Johnson Street and CTH K—*City of Fond du Lac*

Of the 24 crashes that occurred at this location, most seem to be associated with two things—the inability of stop signs to control traffic and the increased use of the roadways during commuting times. Specifically, 54 percent were caused by failures to yield, while the nature of the crashes was primarily angle (50 percent) or head on (21 percent). Thirty-three percent of crashes occurred between 6-8 a.m. and 21 percent of crashes occurred between 4-6 p.m., the prime commuting hours. Two accidents involved alcohol, and a total of 22 injuries occurred.

17. Macy Street and Western Avenue—*City of Fond du Lac*

The 18 crashes that occurred here, although slightly under the threshold, are still notable. The main cause of crashes appears to be from driver error while negotiating the intersection. Thirty-nine percent of crashes involved an inattentive driver, another 39 percent involved a disregard for traffic controls. Sixty-one percent of incidents were angle crashes. One crash involved alcohol, and 7 injuries resulted from crashes at this intersection.

18. Macy Street and Second Street—*City of Fond du Lac*

Driver error appears to be the cause for most of the 22 crashes that occurred at this intersection, and the statistics support this statement. 36 percent of crashes involved a disregard of traffic controls, which at this intersection are traffic signals, 25 percent were caused by an inattentive driver, and finally 17 percent were caused by a failure to yield. Seventy-one percent of incidents were angle crashes. Seven injuries resulted from collisions at this intersection.

19. Main Street and Merrill Avenue—*City of Fond du Lac*

Twenty collisions occurred at this intersection, which provides access to the historic downtown district. Fifty percent of the accidents occurred at night. Alcohol related crashes accounted for 20 percent at this intersection, a relatively high amount when compared with other intersections. Prevalent crash types were rear ends (45 percent) and side swipes (25 percent). Six injuries occurred at this intersection.

20. Main Street and Arndt Street—*City of Fond du Lac*

Of the 34 accidents that occur at this intersection, it seems a good deal of them result from the difficulty in crossing Main Street, where traffic does not stop, from Arndt Street. This is seen in the statistics: 65 percent caused by a failure to yield and 12 percent caused by inattentive drivers. In terms of crash types, 82 percent were angle crashes, while 15 percent were rear end.

21. **Main Street and Scott Street—*City of Fond du Lac***

The 42 accidents that occurred at this intersection most likely result from heavy traffic volumes and driver error, as well as adverse conditions. Forty-three percent of accidents involved inattentive drivers, 21 percent involved a failure to yield, and 12 percent involved driving too fast for conditions, which may be associated with the 26 percent of crashes occurring in wet conditions. Crash types were primarily rear ends (43 percent) and angle crashes (29 percent). Five accidents involved collisions with traffic signs, and 1 involved a collision with a bike. Two alcohol related crashes occurred. A total of 25 injuries occurred at this intersection.
22. **Marr Street and Fourth Street—*City of Fond du Lac***

This intersection experienced 48 crashes over the four year period. It appears as if this high number is a result of the inability of the stop signs to control traffic. Forty-four percent of accidents are attributed to a failure to yield and 17 percent are caused by inattentive drivers. In terms of crash type, 73 percent are angle crashes, while 13 percent are side swipes. One accident involved a bike, 1 involved a pedestrian, and 2 involved alcohol. Twenty-one injuries resulted from accidents at this location.
23. **Marr Street and Division Street—*City of Fond du Lac***

This intersection, controlled by traffic signals, contained 29 crashes, the majority of which can be attributed to driver error as the statistics support. Forty-one percent of accidents had a disregard for traffic control, 21 percent had an improper turn, and 17 percent had a failure to yield. Crash types were primarily angle crashes (41 percent) and sideswipes (31 percent). Seventeen injuries occurred at this intersection.
24. **Park Avenue and Division Street—*City of Fond du Lac***

The 22 crashes at this intersection can reasonably be attributed to driver error. Of all crashes, 55 percent were from a disregard of traffic controls, 27 percent from an improper turn, and 23 percent from a failure to yield. Crash types were 41 percent side swipes and 55 percent angle crashes, respectively. In addition, 36 percent of crashes occurred at night. One crash is attributed to alcohol, and a total of 6 injuries occurred at this intersection.
25. **Pioneer Road and Military Road—*City of Fond du Lac***

Many of the 30 crashes occurring at this intersection are attributed to driver error and/or difficulty in managing the intersection. Specifically, it appears as if making left turns, be it from Pioneer Road or Military Road, is quite difficult, with 47 percent of crashes involving left turns. Fifty-seven percent of crashes are attributed to failures to yield and 17 percent to inattentive drivers. Crash types are primarily angle crashes (57 percent), with rear ends (20 percent) and head on (13 percent) also rather prevalent. Eighteen injuries can be ascribed to crashes occurring at this intersection.
26. **Pioneer Road and Hickory Street—*City & Town of Fond du Lac***

The 23 crashes at this intersection are most likely caused by a combination of driver error and an intersection that is difficult to navigate under current traffic levels.

Thirty percent of accidents are caused by a disregard of traffic controls, while another 26 percent are caused by a failure to yield. In addition, 26 percent of crashes occurred in adverse weather conditions (5 wet, 1 snow). Crash types were primarily angle crashes (65 percent) and rear ends (22 percent). Three crashes were related to alcohol. A total of 13 injuries resulted from crashes at this intersection.

27. Pioneer Road and Main Street—*City of Fond du Lac*

Of the 32 accidents that occurred at this intersection, the most prominent troubled area is left turns. Fifty percent of crashes involved at least one vehicle attempting to make a left turn. In addition, 41 percent of accidents are attributed to inattentive drivers, while another 22 percent were a failure to yield. Crash types were primarily rear end (47 percent) and angle crashes (25 percent). Twenty-five percent of crashes occurred at night. At this intersection, 2 crashes were related to alcohol, and 17 injuries occurred.

28. Rolling Meadows Drive and Military Road—*City of Fond du Lac*

Thirty-two accidents occurred at this intersection, of which most seem to be caused by driver error and/or difficulty navigating the intersection. For instance, 38 percent of crashes are attributed to a failure to yield, in addition to the 28 percent from following too close. Left turns appear to be an issue, with 53 percent of all crashes involving at least one vehicle attempting a left turn. Crash types are primarily angle crashes (53 percent) and rear ends (31 percent). Twenty-eight injuries occurred at this intersection.

29. Scott Street and Hickory Street—*City of Fond du Lac*

The majority of the 20 accidents at this intersection may be attributed to driver error and bad driving conditions. In terms of driver error, 45 percent of crashes were due to inattentive driving, in addition to 20 percent due to driving too fast for conditions, which ties into driving conditions. Thirty-five percent of crashes occurred in wet conditions, in addition to the 25 percent that occurred at nighttime. One alcohol related accident occurred. Fourteen injuries can be attributed to this intersection.

30. Scott Street and USH 45—*City of Fond du Lac*

This intersection had 28 collisions associated with it. With stoplights and railroad signals at this intersection, it proves to be a rather difficult one to navigate, and driver error may be due to the confusion that can result at this location. Thirty-two percent of accidents result from inattentive drivers, and 13 percent from driving too fast for conditions. Twenty-five percent of crashes occurred in wet conditions. In terms of crash type, 54 percent were rear ends, and 25 percent were angle crashes. Two accidents were associated with alcohol. Fourteen injuries occurred at this intersection.

31. Scott Street and Brooke Street—*City of Fond du Lac*

It appears as if a good amount of the 34 crashes that occurred at this intersection result from the traffic levels and subsequent congestion on the road way. The statistics illustrate this: 24 percent of accidents are caused by a failure to yield, while another 24 percent are caused by following too closely. This goes hand in hand with the 44 percent of crashes that are rear ends; another 26 percent are angle crashes. Two crashes involved alcohol, and a total of 23 injuries occurred at this intersection.

32. Scott Street and Macy Street—*City of Fond du Lac*

Twenty crashes occurred at this intersection, of which a good deal could be associated with the driver's inability to adjust their driving to road conditions. Forty percent of crashes occurred in wet conditions, with 20 percent of crashes attributed to driving too fast for conditions. Fifty-five percent are attributed to a failure to yield. Crash types are primarily angle crashes (50 percent). Thirteen injuries occurred at this location.

33. Scott Street and Doty Street—*City of Fond du Lac*

This intersection had 24 crashes, of which most were related to the difficulty involved in accessing and/or crossing Scott Street from Doty Street. Traffic from Scott Street does not stop, while traffic at Doty does. For example, 54 percent of crashes involved making a left turn for at least one vehicle. Sixty-three percent of crashes were associated with a failure to yield. Crash types were mainly rear ends (29 percent) and angles (50 percent). Thirteen injuries are associated with this intersection.

34. USH 41 and CTH 00—*Towns of Fond du Lac & Friendship*

This intersection is a bit more complicated. USH 41, a multilane highway, is over passed by CTH 00 and accessed by four ramps, arranged in a diamond pattern. A total of 41 crashes occurred in relation to this intersection. Causes of crashes varied. For instance, 22 percent from driving too fast for conditions. In addition, 20 percent occurred in inclement weather conditions (5 wet, 3 ice). One crash involved alcohol. A total of 10 injuries resulted from collisions at this intersection, and 2 fatalities.

In terms of ramps, the southbound USH 41 off ramp is estimated to account for 40 percent of all ramp related crashes, while the northbound USH 41 off ramp accounts for another 40 percent. Data for this was limited, and thus the fact that this is merely an estimate must be stressed.

35. USH 41 and Military Road—*Town of Fond du Lac*

USH 41 is over passed by Military Road/USH 151 and accessed by eight ramps, arranged in a cloverleaf pattern. Eighty-two crashes occurred at this intersection. The crashes appear to be associated with the difficulties in managing this complicated intersection, especially the sharply curved on and off ramps. Specifically, 30 percent of crashes were associated with negotiating curves, 34 percent with driving too fast for conditions, 17 percent with inattentive drivers, and 16 percent involved crashing into traffic signs. Crash types, when involving more than one vehicle, were primarily rear ends, accounting for 34 percent of all crashes. Twenty-six percent of crashes occurred in inclement weather, with 15 in wet conditions and 6 in snow. Forty-five injuries occurred at this intersection, and 1 fatality.

In terms of the ramps, some general observations must be mentioned. The ramp system for this interchange is rather complicated and difficult to traverse. Ramps providing access and exit from USH 41 southbound are estimated to account for 42 percent of ramp related accidents, while those northbound account for approximately 58 percent.

36. **USH 41 and Hickory Street—*City & Town of Fond du Lac***
USH 41 is over passed by Hickory Street and accessed by four ramps, arranged in a trumpet pattern. This intersection experienced 29 crashes within its bounds. It appears as if a major factor to these accidents is improper driving for road conditions. Thirty-four percent were caused by driving too fast for conditions, and another 41 percent were directly associated with inclement weather (9 wet, 3 snow). Accident types involving more than one vehicle were primarily rear ends, representing 24 percent of all crashes. Three accidents involved deer, and 5 injuries occurred at this intersection. Southbound ramps accounted for approximately 40 percent of ramp related crashes, while northbound accounted for an estimated 60 percent.
37. **USH 41 and Main Street—*City & Town of Fond du Lac***
USH 41 is over passed by Main Street/HWY 175 with two separate bridges, one for north and southbound traffic. It is accessed by four ramps, two off and two on. Seventy-six crashes occurred that were associated with this intersection. Statistics indicate that this intersection is difficult to navigate for drivers, especially under inclement weather. Twenty-five percent of crashes involved negotiating a curve, while 17 percent occurred while merging. Thirty-three percent of crashes involved driving too fast for conditions, while 46 percent of all crashes occurred during inclement weather (12 wet, 17 snow, 6 ice). 12 percent of crashes were with the median barrier, 8 percent were overturns, and 8 percent were with the guardrail fence. 6 crashes involved alcohol. 31 injuries occurred at this location, and 1 fatality. This interchange was permanently closed as part of the USH 151 bypass project.
38. **Western Avenue and Hickory Street—*City of Fond du Lac***
This intersection had 21 crashes, of which most were associated either with inclement weather or the difficulty for drivers to manage a busy 4-way stop. Thirty-three percent of crashes occurred in inclement weather (3 wet, 2 snow, 2 ice). 52 percent were associated with a failure to yield. The most prominent crash type was angle crashes, with 67 percent. Two crashes involved alcohol. Ten injuries resulted from crashes at this intersection.
39. **Western Avenue and Military Road—*City of Fond du Lac***
Twenty-three crashes occurred at this intersection. It appears as if the flashing signals used at night may not be enough to control traffic, with 45 percent of crashes occurring at night. Twenty-six percent of crashes were associated with a failure to yield, which becomes more of an issue when the stop lights are only flashing. Thirty-eight percent of crashes were angle. Ten injuries occurred at this intersection.
40. **Winnebago Drive and Park Avenue—*City of Fond du Lac***
Of the 31 accidents that occurred at this intersection, many of them may be attributed to driver error and the difficulties associated with making left turns. Thirty-nine percent of accidents involve at least one vehicle attempting to make a left turn. Thirty-two percent are associated with a failure to yield, with an additional 26 percent associated with a disregard for traffic controls. Crash types were primarily angle (61 percent) and rear ends (16 percent). One crash involved alcohol. Ten injuries occurred at this intersection.

41. Winnebago Drive and USH 151 Bypass/STH 149—Town of Taycheedah

Twenty-one crashes occurred at this intersection, which at the time was rather difficult to discern, but has since been reconstructed. The majority of crashes were possibly due to the difficulty in determining who had right of way to enter the intersection and proceed onward. Thirty-three percent of accidents were associated with a failure to yield. Twenty-nine percent involved deer. Crash types were rear ends (29 percent) and angle crashes (33 percent). Fifteen injuries occurred at this intersection.

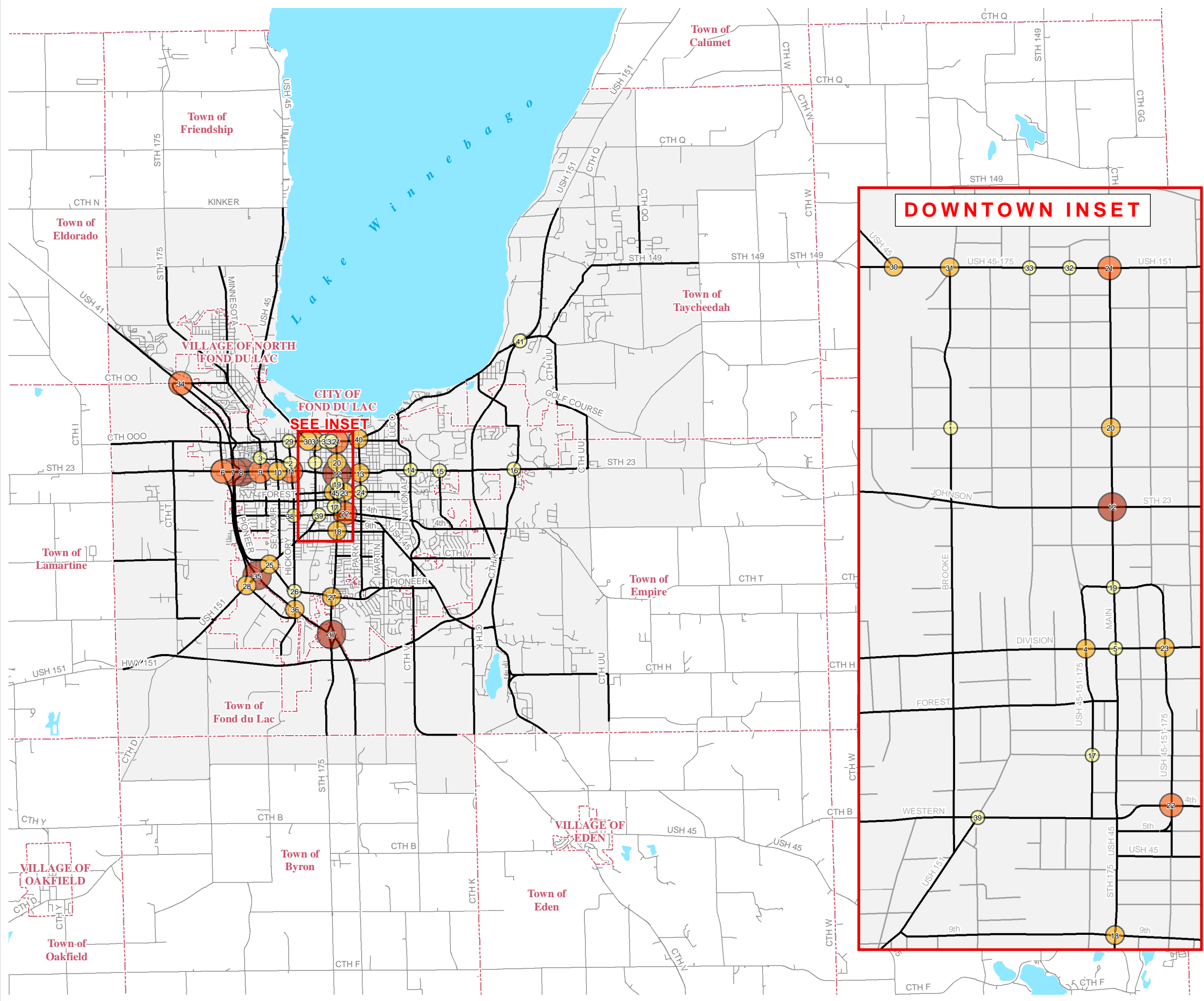
EXHIBIT 63

VEHICLE CRASH SUMMARY TABLE

INTERSECTION ID #	INTERSECTING ROADWAYS		# OF CRASHES
1	Arndt Street	Brooke Street	21
2	Arndt Street	Hickory Street	22
3	Arndt Street	Peters Avenue	20
4	Division Street	Macy Street 45-151-175	36
5	Division Street	Main Street	23
6	Johnson Street 23	Rolling Meadows Drive	57
7	Johnson Street 23	USH 41	80
8	Johnson Street 23	Pioneer Road	90
9	Johnson Street 23	Peters Avenue	43
10	Johnson Street 23	Seymour Street	27
11	Johnson Street 23	Hickory Street	42
12	Johnson Street 23	Main Street 45-151-175	132
13	Johnson Street 23	Park Avenue	38
14	Johnson Street 23	National Avenue	24
15	Johnson Street 23	Prairie Road	27
16	Johnson Street 23	CTH K	24
17	Macy Street 45-151-175	Second Street	22
18	Main Street 175	Ninth Street	28
19	Main Street 45-151-175	Merrill Avenue 45-151-175	20
20	Main Street 45-151-175	Arndt Street	34
21	Main Street 45-151-175	Scott Street 45-175	42
22	Marr Street 45-151-175	Fourth Street	48
23	Marr Street 45-151-175	Division Street	29
24	Park Avenue	Division Street	22
25	Pioneer Road	Military Road 151	30
26	Pioneer Road	Hickory Street	23
27	Pioneer Road	Main Street 175	32
28	Rolling Meadows Drive	Military Road 151	32
29	Scott Street 175	Hickory Street	20
30	Scott Street	USH 45	28
31	Scott Street 45, 175	Brooke Street N	34
32	Scott Street 45-175	Macy Street	20
33	Scott Street 45-175	Doty Street	24
34	USH 41	CTH OO	41
35	USH 41	Military Road 151	82
36	USH 41	Hickory Street	21
37	USH 41	Main Street 175	76
38	Western Avenue	Hickory Street	21
39	Western Avenue	Military Road 151	23
40	Winnebago Drive 151	Park Avenue	31
41	Winnebago Drive 151	USH 151 Bypass, STH 149	21

Source: ECWRPC 2005, WisDOT 2001-2004.

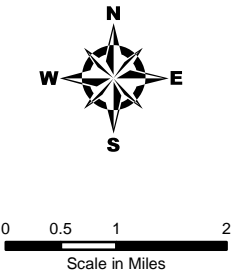
**EXHIBIT 64
FOND DU LAC AREA
INTERSECTION CRASH
LOCATIONS**



- 26 IDENTIFICATION NUMBER
- 17 - 26 CRASHES
 - 27 - 38 CRASHES
 - 41 - 60 CRASHES
 - 76 - 132 CRASHES
- URBANIZED FUNCTIONALLY CLASSIFIED
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

* Please see Exhibit 63 for more information regarding the intersection crash location.

Source: WisDOT & ECWRPC provided 2000 metropolitan planning area and 2001-2004 crash data. Fond du Lac County provided 2004 centerline, hydrology, and municipality boundaries.



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Prepared By
EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005

BICYCLE CRASH ANALYSIS

There were 56 bicycle related incidents in Fond du Lac from 2001 – 2004. All of the incidents resulted in at least one injury; there were no fatalities. With the exception of one incident, all of the incidents occurred in the City of Fond du Lac. The one exception occurred on Golf Course Drive and at Winnebago Drive (Town of Taycheedah).

The Johnson Street corridor had the greatest number of incidents with a total of 15. Three incidents occurred on Johnson Street and at National Avenue with the possible contributing circumstance of either the driver's or the bicyclist's failure to yield.

Eighty-two percent of the incidents had a possible contributing circumstance of either the driver's or the bicyclist's failure to yield, inattentive driving, failure to keep vehicle under control, disregard for traffic control, unsafe backing, or driver condition. The remaining 18 percent were either not documented or stated as "other." Bicycle crashes by intersection are listed in Exhibit 65.

EXHIBIT 65

BICYCLE CRASH SUMMARY TABLE

2001- 2004 BICYCLE RELATED CRASHES			
ON HWY/STREET	AT HWY/STREET	CRASHES	INJURIES
4th Street	Ellis Street	1	1
4th Street	Main Street	2	2
4th Street	Marr Street	1	1
9th Street	Marr Street	1	1
9th Street	Sherman Street	1	1
9th Street	Center Street	1	1
9th Street	Martin Avenue	1	1
Arndt Street	Grand Court	1	1
Division Street	Champion Avenue	1	1
Division Street	Cottage Avenue	1	1
Division Street	Everett Street	1	1
Johnson Street	Chestnut Street	1	1
Johnson Street	Doty Street	1	1
Johnson Street	Hickory Street	2	2
Johnson Street	Main Street	2	2
Johnson Street	Military Road	2	2
Johnson Street	National Avenue	3	3
Johnson Street	Park Avenue	1	1
Johnson Street	Pioneer Road	1	1
Johnson Street	CTH K	1	1
Forest Avenue	Hickory Street	1	1
Golf Course Drive	Winnebago Drive	1	1
Hickory Street	Western Avenue	1	1
Luco Road	Scott Street	1	1
Main Street	Forest Avenue	1	1
Main Street	Harbor View Drive	1	1
Main Street	William Avenue	1	1
Main Street	1st Street	1	1
Main Street	2nd Street	1	1
Main Street	11th Street	1	1
Main Street	Western Avenue	1	1
Marr Street	4th Street	1	1
Marr Street	15th Street	1	1
Martin Road	Pioneer Road	1	1
Military Road	Hickory Street	1	1
National Avenue	Marshall Avenue	1	1
National Avenue	2nd Street	2	2
Park Avenue	Bischoff Street	1	1
Park Avenue	Johnson Street	1	1
Park Avenue	Ledgeview Avenue	1	1
Park Avenue	Sheboygan Street	1	1
Peters Avenue	Forest Avenue	1	1
Peters Avenue	Scott Street	1	1
Western Avenue	Hickory Street	1	1
Winnebago Drive	Bechaud Boulevard	2	3
Winnebago Drive	Northgate Street	1	1
USH 45	CTH K	1	1
USH 151	USH 45	1	1

Source: ECWRPC 2005, WisDOT 2001-2004.

PEDESTRIAN RELATED INCIDENTS

There were 42 pedestrian related incidents in the Fond du Lac Urbanized Area from 2001 – 2004. All of the incidents resulted in at least one injury; one being a fatality. With the exception of three incidents, all occurred in the City of Fond du Lac. The three exceptions occurred on Winnebago Drive and at County Highway K (Town of Taycheedah), on U.S. Highway 41 and at County Highway OO (Town of Friendship), and on U.S. Highway 45 and at County Highway H (Town of Empire). The Main Street corridor had the greatest number of incidents with a total of 10. Three incidents occurred at the intersection of Main Street and Division Street. Sixty percent of the incidents had a possible contributing circumstance of either the driver's or the bicyclist's failure to yield, inattentive driving, failure to keep vehicle under control, disregard for traffic control, unsafe backing, or driver condition. The remaining 40 percent were either not documented or stated as "other." Pedestrian crashes by intersection are listed in Exhibit 66.

EXHIBIT 66

PEDESTRIAN RELATED CRASHES SUMMARY TABLE

2001 - 2004 PEDESTRIAN RELATED CRASHES				
ON HWY/STREET	AT HWY/STREET	CRASHES	INJURIES	FATALITIES
4th Street	National Avenue	1	1	0
4th Street	Marr Street	1	1	0
4th Street	National Avenue	1	1	0
6th Street	Park Avenue	1	1	0
9th Street	Military Road	1	1	0
Arndt Street	Doty Street	1	1	0
Arndt Street	Hickory Street	1	1	0
Division Street	STH 175	1	1	0
Division Street	Main Street	1	1	0
Johnson Street	Main Street	2	1	0
Johnson Street	Marquette Street	1	1	0
Forest Avenue	Sophia Street	1	1	0
Hickory Street	Johnson Street	2	3	0
Hickory Street	Portage Street	1	1	0
Main Street	Bank Street	1	1	0
Main Street	Division Street	3	2	0
Main Street	Follett Street	1	1	0
Main Street	Forest Avenue	1	1	0
Main Street	Promen Drive	1	1	0
Main Street	6th Street	1	1	0
Main Street	12th Street	1	1	0
Main Street	21st Street	1	1	0
Military Road	Johnson Street	1	1	0
National Avenue	2nd Street	1	1	0
Park Avenue	Division Street	1	1	0
Peters Avenue	Arndt Street	1	1	0
Peters Avenue	Berger Parkway	1	2	0
Pioneer Road	Military Road	1	1	0
Scott Street	Brooke Street	1	1	0
Scott Street	Monmouth Street	1	1	0
Scott Street	Thorp Street	1	1	0
Winnebago Drive	CTH K	1	1	0
STH 23	Park Avenue	1	1	0
STH 23	Townline Road	1	1	0
STH 23	CTH VVV	1	2	0
USH 41	CTH OO	1	0	1
USH 45	CTH H	1	1	0
USH 151	Brooke Street	1	1	0

Source: ECWRPC 2005, WisDOT 2001-2004.

FREIGHT RELATED CRASHES

Identifying current safety concerns in regards to freight will help achieve the overriding goal of this plan to increase the safety of the transportation system. The following is data describing current safety concerns of truck freight in the Fond du Lac Urbanized Area. Crashes occurred primarily in Fond du Lac. It must be noted that this includes the municipalities at the Town and City level, as the data source did not differentiate between the two. Crashes for the other municipalities are listed in the following table.

EXHIBIT 67

TRUCK CRASHES BY MUNICIPALITY (2000-2004)

Municipalities	Crashes	Percent
Fond du Lac**	116	73%
Byron	19	12%
Empire	8	5%
North Fond du Lac	7	4%
Taycheedah	6	4%
Friendship	3	2%
Total	159	100%

**Fond du Lac represents City and Town. Data did not differentiate between the two and could not be separated.
Source: FMCSA 2004

Not surprisingly, the highway with the greatest number of crashes is USH 41, with 33.7 percent. Exhibit 68 shows crashes for other streets and highways in the Urbanized Area. Note that Johnson Street and STH 23 were recorded separately in the table. If combined, the account for 19.6 percent of truck crashes. The same can be said for Fond du Lac Street and USH 45, accounting for 9.6 percent of crashes.

EXHIBIT 68

TRUCK CRASHES ON MAJOR HIGHWAYS (2000-2004)

Location	Crashes	Percent*
Fond du Lac St.**	9	5.1%
Johnson St.***	17	9.5%
Main St.	9	5.1%
Scott St.	5	2.8%
STH 23	18	10.1%
STH 26	13	7.3%
USH 41	60	33.7%
USH 45	8	4.5%
USH 151	32	18.0%
STH 175	7	3.9%
Total	178	100.0%

* % adjusted to exclude crashes where HWY not specified

** Portions of Fond du Lac Street run concurrent with USH 45 in the City of Fond du Lac

*** STH 23 is Johnson Street in the City of Fond du Lac

Source: FMCSA 2004

Truck crash types are illustrated in Exhibit 69. The majority of crashes occurred with other motorized vehicles (71.7 percent). Among all other crash types, running off the road accounted for the next greatest percentage, with 8.6 percent.

EXHIBIT 69

CRASH TYPE—COLLISION AND NONCOLLISION (2000-2004)

Accident Type	Count	Percent
Collision - Motor Vehicle	200	71.7%
Collision - Fixed Object	6	2.2%
Collision - Cargo Loss/Shift	6	2.2%
Collision - Motor Vehicle	3	1.1%
Collision - Pedestrian	3	1.1%
Collision - Other Movable Object	2	0.7%
Collision - Pedestrian Bicyclist	1	0.3%
Collision - Train	1	0.3%
Noncollision - Ran Off Road	24	8.6%
Noncollision - Jackknife	6	2.2%
Noncollision - Overturn	5	1.7%
Noncollision - Downhill Runaway	3	1.1%
Noncollision - Explosion or Fire	2	0.7%
Other	10	3.6%
NA	7	2.5%
Total	279	100%

Source: FMCSA 2004

It appears as if the heaviest trucks, those 70,001 pounds and up are involved in the greatest number accidents, as is evident in Exhibit 70. This could be attributed to the fact that it takes these trucks longer to speed up and slow down, and turns may be more difficult as well.

EXHIBIT 70

TRUCK WEIGHT FOR TRUCKS INVOLVED IN CRASHES (2000-2004)*

Weight (pounds)	Crashes	Percent*
10,000-20,000	8	9.8%
20,001-30,000	9	10.9%
30,001-40,000	5	6.1%
40,001-50,000	3	3.7%
50,001-60,000	5	6.1%
60,001-70,000	5	6.1%
70,001-80,000	47	57.3%
Total	82	100%

*% adjusted to exclude crashes where weight not specified

Source: FMCSA 2004

A variety of truck types exist, as is evident from Exhibit 71. It appears as if most truck related crashes occur with semi-trailers, perhaps because of their size and unique turning and driving requirements.

EXHIBIT 71

CRASHES BY TRUCK TYPE 2000-2004

Truck Type	Crashes	Percent
Tractor/ Semi-Trailer	135	48.4%
Single Unit Truck (2-Axle/6-Tire)	53	19%
Single Unit Truck (> 3 Axles)	35	12.6%
Bus (Seats > 15 w/Driver)	18	6.4%
Truck/Tractor (Bobtail)	9	3.2%
Truck/Trailer	9	3.2%
Unknown Heavy Truck	7	2.5%
NA	7	2.5%
Tractor/Double	6	2.2%
Total	279	100.0%

Source: FMCSA 2004

RECOMMENDATIONS

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 establishment of the long range transportation model for the Fond du Lac 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 within this document. 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, and environmentally sound transportation system that provides personal mobility for all segments of the population and supports the economy of the region. As stated in *Corridors 2020*, WisDOT's long-range highway improvement 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 Fond du Lac 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. Recommendations for alternative modes of transportation to the automobile are also made, generally in terms of implementation of the adopted policies. Short range projects are identified and programmed in the 2006 Fond du Lac MPO Transportation Improvement Program (TIP).

Exhibit 72 is a listing of the recommendations, both committed and planned projects that were identified after analyzing current and proposed land uses, current deficiencies, as well as deficiencies projected to exist under the Current Plans (2035) Scenario, the preferred alternative.

The projects are categorized as expansion (E) and (B) if the facility is on the proposed bike route shown in Exhibit 72. The project recommendations included in the listing are also shown on a map

of the area, Exhibit 73, following the listing. The number at the beginning of each listing corresponds to the numbers noted on the map.

EXHIBIT 72

TRANSPORTATION RECOMMENDATIONS

- 1) (E) (B) Network Facility: **USH 151.** Cost: \$11,000,000
Facility Segment: CTH D to STH 175.
Jurisdiction: WisDOT.
Proposed Project: Construct the 4 lane divided highway bypass from CTH D to STH 175.
Implementation Date: Short range improvement, 0 – 15 years
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP. Planned construction for 2007-2008. WisDOT plans to relocate USH 151 onto the facility.
Plan Recommendation: WisDOT should proceed with plans to construct the four lane facility with bike and pedestrian facilities. The travel model shows the new facility will likely operate with no deficiencies.
- 2) (E) Network Facility: **USH 151 BYPASS GRADE SEPARATION** Cost: \$15,000,000
Facility Segment: USH 151 Bypass
Jurisdiction: WisDOT.
Proposed Project: Officially map all intersections with the USH 151 Bypass to eliminate at-grade cross traffic, similar to USH 45.
Implementation Date: Long range improvement, 15 -30 years.
Actions Taken: Not scheduled.
Plan Recommendation: Officially map all intersections with the USH 151 Bypass to eliminate at-grade cross traffic, similar to USH 45.
- 3) (E) Network Facility: **USH 41** Cost: \$10,000,000
Facility Segment: Townline Road to Lost Arrow Road
Jurisdiction: WisDOT
Proposed Project: Reconstruction of USH 41, widening to 6 lanes.
Implementation Date: Long range improvement, 15 - 30 years.
Actions Taken: Not scheduled.
Plan Recommendation: WisDOT should proceed with plans to increase capacity on USH 41 within the plan horizon. The travel model shows deficiency on USH 41 when tested as 4 lanes.
- 4) (E) Network Facility: **USH 41** Cost: \$8,000,000
Facility Segment: CTH OO to the North County Line (NCL)
Jurisdiction: WisDOT
Proposed Project: Pavement replacement on USH 41 from CTH OO to the North County Line.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Pavement replacement on USH 41 from CTH OO to the North County Line.

- 5) (E) Network Facility: **USH 41 FREEWAY MODERNIZATION** Cost: \$100,000
Facility Segment: Kohlman Road and Pioneer Road.
Jurisdiction: WisDOT.
Proposed Project: Design structures to meet interstate height and width standards.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Project should be constructed as programmed.
- 6) (E) Network Facility: **USH 41 FREEWAY MODERNIZATION** Cost: \$5,000,000
Facility Segment: WCL and FVW Railroad Structure Reconstruction
Jurisdiction: WisDOT.
Proposed Project: WCL and FVW Railroad Structure Reconstruction
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: WCL and FVW Railroad Structure Reconstruction
- 7) (E) Network Facility: **USH 45 (MAIN STREET)** Cost: \$2,000,000
Facility Segment: Western Ave to Scott St.
Jurisdiction: WisDOT.
Proposed Project: Reconstruct USH 45 from Western Ave to Scott St.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Reconstruct USH 45 from Western Ave to Scott St.
- 8) (E) Network Facility: **STH 175 (VAN DYNE ROAD)** Cost: \$4,000,000
Facility Segment: Village of North Fond du Lac to the North County Line (NCL)
Jurisdiction: WisDOT
Proposed Project: Resurface STH 175 from the Village of North Fond du Lac to the North County Line.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Resurface STH 175 from the Village of North Fond du Lac to the North County Line.
- 9) (E) Network Facility: **STH 175** Cost: \$3,000,000
Facility Segment: USH 41 to USH 45
Jurisdiction: WisDOT
Proposed Project: Resurface STH 175 from Fond du Lac to USH 151.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Resurface STH 175 from Fond du Lac to USH 151.
- 10) (E) Network Facility: **STH 23 (WEST JOHNSON STREET)** Cost: \$11,850,000
Facility Segment: Townline Road to USH 41.
Jurisdiction: WisDOT.
Proposed Project: Reconstruct facility as a 4 lane highway.
Implementation Date: Short range improvements 0 - 15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct facility as a 4 lane highway.

- 11) (E) (B) Network Facility: **STH 23 (EAST JOHNSON STREET)** Cost: \$11,000,000
Facility Segment: From CTH K to the east out of the MPO area, as part of the 4 lane project between Fond du Lac and Plymouth.
Jurisdiction: WisDOT
Proposed Project: Reconstruct to a 4-lane expressway with bike and pedestrian facilities.
Implementation Date: Short range improvement 0 - 15 years
Actions Taken: Construction is scheduled for 2013.
Plan Recommendation: Proceed with the 4-lane facility, identified as a Corridor 2020 connector highway by WisDOT.
- 12) (E) Network Facility: **CTH K** Cost: \$4,000,000
Facility Segment: USH 151 to CTH V.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct CTH K as a 4 lane facility from USH 151 to CTH V.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH K as a 4 lane facility from USH 151 to CTH V.
- 13) (E) (B) Network Facility: **CTH T (ESTERBROOK ROAD)** Cost: \$2,800,000
Facility Segment: STH 23 to CTH OO.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct the stretch from STH 23 to CTH OOO to a four lane facility and construct a new 4 lane facility from CTH OOO to CTH OO.
Implementation Date: Long range improvement, 15 – 30 years.
Actions Taken: Not scheduled.
Plan Recommendation: Proceed with plans to make CTH T (Esterbrook Road) a minor urban arterial and protect with corridor preservation for an ultimate 4 lane facility with bike and pedestrian facilities.
- 14) (E) Network Facility: **CTH T** Cost: \$2,800,000
Facility Segment: STH 23 to Esterbrook Rd.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct CTH T as a 4 lane facility from STH 23 to Esterbrook Rd.
Implementation Date: Long range improvement, 15 – 30 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH T as a 4 lane facility from STH 23 to Esterbrook Rd.
- 15) (E) Network Facility: **CTH T** Cost: \$3,500,000
Facility Segment: National Ave to CTH K.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct CTH T as a 4 lane facility from National Ave to CTH K.
Implementation Date: Long range improvement, 15 – 30 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH T as a 4 lane facility from National Ave to CTH K.

- 16) (E) Network Facility: **CTH V** Cost: \$4,200,000
Facility Segment: CTH VV to USH 45.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct to 4 lanes.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH VV to a 4 lane facility from CTH V to USH 45.
- 17) (E) Network Facility: **CTH V** Cost: \$3,000,000
Facility Segment: CTH K to National Ave.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct to 4 lanes.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH V from CTH K to National Ave. as a 4 lane facility.
- 18) (E) Network Facility: **CTH VV (PIONEER ROAD)** Cost: \$14,500,000
Facility Segment: Military Road to USH 45
Jurisdiction: Fond du Lac County
Proposed Project: Reconstruct Pioneer Road as a 4 lane facility.
Implementation Date: Short range improvement 0 - 15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Proceed with the reconstruction of CTH VV (Pioneer Road) as a 4 lane facility. Travel model shows potential deficiencies occurring by 2035 under with the current 2 lane facility.
- 19) (E) Network Facility: **CTH VV** Cost: \$14,500,000
Facility Segment: Military Rd. to CTH 000.
Jurisdiction: Fond du Lac County.
Proposed Project: Reconstruct CTH VV as a 4 lane facility from Military Rd. to CTH 000.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct CTH VV as a 4 lane facility from Military Rd. to CTH 000.
- 20) (E) Network Facility: **CTH VV UNDERPASS** Cost: \$9,600,000
Facility Segment: Morris St. to Hickory St.
Jurisdiction: Fond du Lac County.
Proposed Project: Construct 4 lane rail underpass.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Construct CTH VV underpass of the Canadian National Railroad.

- 21) (E) Network Facility: **6th STREET (USH 45)** Cost: \$957,000
Facility Segment: Fond du Lac Ave to Main St.
Jurisdiction: City of Fond du Lac.
Proposed Project: Reconstruct 6th Street as a 4 lane facility from Fond du Lac Ave to Main St.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Not scheduled.
Plan Recommendation: Reconstruct 6th Street as a 4 lane facility from Fond du Lac Ave to Main St.
- 22) (E) Network Facility: **JOHNSON STREET (STH 23)** Cost: \$75,000
Facility Segment: Pioneer Rd. to Prairie Rd.
Jurisdiction: City of Fond du Lac.
Proposed Project: Intersection safety improvements - AES
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Intersection safety improvements - AES
- 23) (E) Network Facility: **LAKESHORE DRIVE RAILROAD OVERPASS** Cost:\$12,500,000
Facility Segment: Connection between USH 45 and STH 175 (Winnebago St.)
Jurisdiction: WisDOT.
Proposed Project: Construction of an overpass over the Canadian National rail lines.
Implementation Date: Long range improvement, 15 -30 years.
Actions Taken: Not scheduled.
Plan Recommendation: Further study on the construction of an overpass over the railroad and future alignment and connection with Winnebago Street and Lakeshore Drive.
- 24) (E) Network Facility: **MASCOUTIN VALLEY TRAIL EXTENSION** Cost: \$390,000
Facility Segment: CTH VV TO CTH VVV.
Jurisdiction: Fond du Lac County.
Proposed Project: Extend the Mascoutin Valley Trail from CTH VV to CTH VVV.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Extend the Mascoutin Valley Trail from CTH VV to CTH VVV.
- 25) (E) Network Facility: **PLANK TRAIL EXTENSION** Cost: \$1,000,000
Facility Segment: USH 151 to MPAB.
Jurisdiction: Fond du Lac County.
Proposed Project: Extend the Plank Trail from USH 151 to the Metropolitan Planning Area Boundary.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Extend the Plank Trail from USH 151 to the Metropolitan Planning Area Boundary.

- 26) (E) Network Facility: **PRAIRIE ROAD** Cost: \$1,000,000
Facility Segment: Morningside Drive to CTH T.
Jurisdiction: City of Fond du Lac
Proposed Project: Construct with attainment of right of way.
Implementation Date: Short range improvement 0 - 15 years
Actions Taken: Not scheduled.
Plan Recommendation: Construct approximately 0.5 miles between Morningside Drive and CTH T.
- 27) (E) Network Facility: **WILD GOOSE/PRAIRIE TRAIL CONNECTOR** Cost: \$780,000
Jurisdiction: Fond du Lac County.
Proposed Project: Construct a 1.6 mile connector trail to link the Wild Goose and Prairie Trails.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Construct a 1.6 mile connector trail to link the Wild Goose and Prairie Trails.
- 28) (E) Network Facility: **WILD GOOSE TRAIL EXTENSION** Cost: \$400,000
Facility Segment: CTH VV to CTH VVV
Jurisdiction: Fond du Lac County.
Proposed Project: Construct a 0.75 mile extension to the Wild Goose Trail from CTH VV to CTH VVV.
Implementation Date: Short range improvement, 0 -15 years.
Actions Taken: Programmed in the 2006 Fond du Lac MPO TIP.
Plan Recommendation: Construct a 0.75 mile extension to the Wild Goose Trail from CTH VV to CTH VVV.

Corridor Preservation. As noted in Exhibit 72, one recommendation is to officially map the USH 151 bypass to eliminate at-grade cross traffic. This will eliminate the risk of high speed crashes at intersections with the USH 151 bypass.

Another recommendation is to preserve corridors on the urban fringe which may serve as arterials for future traffic movement, the most notable being Esterbrook Road. Esterbrook Road should be examined as a future north-south arterial from CTH OO to CTH OOO. Access control and setbacks on this future arterial should also be examined.

Other projects for further study in addition to the grade separation of Lakeshore Drive would include rail mainline crossings through the Urbanized Area. A crossing at Subway Road, which is just north of Lakeshore Drive, should also be examined. Finally a crossing at CTH N, which is just north of Subway Road and provides access to USH 41, should also be studied in the future.

Transit. The Fond du Lac Area Transit System operates at a favorable level compared to transit systems of similar size throughout the state. Recommendations for transit include:

- Convert one hour routes to 30 minute routes, especially during peak hours.
- Expand service to efficiently serve the Urbanized Area population
- Research the benefits of a Regional Transit Authority (RTA) with other communities along the USH 41 corridor.
- Coordination of efforts with other area transit providers, as well as major employers

It is the recommendation of the East Central Wisconsin Regional Planning Commission (ECWRPC) that the Fond du Lac Urbanized Area along with the other Urbanized Areas within the ECWRPC planning region (the Fox Cities and Oshkosh Urbanized Areas) play a role in the examination of 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 a Regional Transit Authority (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.

Bicycle and Pedestrian. The physical recommendations for bicycle and pedestrian facilities are also shown in Exhibit 72. 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, and safety for bicyclists, pedestrians, and automobile users.

The following recommended guidelines should be considered in the planning process:

- 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 with a minimum width of 5' 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. Indications from the freight-oriented users during the advisory committee deliberations were that existing accessibility is good in the Fond du Lac area. Consideration of land use and truck route access in the location of freight-related and freight dependent facilities should be included in the planning process. This will help to insure the continued economic health of the area and to most efficiently use the existing highway network. Another recommendation is to transfer more freight back to rail. This will help alleviate congestion on our streets and highways, as well as reduce the “wear and tear” on the infrastructure as well.

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 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 and 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

Congestion Management Strategies. Although the Fond du Lac Urbanized Area does not have many congestion issues or infrastructure deficiencies, the Fond du Lac 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 is typically the last resort to alleviate congestion, based on the cost to add lanes.

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 Fond du Lac Urbanized Area are timing mechanisms for trains. These systems can be used to notify drivers how long a train is anticipated to be at a particular crossing. This would allow drivers to consider alternative routes depending on the anticipated delay.

Roundabouts. Roundabouts are extremely efficient in moving traffic in a safe and efficient manner by reducing speeds and the number of conflict points 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.

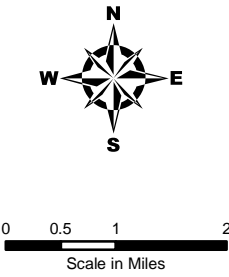
Elimination of On-Street Parking. The elimination of on-street parking greatly improves traffic flow on a given facility. It also reduces crashes between vehicles which are trying to park or re-enter the facility and vehicles which are trying to travel through on the facility.

EXHIBIT 73 FOND DU LAC AREA RECOMMENDED TRANSPORTATION PROJECTS

- 26 PROJECT NUMBER*
- SHORT-RANGE PLANNED INTERSECTION PROJECTS
- LONG-RANGE PLANNED INTERSECTION PROJECTS
- SHORT RANGE PLANNED PROJECTS
- LONG RANGE PLANNED PROJECTS
- RAILROAD TRACKS
- MUNICIPALITY BOUNDARIES
- 2000 METROPOLITAN PLANNING AREA

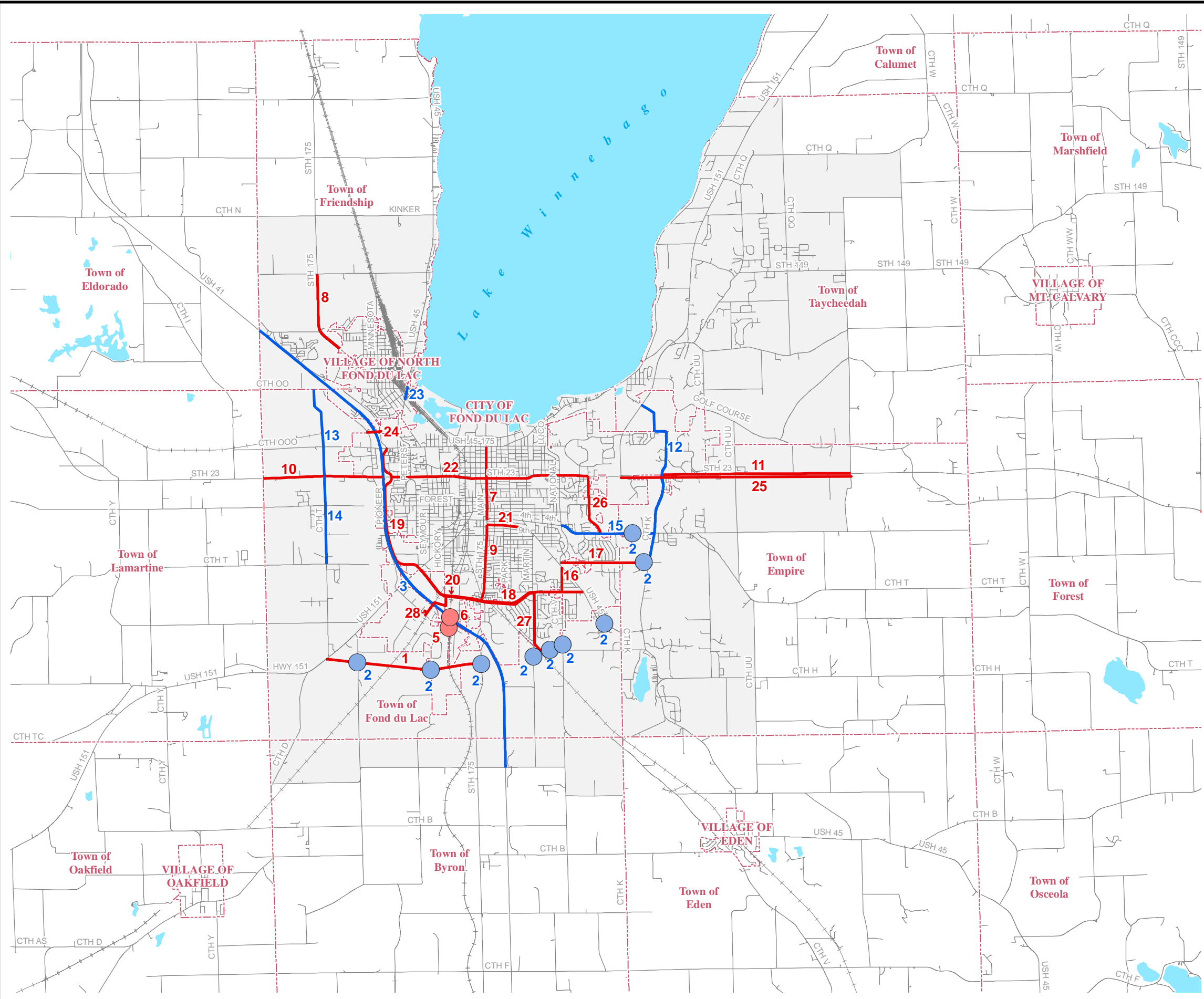
*Please see Exhibit 72 for more information regarding the recommended transportation projects.

Source: Fond du Lac County provided 2004 centerline, municipality boundaries, and hydrology. ECWRPC provided the recommended projects.



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Prepared By
EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005



ENVIRONMENTAL REVIEW

ENVIRONMENTAL REVIEW

INTRODUCTION

The East Central Wisconsin Regional Planning Commission has been designated by the Fond du Lac Metropolitan Planning Organization (MPO) to conduct the urban transportation planning process. This planning effort reflects the Transportation Equity Act of the 21st Century (TEA-21), which requires the consideration of the overall environmental, social, and economic effects of the metropolitan transportation plan.

An extensive issues identification process was completed to develop goals, policies, and objectives for the long range land use/transportation plan. The environmental assessment scoping process was initiated concurrently with the issue identification phase of the planning process. The issues were established through special committees and public comment. Multimodal transportation, the connectivity of transportation and land use, and the potential environmental effects of these planning goals and objectives were addressed to meet the requirements established by the TEA-21.

This chapter evaluates the potential environmental impact of goals, objectives, and recommendations contained in the long range land use/transportation plan. The assessment of potential environmental effects addresses economic, social, and natural resource impacts.

ENVIRONMENTAL JUSTICE

Environmental justice is a process which seeks to ensure that access to transportation systems and the transportation planning process is available to all, regardless of race or socioeconomic status. In terms of race, the Fond du Lac Urbanized Area has a substantially low minority population which is fairly scattered (Exhibit 74). Public involvement efforts within the planning process to include minority groups have included notification to local minority organizations and agencies, with contact information on public documents in Hmong and Spanish (the primary languages spoken by non-English speaking residents of the Urbanized Area) for further information.

In terms of low income populations, areas are more easily identified. In this case, consistent areas of low income populations were defined through the use of 2000 census tract data. These areas were categorized as less than 20 percent, 20 to 39.99 percent, 40 to 59.99 percent, and 60 or more percent of the total households. These areas are identified in Exhibit 75. Also included within Exhibit 75 is the location of identified Transportation Improvement Program (TIP) projects from 2006 to 2010 and their geographic relationship to these low income areas.

Efforts were made to include all individuals within the planning process. Public information meetings were held during all phases of the planning process. Advertisements were published in the local newspaper (*The Fond du Lac Reporter*) prior to public information meetings held throughout the entire planning process. Flyers and notices were distributed via mail and e-mail to various committees, organizations, and agencies throughout the planning process for distribution to as many individuals as possible. Presentations were made to local groups with further interest in the planning process. Locations of public information meetings were crucial in the public involvement process. All meeting locations were selected to include easy access for all individuals, especially transit and alternative mode users, as well as facilities which catered to the mobility needs of the disabled.

Various planning documents, including the draft of this plan were open to public comment. Public participation throughout the process is characterized as consistent.

A goal of the Fond du Lac Metropolitan Planning Organization is to “provide an efficient and accessible transportation system which will meet the short and long range needs, interests, and objectives of all of the region’s citizens”. As identified in Exhibits 74 and 75, it is graphically depicted that a good portion of short range and long projects are scheduled for areas of minority (non-white) and/or low income populations. Although there are no major concerns at this time, these projects will continue to improve the accessibility, mobility, and safety of all users using all modes, while posing no significant negative impacts. Exhibits 76 and 77 show areas of minority (non-white) and low income populations in relation to transit which is relied on by many of these individuals to access major employment areas, medical facilities, post-secondary education, recreation, shopping centers, etc.

Economic Impacts

The effects of the land use/transportation plan have the potential to extend into economic and social arenas. Level of service on roadways, multimodal opportunities, and accessibility for businesses are all issues to be considered. If levels of service on the transportation network decline during the planning period, the potential for more time spent on roadways would be significant. (Level of service is discussed further in the Congestion Impact section.) Additional business and personal travel time translates into increased transportation costs. However, economic incentives exist to keep business travel expenses to a minimum, and policies within the plan target the need to maintain acceptable levels of service on roadways.

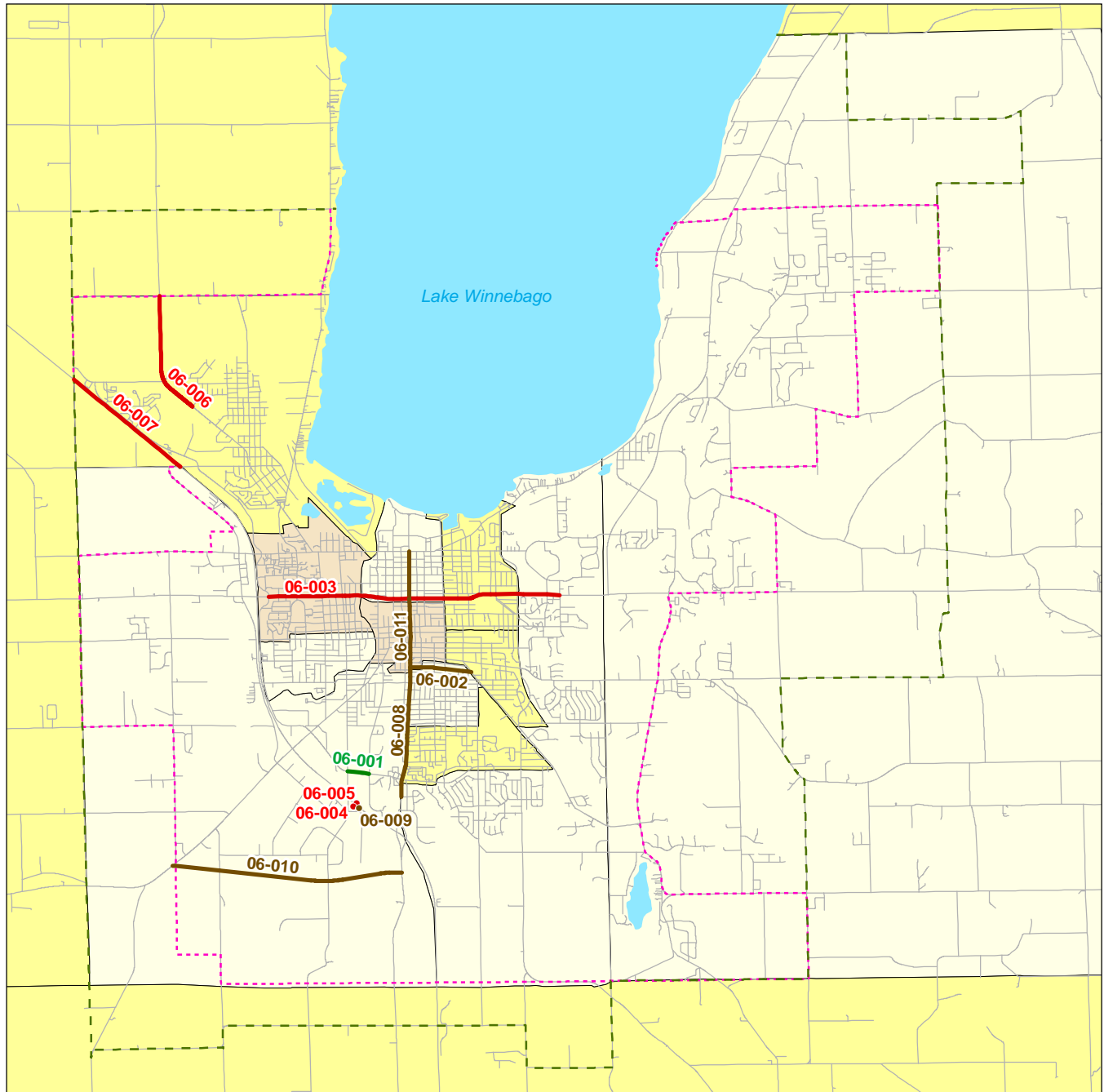
Focusing on maintaining and improving existing facilities and multimodal opportunities will provide benefits to businesses and residents. The plan identifies policies, which if enacted, would ensure that appropriate types and levels of multimodal transportation services are provided to the area. Additionally, maintaining and/or improving transportation facilities will enable the transportation system to continue to provide adequate accessibility to agricultural supplies and markets. An integrated transportation system combining different modes, including rail and trucking facilities, enhances the movement of goods and services. Efficiently routing truck traffic and providing joint terminals and delivery services would increase the accessibility of distant suppliers. Enhanced accessibility and multi-modalism will provide incentives for businesses to expand and improve the business climate to attract new businesses.

Social Impacts

Several objectives within the long range transportation/land use plan note the importance of an efficient and environmentally sound transportation network, along with efficient and environmentally sound land uses. Implementation of these objectives would improve quality of life and make the Fond du Lac Urbanized Area a more attractive community. The Fond du Lac Urbanized Area has substantial shoreland along Lake Winnebago, much of which is already developed. This plan and the plan adopted by the City of Fond du Lac include policies such as the preservation and redevelopment of waterfront areas for greater recreational use, preserving scenic easements for viewsheds, and creating multimodal recreational opportunities, such as bicycling or walking along a redeveloped waterfront or park area. Enacting these policies would make the Fond du Lac Urbanized Area a more attractive place to work, live, and play.

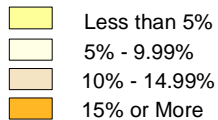
Another social impact addressed by this plan is the effect transportation investments will have on each resident’s ability to travel to and from work, school, a friend’s house, or other important places

EXHIBIT 74 **FOND DU LAC URBANIZED AREA TIP PROJECTS (2006-2010)** **AND MINORITY (NON-WHITE) POPULATION CONCENTRATION (2000)**



--- 2000 Metropolitan Planning Boundary
 --- 2000 Adjusted Urbanized Boundary

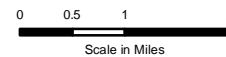
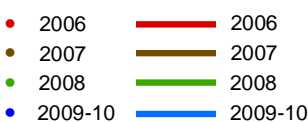
Percent Minority by Census Tract



06-042
 06-042
 06-042
 06-042

TIP Project Number

TIP Project Years

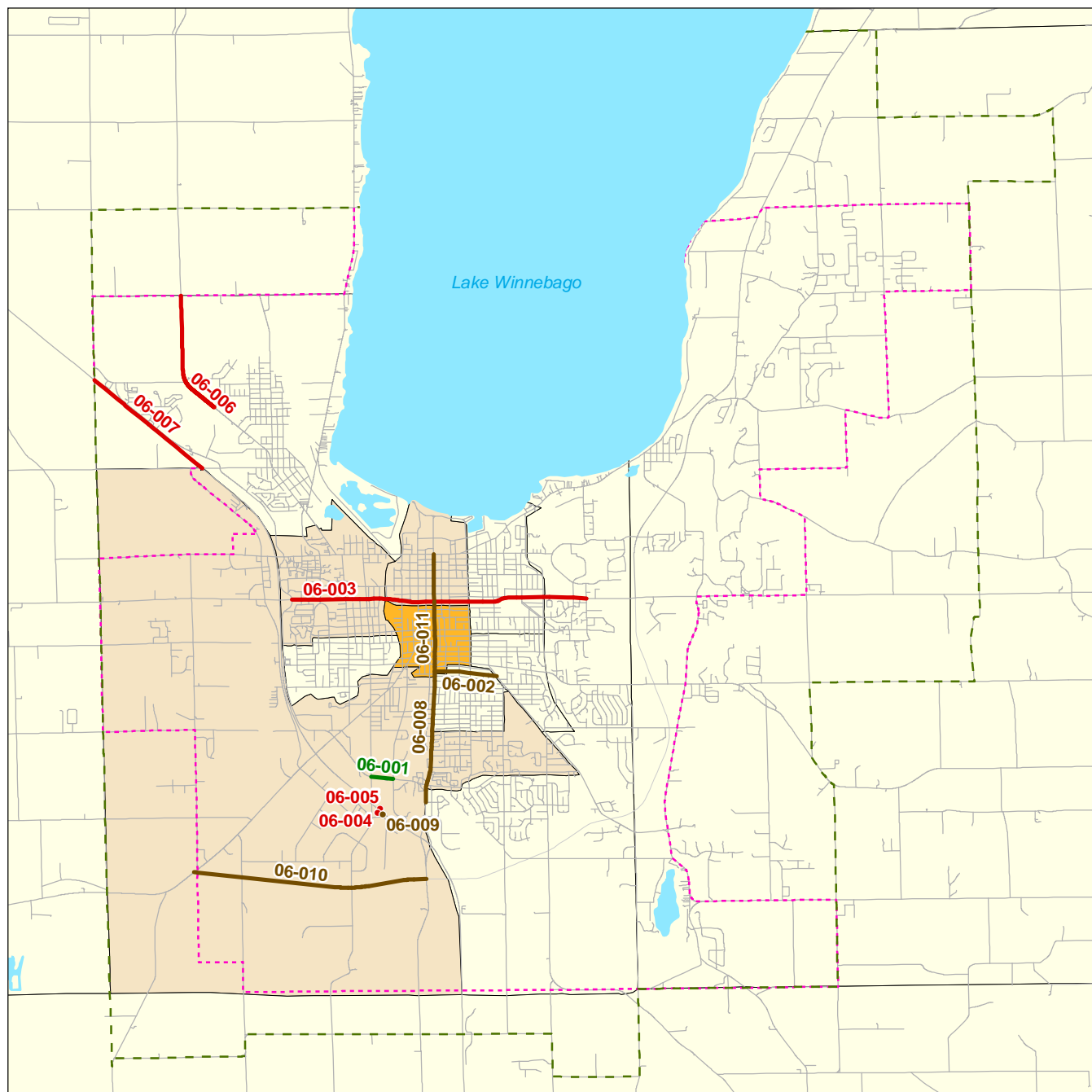


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Prepared By:
 EAST CENTRAL WISCONSIN
 REGIONAL PLANNING COMMISSION
 SEPTEMBER 2005

EXHIBIT 75

FOND DU LAC URBANIZED AREA TIP PROJECTS (2006-2010) AND PERCENT HOUSEHOLDS BY CENSUS TRACT WITH LOW TO EXTREMELY LOW INCOME (2000)



--- 2000 Metropolitan Planning Boundary
--- 2000 Adjusted Urbanized Boundary

06-042
06-042
06-042
06-042 TIP Project Number

Households with Low to Extremely Low Income

Less than 20%
20% - 39.99%
40% - 59.99%
60% or More

TIP Project Years

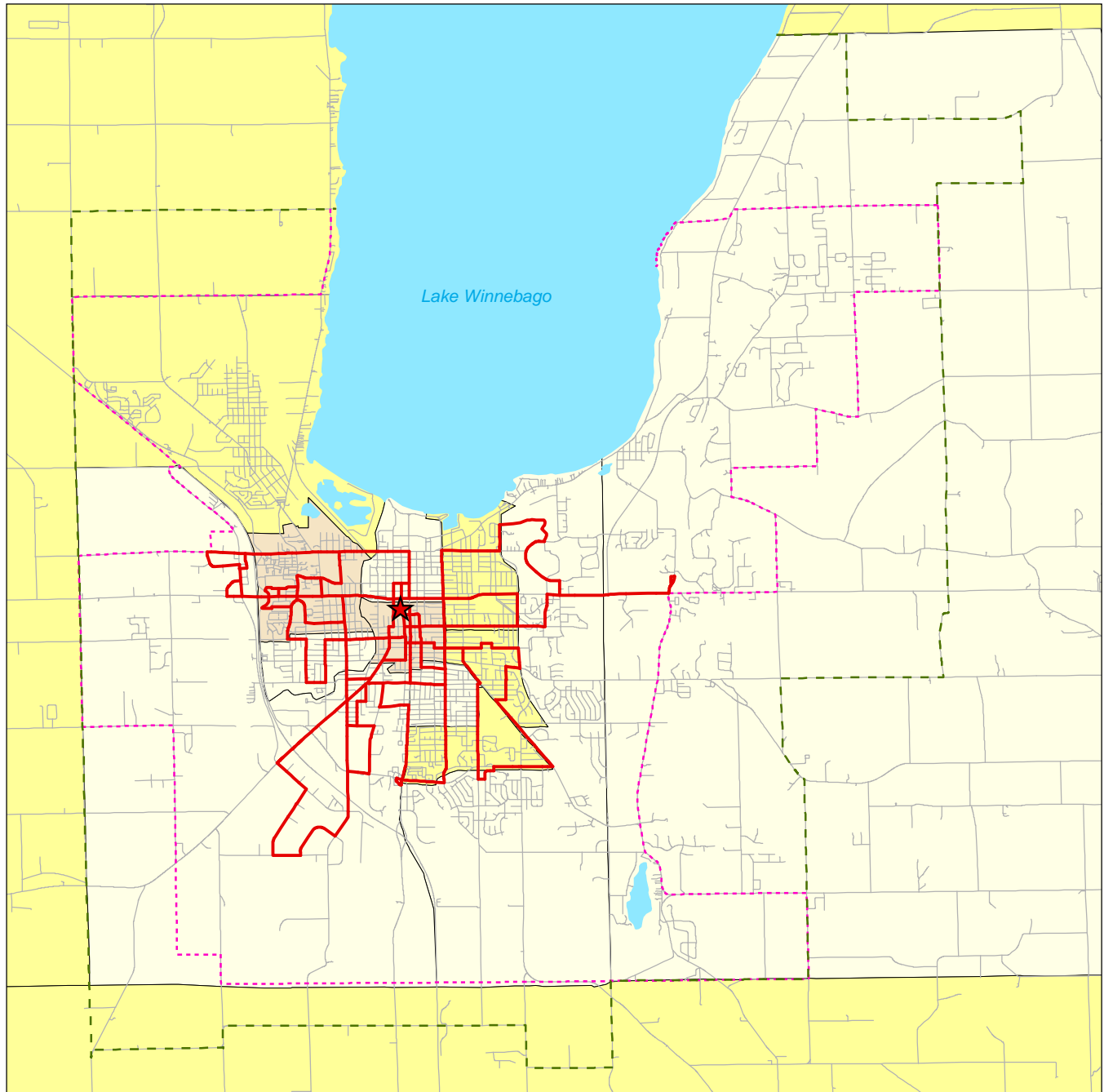
• 2006
• 2007
• 2008
• 2009-10
2006
2007
2008
2009-10



0 0.5 1 2
Scale in Miles

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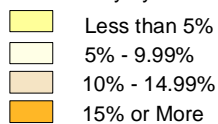
EXHIBIT 76 **FOND DU LAC AREA FIXED TRANSIT ROUTES (2005)** **AND MINORITY (NON-WHITE) POPULATION CONCENTRATION (2000)**



--- 2000 Metropolitan Planning Boundary
 --- 2000 Adjusted Urbanized Boundary

— 2005 Fixed Transit Routes
 ★ Transit Center

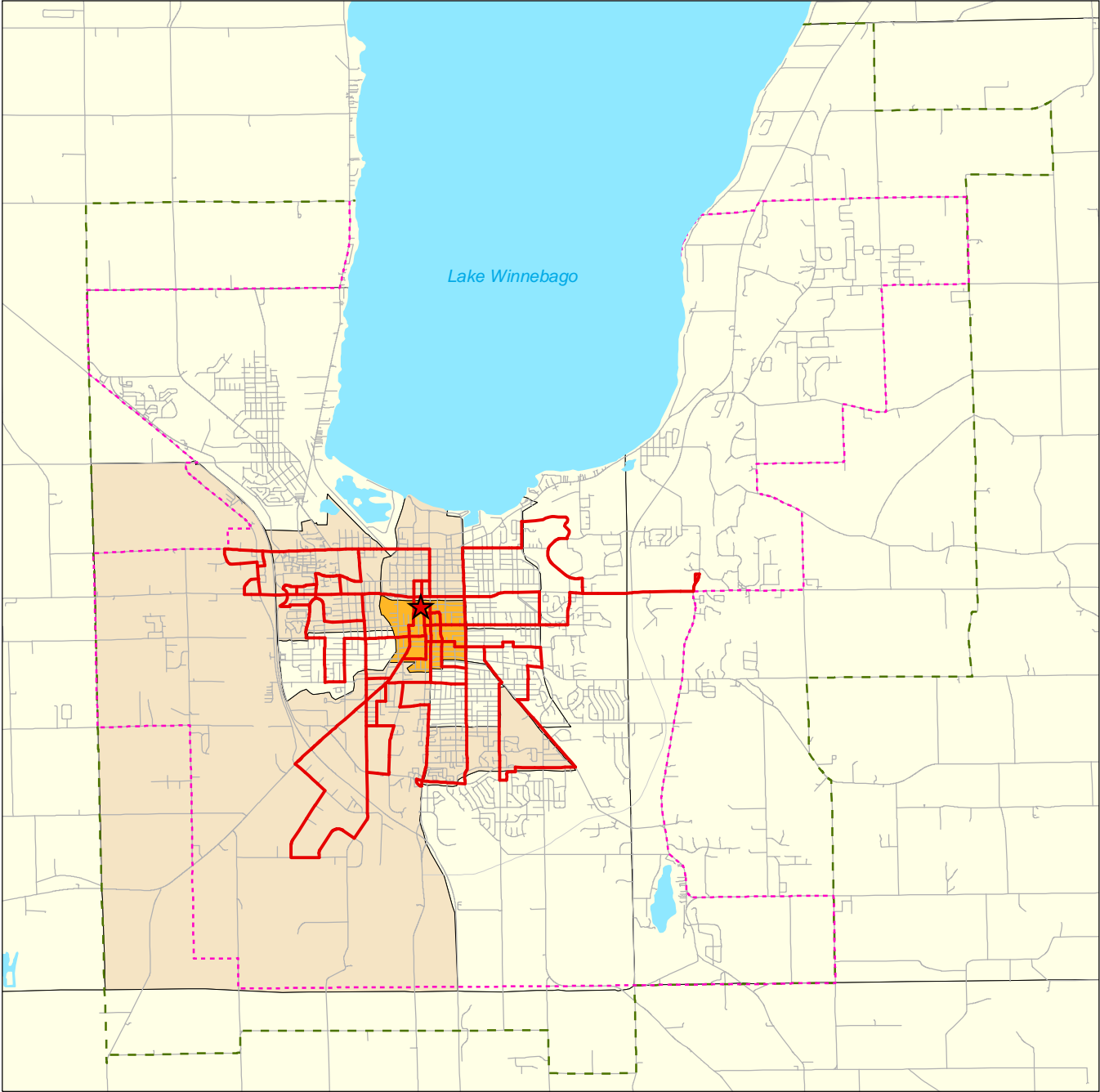
Percent Minority by Census Tract



0 0.5 1 2
 Scale in Miles

This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

EXHIBIT 77 **FOND DU LAC AREA FIXED TRANSIT ROUTES (2005) AND** **PERCENT HOUSEHOLDS BY CENSUS TRACT WITH LOW TO EXTREMELY LOW INCOME (2000)**



- - - 2000 Metropolitan Planning Boundary
 - - - 2000 Adjusted Urbanized Boundary

— 2005 Fixed Transit Routes
 ★ Transit Center



0 0.5 1 2
 Scale in Miles

Households with Low to Extremely Low Income

- Less than 20%
- 20% - 39.99%
- 40% - 59.99%
- 60% or More

This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Sources: U.S. Census Bureau - 2000 TIGER Census Tracts, 2000 Metropolitan Planning Area & 2000 Adjusted Urbanized Area provided by ECWRPC & WisDOT. Fond du Lac County provided 2004 centerline and hydrology. The City of Fond du Lac and ECWRPC provided the 2005 fixed transit routes.

inside and outside the community. In the recent past, transportation planning has focused on automobile travel, with other modes of transportation planned for separately. Pedestrian and bicycle travel were considered to be recreational. This has contributed to the design and construction of auto dependent neighborhoods in the Fond du Lac Urbanized Area and elsewhere. Auto-dependent designs not only reduce the mobility of non-drivers, but also create an artificial burden, as owning an automobile is no longer a choice, but a necessity.

This plan includes goals, policies, and objectives for public transportation, pedestrian, and bicycle travel as alternative modes. Providing alternative modes of transportation reduces traffic congestion, and provides individuals, particularly the elderly, the disabled, the young, and the poor with greater independence of movement. It also makes automobile usage a matter of choice, rather than a necessity. The transportation plan has been developed to work with the land use plan to enable residents within the Fond du Lac Urbanized Area and visitors to reach vital destinations quickly and safely.

Currently, only residents in portions of the Urbanized Area have a variety of modes to choose from. While the plan encourages the development of alternative modes, realistically, they can not be available everywhere. The density of existing development in some areas is too low for fixed route public transit to be a viable option. Many streets within the central city and some outside the central city are too narrow and busy for bicycle travel. Much of the existing development has occurred at densities or in land use patterns which make pedestrian and bicycle travel inconvenient.

In some areas, no facilities were provided for pedestrian or bicycle travel. Right of way would have to be purchased to provide these facilities. Purchasing right of way in developed areas can be very expensive.

LAND USE IMPACTS

Policies within the plan state that the disruption and dislocation of neighborhoods, households, businesses, industries, and public and institutional buildings by construction or expansion of existing transportation facilities should be minimized. Integrated planning is an objective in the land use/transportation plan as a means to maintain a transportation system that supports current land use plans and desired patterns of future development.

CONGESTION IMPACTS

The impacts of congestion on a transportation system can be severe. For example, as traffic increases on a street, the likelihood of crashes will increase as well. A traveler on a severely congested street will probably experience frequent stops and starts, vehicles weaving through traffic to change lanes, and other hazardous situations that could result in a crash. Other negative effects of congestion include more significant wear on the street and vehicle, increased driver stress and vehicle emissions attributable to frequent acceleration and extended idling time. However, the provision of incentives to use modes of transportation other than the single occupant vehicle could reduce the number of vehicles on the Fond du Lac street network.

The plan addresses the likelihood of congestion in the Fond du Lac Urbanized Area and identifies methods of reducing traffic at these potentially hazardous locations. The plan's policies state that an

efficient street and highway system must consider financially constrained improvements to minimize congestion and to keep travel times low. Some of these improvements include channelization, signalization, signal timing, and/or removal of on-street parking to maintain adequate service. In addition, the use of alternative modes of transportation such as transit, walking, and bicycling should be strongly encouraged to minimize the number of cars on the network. All new road construction in any jurisdiction within the Fond du Lac Metropolitan Area, should consider these alternative modes of transportation.

The standard used to evaluate traffic operating conditions and identify congestion is known as level of service (LOS). This is addressed below.

Level of service. Level of service is typically broken into the following six categories:

Level of service A, which is characterized by free traffic flow. Under these conditions, transportation system users are virtually unaffected by other users, travel safety and comfort are very high.

Level of service B, which is characterized by stable traffic flow. LOS B conditions allow system users a significant amount of freedom to choose their own speeds, but a slight amount of interaction with others is common. Travel safety and comfort are also high under LOS B conditions.

Level of service C, which is characterized by stable yet restricted traffic flow. Under these conditions, the amount of interaction with other transportation system users becomes significant, and the general level of comfort and convenience begins to decline.

Level of service D, which is characterized by high-density traffic flow, lower speeds, and restricted maneuverability. LOS D conditions generally create uncomfortable and inconvenient traveling conditions; however, traffic flow is typically stable.

Level of service E, which is characterized by unstable traffic flow and volumes that are at or slightly below capacity. Under these conditions, system users experience poor comfort and convenience levels, and crash exposure is increased.

Level of service F, which is characterized by forced flow, traffic queues, and stop-and-go situations. Under these conditions, the amount of traffic that is present on a facility exceeds the amount that can be served, which creates the problems mentioned above. System users will typically experience low comfort and convenience, poor travel times, and high crash exposure on an LOS F roadway.

The land use/transportation plan uses LOS C as the minimum desirable level of service for each major roadway. During the development of this plan, a computer model was used to identify which of the area's roadways will likely experience levels of service below this threshold during the planning period. This process and its relationship to level of service are summarized below.

Modeling process. Estimating levels of service requires the collection of a significant amount of data. Included is block level census data for the year 2000, such as population, household characteristics, employment and information describing the Fond du Lac area street and highway network. Network information includes annual average daily traffic (AADT) volumes and facility types in terms of function, width, number of lanes, land use, speed and capacity. Statistical relationships, developed using travel surveys, link the socioeconomic data from the census to trip-

making behavior. The relationships are used by the travel demand model to simulate trips between traffic analysis zones (TAZs) within the study area. In addition to these internal trip exchanges, trips traveling through the study area are also included in the overall modeling effort. During calibration, these modeled trip exchanges were "assigned" or added to the computerized network of the study area's roadways and compared and calibrated to actual traffic counts.

Once the base traffic conditions were calibrated, the same relationships were used in creating the year 2035 model. The trip generation rates developed for the calibrated base year model are then applied to the socioeconomic projections to create the future (2035) model for the area. This process involved estimating growth or decline within each of the study area's TAZs through 2035 to estimate the levels of traffic generation within and between zones.

The assignment of traffic to the base and future networks is generally determined by each street's average speed and capacity. When creating the network, each street is assigned a speed and capacity in the model database. These attributes largely determine each street's relative attractiveness to a vehicle traveling to, from, or within the Fond du Lac study area; therefore, streets with the highest speeds, directness, and capacities will generally have the greatest number of vehicles assigned to them. As mentioned above, the calibration process helps to create a network that represents actual (or estimated future) traffic levels on each street in the model. Once this is completed, level of service can be estimated for the future network by comparing the traffic assignment for each street with its corresponding capacity. Those streets that equal or exceed a volume to capacity (v/c) ratio that represents LOS C (80 percent of capacity) could experience traffic levels identified as undesirable in this plan.

Potentially congested roadways. The roadway capacity improvement recommendations included in this plan resulted from the modeling of projected traffic on the existing network to determine areas of potential deficiency, deficiency, and severe deficiency, and the subsequent modeling of alternative improvements. Severity of deficiency is based on the volume to capacity ratio. The resulting recommendations are intended to alleviate future congestion problems in the Fond du Lac area.

COMMUNITY AND NEIGHBORHOOD IMPACTS

Several policy statements in the plan support the development of a transportation system compatible with existing and future development patterns. The policies include minimizing the disruption of neighborhoods and reducing the penetration of neighborhood units by arterial streets.

Minimizing both of these activities will enhance the efficiency of the transportation network within communities. Policies also state that the location of new or relocation of existing facilities in or through recreational, historical, scenic, or cultural sites should be avoided whenever possible.

When identifying transportation projects for a long range plan, it is essential that existing and proposed land uses be considered to ensure that these projects do not isolate neighborhoods from important destinations. For example, it would not be wise to place a major street between an elementary school and a densely populated residential area, for many children could be forced to risk injury while walking to and from the school. Granted, proper signalization at intersections and clearly marked crossing zones could reduce the risk, but the presence of the street would certainly create a safety risk for the residents.

This plan considers the effects that major transportation investments could have on the Fond du Lac area and its neighborhoods and attempts to minimize the negative impacts that could result from the projects proposed in the document.

Noise Impacts. The consideration of the impact of noise is addressed in policies stating the need to meet national standards ensuring that residential areas, schools, and other areas with high concentrations of people are not exposed to harmful levels of noise from transportation facilities.

Visual Impacts. In an effort to develop attractive communities, the plan promotes designing transportation facilities to be aesthetically pleasing and sensitive to the natural landscape. Incorporating amenities such as boulevards, berms, and attractive landscaping is important in the design of major arterials in urbanized areas. For rural areas, the plan stresses the need to minimize views such as junkyards, billboards, and strip commercial development.

Historical and Cultural Impacts. As discussed previously, the disruption of neighborhoods, historic areas, and recreational areas is discouraged in the development of a transportation system. When expansion, relocation, or new construction is proposed, the consideration of the costs and benefits of the new or updated facility must be weighed against the impacts to these areas.

NATURAL RESOURCES

Water Resources. Many water resources are part of environmentally sensitive areas. The location of roadways through environmentally sensitive areas should be kept to a minimum. Maintaining natural water depths and implementation of construction site erosion control measures are ways to prevent sediment laden run-off from flowing into surface waters. Run-off control measures must be taken during any construction of a transportation facility. Exhibit 78 shows wetlands and streams in the Fond du Lac area.

The location of new developments should be planned in conjunction with both existing transportation facilities and land uses to promote sanitary sewer systems which will effectively and economically serve urban development. To facilitate compact development, vacant developable lands within the existing Urbanized Area should first be in-filled. Sanitary sewerage service to existing development should be provided whenever it is the most cost effective alternative for addressing failing on-site sanitary systems.

Sewer service area plans play a significant role in development. East Central Wisconsin Regional Planning Commission, under a contract with the Wisconsin Department of Natural Resources (WDNR), prepares sewer service area plans, while the WDNR ultimately reviews and approves the plans. Because the sewer service area planning process is largely based on growth projections, the results of boundary limits established can in some instances be too restrictive or too liberal. If the boundary is too restrictive, development can be pushed into unsewered areas and is non-contiguous. If the boundary is too liberal, development can occur in a haphazard, or leap frog fashion. Communities have criticized East Central's projections for being too conservative and have fought for additional acreage allocations. In response to community's demands and to provide a choice of developable sites within the sewer service area boundary, East Central has historically provided excess acreage within the sewer service planning area. By providing this level of excess available acres, East Central is leaving the burden of controlling development to individual jurisdictions.

Air Quality. The Fond du Lac Urbanized Area is currently an attainment area or an area which meets all air quality standards. To remain an attainment area, the plan supports efficient traffic control measures and the encouragement of transit, bicycle, and pedestrian travel. Air quality should be monitored to ensure that motor vehicles, including air and water craft, do not exceed the exhaust emission standards established by the Environmental Protection Agency (EPA).

Energy Consumption. The plan recognizes that energy supplies are uncertain and that the conservation of energy is important. The conservation of energy encompasses the need for development to occur at densities adequate to sustain reasonable urban services and to support multimodal transportation. The use of ride sharing, organized efforts such as Travel Demand Management (TDM) programs, and transit should be considered especially in areas where major employers are located, and the location of major businesses should consider the availability of transit. Pedestrian and bicycle facilities should be made available where possible. Pedestrian and bicycle facilities can easily be incorporated concurrent with new development. It is more difficult and costly to incorporate these facilities into existing development. While densities within the older portion of the City of Fond du Lac are capable of sustaining transit, much of the new development in the city and surrounding towns is not.

The design of highway facilities needs to include smooth pavements and the elimination of steep grades and sharp curves to conserve energy. Traffic flows and transportation facility locations should provide the fewest interruptions and shortest travel paths for the greatest number of trips. Efforts to improve energy conservation through improved fuel efficiency of vehicles and through educational programs on better driving travel habits are also necessary.

Ecosystems and Habitat Fragmentation. Minimizing environmental disruption and maintaining a quality environment is a priority of the land use/transportation plan. Locating and expanding roadways through environmentally sensitive areas should be kept to a minimum. These areas include wetlands, areas subject to flooding, steep slopes (areas with slopes greater than 12 percent), high bedrock, and areas where endangered plants and wildlife are found. Encouraging the presence of natural vegetation, especially along roadsides, offers protection to wildlife and a reduction in the need for herbicides.

WDNR WETLANDS

STREAM BUFFER (75')

2000 METROPOLITAN PLANNING AREA

MUNICIPALITY BOUNDARIES

Prepared By
EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005

FINANCIAL PLAN

FINANCIAL PLAN

INTRODUCTION

The primary goal for the street and highway network is to connect activity centers and meet the short and long-range needs, interest and objectives of the citizens of the area in a cost-effective manner. A determination must be made as to what is cost effective, relative to adequately providing an efficient street and highway system. What level of spending is required to provide and maintain the street and highway network and how equitable are the arrangements between jurisdictions and the populous to support the total network? The financial plan considers anticipated future funding and the adequacy of existing spending by comparing transportation expenditures across all jurisdictions.

The analysis is based on a four years of data from the Wisconsin Department of Revenue 2000-2003, Municipal Expenditure and Revenue report, with local road data from the Wisconsin Information System for Local Roads (WISLR), and WisDOT staff. The Fond du Lac financial study is part of an ongoing effort to identify specific street and highway needs and estimate related costs over the life of the plan. The WISLR analysis includes a pavement inventory and preliminary evaluation for all local roads, but excludes U.S., State and connecting highways. All jurisdictions receiving local road aid in the State of Wisconsin are required to submit a surface rating on all local streets and highways every two years. In 2001 and 2003, an inventory and evaluation was completed for all streets and highways statewide, most using the PASER pavement surface rating system.

The PASER rating system has been developed and improved over the years by the Transportation Information Center (TIC) at the University of Wisconsin - Madison, in cooperation with and sponsored by WisDOT. Streets are evaluated based on a 1 to 10 rating of the roadway surface, with "1" being in the worst condition and "10" being a brand new facility. The results are submitted and entered into Wisconsin's Information System for Local Roads (WISLR). The rating scores are used within WISLR to suggest surface treatments and estimate cost, as well as prioritize projects based on functional classification.

WISLR also simulates or models the deterioration of the road surface and projects surface conditions up to five years into the future. During the simulation, street and highway projects can be selected based on an annual budget designated by the user. For example, if a selected project is rated at "7", and requires crack seal and patching, it subtracts that cost from the budget. At the same time, it raises the condition rating of the street and improves the overall system. The software allows testing with various funding amounts in an effort to establish an average cost per mile for preservation and maintenance across jurisdictions.

The U.S., State Trunk (STH) and connecting highway information is based on historic spending identified in the 2000-2003 *State Transportation Improvement Program* (STIP), WisDOT, and the *Transportation Improvement Program (TIP) 2006 for the Fond du Lac Urbanized Area*, ECWRPC 2005. The averaged information provides an estimate of the annual federal/state funding for the street and highway network that is used to project the funding that would be needed to implement the recommendations in the long range plan.

On average, local jurisdictions in the Fond du Lac MPO study area spend about \$14.5 million annually on the preservation, maintenance and administration of the street and highway system. Federal, state and local construction and capacity expansion projects typically amount to about \$10.2 million, for an annual expenditure of nearly \$25 million dollars. The study shows that from 2005 to 2035 the expenditure to provide, maintain and improve the transportation system could be over \$485 million over the 30 year plan horizon.

PLANNING AREA BOUNDARIES

Population and other socioeconomic information used in the various plan forecasts are primarily available by minor civil division (MCD) or political jurisdictions, i.e. county, town, village and city boundaries. The financial study includes a portion of Fond du Lac County (60% by population), all of the City of Fond du Lac, the Village of North Fond du Lac and the towns of Byron, Empire, Friendship, Fond du Lac and Taycheedah. TEA 21 and prior legislation (ISTEA) requires that financially constrained planning be done in the study area boundary described earlier in this report, the Metropolitan Planning Area Boundary (MPAB). The MPAB represents that area anticipated to be urban in nature by the year 2035.

Another boundary requiring definition for this section is the Urbanized Area Boundary (UAB). The UAB is that area currently developed in a contiguous urban nature and categorized by the U.S. Bureau of Census as the Urbanized Area. It is within this boundary that projects are eligible for STP-Urban category funding programs and identified in the Urban STIP and TIP. Historic, existing and projected information used in the financial analysis includes all of the Metropolitan Planning Area (MPAB) for final state, federal and local funding as they relate to anticipated needs over the life of the plan.

Street and Highway Miles

The Fond du Lac study was completed using WisDOT 2005 Urban Functional Classification System Mileages or mileage within the federal urbanized area. Functional classification is a system to rank streets and highways based on their function, traffic carrying capacity and access to land use. The functionally classified network contains those streets and highways selected, by local governments in cooperation with WisDOT, as the most important to the urban area regardless of jurisdiction. Principal and minor arterials have larger volumes of traffic, serving mainly through traffic, with less direct access to land use. Collector streets provide more access to the various land uses, or destinations, and serve a lesser role in carrying traffic. This study gives additional focus to the classified system and the jurisdictional arrangements in place to provide and maintain the transportation network.

Federal guidelines state that up to 35 percent of total, street and highway miles may be included in the functionally classified network and eligible for STP Urban funding. In 2005 the Fond du Lac Urbanized Area had approximately 35 percent of the system classified or about 118 of the total 336 miles. Local streets account for the balance, amounting to about 218 miles (Exhibit 79). Local streets provide access to land use and carry traffic to collectors and arterials for the major portion of the trip. Projects on local streets are not eligible for STP Urban Funding and must be funded by local revenue and/or other programs.

EXHIBIT 79

2005 FOND DU LAC URBANIZED AREA MILEAGE

Principal Arterials	28.76
Minor Arterials	42.88
Collectors	46.69
Total Classified System	118.33
Local Streets and Highways	218.07
Total Urbanized Mileage	336.16
Percent Total Miles Classified	35%

Source: WisDOT, 2005

For the purpose of this study, street and highway miles are adjusted to reflect the larger Fond du Lac Urbanized Area in the year 2035, the MPAB. The principal arterials and/or state trunk or connecting highways were adjusted and provided by WisDOT. Included within the classified system are various county trunk highways classified principal arterials, minor arterials or collectors under local jurisdictions. The remaining miles are local streets and highways and are based on WisDOT local road files and proposed development, proportioned to reflect the communities within the Metropolitan Planning Area (MPA) out to the year 2035. The proposed 2035 system includes 40 miles of principal arterials, 48 miles of minor arterials, 47 miles of collectors, leaving about 245 miles defined as local streets and highways (Exhibit 80). The projections comply with the recommendation that up to 35 percent of the total system may be classified and eligible for STP Urban Funding.

EXHIBIT 80

2035 FOND DU LAC URBANIZED AREA MILEAGE

Principal Arterials	39.88
Minor Arterials	48.58
Collectors	46.93
Total Classified System	135.39
Local Streets and Highways	245.00
Total Urbanized Mileage	380.39
Percent Total Miles Classified	35%

Source: WisDOT, ECWRPC, 2005

Estimated Long Range Funding

The following analysis is based in large part on the annual bulletin of *County and Municipal Revenues and Expenditures*, published by the Wisconsin Department of Revenue (DOR). Each jurisdiction in Wisconsin is required to file a report on revenues and expenditures and is provided a *Financial Report Form* by the Department of Revenue. Transportation expenditures are reported to DOR on a line-item basis that includes four categories: maintenance and administration, highway construction, road related facilities, and other transportation costs.

The reports also identify state highway aids as a line-item, but exclude costs incurred by the state for connecting highways within the MPAB. To isolate local expenditure, the state and federal highway aids are separated from the total transportation costs reported. Because transportation spending varies significantly from year to year, the highest/lowest local expenditure was adjusted based on a four year spending history.

The methodology assumes that historic revenue levels will be constant into the future and will be compared to recommended future projects and transportation improvements using constant dollar estimates. On average, jurisdictions in the Fond du Lac study area spend about \$14.5 million annually just to maintain and administer the transportation system (Exhibit 81). This can include general highway maintenance, snow plowing, salt, ditch cleaning, ROW clearing, drainage improvements, equipment and other items, related to providing an acceptable level of service on the roadways. The \$14.5 million does not include construction of new roadways or capacity expansion of existing roadways that are defined as planned high cost projects.

EXHIBIT 81

ANNUAL AVERAGE LOCAL REVENUES PRESERVATION AND MAINTENANCE Fond du Lac Metropolitan Area

Fond du Lac Study Area	Local Transportation Expenditure \$	Percent of Total Expenditure
City of Fond du Lac	\$8,135,550	57%
Village of North Fond du Lac	\$945,850	6%
Town of Byron	\$89,625	1%
Town of Empire	\$127,050	1%
Town of Fond du Lac	\$191,700	1%
Town of Friendship	\$197,975	1%
Town of Taycheedah	\$243,075	2%
Fond du Lac County (60% by Population)	\$4,648,150	32%
Total Local Expenditure	\$14,578,975	100%
Projected Local Revenue	\$14,578,975 * 30 Years	\$437,369,250

Source: DOR, ECWRPC 2005

The Fond du Lac County expenditure of over \$4.6 million is based on over 60 percent of the population of the county being within the MPO. The largest portion, over \$8 million and 57 percent of the total MPO, is spent by the City of Fond du Lac. Inevitably the cost of maintenance and preservation directly relates to the miles of roadway and to a large extent the facility type, in terms of rural or higher cost urban sections. The total anticipated revenue for preservation and maintenance over the life of the plan is estimated at over \$437 million.

Projected state and federal funding for the Fond du Lac MPO area is provided by WisDOT and shows specific annual programs based on current funding levels (Exhibit 82). *The data shows over \$463 thousand every year for highway expansion based on the currently enumerated USH 151 bypass. The projection assumes other major projects will be enumerated in the urbanized areas over the 30 year planning period.

EXHIBIT 82

WISDOT ANNUAL FUNDING PROJECTIONS Fond du Lac Urbanized Area

	<u>Fond du Lac</u>
Major Highway Expansion	
*Based on Existing Majors Enumerated for Construction (151 Bypass)	463,333
STH Preservation, Maintenance and Operations	
Backbone Rehab	1,071,600
Non-Backbone 3R	1,617,218
STH "Low Cost" Bridges	150,000
"High Cost" Bridges	
CTH VV Railroad Overpass (TIP)	
STH Maintenance and Operations	1,710,000
Total	4,548,818
Local Road Expansion and Preservation	
STP-Urban	363,564
General Transportation Aids	2,789,097
Connecting Highway Aids	331,345
Municipal Streets Portion of LRIP	100,000
Federal Safety Programs	158,586
Local Bridges	200,000
Total	3,942,592
Bike and Ped	
In-street accommodations	
STP-Enhancements	359,604
Total	359,604

Transit

FTA 5307 Program	415,808
FTA 5309 Program (Capital)	97,765
State Operating Assistance	433,209
Total	946,782

Grand Total

10,261,129

Source: WisDOT 2005

Three 10 year time frames project the annual funding amounts (Exhibit 83). Based on annual expenditures it is estimated WisDOT will fund over \$307 million in transportation improvements over the life of the plan. State and federal funding for expansion and preservation of the local road system is expected to amount to over \$118 million and includes WisDOT General Transportation Aids provided to all jurisdictions.

EXHIBIT 83

PROJECTED STATE/FEDERAL LONG RANGE FUNDING
Fond du Lac Metropolitan Planning Area

	2005 – 2015	2015 – 2025	2025 – 2035	Plan Total
Highway Expansion*	1,389,999	1,389,999	1,389,999	13,899,990
Preservation/Maintenance	13,646,454	13,646,454	13,646,454	136,464,542
Local Road Improvements	11,827,776	11,827,776	11,827,776	118,277,760
Bike and Pedestrians	1,078,812	1,078,812	1,078,812	10,778,120
Transit	2,840,346	2,840,346	2,840,346	28,403,460
Total Funding	\$30,783,387	\$30,783,387	\$30,783,387	\$307,883,872

Source: DOR, WisDOT, ECWRPC 2005

The constant dollar assumption to project local funding combined with the state and federal projections provided by WisDOT, shows anticipated revenue over the life of the plan at over \$745 million (Exhibit 84). It is anticipated that the Fond du Lac MPO will spend over \$74 million every ten years to maintain and operate the transportation system.

EXHIBIT 84

PROJECTED LONG RANGE FUNDING Fond du Lac Metropolitan Planning Area

Anticipated Revenues	2005 - 2015	2015-2025	2025-2035	Plan Total
Local	43,736,925	43,736,925	43,736,925	437,369,250
State and Federal	30,783,387	30,783,387	30,783,387	307,883,872
Total Revenue	74,520,312	74,520,312	74,520,312	745,203,122

Source: DOR, WisDOT, ECWRPC 2005

Estimated Long Range Need

WisDOT is currently working on an inventory and assessment of the state trunk highways and other principal arterials within federal urban areas as part of the *Connections 2030* Plan. The complete study includes statewide data on all urban principal arterial needs that will be provided to the MPOs and used in the preparation of future TIPs and financial plans. WisDOT met with MPO staff to compile a listing and schedule of principal arterial improvement projects and estimated the various costs over the life of the plan.

Recommended Projects

Exhibit 85 shows a listing of major projects that originated from local land use and transportation plans, and/or capitol improvement programs from all jurisdictions, the Fond du Lac TIP, WisDOT six year programs and the long range planning process. For the most part the projects involve high-cost construction or reconstruction activities and are beyond normal preservation and maintenance efforts.

The planned projects amount to over \$135 million in needs and include state trunk and connecting highways and a number of local streets in the urban area. Connecting highways are those streets owned by the local jurisdiction, but are signed and designated state trunk highways, paid for by WisDOT through local maintenance agreements. Still other streets belong to the local jurisdiction, are classified principal arterials based primarily on traffic volumes, and are eligible for additional funding through the STP-Urban program. Arterials can also be county trunk highways, like CTH V, and are subject to maintenance agreements with the various jurisdictions along the route.

EXHIBIT 85

HIGH COST PLANNED PROJECTS >\$500,000

Facility	Cost
USH 151 (CTH D to USH 41)	\$11,000,000
USH 151 Grade Separations	\$15,000,000
USH 41 6-lane	\$10,000,000
USH 41 6-lane RR Upgrade	\$5,000,000
USH 45 (Main Street)	\$2,000,000
STH 175 (V_NFDL to CtyLine)	\$4,000,000
STH 175 (USH 41 to USH 45)	\$3,000,000
STH 23 (Town Line to USH 41)	\$11,850,000
STH 23 (East CTH K to MPB)	\$11,000,000
CTH K (CTH V to USH 151)	\$4,000,000
CTH T(STH 23 to Esterbrook)	\$2,800,000
CTH T(STH 23 to CTH OOO)	\$2,800,000
CTH T (National to CTH K)	\$3,500,000
CTH V (CTH VV to USH 45)	\$4,200,000
CTH V (CTH K to National)	\$3,000,000
CTH VV (Military to USH 45)	\$14,500,000
CTH VV (Rail Underpass)	\$9,600,000
6th St (Fond du Lac to Main)	\$957,000
Lakeshore Dr (Overpass)	\$12,500,000
RR Crossing Improvements	\$5,000,000
Total	\$135,707,000

Source: WisDOT, ECWRPC 2005

Maintenance and Preservation

Preservation needs are estimated on a dollar per mile basis, using the assumption that local streets and highways are less expensive to provide and maintain than the classified arterial and collector system. Expenditures for the street and highway network vary widely based on facility type and jurisdictional responsibility, which in turn reflects levels of urban development and traffic volumes. Studies show WisDOT with the greatest per mile expenditures, associated with high cost freeway, bridge structure and interchange projects. Cities are second in line for expenditures, followed by villages, counties and towns. Cities have the largest portion of 4-lane facilities, higher traffic capacity requirements, typically more sidewalks, with most streets requiring accommodations for sewer, water, utilities and other infrastructure associated with the transportation corridor. County trunk highways fall somewhere in between, built to a higher standard than town roads, but typically lacking curb and gutter or other amenities.

WisDOT estimates that the Fond du Lac MPO communities spend over \$2.2 million annually on the physical preservation and maintenance of the street and highway system. That number reflects black top, gravel, tar, concrete and the physical patching and paving of the roadway surfaces as defined within WISLR. That number is only a portion of the total cost to provide the transportation system.

The reported expenditures relate to more than just the estimated road surface preservation cost per mile and may include the cost for snow plowing, salt, right-of-way maintenance like ditch cleaning or clearing brush, traffic signs and signals etc. The cost likely includes facilities like highway garages, graders and trucks and the operating and maintenance budgets. As part of the Department of Revenue and road mileage analysis a formula was establish to better reflect the total cost of operating and maintaining the transportation system. The formula reflects the higher cost for principal and minor arterials compared to the collector and local road system.

The street and highway mileage within the MPO is projected to be just over 380 miles near the end of the 30 year planning period (Exhibit 86). The annual principal arterial preservation need of \$34,500 per mile, applied to 39.88 miles over the planning period, amounts to more than \$41 million over the 30 year planning period. The same method applied to the 95.51 miles of minor arterials and collectors amounts to over \$81 million by the year 2035.

An assumption is made that local streets typically have less traffic and fewer trucks than minor arterials or collectors, are not as wide and thus, are slightly less expensive to maintain. \$25,500 per mile is applied to 245 miles of local roads to estimate the preservation cost over the life of the plan. The formula shows the estimated need for the local road preservation at over \$187 million. The total identified preservation need over the life of the plan amounts to over \$310 million.

EXHIBIT 86

ESTIMATED LOCAL PRESERVATION NEEDS FORMULA

Facility Type	Total Miles Year 2035	Annual Cost Per Mile Times 30 Years	Anticipated (\$) Need
Principal Arterial	39.88	x \$34,500 x 30 Years =	\$41,275,800
Minors/Collectors	95.51	x \$28,500 x 30 Years =	\$81,661,050
Local Roads	245.00	x \$25,500 x 30 Years =	\$187,425,000
Grand Total	380.39		\$310,361,850

Source: WisDOT, ECWRPC 2005

Cost projections for transit and other modes reflect a balance in need and funding derived from WisDOT's annual expenditure over the life of the plan. Based on rising fuel cost and considerations to reduce service, this expenditure is considered a minimum in terms of improving the viability of other transportation modes. The analysis shows that over \$10 million is proposed to maintain the current expenditures for bike, pedestrians and freight improvements over the 30 year planning period (Exhibit 87).

EXHIBIT 87

LONG RANGE FINANCIAL NEED SUMMARY Fond du Lac Metropolitan Planning Area

Anticipated Need	Plan Total
Street and Highway Maintenance	310,361,850
Recommended Projects	135,707,000
Transit	28,403,460
Other Modes Bikes/Pedestrian/Freight	10,778,120
Grand Total Need	\$485,250,430

Source: WisDOT, ECWRPC, 2005

A comparison of estimated funding and need shows that resources will be available to implement the proposed actions over the life of the plan. The local share of over \$437 million represents the largest portion of the funding, and consistent with the needs analysis, will represent the largest portion of potential spending over the life of the plan (Exhibit 88).

EXHIBIT 88

LONG RANGE FUNDING SUMMARY Fond du Lac Metropolitan Planning Area

Revenue Sources	Plan Total
State and Federal Street and Highway	\$268,592,292
State and Federal Transit	28,403,460
State and Federal Other Modes/Enhancement/Safety	10,788,120
Local Funds All Modes	437,369,250
Grand Total Funding	\$735,443,822

Source: WisDOT, ECWRPC, 2005

Relative to the 30 year plan horizon, estimated expenditures exceed the projected need, demonstrating some flexibility to consider a number of projects including enhanced programs for transit, bicycles pedestrians and freight. The roughly \$298 million difference between estimated funding and estimated need represents about \$10 million annually that might be directed to other modes of transportation including the expansion of fixed-route transit and paratransit services.

BICYCLE AND PEDESTRIAN

Past history provides strong evidence that improvements enabling bicyclists and pedestrians to co-exist safely and effectively in the world of the motor vehicle often have not received high priority. As a result, many long stretches of roadway and site-specific locations continue to pose significant challenges for these modes of transportation.

Retrofitting existing roadways to make them more user-friendly for bicyclists and pedestrians encompasses a myriad of potential actions and has a correspondingly broad range of cost implications. Although many potential improvements would be highly beneficial to the bicyclist and/or pedestrian, they often require significant costs and most cannot be economically justified as "stand alone" projects. For these types of improvements, their timing by necessity should correspond to major improvement actions slated for the roadway. Some major projects designed to accommodate the bicyclist and pedestrian, however, are independent actions which do not entail modification of the roadway, and should be constructed as funding permits. Examples of these types of projects include off-road paths, sidewalks, and pedestrian overpasses.

Additionally, there are a number of improvements, particularly at site-specific locations, which can be successfully implemented at relatively little cost and by effecting only minor roadway design changes. These types of projects would include improvements such as safety islands, sidewalk curb cuts, paved shoulders, striped bike lanes, bicycle-friendly drainage grates, strategically located bike racks, and so forth. To demonstrate a commitment to creating a more user-friendly environment for bicyclists and pedestrians in the urban area, a relatively consistent level of funding should be applied so that selected improvements can be undertaken on an annual basis until the list is depleted.

To be cost-effective, bicycle and pedestrian related improvements should be built into the design of new projects. Only the cost of design modifications needed to satisfactorily accommodate bicyclists and pedestrians beyond that of the standard design motor vehicle roadway construction is justifiably a cost of implementing the bicycle/pedestrian component of the long-range plan. The additional cost to utilize a new standard pavement width of 56 feet to comply with AASHTO standards for safe bicycle accommodations is logically allocated to the bicycle/pedestrian component of the plan and can be relatively easily quantified. Similarly, the cost of providing extra width paved shoulders, sidewalks, and pedestrian overpasses associated with new construction or reconstruction activities can be estimated as a segregated component of total project cost. The cost of undertaking site-specific improvements can be estimated for budgeting purposes once they are inventoried and prioritized. For this analysis costs for streets and highways proposed as bicycle routes are estimated to include the additional width and amenities discussed earlier.

APPENDIX A

Methodology – Population and Housing Forecasts

Population Projection Methodology

Base Methodology

East Central uses a ratio methodology, termed share-of-the-county, to distribute county projections to the minor civil division (MCD) level. The share of the county population for each MCD is calculated for four years. The four years selected include the last three census counts and the most recent final DOA population estimate. The average annual percentage change in the share of the county population for each historic reference point is calculated and used as a constant to project the future percentage shares for each MCD. This constant is multiplied times the number of years between the most recent reference point and the chosen projection year. The resulting number is added to the base share to obtain a MCD's projected share of the county's population. These projected shares are then multiplied by the county population projections to estimate the potential MCD population for that corresponding year.

The set of equations used are:

1. $m_y / c_y = s_y$
2. $(s_d - s_y) / n = a$
3. $(a_1 + a_2 + a_3 + a_4) / 4 = k$
4. $(k * n) + s_d = p_y$
5. $p_y * c_y = m_y$

where: m = MCD population; c = county population; s = share of the county; s_d = most recent reference share; a = annual change; k = average annual change; n = number of years between year₁ and year₂; p = projected MCD percentage share of the county's population; _y = appropriate year.

For example, for the most recent population projections, the historic reference points would be 1980, 1990, 2000 and 2004. The projected years would be 2005, 2010, 2015, 2020 and 2030.

Assumptions

Every model carries with it a certain set of assumptions. The assumptions within the share-of-the-county methodology, along with caveats to those assumptions, are listed below. The caveats which impact MPO communities are listed in the Adjustments to Minor Civil Division Projections section.

1. The base model tacitly assumes that the rate of annexation present in the past will continue into the future. Adopted boundary agreements within the region and proximity to community borders where annexation is not possible under present state statutes means that in some instances, the rate of annexation for some minor

civil divisions (MCDs) will change. In these instances, the base projections have been modified to adjust for those differences.

2. Some communities within the region are or will be landlocked in the near future, so growth in these communities will slow, unless densities increase through smaller lot sizes for new development and redevelopment of lands within the community to higher densities occurs. Base projections have been modified in instances where these conditions are not accounted for within historic development patterns.
3. From the 1950s through the 1990s, the majority of growth within the East Central region resulted from natural increase. While net migration rates varied internally, net migration for the region as a whole varied only slightly, ranging from a low of -3.4% to a high of 2.4%. Since 1990, the majority of growth within the East Central region has come from net migration. As the population ages through the projection period, the rate of natural increase is expected to drop. As a result, net migration is expected to play a more prominent role in the region's population change.
4. Wisconsin and the East Central region benefited significantly from net migration in the 1990's, as economic conditions and quality of life within the state and region were more positive than in other parts of the country and state. The Wisconsin Department of Administration anticipates that Wisconsin and the region will continue to maintain a comparative advantage in retaining residents and attracting migrants into the state and region.
5. The model assumes that the region's economy will continue to outperform other areas within the country and state, and that an adequate supply of affordable housing will be provided that meets the housing needs and desires of the local workforce and other residents. Access to employment opportunities and an adequate supply of attractive, affordable housing is expected contribute to the region's ability to retain residents and preferentially attract in-migrants.
6. The model also assumes that communities are willing to continue making the investments in infrastructure and staffing necessary to maintain the historic service levels that have contributed to the region's quality of life, thereby continuing to retain residents and encourage in-migration.

These last two assumptions are critical to maintaining the level of growth anticipated during the projection period.

Adjustments to County Projections

The migration patterns in the region changed significantly in the 1990's. As a result, in 1994 and 1995, the official county population estimates for one or more counties was higher than the 1995 DOA projections, which were developed in 1993. Growth in certain communities of the region (particularly the urbanized areas) also outstripped DOA's 1993 projections, which resulted in ECWRPC playing "catch-up" for those particular communities by updating projections on an annual basis for planning

purposes. Such frequent updates not only appear to be inconsistent, but the time-consuming process also takes staff time away from other important projects.

The Wisconsin Department of Administration (DOA) published a revised set of population projections in March 2004. Although this set of projections was designed to incorporate the substantial increase in migration, which the state and region is experiencing, the recently released 2004 population estimates indicate that the region's growth may currently be even higher than initially anticipated. As a result, East Central has made a slight modification to DOA's county projections to adjust for this higher than anticipated growth, in an effort to maintain more consistent local area projections.

The DOA projections are modified by calculating an annual growth rate for each county in the region. This growth rate is used to estimate the potential population for the next projection year. The resulting ratio is used to adjust the DOA county population projections through the projection period. These revised county projections are then substituted for the DOA county projections in the share-of-the-county methodology.

The set of equations used are:

1. $(c_d - c_y) / c_y = g$
2. $(g / t) * m = p$
3. $c_y + (c_y * p) = c_p$
4. $c_p / d_1 = r$
5. $r * d_y = e_y$

where: c_d = most recent county DOA estimate; c_y = last county census count; g = percent change in population; t = number of year between the most recent county DOA estimate and the last county census count; m = number of years between c_y and the projection period; p = revised 5 year growth rate; c_p = potential county population projection; d = DOA county population projection; r = projection ratio; e = revised population projection; $_1$ = first projection period; $_y$ = appropriate year.

Adjustments to Minor Civil Division Projections

For most communities in the region, future minor civil division estimates follow the ratio methodology described in the base methodology. In some instances, adjustments to the base estimate have been made to account for local conditions. These adjustments are made by modifying "k" (the average annual change) in step 4 of the minor civil division projection methodology. The adjustments made for Fond du Lac County are noted below.

Some population growth was shifted from the City of Fond du Lac to the Town of Fond du Lac to account for a recent boundary agreement. Some population growth was also shifted from the Town of Taycheedah to the Town Fond du Lac to balance current growth trends. The 1970 and 2000 population for the Village of Mt. Calvary includes seminary students. The 1980 and 1990 figures do not. As a result, the formula has overestimated growth for the Village. A portion of that growth has been transferred to the Village of Eden and the Towns of Byron and Fond du Lac to balance current growth trends.

Household Projection Methodology

In previous household projections, East Central has relied on persons per household projections from DOA to estimate future household growth. In this projection update, DOA did not release person per household projections, but rather chose to release only projected households. As a result, staff found it necessary to develop an alternate methodology for projecting households at the minor civil division level. After reviewing a number of potential methodologies, staff selected the two methodologies which generated the least number of outliers ($p_{phh} < 1$ or $p_{phh} > 4$). While communities and counties may choose to use either methodology for planning purposes, for sewer service area and long range transportation/land use planning purposes, ECWRPC will use the methodology which generates the largest number of projected households. In the Fox Cities and Oshkosh Urban Areas a mix of both methodologies was used to obtain the largest number of projected households. For the Fond du Lac MPO, the methodology which consistently generated the largest number of households is a ratio methodology, which is described below.

For all Methodologies:

Projected Population in Households

Total population figures include not only persons in households, but also persons in group quarters. As the population ages during the projection period, it is likely that the persons in group quarters will increase over time. ECWRPC has followed DOA's example and increased the number of persons in group quarters by holding the proportion of persons in group quarters constant through the projection period. The set of equations used to estimate the number of future persons in households are:

$$1. \quad g_{2000} / t_{2000} = q$$

$$2. \quad t_y * q = g_y$$

$$3. \quad t_y - g_y = c_y$$

Where: g = the population in group quarters; t = total population; q = proportion of total population in group quarters; c = population in households; y = appropriate year.

Ratio Household Projection Methodology:

Household projections

The ratio methodology used distributes historic and anticipated county growth to the minor civil division (MCD) level. The ratio, or share, of MCD households to county households for each MCD is calculated for four years. The four years selected include the last three census counts and the most recent household estimate. The average annual percentage change in the share of the county households for each historic reference point is calculated and used as a constant to project the future percentage shares for each MCD. This constant is multiplied times the number of years between the most recent reference point and the chosen projection year. The resulting number is added to the base share to obtain a MCD's projected share of the county's households. These projected shares are then multiplied by preliminary county household projections to estimate the potential MCD households for that corresponding year.

The set of equations used are:

$$6. \quad m_y / h_y = s_y$$

$$7. \quad (s_d - s_y) / n = a$$

$$8. \quad (a_1 + a_2 + a_3 + a_4) / 4 = k$$

$$9. \quad k + j = d$$

$$10. \quad (d * n) + s_d = p_y$$

$$11. \quad p_y * h_y = m_y$$

where: m = MCD households; h = county households; s = share of the county; s_d = most recent reference share; a = annual change; k = average annual change; j = adjustment applied to the average annual change in the population projection methodology; d = modified average annual change; n = number of years between year₁ and year₂; p = projected MCD percentage share of the county's households; $_y$ = appropriate year.

For example, for the most recent household projections, the historic reference points would be 1980, 1990, 2000 and 2004. The projected years would be 2005, 2010, 2015, 2020 and 2030.

Historic Reference Point Households

Where possible, the historic reference point households were taken from the U.S. Census. The number of households per MCD is not available for 2004, so 2004 household estimates were generated as follows:

1. $t_{2004} * q_{2000} = g_{2004}$
2. $t_{2004} - g_{2004} = c_{2004}$
3. $p_{2005} - p_{2000} / 5 = k$
4. $(k * 4) + p_{2000} = p_{2004}$
5. $t_{2004} / p_{2004} = h_{2004}$

Where: t = 2004 DOA population estimate; q = proportion of total population in group quarters; g = the population in group quarters; c = population in households; p = persons per household; k = average annual change in persons per household; h = estimated number of households.

Projected Persons per Household

The average number of persons per household for each MCD is calculated by dividing the projected number of persons in households by the projected number of households.

The equation used is:

$$c_y / m_y = x_y$$

Where: c = MCD population in households; m = MCD households; x = average persons per household; y = appropriate year.

Final County Household and Person per Household Projections

Rounding errors produce a sum of MCD households that is slightly different than the preliminary county household projections. For consistency's sake, county household projections are modified to equal the sum of all households within the county. The average number of persons per household for the county is calculated by dividing the sum of all persons per household by the sum of households in the county.

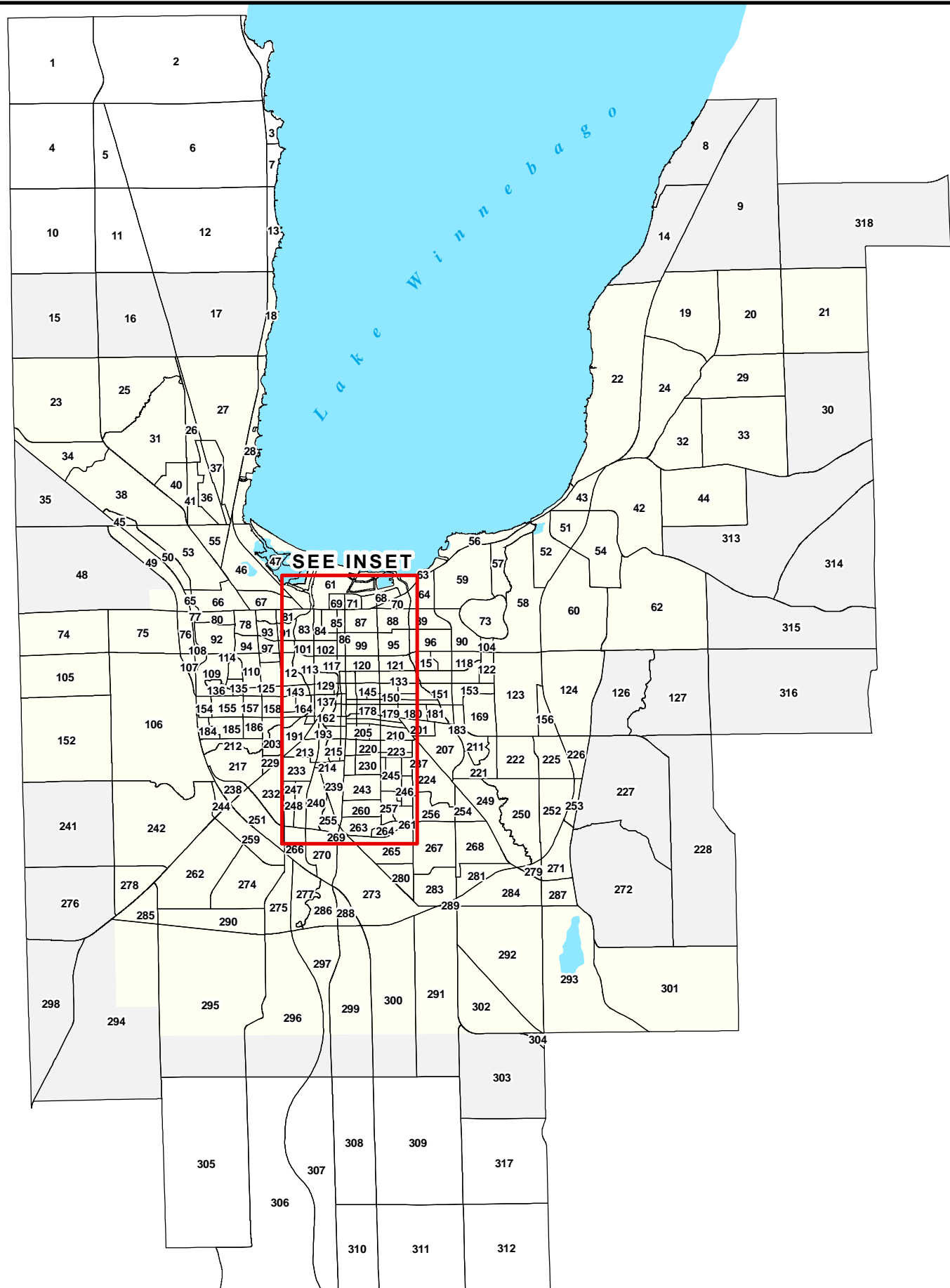
The set of equations are:

1. $\sum m_y = M_y$
2. $\sum c_y / M_y = x_y$

Where: c = MCD population in households; m = MCD households; M = Households in the county; x = average persons per household; y = appropriate year.

APPENDIX B

Socioeconomic Data by TAZ



DOWNTOWN INSET

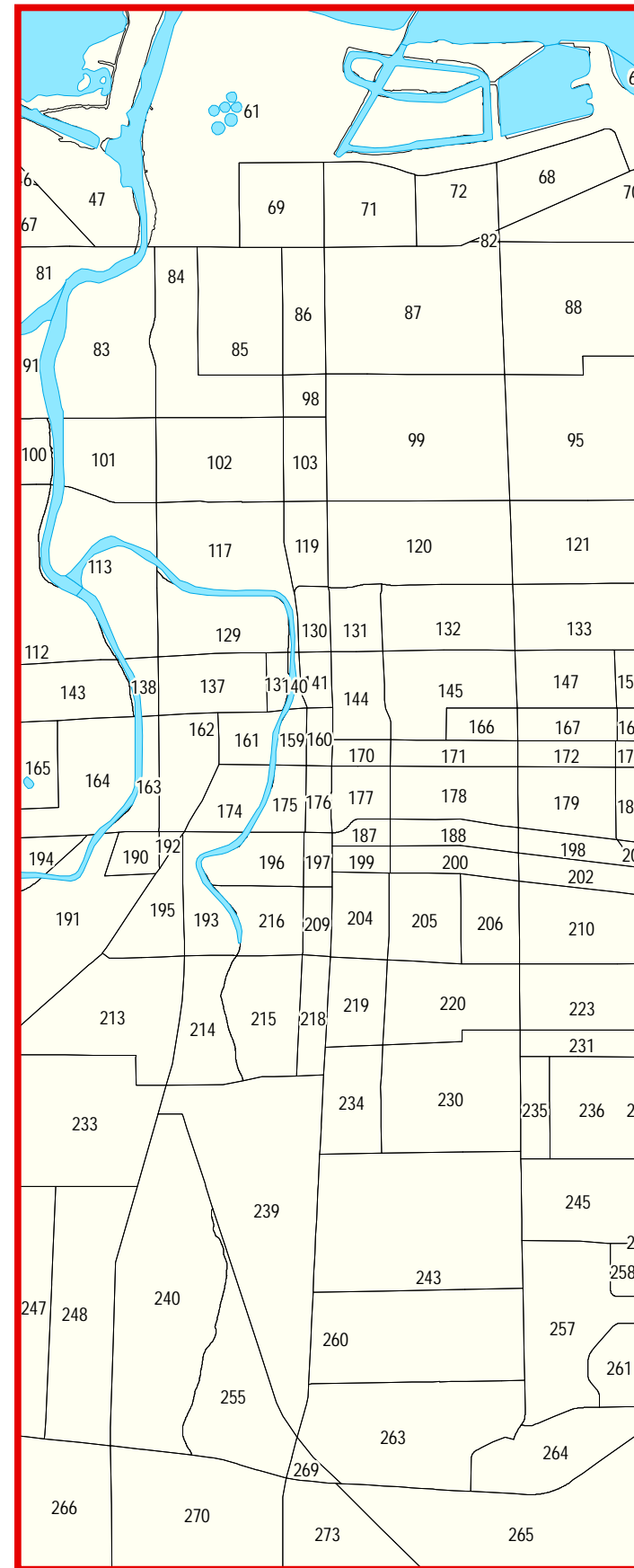
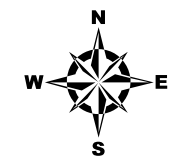


EXHIBIT 89 FOND DU LAC AREA TRAFFIC ANALYSIS ZONES

- 26 TRAFFIC ANALYSIS ZONES (TAZs)
- 2000 ADJUSTED URBANIZED AREA
- 2000 METROPOLITAN PLANNING AREA

Source: WisDOT & ECWRPC, Traffic Analysis Zones (TAZs), 2004
& Metropolitan planning and adjusted urbanized areas, 2000.



0 0.5 1 2
Scale in Miles

This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By
EAST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION-SEPTEMBER 2005

FOND DU LAC SOCIOECONOMIC FORECASTS - BASE YEAR				
TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
1	61	144	1	0
2	91	238	1	0
3	21	33	45	0
4	15	43	0	0
5	4	9	0	0
6	46	83	0	0
7	8	24	0	0
8	87	118	6	0
9	64	168	23	0
10	21	66	0	0
11	6	10	0	0
12	96	196	0	0
13	16	38	0	0
14	103	166	31	0
15	11	33	0	0
16	10	32	2	0
17	63	119	43	0
18	30	71	21	0
19	38	112	24	0
20	173	484	65	0
21	96	273	17	0
22	184	385	62	0
23	16	37	20	0
24	48	149	75	0
25	1	3	6	0
26	89	251	21	0
27	136	315	55	0
28	40	93	27	0
29	84	239	11	0
30	37	126	19	0
31	410	1117	92	465
32	46	121	0	0
33	25	73	8	0
34	270	596	4	0
35	5	14	14	0
36	39	77	38	0
37	0	0	38	0
38	154	359	27	0
40	219	516	129	836
41	309	783	149	121
42	72	216	164	0
43	33	99	13	0
44	12	30	3	0
45	1	1	3	0
46	24	53	20	0
47	0	0	39	0
48	13	32	127	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
49	42	86	66	0
50	1	6	296	0
51	74	181	12	0
52	22	52	1	0
53	554	1087	45	0
54	1	981	251	0
55	241	536	627	0
56	117	235	9	0
57	44	121	16	446
58	39	106	32	0
59	196	343	179	2319
60	4	16	3	0
61	33	79	66	0
62	174	426	43	273
63	52	120	22	0
64	127	296	28	0
65	0	0	0	0
66	177	317	284	0
67	191	467	33	0
68	14	30	502	0
69	0	0	148	0
70	94	221	189	0
71	12	39	214	0
72	35	65	116	0
73	0	0	185	741
74	24	51	2	0
75	7	15	792	0
76	0	0	190	0
77	0	0	2	0
78	362	679	6	0
79	74	153	4	0
80	342	481	11	0
81	74	194	26	0
82	0	0	0	0
83	26	66	19	0
84	103	243	103	0
85	147	378	7	0
86	66	165	65	0
87	285	733	170	0
88	262	613	41	0
89	213	535	27	0
90	11	23	127	7596
91	0	0	34	0
92	248	335	1064	0
93	0	0	36	215
94	259	379	172	0
95	264	683	91	43
96	208	477	753	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
97	11	34	183	0
98	6	11	7	0
99	306	871	270	0
100	53	134	35	0
101	41	124	132	0
102	94	436	254	68
103	12	19	111	0
104	0	0	67	0
105	17	42	9	0
106	31	72	542	0
107	0	0	63	0
108	0	0	137	0
109	270	462	846	0
110	204	391	238	0
111	52	91	120	0
112	192	480	214	0
113	23	69	18	0
114	1	4	65	623
115	20	43	47	0
116	46	109	155	0
117	247	600	800	0
118	92	271	15	0
119	7	12	123	0
120	0	0	131	502
121	178	456	2	0
122	99	185	432	191
123	76	225	103	0
124	16	42	207	0
125	168	399	20	0
126	25	75	12	0
127	61	176	11	0
128	155	346	0	0
129	79	172	26	0
130	18	30	114	0
131	298	324	245	0
132	125	260	74	0
133	145	397	44	0
134	228	445	92	441
135	46	114	0	0
136	73	177	0	0
137	124	253	7	0
138	0	0	213	0
139	0	0	24	0
140	0	0	1	0
141	31	46	284	0
142	14	28	0	0
143	88	210	41	0
144	19	23	476	0
145	124	268	131	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
146	82	233	0	0
147	69	196	0	0
148	37	90	0	0
149	11	22	2	0
150	31	399	3542	0
151	137	343	157	2559
152	44	130	24	35
153	2	340	383	556
154	14	45	207	0
155	131	354	58	287
156	1	1	0	0
157	132	315	14	90
158	191	488	0	0
159	0	0	68	0
160	34	32	316	0
161	41	80	302	0
162	148	260	9	0
163	0	0	105	0
164	56	133	8	0
165	26	98	12	0
166	39	95	3	0
167	51	131	0	0
168	29	74	3	0
169	236	477	56	0
170	9	12	65	0
171	64	153	7	0
172	51	125	0	0
173	89	221	0	0
174	116	124	178	0
175	0	149	438	0
176	0	0	167	0
177	101	217	288	146
178	167	364	74	281
179	67	170	2	0
180	136	336	47	0
181	76	186	5	0
182	95	168	0	0
183	157	233	23	0
184	48	142	141	0
185	92	290	11	0
186	129	318	5	0
187	16	42	29	0
188	85	169	9	0
189	62	135	0	0
190	13	34	11	0
191	167	418	69	0
192	0	0	14	0
193	41	108	26	0
194	30	65	2	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
195	35	66	17	0
196	54	132	16	0
197	26	45	125	0
198	45	111	1	0
199	39	81	23	0
200	84	220	10	0
201	84	195	82	395
202	68	159	0	0
203	54	116	56	0
204	108	238	56	0
205	133	301	6	0
206	87	251	0	0
207	343	824	98	0
209	40	96	4	0
210	203	494	16	0
211	137	314	125	76
212	69	175	34	0
213	114	291	131	201
214	36	103	306	0
215	38	87	79	0
216	25	56	119	0
217	8	14	391	0
218	64	133	74	292
219	74	173	115	0
220	178	470	8	0
221	152	417	13	0
222	119	328	0	0
223	168	368	15	0
224	52	121	252	0
225	4	8	8	0
226	1	4	4	0
227	58	170	11	0
228	103	276	24	0
229	14	32	341	0
230	263	695	5	0
231	74	161	0	0
232	7	16	361	0
233	182	469	75	0
234	131	310	8	0
235	41	98	0	0
236	90	196	55	348
237	91	212	0	0
238	6	12	62	0
239	203	473	224	0
240	37	109	3728	0
241	46	148	6	0
242	25	58	466	0
243	376	792	39	0
244	0	0	10	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
245	109	226	32	0
246	98	227	1	0
247	0	0	87	0
248	1	0	178	0
249	72	205	38	0
250	95	322	20	0
251	0	0	40	0
252	4	9	7	0
253	0	0	0	0
254	98	265	6	0
255	2	20	143	0
256	128	342	47	0
257	35	84	30	428
258	15	48	0	0
259	0	0	390	0
260	203	437	92	0
261	63	168	42	0
262	14	137	474	0
263	251	395	69	45
264	15	27	13	0
265	385	1111	8	0
266	2	1	941	0
267	466	1341	128	595
268	204	578	4	0
269	11	17	49	0
270	40	67	384	0
271	3	10	0	0
272	79	223	4	0
273	86	155	420	0
274	4	13	752	0
275	0	0	135	0
276	15	27	13	0
277	0	0	404	0
278	15	39	60	0
279	3	7	0	0
280	1	1	7	0
281	5	17	0	0
283	16	70	1	0
284	33	105	7	0
285	4	11	98	0
286	14	45	0	0
287	19	47	2	0
288	1	2	0	0
289	2	1	0	0
290	10	25	9	0
291	10	32	4	0
292	40	86	1	0
293	108	228	20	0
294	11	24	44	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
295	21	57	22	0
296	6	15	6	0
297	2	4	0	0
298	12	33	0	0
299	15	29	11	0
300	8	22	12	0
301	85	247	5	0
302	11	22	6	0
303	22	64	8	0
304	2	4	13	0
305	37	116	0	0
306	19	52	0	0
307	20	59	136	0
308	14	36	62	0
309	23	63	0	0
310	30	88	0	0
311	6	23	0	0
312	13	29	0	0
313	20	60	28	0
314	12	32	0	0
315	26	71	71	0
316	37	113	0	0
317	12	40	0	0
318	0	0	53	0

FOND DU LAC SOCIOECONOMIC FORECASTS - 2035				
TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
1	91	206	21	0
2	155	373	85	0
3	17	30	45	0
4	15	41	0	0
5	4	8	0	0
6	86	170	9	0
7	4	12	12	0
8	87	161	6	0
9	69	165	23	0
10	21	58	0	0
11	6	9	0	0
12	156	324	0	0
13	12	25	0	0
14	116	225	31	0
15	11	29	0	0
16	10	31	2	0
17	123	230	51	0
18	24	50	21	0
19	77	219	144	0
20	238	593	65	0
21	148	370	17	0
22	249	557	78	0
23	56	124	20	0
24	74	202	324	0
25	41	108	186	324
26	110	314	21	0
27	136	377	412	0
28	40	96	12	0
29	136	345	11	0
30	37	111	19	0
31	593	1,630	299	430
32	124	293	0	0
33	77	198	8	0
34	370	824	48	0
35	15	36	812	0
36	62	166	28	0
37	0	0	62	0
38	222	514	6	0
40	229	737	129	773
41	362	1,104	128	112
42	124	331	164	0
43	50	131	173	0
44	12	26	3	0
45	1	1	0	0
46	13	61	65	0
47	0	0	48	0
48	130	282	336	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
49	42	84	615	0
50	1	5	436	0
51	76	169	22	0
52	63	131	37	0
53	689	1,588	405	0
54	1	1,174	491	0
55	240	613	625	0
56	129	266	9	0
57	44	109	16	412
58	369	882	340	0
59	324	520	240	2,144
60	639	2,268	3	0
61	17	37	228	0
62	174	400	43	252
63	62	128	23	0
64	156	327	27	0
65	0	0	0	0
66	411	663	546	0
67	226	500	39	0
68	7	21	590	0
69	0	0	221	0
70	106	226	168	0
71	4	11	289	0
72	0	0	226	0
73	2	0	184	741
74	24	47	91	0
75	0	0	1,409	0
76	0	0	204	0
77	0	0	2	0
78	473	816	6	0
79	100	201	4	0
80	342	559	140	0
81	94	217	14	0
82	1	0	0	0
83	2	4	42	0
84	106	230	259	0
85	189	450	29	0
86	47	107	114	0
87	279	644	188	0
88	243	520	41	0
89	210	470	0	0
90	0	0	154	7,596
91	0	0	148	0
92	248	325	1,106	0
93	0	0	42	199
94	298	415	260	0
95	252	586	91	40
96	244	501	682	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
97	0	0	243	0
98	4	9	12	0
99	321	873	240	0
100	47	106	55	0
101	8	52	192	0
102	107	489	253	63
103	32	48	106	0
104	0	0	112	0
105	57	150	9	0
106	31	63	961	0
107	0	0	165	0
108	0	0	137	0
109	287	534	796	0
110	266	469	238	0
111	64	100	120	0
112	188	427	226	0
113	0	0	17	0
114	1	4	65	576
115	41	91	47	0
116	52	116	155	0
117	0	0	874	0
118	92	238	15	0
119	7	11	149	0
120	238	554	138	464
121	185	432	2	0
122	187	305	360	177
123	484	1,369	490	0
124	75	173	1,394	0
125	168	366	20	0
126	25	69	12	0
127	121	318	11	0
128	132	260	0	0
129	102	202	118	0
130	18	28	114	0
131	281	286	260	0
132	127	261	46	0
133	149	374	56	0
134	126	267	207	408
135	46	104	0	0
136	73	156	0	0
137	224	445	6	0
138	0	0	219	0
139	0	0	24	0
140	0	0	1	0
141	31	45	305	0
142	14	25	0	0
143	81	188	46	0
144	19	24	479	0
145	136	276	131	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
146	82	207	0	0
147	69	175	0	0
148	37	79	0	0
149	19	33	2	0
150	54	493	3,542	0
151	132	309	157	2,366
152	134	348	24	32
153	105	633	383	556
154	22	59	233	0
155	131	312	58	265
156	20	18	0	0
157	152	327	14	83
158	191	441	0	0
159	0	0	80	0
160	34	33	316	0
161	32	56	229	0
162	167	305	14	0
163	0	0	108	0
164	57	125	29	0
165	37	123	12	0
166	31	72	3	0
167	51	122	0	0
168	28	64	19	0
169	357	657	71	0
170	8	11	67	0
171	59	133	7	0
172	51	110	0	0
173	90	198	0	0
174	134	139	178	0
175	0	178	438	0
176	0	0	167	0
177	98	192	294	135
178	162	335	84	260
179	65	156	2	0
180	136	298	47	0
181	77	173	5	0
182	56	90	0	0
183	157	238	23	0
184	55	144	323	0
185	117	327	60	0
186	129	284	5	0
187	20	52	23	0
188	84	161	5	0
189	87	173	0	0
190	13	30	11	0
191	209	475	56	0
192	4	0	12	0
193	54	136	24	0
194	21	41	0	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
195	38	66	12	0
196	84	202	16	0
197	16	28	147	0
198	45	98	0	0
199	40	75	23	0
200	85	201	10	0
201	116	245	82	365
202	69	146	0	0
203	45	89	139	0
204	104	214	93	0
205	169	353	6	0
206	100	260	0	0
207	389	840	80	0
209	21	48	45	0
210	207	492	16	0
211	171	355	155	70
212	155	373	45	0
213	124	298	114	186
214	32	83	306	0
215	29	58	99	0
216	45	94	123	0
217	0	0	945	0
218	30	55	145	270
219	59	138	155	0
220	184	439	8	0
221	235	567	13	0
222	474	1,198	0	0
223	162	320	15	0
224	52	111	287	0
225	4	7	8	0
226	1	4	4	0
227	38	98	220	0
228	103	247	24	0
229	9	19	395	0
230	263	611	5	0
231	73	143	0	0
232	0	0	757	0
233	186	421	145	0
234	120	252	31	0
235	41	89	0	0
236	90	172	55	322
237	91	192	0	0
238	0	0	161	0
239	189	466	288	0
240	104	285	3,837	0
241	56	163	6	0
242	228	465	856	0
243	287	570	39	0
244	0	0	66	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
245	109	199	32	0
246	111	231	1	0
247	0	0	418	0
248	0	0	299	0
249	113	283	44	0
250	289	900	20	0
251	0	0	334	0
252	245	484	7	0
253	0	0	0	0
254	109	259	6	0
255	0	19	207	0
256	141	333	47	0
257	35	75	30	396
258	15	42	0	0
259	0	0	897	0
260	213	403	92	0
261	63	157	42	0
262	279	621	394	0
263	389	579	82	42
264	136	249	31	0
265	378	959	8	0
266	2	1	949	0
267	506	2,532	150	550
268	523	1,354	4	0
269	8	12	49	0
270	8	12	794	0
271	73	260	0	0
272	189	469	11	0
273	86	142	1,367	0
274	4	13	838	0
275	0	0	120	0
276	15	24	13	0
277	0	0	404	0
278	15	34	684	0
279	13	28	0	0
280	139	122	7	0
281	5	15	72	0
283	99	379	71	0
284	73	204	78	0
285	2	5	560	0
286	0	0	0	0
287	98	274	43	0
288	0	0	303	0
289	0	0	23	0
290	10	22	9	0
291	10	28	4	0
292	60	114	1	0
293	208	404	139	0
294	11	22	38	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
295	21	58	22	0
296	4	9	6	0
297	1	0	0	0
298	12	29	0	0
299	15	26	11	0
300	8	21	12	0
301	85	380	5	0
302	11	19	6	0
303	22	57	8	0
304	2	4	13	0
305	37	102	0	0
306	19	92	0	0
307	20	52	136	0
308	14	32	62	0
309	43	104	0	0
310	42	108	0	0
311	6	20	0	0
312	33	65	0	0
313	20	53	28	0
314	12	33	0	0
315	26	62	71	0
316	37	99	0	0
317	12	37	0	0
318	0	0	53	0

FOND DU LAC SOCIOECONOMIC FORECASTS - COMPACT

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
1	4	9	0	0
2	4	10	0	0
3	4	7	0	0
4	4	11	0	0
5	1	2	0	0
6	4	8	0	0
7	4	12	0	0
8	3	6	0	0
9	50	125	1,464	0
10	4	11	0	0
11	4	6	0	0
12	4	9	0	0
13	4	9	0	0
14	4	8	0	0
15	4	11	0	0
16	5	16	0	0
17	4	8	0	0
18	4	9	0	0
19	4	11	0	0
20	4	10	0	0
21	4	10	0	0
22	7	16	0	0
23	4	8	0	0
24	4	11	0	0
25	4	11	0	0
26	53	160	559	0
27	1,464	4,294	2,710	800
28	209	532	144	150
29	4	10	0	0
30	4	12	0	0
31	1,853	5,398	2,903	800
32	4	10	0	0
33	4	11	0	0
34	1,033	2,436	1,207	400
35	4	10	0	0
36	0	0	1,293	0
37	0	0	1,231	0
38	799	1,962	3,940	100
40	370	1,260	1,334	200
41	76	244	1,222	0
42	4	11	0	0
43	465	1,299	268	100
44	4	9	0	0
45	96	96	222	0
46	511	2,523	170	60
47	0	0	0	0
48	4	9	0	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
49	489	1,030	882	0
50	186	1,037	894	0
51	261	612	970	0
52	1,535	3,378	844	250
53	908	2,229	1,872	1,000
54	0	3,600	7,561	1,425
55	114	300	1,462	30
56	245	537	337	0
57	408	1,075	673	0
58	1,418	3,589	2,018	1,500
59	789	1,340	2,110	0
60	1,248	4,645	1,632	0
61	1,070	2,384	399	800
62	3,800	9,255	587	501
63	0	0	259	15
64	378	860	715	800
65	0	0	101	0
66	267	465	1,173	40
67	542	1,266	112	0
68	285	883	250	0
69	166	514	150	0
70	460	1,040	211	0
71	261	862	225	0
72	103	195	176	0
73	0	0	3,332	8,000
74	6	12	0	0
75	1,567	3,125	713	250
76	0	0	740	0
77	0	0	168	0
78	763	1,394	262	50
79	151	321	0	0
80	534	923	0	0
81	64	156	94	0
82	0	0	0	0
83	231	568	389	0
84	160	369	422	0
85	188	482	387	0
86	156	376	239	0
87	329	820	1,086	150
88	288	666	558	0
89	281	663	614	60
90	1,305	2,540	448	300
91	161	314	114	0
92	579	802	463	0
93	0	0	174	500
94	302	445	0	0
95	303	807	660	100
96	380	888	831	150

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
97	125	420	190	0
98	126	324	67	0
99	330	861	750	1,500
100	73	174	187	0
101	90	201	333	0
102	169	429	332	60
103	63	101	237	0
104	0	0	290	0
105	5	14	0	0
106	948	2,049	11,723	0
107	0	0	570	0
108	0	0	200	0
109	348	692	1,149	0
110	284	530	703	200
111	64	106	328	0
112	201	533	539	60
113	125	383	269	0
114	145	541	500	900
115	151	355	467	800
116	115	330	445	100
117	0	0	636	0
118	201	552	444	250
119	18	29	221	0
120	269	642	462	100
121	237	595	380	150
122	188	282	260	150
123	1,757	5,258	1,419	1,200
124	2,064	5,044	1,011	800
125	216	529	357	1,000
126	1,806	5,254	683	500
127	2,796	7,764	749	50
128	279	627	201	300
129	92	194	261	0
130	6	10	233	10
131	32	35	162	0
132	101	221	396	60
133	158	419	490	0
134	142	267	403	300
135	94	226	65	0
136	129	292	267	0
137	74	174	305	0
138	0	0	137	0
139	0	0	110	0
140	0	0	92	0
141	0	1	237	0
142	45	83	0	0
143	103	253	81	0
144	18	24	616	0
145	150	323	507	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
146	138	380	71	0
147	92	271	275	60
148	71	161	140	25
149	32	60	77	0
150	0	50	2,941	600
151	189	403	624	0
152	4	11	0	0
153	451	1,550	744	5,000
154	137	246	361	100
155	413	1,048	494	300
156	440	440	0	0
157	174	395	377	60
158	190	514	470	600
159	0	0	267	0
160	4	5	222	0
161	9	17	461	0
162	86	191	283	0
163	0	0	108	0
164	110	293	273	0
165	135	437	74	0
166	60	148	0	0
167	38	96	181	0
168	37	88	158	0
169	399	876	1,212	500
170	9	12	293	0
171	88	194	10	0
172	67	152	8	0
173	149	348	17	0
174	61	67	213	200
175	0	0	650	0
176	0	0	410	0
177	18	38	639	0
178	122	291	292	0
179	113	288	201	0
180	223	516	0	0
181	150	355	268	300
182	76	129	135	0
183	116	186	199	0
184	124	341	510	0
185	270	799	557	150
186	267	622	352	0
187	35	108	151	60
188	97	195	0	0
189	24	60	496	1,500
190	0	0	120	0
191	292	717	522	60
192	0	0	0	0
193	279	739	128	0
194	8	17	0	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
195	60	112	209	0
196	100	274	165	0
197	9	16	284	0
198	80	184	0	0
199	40	79	0	0
200	82	206	42	0
201	300	673	413	350
202	95	213	0	0
203	143	321	470	160
204	71	155	178	0
205	93	234	115	150
206	73	197	219	0
207	606	1,384	1,475	300
209	143	346	176	0
210	89	224	368	1,500
211	301	500	720	350
212	495	1,230	117	0
213	380	944	174	150
214	128	851	725	14,000
215	0	5,000	1,871	25,000
216	42	92	216	150
217	919	2,016	1,263	400
218	10	18	412	0
219	293	743	106	0
220	146	379	226	0
221	484	1,187	474	800
222	698	1,876	792	150
223	202	423	163	0
224	863	1,938	889	500
225	489	910	686	350
226	549	2,043	316	0
227	2,879	7,856	583	100
228	4	10	0	0
229	19	42	350	0
230	304	757	380	800
231	110	228	0	0
232	227	484	1,735	0
233	363	920	499	400
234	137	405	227	50
235	43	99	113	0
236	151	316	228	0
237	89	197	293	150
238	201	373	442	0
239	847	2,255	1,048	1,000
240	226	755	1,397	500
241	5	15	0	0
242	3,030	6,544	4,873	1,500
243	392	767	826	0
244	0	0	390	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
245	136	262	386	0
246	172	378	160	0
247	193	412	420	0
248	196	488	800	300
249	808	2,141	2,204	500
250	1,066	3,508	3,822	1,500
251	0	0	2,488	150
252	980	2,052	866	0
253	0	0	0	0
254	302	760	519	100
255	44	85	393	0
256	402	999	646	60
257	209	486	518	150
258	23	68	47	0
259	0	0	2,304	50
260	227	454	934	150
261	123	325	266	0
262	1,066	1,976	2,118	2,000
263	138	218	564	150
264	93	178	283	0
265	538	1,445	1,220	1,000
266	0	0	1,234	0
267	1,516	7,850	1,195	1,500
268	758	2,086	1,345	350
269	0	0	61	0
270	177	286	766	0
271	752	2,828	630	150
272	4	10	0	0
273	669	1,165	5,102	0
274	1,462	5,178	1,507	2,000
275	0	0	1,705	500
276	4	7	0	0
277	0	0	1,512	0
278	772	1,868	981	600
279	94	203	61	0
280	60	60	843	0
281	448	1,419	571	300
283	753	3,065	647	600
284	1,145	3,392	492	0
285	383	1,039	448	0
286	0	0	875	0
287	459	1,359	268	150
288	284	891	293	0
289	0	0	46	0
290	945	2,199	663	0
291	3,671	10,936	1,764	200
292	2,447	4,897	1,956	0
293	4	8	0	0
294	4	8	0	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
295	1,305	3,825	268	0
296	3,511	8,171	3,949	400
297	0	0	1,332	0
298	4	10	0	0
299	2,462	4,431	1,216	500
300	2,800	7,820	3,060	1,200
301	6	28	0	0
302	4	7	0	0
303	4	11	0	0
304	4	8	0	0
305	4	11	0	0
306	39	198	0	0
307	49	133	148	0
308	4	9	129	0
309	4	10	0	0
310	4	11	0	0
311	4	14	0	0
312	4	8	0	0
313	5	14	0	0
314	4	11	0	0
315	4	10	0	0
316	4	11	0	0
317	10	31	0	0
318	0	0	0	0

FOND DU LAC SOCIOECONOMIC FORECASTS - FULL BUILD				
TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
1	874	2,092	271	0
2	1,498	3,816	841	0
3	10	18	54	0
4	679	1,940	1,449	0
5	3	7	1,277	0
6	805	1,682	4,397	285
7	8	27	15	0
8	890	1,746	480	0
9	1,788	4,511	860	143
10	1,925	5,633	15	0
11	69	107	2,067	0
12	1,365	3,000	1,929	3,421
13	16	36	40	0
14	722	1,483	37	0
15	1,458	4,071	877	0
16	621	2,054	2,238	0
17	1,414	2,796	910	0
18	15	33	8	0
19	336	1,131	2,149	0
20	759	1,999	57	0
21	1,185	3,137	54	0
22	1,370	3,240	1,345	342
23	741	1,640	2,520	0
24	664	1,918	365	0
25	487	1,361	423	0
26	107	323	20	0
27	145	426	5,112	0
28	29	74	53	0
29	526	1,410	10	0
30	1,431	4,535	121	0
31	973	2,827	323	1,325
32	426	1,067	0	0
33	1,143	3,107	8	0
34	358	845	87	0
35	14	37	4,382	143
36	60	171	43	0
37	0	0	93	0
38	346	848	2,482	171
40	186	633	125	2,383
41	351	1,353	118	345
42	503	1,419	645	0
43	130	364	170	0
44	816	1,899	99	0
45	0	0	105	0
46	13	63	205	0
47	0	0	46	0
48	2,576	5,902	4,724	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
49	3	6	737	0
50	1	5	601	0
51	66	154	250	0
52	205	451	54	0
53	1,066	2,600	616	0
54	386	4,465	1,615	1,425
55	233	660	712	0
56	290	634	12	0
57	41	109	24	1,271
58	656	1,659	465	0
59	265	450	235	4,610
60	1,995	7,523	448	0
61	17	38	497	0
62	3,190	7,761	43	778
63	60	132	23	0
64	132	293	39	0
65	0	0	0	0
66	315	538	630	0
67	220	513	43	0
68	0	0	711	0
69	0	0	247	0
70	102	231	168	0
71	3	11	408	0
72	0	0	269	0
73	2	0	209	4,112
74	529	1,092	354	0
75	0	0	3,155	0
76	0	0	204	0
77	0	0	2	0
78	402	735	5	0
79	105	224	41	0
80	227	392	191	0
81	68	166	16	0
82	1	0	0	0
83	2	4	387	0
84	102	236	245	0
85	184	462	33	0
86	46	109	153	0
87	270	661	208	0
88	236	533	40	0
89	204	482	27	0
90	0	0	154	21,652
91	0	0	249	0
92	241	333	1,198	0
93	0	0	42	613
94	175	258	432	0
95	244	600	91	123
96	236	514	682	143

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
97	0	0	385	0
98	3	9	37	0
99	311	1,197	240	0
100	45	109	55	0
101	8	132	334	0
102	125	1,056	259	194
103	31	49	142	0
104	0	0	215	0
105	328	916	1,332	0
106	720	1,556	6,737	0
107	0	0	199	0
108	0	0	137	0
109	278	548	1,136	0
110	184	344	301	0
111	56	93	139	0
112	182	438	236	0
113	0	0	44	0
114	1	4	65	1,776
115	39	93	12	0
116	50	119	155	0
117	0	0	876	0
118	89	244	15	0
119	7	11	147	0
120	231	620	185	1,431
121	180	443	2	0
122	125	318	440	544
123	1,112	3,328	653	0
124	865	2,115	1,708	0
125	163	375	20	0
126	1,209	3,518	16	0
127	853	2,370	1,019	1,140
128	128	266	0	0
129	83	175	127	0
130	17	29	116	0
131	272	294	263	0
132	123	289	46	0
133	145	408	141	0
134	122	386	207	1,257
135	45	106	0	0
136	71	160	0	0
137	218	462	6	0
138	0	0	221	0
139	0	0	24	0
140	0	0	8	0
141	30	46	309	0
142	14	25	0	0
143	79	193	88	0
144	18	24	568	0
145	132	283	206	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
146	79	212	0	0
147	67	180	0	0
148	36	81	0	0
149	18	34	2	0
150	52	1,425	3,843	1,140
151	128	410	177	7,294
152	842	2,412	417	100
153	4	1,291	384	1,585
154	18	100	342	0
155	127	321	58	818
156	208	193	3	0
157	147	335	14	257
158	185	452	0	0
159	0	0	84	0
160	33	34	316	0
161	31	57	363	0
162	162	313	42	0
163	0	0	124	0
164	56	128	30	0
165	36	157	12	0
166	30	74	3	0
167	49	126	0	0
168	28	66	34	0
169	346	674	73	0
170	8	11	67	0
171	57	158	30	0
172	50	113	0	0
173	87	203	0	0
174	130	143	167	0
175	0	570	438	0
176	0	0	167	0
177	95	197	337	416
178	157	344	84	801
179	62	159	8	0
180	132	305	47	0
181	75	177	5	0
182	54	93	0	0
183	171	275	65	0
184	54	148	323	0
185	82	242	60	0
186	125	292	5	0
187	19	53	23	0
188	82	165	5	0
189	85	178	0	0
190	13	31	11	0
191	203	488	18	0
192	4	0	14	0
193	53	140	39	0
194	20	42	0	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
195	36	68	17	0
196	82	218	21	0
197	16	29	147	0
198	44	101	0	0
199	39	77	22	0
200	83	207	6	0
201	112	251	125	1,126
202	67	150	0	0
203	42	87	194	0
204	101	219	93	0
205	164	365	6	0
206	97	282	0	0
207	377	862	173	0
209	20	50	50	0
210	200	504	16	0
211	166	579	155	217
212	149	396	81	0
213	120	345	112	573
214	30	81	322	0
215	28	59	99	0
216	44	96	123	71
217	0	0	1,366	0
218	29	56	153	832
219	57	142	154	0
220	178	450	8	0
221	228	631	13	0
222	460	1,229	0	0
223	157	328	13	0
224	51	114	782	0
225	423	788	8	0
226	159	591	10	0
227	398	1,086	1,054	285
228	1,263	3,206	156	0
229	5	12	395	0
230	255	627	5	0
231	71	146	0	0
232	0	0	825	0
233	180	432	286	0
234	117	259	31	0
235	40	91	0	0
236	87	176	55	992
237	89	197	0	0
238	0	0	223	0
239	180	469	307	228
240	96	277	3,967	0
241	874	2,691	978	2,850
242	214	462	6,117	5,701
243	278	673	152	0
244	0	0	147	0

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
245	106	205	32	0
246	108	238	0	0
247	0	0	540	0
248	0	0	426	0
249	110	291	44	0
250	280	924	20	0
251	0	0	384	0
252	666	1,395	67	0
253	23	0	21	0
254	106	266	6	0
255	0	61	312	0
256	137	341	23	0
257	34	77	30	1,220
258	14	43	0	0
259	0	0	1,429	0
260	206	414	76	0
261	61	161	42	0
262	336	1,044	1,258	143
263	377	595	86	128
264	132	255	31	0
265	366	984	8	0
266	2	1	1,066	0
267	481	2,662	150	1,696
268	507	1,389	4	0
269	8	12	51	0
270	44	68	1,106	0
271	175	657	0	0
272	510	1,339	1,522	2,850
273	78	135	3,940	143
274	0	0	1,592	0
275	0	0	1,453	0
276	124	207	4,272	0
277	0	0	776	0
278	223	540	716	0
279	13	28	0	0
280	167	155	55	0
281	300	950	73	0
283	481	1,961	71	0
284	203	600	78	0
285	4	11	820	0
286	611	0	0	0
287	95	281	59	0
288	0	0	302	0
289	0	0	22	0
290	10	23	2,048	0
291	2,307	6,872	224	0
292	1,039	2,080	1,845	1,425
293	451	1,028	283	171
294	2,101	4,511	6,261	2,280

TAZ	HOUSEHOLDS	POPULATION	TOTAL EMPLOYMENT	SCHOOL ENROLLMENT
295	1,047	3,070	9,197	4,276
296	1,400	3,259	3,764	5,701
297	23	0	1,206	0
298	573	1,467	572	0
299	591	1,064	4,804	0
300	1,662	4,641	2,076	285
301	1,332	6,307	44	0
302	481	895	300	171
303	1,003	2,749	75	0
304	2	4	48	0
305	1,842	5,376	667	285
306	1,381	7,037	96	0
307	208	571	3,204	855
308	57	136	3,350	0
309	264	673	6,324	0
310	431	1,178	0	0
311	901	3,215	189	0
312	762	1,582	1,806	0
313	2,508	7,004	194	0
314	1,124	3,298	29	0
315	1,416	3,599	1,886	1,710
316	1,851	5,263	2,077	1,425
317	944	3,045	1,990	228
318	2,442	0	218	0

APPENDIX C

MPO Process/Summary of Proceedings

Long Range Transportation/Land Use Plan Advisory Committee,
Technical Advisory Committee and Policy Board



Wisconsin Department of Transportation

www.dot.state.wi.us

Scott McCallum
Governor

Thomas E. Carlsen, P.E.
Acting Secretary

Division of Transportation Investment
Management
4802 Sheboygan Ave.
P O Box 7913
Madison, WI 53707-7913

Telephone: 608-266-3661
FAX: 608-267-0441

July 15, 2002

As you may know, on May 1, 2002, the US Bureau of Census designated Fond du Lac as a new urbanized area (population >50,000). In its determination, the Census Bureau included the City of Fond du Lac, the Village of North Fond du Lac, and portions of the towns of Empire, Fond du Lac, Friendship and Taycheedah in the new "urbanized area". By federal law all urbanized areas are required to establish a Metropolitan Planning Organization (MPO) to conduct transportation planning.

As our role in facilitating this process, WisDOT would like to bring affected local governments, including Fond du Lac County, and community and regional planners together to discuss the purpose and implications of a new MPO, along with the process and options for designating the MPO. We propose meeting with appropriate local officials, to discuss the function, purpose and benefits of an MPO, the designation process, and what the federal regulations require. We have determined that the best time to hold such a meeting is at 10:00 AM, August 7, 2002, in rooms D and E of the Fond du Lac City/County Building, 160 S. Macy St., Fond du Lac.

Responsibilities of an MPO

Sections 23 U.S.C. 134 and 49 U.S.C. 5303 of the Federal Regulations require "that a Metropolitan Planning Organization (MPO) be designated for each urbanized area and that the metropolitan area have a *continuing, cooperative, and comprehensive* transportation planning process that results in plans and programs that consider all transportation modes and support metropolitan community development and social goals." In other words, the MPO is designed to facilitate the process of making the transportation investment decisions in metropolitan areas. In order to make this possible, the responsibilities of the MPO have been determined to involve the following:

- Carrying out the metropolitan transportation planning process
- Determining mutual responsibilities in the metropolitan planning process
- Developing an annual unified planning work program (UPWP)
- Developing a transportation improvement program (TIP)
- Approving the long range metropolitan transportation plan and its periodic updates
- Approving, along with the governor, the TIP and its amendments
- Certifying, along with the state, that the planning process is in compliance with the requirements of applicable U.S. codes, federal laws and regulations

Federal Regulations require both a TIP and a Long Range Transportation Plan in order to spend Federal highway and transit money in the urbanized area.

Having a functioning MPO involves the creation of a policy body to make the ultimate decisions and some type of staff support to that policy body. There are a number of ways that both of these two requirements can be met. Options will be presented at the meeting.

Federal regulations state “The voting membership of an MPO policy body...must include representation of local elected officials, officials of agencies that administer or operate major modes or systems of transportation (e.g., transit operators, sponsors of major local airports, maritime ports, rail operators, etc.) and appropriate State officials.”

Designating an MPO Within 12 months after Fond du Lac’s designation as an urbanized area, the Governor’s office and local officials need to work together to establish the MPO. Thus, the MPO should be established and in place by May 1, 2003. The designation of the MPO “shall be by agreement among the Governor and units of general purpose local governments representing 75 percent of the affected metropolitan population.” According to the above rules, since the City of Fond du Lac contains 75% of the urbanized area population, the City has to concur with the designation of the MPO. However, since this is supposed to be a cooperative effort, the other constituent communities and agencies need to be involved in the process to establish the MPO, its policy body and the staffing arrangements.

We encourage each of you to attend this meeting so that all affected parties can understand the MPO designation process and the impacts and responsibilities of a new MPO.

Sincerely,

Kenneth J. Leonard
Bureau of Planning

cc: Sam Tobias, Terry Dietzel, Ernest Winters, Allen Buechel, Stephen Nenonen, Mark O. Lentz, Wayne Rollin, Allan Meindel, Jerome Guelig, Mary Toriello, Harold Manske, Charles McCourt, Karen Matze, Jodie Goebel, Michael Tolvstad



SCOTT McCALLUM

**Governor
State of Wisconsin**

November 20, 2002

Stephen T. Nenonen, City Manager
City of Fond du Lac
City-County Government Center
160 S. Macy Street
Fond du Lac, WI 54936

Dear Mr. Nenonen:

Per your letter of October 24, 2002 and City Resolution No. 7444 and Village of North Fond du Lac Resolution No. 45-2002, I am pleased to approve the creation of the new Fond du Lac Metropolitan Planning Organization for the purposes of meeting federal transportation planning requirements.

Sincerely

A handwritten signature in cursive script that reads "Scott McCallum".

Scott McCallum
Governor

Scope of Long-range Transportation Plan
23 CFR 450.322(b)

- Transportation Demand of Goods and People
- Adopted operations and system management strategies
- Bicycle and Pedestrian Facilities
- Consideration of results of congestion management systems
- Preservation of existing transportation systems
- Sufficient detail of all proposed projects to develop cost estimates
- Multimodal evaluation of plan impacts
- Identify corridors for future MIS/NEPA studies
- Reflect land use and other community plans
- Include transportations enhancement activities
- Include a financial plan

Seven Planning Factors

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency
- Increase the safety and security of the transportation systems for motorized and non-motorized users
- Increase the accessibility and mobility options available to people and for freight
- Protect and enhance the environment, promote energy conservation, and improve quality of life
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system

**Fond du Lac MPO Transportation/Land Use Plan
Draft Schedule**

Approximate Date	Arena	Actions
January/Feb. 2004	in-house	develop public participation plan
January 2004	in-house	letter to prospective TAC members; invite participation; announce process; forewarn of late-Jan. meetings
March-April 2004	kick-off meeting with expanded TAC	MPO plan requirements; committee role; status of last plan; new plan approach; present existing conditions
April 2004	Public info meeting	describe requirements and process; provide questionnaire for input on goals
May 2004	status report to Policy Board	MPO plan requirements; committee role; status of last plan; new plan approach; present existing conditions
May 2004	expanded TAC meeting	review requirements; vision & goals
June 2004	expanded TAC meeting	vision & goals; objectives
June-August 2004	in-house	land use scenario building
August 2004	status report to Policy Board	MPO plan requirements; committee role; status of last plan; new plan approach; present existing conditions
September 2004	expanded TAC meeting	present draft land use scenarios
Sept.- Oct. 2004	in-house	finalize land use scenarios
Oct. 2004	in-house	model scenarios
October 2004	status reports to Transp. Committee and Commission	present land use scenarios
December 2004	expanded TAC meeting	present final land use scenarios and model results (deficiencies); begin recommendation discussion
January 2005	Public information meeting	present land use scenarios and model results, relative to goals; input on recommendations
February 2005	status report to Policy Board	present land use scenarios and model results, relative to goals; input on recommendations
March-April 2005	in-house	develop recommendations
April 2005	expanded TAC meeting	present/review recommendations
May 2005	status report to Policy Board	present/review recommendations
June 2005	expanded TAC meeting	review of draft plans
August 2005	status report to Policy Board	presentation of draft plans
August 2005	Public information meetings	presentation of draft plans
October 2005	MPOs	plan approval

MPO TECHNICAL COMMITTEE

January 9, 2003

Fond du Lac City/County Government Center
Conference Room D/E

10:00-11:20 AM

Present:

Ann Schell, East Central Regional Planning
Stephanie Hickman, Federal Highway Administration
Harold Manske, Town of Fond du Lac
Charles McCourt, Town of Friendship
Mary Toriello, Town of Empire
Alan Meindel, Fond du Lac Area Transit
Mike Tolvstad, Village of North Fond du Lac
Wayne Rollin, City of Fond du Lac, Community Development
Mark Lentz, City of Fond du Lac, Public Works
Allen Buechel, Fond du Lac County Executive
Marianne Geiger, Fond du Lac County Executive's Office
Rick Raupp, Wisconsin DOT
Don Uelmen, Wisconsin DOT
Kurt Miller, Wisconsin DOT
Walt Rath, East Central Regional Planning

The primary focus of this meeting was to define the MPO map boundary.

Wisconsin DOT , Division of Transportation Investment Management, Bureau of Planning distributed a "Criteria for Establishing Adjusted Urban Area Boundaries and Updated Guidelines for Establishing Metropolitan Planning Area Boundaries".

Urbanized and Metropolitan boundary areas were defined for the City of Fond du Lac, Town of Friendship, Town of Fond du Lac, Town of Empire, and Village of North Fond du Lac.

URBANIZED PLANNING BOUNDARY AREAS:

Urbanized Areas consist of a central core of adjacent densely settled territory that together contains at least 50,000 people, generally with an overall population density of at least 1,000 people per square mile.

Urban Clusters are newly identified statistical geographic entities, defined by the 2000 Census as consisting of a central core of adjacent densely settled territory that together contains between 2,500 and 49,999 people, generally with an overall population density of 1,000 people per square mile.

The purpose for making these adjustments are to:

- Determine the area eligible for FHWA federal-aid funds
- Match the population of the cities and villages with the total population of the urbanized area.
- Smooth out the edges for ease in mapping, visibility, and data gathering
- Delineate the area for functional classification purposes
- Determine highway levels of service and access management standards

The criteria for adjustments include:

- Recommended anticipated growth boundary for a 3-5 year range
- Include everything that the census has included within the boundary
- Move the Urbanized Areas out to the corporate limit where not included in the census urbanized boundary

METROPOLITAN PLANNING AREA BOUNDARIES

Metropolitan Planning Area boundaries should encompass the existing urbanized area, and the area expected to be urbanized with a 20-30 year forecast period.

The criteria for adjustments include:

- Recommended anticipated growth boundary out to a 2030 horizon

Mark Lentz will schedule a meeting with Ernie Winter, Sam Tobias, Wayne Rollin, Mary Toriello, Harold Manske, and Jerry Guelig to resolve the boundaries for the Town of Taycheedah. This map will then be forwarded to ECWRPC.

The revised boundary map will be reviewed at the February 13, 2003, MPO Policy Meeting, which will be held at 9:00 AM in Conference Room D/E of the Fond du Lac City/County Government Center. If there are major changes that need to be made, then a meeting will be scheduled prior to February 13th.

SUMMARY OF PROCEEDINGS

Technical Advisory Committee
Fond du Lac Area MPO
City/County Building
April 17, 2003

The meeting was called to order at approximately 10:00 a.m. by Mark Lentz, Chair

Committee Members Present

Mark Lentz, Vice-chair	C. Fond du Lac
Jerome J. Guelig	Town of Taycheedah
Stephanie Hickman	FHWA
Curt Holman	Canadian National Railway
Harold Manske	Town of Fond du Lac
Charles McCourt	Town of Friendship
Kurt Miller	WisDOT, Madison
Jim Pierquet (for Mary Toriello)	Town of Empire
Rick Raupp	WisDOT, District 2
Wayne Rollin	City of Fond du Lac
Ann Z. Schell	ECWRPC
Sam Tobias	Fond du Lac County
Mike Tolvstad	Village of North Fond du Lac
Ernest Winters	Fond du Lac County

Committee Members Absent

Alan Meindel	Fond du Lac Area Transit
Lee F. Perrizo	Fond du Lac County Airport

Other Present

Melissa Kraemer	ECWRPC
Jason Kakatsch	ECWRPC
Walt Raith	ECWRPC
Don R. Uelmen	WisDOT, Madison

1. Approval of minutes from January 9, 2003 meeting

A motion was made by Mr. Manske, seconded by Mr. Rollin, to approve the minutes of the January 9th, meeting. The motion passes without opposition.

2. Review and recommendation on the adjusted urbanized area and metropolitan area boundaries.

Ann Schell noted that there had been some changes recommended by WisDOT, to the boundaries established by the TAC at their January meeting. She asked Mr. Miller to run through those suggested adjustments, so that the boundaries could be taken to the MPO policy board on May 8th. Mr. Miller addressed the committee concerning changes to the eastern adjusted urbanized area boundary. Mr. Pierquet agreed to tighten up the boundary in the Town of Empire. The committee agreed with the changes. Mr. Miller then suggested the need for some adjustments to the southern portions of the boundary, to include all of the future STH 151 bypass. There was considerable discussion concerning census block boundaries and anticipated development along the bypass. An agreement was reached on the southern boundary. There was also considerable discussion on impending development in the western portions of the urbanized area, and some minor changes were proposed. Mr. Tolvstad and Mr. Guelig agreed that the northeast corner of the area were fine as shown. It was agreed that the UAB should moved out to the Lamartine town line, and that the MPAB would be in that same place.

A motion was made by Mr. Rollin, seconded by Mr. Tobias, to recommend approval of the adjusted urbanized area and metropolitan planning area boundaries to the MPO Policy Committee. The motion passed unanimously.

WisDOT will be making the agreed-upon changes to the map, for presentation at the MPO meeting in May.

3. Review of TAC member list.

Ann Schell referred the committee to the member list included in their packet. She asked if there were any corrections. Mr. Pierquet noted that Mary Toriello would continue to be the Town of Empire's representative on the TAC, even though she was no longer the town chair. Mr. Tolvstad noted that there was an error in the zip code in his address, and also that he had not received a packet for this meeting. Ms. Schell said that she would check on the mailing list and make that correction. Mr. Holman said that he would likely be replacing Mr. Bierman, as Canadian National's representative, and that materials should be sent to him in the future. There were no other changes.

4. Introduction and discussion of project prioritization process for STP-Urban projects.

Ms. Schell reminded the TAC that the development of the TIP is one of the requirements for all MPOs, and that one of the functions of the TIP was to prioritize projects for funding under the federal STP-Urban funding that comes to the urbanized area in a lump sum. She referred to the prioritization process that was mailed to committee members, and noted that it was an example. This process has been used for a number of years, with some tweaking, in the Fox Cities and Oshkosh urbanized areas. The criteria were reviewed individually. Mr. Raith and Ms. Schell explained how the criteria apply to projects in all modes, as all modes are eligible for funding. Ms. Schell asked that the committee members give the process some thought and asked for comments or suggestions on the criteria. The TIP is not required until October of 2005, however, Ms. Schell suggested that we start compiling projects sooner, to gain experience in the process.

5. Discussion of Long-range Transportation/Land Use Plan approach

Ms. Schell described the long range plan requirements, and the need for analysis of land use pattern alternatives, as to their effects on the transportation system. She explained that the arrangement of the projected population growth (2030) into different land use configurations, such as sprawl vs. compact development patterns, is not a large enough population change to illustrate much variation in the impacts. She noted that staff has been discussing this issue and had determined that some analysis of a longer period of time, therefore a greater population growth, would better show the impacts of land use decisions on the transportation system. She asked for opinions and input on the concept, and noted that existing land use data was currently being collected by town new East Central employees, and she introduced Melissa Kraemer and Jason Kakatsch to the committee.

Ms. Hickman and Mr. Uelmen informed the committee that DNR was currently reviewing the possibility of revising definitions for air quality non-attainment areas and "contributing counties". The Fond du Lac area, along with most of the eastern side of the state, may be required to take compliance into consideration in the planning process in the future. This is not yet certain, but should be decided in the next few months. East Central staff will be attending briefings on the subject, at the end of the month.

There being no additional business, the meeting was adjourned at approximately 11:50 a.m.

May 8, 2003

MPO TECHNICAL COMMITTEE
Fond du Lac City/County Government Center
Conference Room D/E

10:00 AM

Present:

Ann Schell, East Central Regional Planning
Stephanie Hickman, Federal Highway Administration
Harold Manske, Town of Fond du Lac
Charles McCourt, Town of Friendship
Jim Pierquet, Town of Empire
Wayne Rollin, City of Fond du Lac, Community Development
Mark Lentz, City of Fond du Lac, Public Works
Tom Ahrens, City of Fond du Lac, Attorney (rep. For Steve Nenonen)
Martin Ryan, City of Fond du Lac Council
Steve Michels, City of Fond du Lac Council
Allen Buechel, Fond du Lac County Executive
Ernest Winters, Fond du Lac County Highway Commissioner
Karen Matze, North Fond du Lac
Rick Raupp, Wisconsin DOT
Don Uelmen, Wisconsin DOT
Kurt Miller, Wisconsin DOT
Jason Kakatsch, East Central Regional Planning
Dave Moesch, East Central Regional Planning
Melissa Kraemer, East Central Regional Planning

INTRODUCTIONS

APPROVAL OF MINUTES FROM JANUARY 9, 2003 MEETING

Motion by Mark Lentz, second by Jim Pierquet, motion carried.

REVIEW AND APPROVAL OF ADJUSTED URBANIZED AREA AND METROPOLITAN PLANNING AREA BOUNDARIES

Maps were explained and reviewed. Motion to accept maps as presented by Wayne Rollin, second by Karen Matze, motion carried.

METROPOLITAN CAPACITY BUILDING INITIATIVE

Stephanie Hickman presented video *Overview of MPO Planning*. She pointed out that in the eyes of the Federal Government this policy board is considered the MPO. A packet was passed out and information included was reviewed. Regular meetings are encouraged as this is the board that will make project decisions. A public involvement plan will need to be implemented. Stephanie encouraged the board to ask for assistance if needed and relay information about any delays. Fond du Lac is currently far ahead of schedule in the development process.

PROGRESS REPORT ON LONG RANGE TRANSPORTATION/LAND USE PLAN

Data compilation has begun for early stages of long range transportation land use plan. The current deadline for this is October of 2005 with a possibility of being move up to April. Information that is gathered will be put into a transportation land use model. Once the information is put together, public input meetings will be held.

DISCUSSION OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP), SURFACE TRANSPORTATION PROGRAM (STP) – URBAN PROJECT PRIORITIZATION PROCESS

This is a required report which covers five years of projects and should stem from the long range plans. This report allows for organized input as to projects on the schedule.

OTHER BUSINESS

The long range plan could be moved up. This would happen if the air quality causes Fond du Lac to designated "Non Attainment" by the DNR. This could cause delays in all pending projects. If FDL is designated as non attainment, the deadline would be moved up to April of 2005 to demonstrate conformity on long range plan and TIP. Each MPO has a 6 year schedule running from 2000 to 2005 – non attainment would cause a burden for conformity and analysis. By July 15th the DNR must come up with a recommendation to the EPA as to which MPO's acquire "Non Attainment" status. The DNR is currently working on criteria to determine which counties qualify for "Non Attainment" designation.

ADJOURN

Motion by Wayne Rollin, second by Steve Michels, carried.

The next meeting of the MPO Technical Committee will be held at 10:00 AM in meeting room D and E of the Fond du Lac City/County Government Center on July 10th.

The next meeting of the MPO Policy Board is scheduled for 10:00 AM in meeting room D/E of the Fond du Lac City/County Government Center on August 14th.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
TECHNICAL ADVISORY COMMITTEE
Fond du Lac City-County Government Center
July 10, 2003

The meeting was called to order at 10:00 a.m. by Mark Lentz, Chair.

Committee Members Present

Lee Perrizo	Fond du Lac County Airport
Mary Toriello	Town of Empire
Harold Manske	Town of Fond du Lac
Charles McCourt	Town of Friendship
Don Uelmen	WisDOT Madison
Jerry Guelig	Town of Taycheedah
Sam Tobias	Fond du Lac County
Wayne Rollin	City of Fond du Lac
Mark Lentz	City of Fond du Lac
Rick Raupp	WisDOT Waukesha
Anita Pusch	WisDOT Waukesha
Stephanie Hickman	FHWA

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Mr. Lentz welcomed the group and began committee member and staff introductions.
2. Approval of minutes from April 17, 2003 meeting.

The Committee reviewed and discussed the summary of proceedings from the last TAC meeting. Mr. Lentz asked for any additional questions or concerns with the minutes. Hearing none, Mr. Rollin moved that the minutes be approved as presented. The motion was seconded by Mr. Manske and passed unanimously.

3. Review and approval of Planning Work Program-2004, Fond du Lac MPO elements.

As the Committee reviewed the work program, Ms. Schell stated that East Central would be requesting the same dollars for the 2004 Work Program as was requested for 2003. In 2004 East Central will continue work to meet federal planning requirements that includes the unified work program, administration and technical assistance (1351), the preparation of the first Fond du Lac TIP (1352), and the first MPO long range transportation/land use plan (1353). She added that work item 1354 is really start-up cost relative to the extra work when starting from scratch. Some discussion followed regarding the first-time activities associated with the Fond du Lac MPO.

Major efforts include collecting base information for the first long range transportation/land use plan. Ms. Schell explained that significant work had already been initiated for a number of tasks including compiling socioeconomic data. Some discussion followed regarding funding and budget for the MPO, given projected shortfalls at the state level. Mr. Uelmen stated that East Central should plan for the same level of funding, but added, the numbers could change depending on the final state budget. Some discussion followed regarding federal and state funds used for MPO areas. Ms. Hickman stated that federal funds are allocated to WisDOT, who then distributes the funding to the state's MPOs. Ms. Schell explained that because East Central's unified work program includes the Fond du Lac MPO, it needs to be approved by the MPO policy board and TAC, and ultimately the Commission. With no further questions, Ms. Toriello moved to approve the 2004 Planning Work Program for the Fond du Lac MPO. The motion was seconded by Mr. Tobias and passed unanimously.

4. Discussion of STP-Urban Project Selection Criteria.

Ms. Schell stated that, while the criteria had been reviewed at the last meeting, the Committee will have ongoing opportunities to raise questions and make changes to the process. There were concerns from the Committee that, without going through the methodology with real-world projects, it will be difficult to understand exactly how the project ranking will work. Ms. Schell reminded the group that the same ranking process has been used and improved for the Fox Cities and Oshkosh Urbanized Areas over the past several years. She added that the process of selecting projects can be very competitive for the funds that are available, and a fairly objective process should be in place. Ms. Schell stated that funding for the Fond du Lac area would probably be less than the amount for the Oshkosh Urbanized area. It is based on the amount of mileage on the functional class street and highway system within the urbanized area. Highway projects are only eligible for STP-Urban funds if they are on the functionally classified system. Ms. Pusch had proposed entitlements prepared by District 2 and discussion followed regarding each jurisdiction's entitlement based on road-miles. Mr. McCourt asked if the pot of money increases with the addition of a new MPO. Mr. Uelmen clarified by saying that it would be the same amount but divided with one more MPO, Fond du Lac. Ms. Pusch added that the federal pot of money for the state was around \$44 million for 2 years.

Mr. Rollin stated that the Committee probably had a good feel for the ranking process and may not need to go through each criterion until we rank a project. Ms. Toriello suggested that the Committee look at a real world project to rank in an effort to understand the process better. After some discussion the Committee agreed that prior to the 2005 TIP the Committee could go through a dry-run with ranking area projects.

Ms. Schell distributed Table A-4 Ranking of Proposed STP-Urban Projects for the Fox Cities and Oshkosh Urbanized Areas. She hoped the table would help Committee members better understand the ranking process and the reasons certain projects receive funding. Ms. Schell explained that sometimes jurisdictions sponsor another jurisdiction's project if it is beneficial to the whole system. Some discussion followed regarding a "negative" funding balance and how it is calculated. As an example, if a community has a paper balance or entitlement of \$50,000 and the project costs \$100,000, after completion the paper balance is -\$50,000. Ms. Schell continued by saying if a community has a negative balance they can not compete for a project, unless everyone else is also negative. Mr. Raupp added that it is another way to fairly distribute the funding around and foster cooperation between communities.

5. Progress report on regional comprehensive planning effort

Ms. Schell said that work on the regional comprehensive plan was moving along including the completion of the Milestone #1 report. The *Milestone 1, State of the Region* report was approved by the Commission at the January quarterly meeting. The report represents a significant amount of background information that can be used by local governments preparing their own comprehensive plans.

Mr. Raith noted that as part of the comprehensive plan, the existing land use for the Fond du Lac area, along with the rest of the region, had been, or will be, gathered. Some discussion followed regarding three public information meetings recently held in Kimberly, Clintonville, and Wautoma.

Ms. Schell stated that the next step is the opportunities and visioning report slated to be completed by the end of 2003. In 2004, work will focus on goals and strategies to accomplish the vision for the plan. Some discussion followed regarding the remainder of the work effort and final report focusing on plan implementation, slated for completion in 2005.

6. Progress report on Long-range Transportation/Land Use Plan

Ms. Schell said that the Fond du Lac long range transportation/land use plan is scheduled to be completed in 2005 along with a TIP. A lot of the base information has been, or will be, collected and formatted for use in the planning process. Information will be compiled in small geographic areas called Transportation Analysis Zones (TAZs) that have been prepared for the Fond du Lac area. The TAZ, or zonal, data will provide the basis for the travel model. Some discussion followed regarding the socioeconomic data required for the development of the travel model. Mr. Raith noted that the model can use a number of variables including population, dwelling units, automobiles, school enrollment and various employment types, with adjustable trip generation rates within the model. The idea is to calibrate the model to known traffic counts on the streets and highways, using the current population and socioeconomic information to generate trips. Once the model is calibrated, land use or development can be added in the model to predict the amount of additional traffic and simulate the impact to the transportation system.

Ms. Schell said that the employment data for Fond du Lac had been obtained by East Central through an agreement with WisDOT and the Department of Work Force Development. Some discussion followed regarding the confidentiality of the information and the need to use the information only in aggregate. The employment data has been difficult to obtain in the past.

Mr. Raith noted that, in large part, the MPO plan incorporates the plans of the communities into a single urbanized area plan. He asked if the City of Fond du Lac would be preparing a comprehensive plan. Mr. Rollin responded that the City was planning to prepare a plan in 2006 and 2007. He added that he was looking forward to using East Central's data which is currently being gathered as part of the regional comprehensive and MPO plans. Some discussion followed regarding the MPO plan and the need to be consistent with the vision of the City and other communities in the Fond du Lac Urbanized Area.

7. Other business

Mr. Uelmen stated that he had good news in terms of air quality and the potential for Fond du Lac County becoming an air quality "non-attainment area". He said that the DNR was continuing to monitor air quality throughout the summer months for ozone. The counties in the region had no violations as of this time and trends were indicating that there would be no violations for the rest of the summer. If this trend continued, this would mean that there would be no new non-attainment zone designations for this year.

8. Adjourn

With no additional business Ms. Toriello moved that the Committee be adjourned. The motion was seconded Mr. Manske and passed unanimously. Mr. Lentz stated the next policy board meeting was on August 14, 2003, and the next TAC meeting will be held on October 9, 2003.

The meeting was adjourned at 11:20a.m.

MPO Policy Board

August 14, 2003

Fond du Lac City/County Government Center
Conference Room D/E

10:00 AM

Present: Ann Schell, East Central Regional Planning
Stephanie Hickman, Federal Highway Administration
Jim Pierquet, Town of Empire (Board member)
Wayne Rollin, City of Fond du Lac, Community Development (Board member)
Mark Lentz, City of Fond du Lac, Public Works (Board member)
Steve Nenonen, City of Fond du Lac, City Manager (Board member)
Martin Ryan, City of Fond du Lac Council (Board member)
Steve Michels, City of Fond du Lac Council (Board member)
Allen Buechel, Fond du Lac County Executive (Board member)
Ernest Winters, Fond du Lac County Highway Commissioner (Board alternate)
Karen Matze, North Fond du Lac (Representing Board member Mike Tolvstad)
Rick Raupp, Wisconsin DOT
Kurt Miller, Wisconsin DOT
Dick Flood, Fond du Lac County Highway Committee Chairman (Board member)
Walt Raith, East Central Regional Planning
John Shaw, Wisconsin DOT (Representing Donna Brown)

INTRODUCTIONS

APPROVAL OF MINUTES FROM MAY 8, 2003 MEETING

Motion, second, motion carried.

REVIEW AND APPROVAL OF 2004 PLANNING WORK PROGRAM – FOND DU LAC AREA MPO ELEMENTS

Work plan was presented and explained. North Fond du Lac notified East Central that they have not been receiving mailings. This will be corrected. Motion to approve and second, carried.

PROGRESS REPORT ON REGIONAL COMPREHENSIVE PLANNING EFFORT

A copy of the first summary technical report was passed around. This is a required plan by state legislation. East Central received a small grant to complete this project. The Existing Conditions Report is on the website for review. Elements of this report were briefly explained.

PROGRESS REPORT ON LONG-RANGE TRANSPORTATION/LAND USE PLAN

Copy of this map was presented. As the data is more complete, a larger map will be completed with census and land use data. Once this map is complete, the future scenario will be completed and added to the map. Current work is on a travel demand model. The goal is to have the model completed by 2004. Employment data has been gathered and East Central is working with it. As to the air quality portion of this data, 2003 was a good summer with few violations.

OTHER BUSINESS

A PASER workshop will most likely be put on with the cooperation of the Fond du Lac County Highway Department similar to the one held in 2001.

ADJOURN

Motion to adjourn, second, carried.

The next meeting of the MPO Technical Committee will be held at 10:00 AM in meeting room D and E of the Fond du Lac City/County Government Center on Oct. 9th. The next meeting of the MPO Policy Board will be held on Nov. 13th at 10:00 AM.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
TECHNICAL ADVISORY COMMITTEE
Fond du Lac City-County Government Center
October 9, 2003

The meeting was called to order at 10:00 a.m. by Mark Lentz, Chair.

Committee Members Present

Mark Lentz	City of Fond du Lac
Mike Tolvstad	Village of North Fond du Lac
Ernie Winters	Fond du Lac County
Harold Manske	Town of Fond du Lac
Dick Flood	Fond du Lac County
Don Uelmen	WisDOT Madison
Kurt Miller	WisDOT Madison
Sam Tobias	Fond du Lac County
Wayne Rollin	City of Fond du Lac
Rick Raupp	WisDOT Waukesha
Jeffery Volz	WisDOT Waukesha
Stephanie Hickman	FHWA

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Mr. Lentz welcomed the group and began committee member and staff introductions.
2. Approval of the summary of proceedings from the July 10, 2003 meeting.

Mr. Lentz asked the group for any comments or concerns with the minutes. Hearing none, Mr. Winters moved that the Summary of Proceedings be approved as presented. The motion was seconded by Mr. Manske and passed unanimously.

3. Review and discussion of existing functional class street and highway system and proposed transportation analysis zones (TAZs).

Maps were distributed showing the 1998 WisDOT functionally classified street and highway system for the Fond du Lac Urban area. Mr. Raith referred to wall maps and stated that over the last several months the Fond du Lac MPO has established the new "Fond du Lac Urbanized Area Boundary", significantly larger than the boundary used in the 1998 functional classification. He described the boundary as the difference between the Urban-Surface Transportation Program (STP-Urban) and the Rural-Surface Transportation Program (STP-Rural), for street and highway funding programs.

Some discussion followed regarding the various funding programs that include the STP-Urban, part of Transportation Improvement Program (TIP) process that is currently being initiated. Now that the boundary has been enlarged WisDOT, in cooperation with local governments, will need to evaluate the new area and update the street and highway system classifications. Mr. Raith briefly explained that functional classification is a method to identify, rank and designate roadways based on the volumes of cars and trucks and how they serve land use for the movement of people, goods, and services.

He stated that up to 35 percent of the total street and highway miles within the Urbanized Area Boundary can be functionally classified and eligible for STP-Urban funding. He noted that those roads previously classified in the rural area would likely be changed to the appropriate urban designation and added to the total urbanized area mileage. As part of the update, the total mileage in the larger area will be calculated and compared with the 35 percent of total cap. Mr. Raith stated that typically areas will classify less than 35 percent to provide some flexibility so that streets or mileage could be added if needed. He said that first we need to work with WisDOT to recalculate the mileage of the larger area as a starting point before adding any newly classified segments.

Over the next few months MPO staff will be working with WisDOT to add those roadways within the new boundary, rank and change the classifications from rural to urban, and calculate the new mileage for the Fond du Lac Urbanized Area. It is possible some roadways should be added to the system based on the amount and type of traffic they carry, the land use that is served, the spacing between other classified streets, and other factors. Mr. Raith cautioned the group that fairly stringent classification criteria has been developed over the years to ensure that only the most important roadways are designated and eligible for the STP-Urban funding program. He asked the group to review the existing and proposed system and consider any changes that might be made based on local knowledge of the street and highway system.

Mr. Raith stated that WisDOT would like to have the major portion of the update completed by the end of the year. Some discussion followed on the time frame to submit comments on the update. Mr. Raupp concurred that changes should be submitted over the next couple months for review as part of the classification process. Mr. Rollin wondered about the TAC members who could not attend the meeting and did not receive the information. After some discussion the TAC recommended that MPO staff prepare maps and mail the information to members of the TAC regarding the functional class update effort. Mr. Raith stated staff would mail information and contact TAC members not attending the meeting.

Mr. Raith referred to wall maps and noted that the land use and transportation system base information has been collected and formatted for use in the planning process. Land use and socioeconomic data information is being compiled in small geographic areas called Transportation Analysis Zones (TAZs). The TAZ, or zonal, data contains a number of variables including population, dwelling units, automobiles, school enrollment, and various employment types to simulate traffic within the model. Mr. Raith noted that collecting the employment data is a significant work effort and called on Mr. Kakatsch to update the Committee on the progress.

Mr. Kakatsch distributed hand-outs and explained that the employment data had been obtained through a cooperative agreement with the Wisconsin Departments of Workforce Development and Transportation. The data is confidential and, under the agreement, can only be displayed in a manner that would not identify specific employers. He referred to the hand-out that showed number of Employers and Employees by employment category for the Fond du Lac MPO area. The data shows that 1,075 employers provide jobs to 28,673 people in the Fond du Lac area.

The largest type of employment is "service" with 46 percent, followed by "manufacturing" with 22 percent, "commercial" with 19 percent, "wholesale trade" at 6 percent, with 3 percent categorized as "other employment". Mr. Kakatsch said that work continues to locate the employers within the various TAZs based on address range information.

He noted that, to-date, about 92 percent of the employment had been located. Some discussion followed regarding showing employment by TAZ and the effort to keep the information confidential. Mr. Raith speculated that a method could be used to map employment by TAZ relating SIC codes to colors, similar to the land use map, which would not identify the number of employees by zone, but would aid in cross referencing the data for accuracy.

4. Discussion of Highway 23 west, future land use and traffic study.

Mr. Raith referred to a wall map illustrating the Highway 23 corridor west of Highway 41. He explained that as part of the long range planning process staff will be working with MPO communities to develop proposed land use scenarios for the entire Fond du Lac area. Over the past few months meetings have been held with the Town and City of Fond du Lac to discuss future land use plans for the STH 23 corridor.

The map illustrates what would be termed a full-build scenario, which assumes the entire land area on each side of Highway 23 will be fully developed at some point in the future. He added, while most would agree the land will probably be fully developed someday, the difficult part is forecasting how long it will take, 10, 20, 30 or more years. He noted that the Highway 23 corridor analysis is being done first due to current development pressure and issues relating to the local road system.

He referred to various areas of the map and noted proposed commercial, industrial and residential development. He explained that specific trip generation rates are used to forecast the amount of additional traffic that would be expected on area streets and highways. The group discussed the amount of traffic expected on Highway 23 and on CTH T (Esterbrook Road). Mr. Raith explained that county, town and city officials have been discussing the future importance of Esterbrook Road as a north/south arterial, parallel to USH 41. Some discussion followed regarding the proposal to add CTH T to the updated functional class system as an Urban Collector.

The Town of Fond du Lac has mapped a number of proposed roads including the extension of Esterbrook Road north from CTH 000 to CTH 00. Currently the County Highway designation on Esterbrook Road (CTH T) is only from Rogersville Road to STH 23. Some discussion followed regarding a proposal that the extension of Esterbrook Road would become a County highway north from Highway 23 to CTH 00.

Mr. Raith stated that given the future importance of the intersection of Esterbrook and Highway 23, it would likely be signalized at some time in the future and should probably be designed to accommodate through, left and right turn lanes, etc. This is the type of what-if scenario that we would like to develop for a number of important corridors in the Fond du Lac area for inclusion in the long range plan.

Mr. Raupp had concerns regarding STH 23 on the east side of Fond du Lac. Here is a case where the new STH 23 facility is complete; the USH 151 bypass is under construction, with considerable development pressure and future access issues. Mr. Raith concurred and noted that some work is currently being done as part of the Highway 23 corridor study from Fond du Lac to Plymouth. WisDOT District 3 is currently reviewing alternatives and accepting comments regarding future STH 23 and local road access. He added that future land use will also be completed for the Highway 23 east corridor as part of the long range plan. Historically, new highway facilities increase development pressure adjacent to, or near, the new facility. He added that this type of work would also be completed for the new USH 151 bypass corridor around the southern portion of Fond du Lac.

5. Progress report on regional comprehensive planning effort
Milestone Report #1, State of the Region, Summary

Ms. Schell distributed copies of the *Milestone 1, State of the Region, Summary Report* that provides an overview of East Central's comprehensive plan process and major regional issues that have been identified for each of the plan elements.

Ms. Schell stated that the next step is the opportunities and visioning report slated to be completed by the end of 2003. In 2004, work will focus on goals and strategies to accomplish the vision for the plan. Some discussion followed regarding the remainder of the work effort and final report focusing on plan implementation, slated for completion in 2005.

6. Other Business

Mr. Lentz noted that the MPO Policy Committee is scheduled to meet on November 13, 2003. With no additional business, Mr. Rollin moved for adjournment. The motion was seconded by Mr. Tobias and the meeting was adjourned at 11:20 pm.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
TECHNICAL ADVISORY COMMITTEE
Fond du Lac City-County Government Center
January 15, 2004

The meeting was called to order at 10:00 a.m. by Mark Lentz, Chair.

Committee Members Present

Mark Lentz	City of Fond du Lac
Lynn M. Gilles	Fond du Lac Area Transit
Wayne Rollin	Fond du Lac
Sam Tobias	Fond du Lac County
Ernest Winters	Fond du Lac County
Jerome J. Guelig	Town of Taycheedah
Charles McCourt	Town of Friendship
Harold Manske	Town of Fond du Lac
Dick Flood	Fond du Lac County
Mike Tolvstad	Village of North Fond du Lac
Rick Raupp	WisDOT District 2
Kurt Miller	WisDOT Madison
Stephanie Hickman	FHWA

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Introductions

Mr. Lentz welcomed the group and began introductions.

2. Approval of the minutes from the October 9, 2003 TAC meeting

Mr. Lentz asked if anyone had questions, changes or corrections to the summary. Mr. Raith noted that the date on the agenda referencing the summary is an error and should read October 9, 2003. With no additional comments, Mr. Tobias moved that the Summary of Proceedings be approved as presented. The motion was seconded by Mr. Winters and passed unanimously.

3. Review of urbanized area functional classification system

Mr. Raith explained that the functionally classified street and highway network represents what is deemed to be the most important roads in the urbanized area. Facilities included on the system are eligible for federal funds as part of the urban surface transportation program (STP-Urban). Those classified roadways outside the urbanized area boundary are eligible for the rural surface transportation program funds (STP-Rural).

He stated that at the last meeting we discussed the existing functional classification system with regard to the expanded urban area boundary. Those roadways that were classified as rural within the boundary must now be classified as urban. Staff has had a couple of meetings with WisDOT District 2 and Central Office as part of the update process. Originally we were asked to make changes to the system only to reflect the larger urbanized area. With only minimal changes anticipated for the remainder of the system, it was expected that the update would be completed by year's end. Since that time WisDOT has made a decision to reevaluate and update the entire system and staff has been working on that.

At the last meeting the locals were asked to consider any roads that should be added to the system. Mr. Raith referred to the map and noted the additions requested by members of the TAC. He explained that some of the roadways will require traffic counts be taken before the facility can be added to the system. He added that it is a "Catch 22", in that WisDOT only counts on the classified system, but it can not be added until we have counts. A couple of options are available, request that WisDOT conduct the counts or use local staff to count. Mr. Raith stated that in discussions with Mr. Lentz, it was thought the City could provide the needed traffic counts. Mr. Raith noted that East Central also had a few traffic counters that could be used.

Mr. Raith referred to the map and noted the segment identification numbers relate to a spreadsheet being developed by staff. He held up the spreadsheet that describes the location, length, change and justification or criteria used to reclassify the segment. He noted that, with the exception of the routes needing traffic counts, the map is very close to the final product. Mr. Raupp and Mr. Miller concurred that WisDOT is close to signing off on the updated system. Mr. Raith added that after WisDOT approval it would be submitted for review by the Federal Highway Administration (FHWA). After approval by FHWA the updated classification system becomes official.

Ms. Hickman stated that after FHWA acceptance, changes or updates can still be made if there is justification. Mr. Raith concurred that staff would always be open to suggested changes if requested through the MPO. Some discussion followed regarding the consideration of truck routes. Mr. Raith explained that truck routes are typically higher level state and county roads that are, for the most part, already on the system. However, as part of the long range plan we will be identifying trucking terminals and other freight facilities to evaluate future access needs on the system.

Some discussion followed regarding the expanded urbanized area and whether it had been finalized. Mr. Raith stated that the MPO, WisDOT and FHWA had previously approved the new urbanized boundary. He added that it would likely not be updated again until sometime after the 2010 census. It was noted that anticipated development on the northwest side of Fond du Lac was not included and concerns were raised about the ability to proceed. Mr. Raith stated that the urbanized area boundary really has no impact on longer-range development plans. He added that the boundary should reflect current or eminent contiguous urban development, combined with that area identified by the census. Ms. Schell clarified by adding that this boundary should not be confused with the sewer service area boundary that could impact developments anticipated to be served by sewer. Ms. Hickman noted that while the area is not in the Urbanized Area, it would be eligible for STP-Rural funding if the facility is on the rural classified system.

4. Status report on Fond du Lac Urbanized Area long-range transportation and land use plan process

Ms. Schell began the discussion by describing work ongoing behind the scenes to prepare for plan development. At the last meeting the TAC discussed the population and employment data that is being compiled by traffic analysis zone. She added that TAZs are small geographical areas used by the travel demand model being developed. Ms. Kraemer referred to a map display showing the Fond du Lac area by TAZ, while the TAC reviewed tables showing population, housing units and vacancy for each TAZ. Some discussion followed regarding the tables and map. It was noted that without TAZ maps it would be impossible to review the information. Ms. Schell stated that staff is really trying to introduce the MPO TAC to the process used in the MPO long range planning process.

Ms. Schell noted that staff would prepare TAZ maps and distribute them to the TAC prior to the next meeting (Attached). Some discussion followed regarding the land use information being collected. Ms. Kraemer clarified that the land use has not been connected to the TAZ coverage yet, but that the work is currently under way. She explained the process to geo-code the employment information by address so that it can be used in the analysis.

Mr. Kakatsch provided hand-outs and stated that at the last meeting the TAC reviewed the number of employees and employers within the Fond du Lac MPO. He explained that some of the data was missing including those employers that are not required to participate in the state's unemployment compensation program, mainly tax exempt and non-profit entities. The new data shows 1,275 total employers and 37,741 total employees. He explained that this data would also be geo-coded by TAZ for use with the travel demand model. Ms. Schell reminded the TAC that the employment data was provided under agreements that it would be kept confidential. She explained that the MPO is not allowed to show the data in any way that would identify an employer.

Some discussion followed regarding the future land use and at what point will some sort of projection be made. Mr. Raith explained that a portion of preparing the land use plan is really collecting whatever plans are already available. For example, the Village of North Fond du Lac has a completed and adopted land use plan that can be directly inserted in the MPO plan. Mr. Raith cautioned that typically each jurisdiction has a fairly optimistic view of how much development is expected in the future. WDOA population lab and East Central will complete population and employment projections for the MPO. That projection will be termed the "control total", or the 2030 projection for the entire MPO area. The TAC or MPO will have to work with the control total and place the proposed future land use in the appropriate location. Mr. Rollin stated that the City also has a plan that will be updated in some areas and thought that assembling the future land use would be interesting work.

Mr. Raith stated that one part of the plan preparation will be the development of the Fond du Lac travel demand model. He explained that the TP+ model software will be used after compiling and formatting year 2000 "base year" socioeconomic data, and the existing street and highway network information. In the model, trips are generated by rates applied to the socioeconomic data variables in the TAZs. Trip distribution and frequency is then adjusted and calibrated to match the actual traffic counts on the street and highway network in the base year. After the model is deemed to be valid through the calibration process, it can be used to prepare traffic projections based on future land use. For example, if a community plans an industrial park, that number of employees will be added to the TAZ. Running the model with the proposed land use will provide estimated traffic that could be added to the system. He concluded by saying the model can be a powerful tool for assessing future need on the system. The model will also be used to evaluate alternative development scenarios that will be prepared as part of the planning process.

Ms. Schell began to describe the public involvement requirements and asked that the Committee consider developing a mailing list that would inform area stakeholders about the upcoming plan preparation. She went through a list of those that should be involved including local governments, transportation providers, and human services agencies, representatives from the larger employers, trucking companies, the railroad, bicycle, pedestrian, other interest groups, and the public. She added that staff is currently working on a public involvement plan that must be available for a 45 day review and comment period. Mr. Rollin stated that Fond du Lac officials will begin to develop a mailing list. The group agreed to develop a list of stakeholders prior to the next meeting.

Ms. Schell stated that several options are available for the MPO to take the next step in the planning process. One option is to assemble a meeting with an expanded TAC developed from the mailing list of area stakeholders. Some discussion followed regarding the size of the group that will make up the planning group. Ms. Schell stated that the number could be as high as fifty, but that 20 or 25 people would be more manageable group for discussion. The stakeholders could meet prior to a public information regarding the plan, where interested citizens would also have an opportunity to become involved in the planning process. Another option would be holding both meetings at the same time, kicking off the process with the TAC members and public together.

At some point staff will be in contact with TAC members to schedule a public information meeting regarding the plan so that citizens interested in the process could be included. Some discussion followed regarding various places such a meeting could be held including the City/County building or UW-Fond du Lac. Some questions were raised regarding the timeline of the process. Ms. Schell noted that staff is in the process of developing a schedule and it will be provided to the TAC prior to the next meeting (Attached).

5. Status report on the STH 23 west corridor

Mr. Raith explained that East Central has been involved in access and land use issues on STH 23 over the last several months. He referred to a display map that was termed a "full build" scenario, showing the existing vacant land adjacent to the corridor, fully developed with a mix of commercial, industrial and residential land uses. The purpose of the study is to estimate the number of vehicles expected to use STH 23 when the area is fully developed at some time in the future. Mr. Raith stated that other land use scenarios would likely be prepared as part of the planning process, including potential development associated with the proposed USH 151 bypass.

The next step in the process is the preparation of a Traffic Impact Analysis (TIA) that will use the numbers developed in the land use study. He explained that the traffic forecast prepared are currently daily or 24 hour volumes. The TIA will convert the numbers to hourly and peak hour forecast to evaluate proposed intersection capacity and operations. He added that the term "peak hour" traffic refers to the highest volumes of traffic in a single hour of the day. WisDOT will be review the traffic forecast developed in the land use study and TIA as they consider the design of intersections and approaches along the corridor.

Mr. Raith stated that he is expecting information from WisDOT that will specifically describe the information needed to complete the TIA. Discussion followed regarding recent local officials meetings with WisDOT and agreements reached in terms of future access locations and longer term improvements to west STH 23. Mr. Raith stated that an important result of the planning process is an agreement to add STH 23 to WisDOT's 6-Year program. He added that at some point the MPO should probably develop a formal resolution supporting improvements to STH 23 that would ultimately be part of the MPO plan. Some discussion followed regarding the importance of having the proposed future improvements on WisDOT's "radar screen".

6. Other business

Some discussion followed regarding the future schedule for TAC and Policy Committee meetings. It was noted that MPO TAC meetings are scheduled for 4-8-04, 7-8-04 and 10-14-04. The MPO Policy Committee meetings are scheduled for 2-12-04, 5-13-04, 8-12-04 and 11-11-04. All meetings are slated to begin at 10:00 A.M. at the Fond du Lac City/County building in rooms D and E. Ms. Schell stated that the list of meeting dates will be included in the summary of proceedings of the meeting. Ms. Hickman noted that November 11, 2004 is a federal holiday. After some discussion regarding the meeting schedules it was determined to leave the dates as presented. Ms. Schell added that a draft of the public involvement plan and a schedule for the long range plan would be provided to the TAC prior to the next meeting. Ms. Hickman stated that the TAC should also review the 7 planning factors that must be considered as part of the federal planning requirements. Mr. Raith noted that the Committee had discussed the planning factors at prior meetings and staff will provide the list to the group prior to the next meeting (Attached).

With no additional business, Mr. Manske motioned that the meeting be adjourned. The motion was seconded by Mr. Rollin and passed unanimously at 11:50 A.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
February 12, 2004

The meeting was called to order at 10:00 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel.....Fond du Lac County Executive
Ernest Winters..... Fond du Lac County Highway Commissioner (Alternate)
Rick Raupp..... Wisconsin DOT
Karen Matze Village of North Fond du Lac
Mark Lentz City of Fond du Lac
Tom Ahrens..... City of Fond du Lac
Kurt Miller Wisconsin DOT
Stephanie Hickman Federal Highway Administration

Staff Present

Ann Schell.....Assistant Director
Jason Kakatsch..... Transportation Planner
Melissa Kraemer Planning Specialist

1. Introductions

After introductions Mr. Buechel asked if the MPO funding had been approved. Ms. Schell confirmed that the funding had been approved.

2. Approval of the August 14, 2003 meeting summary of proceedings

Mr. Buechel asked the group for any comments or concerns with the meeting notes. Hearing none, Ms. Matze moved for the approval of the summary of proceedings. The motion was seconded by Mr. Winters and passed unanimously.

3. Progress report on the long-range transportation/land use plan

Ms. Schell described the development of the employment data is being developed. Mr. Buechel asked for a time frame for the completion of the employment data and Mr. Kakatsch responded with 2-3 weeks.

Ms. Schell also commented that WisDOT will provide East Central staff with a consultant for the transportation model. Mr. Miller added that February 13, 2003 is the deadline for the proposals from consultants. Ms. Hickman asked Ms. Schell if additional Technical Advisory Committee meetings would be set up to discuss model information. Ms. Schell replied with possibly. Ms. Matze requested that East Central staff set-up a MPO kick off meeting.

4. Draft Fond du Lac MPO Public Involvement Policy – review and release for public review

Ms. Schell commented that it is a federal requirement for the Fond du Lac MPO to make special reference to minorities and language issues (Title 6). Ms. Schell commented on the data tables with

Fond du Lac's population. She mentioned that the Census Bureau has changed their classification with regard to population races. If you are more than one race, you are counted in each race. Ms. Hickman commented that this is the first year that the Census is doing that. Ms. Schell also commented that this census data is the actual 2000 data. Ms. Matze inquired about services being provided to people who are blind and what the conversion time would be to convert documents to Braille. Ms. Hickman mentioned that she use to work at the Iowa DOT and they would provide tape for the people that were blind. Mr. Buechel also mentioned that Fond du Lac County has a directory for people who interpret languages. Ms. Schell commented on the group quarters/household tables for Fond du Lac County.

Ms. Schell discussed the Public Involvement Process. The first two items that she discussed were the identification of stakeholders and how the Public Involvement policy would need a 45 day comment period. She also talked about the Long-Range Plan and that it would include notation in Spanish and Hmong. Ms. Schell inquired about putting the information regarding the Long-Range Plan on a website. A few suggestions were the City of Fond du Lac, the Village of Fond du Lac, Fond du Lac County, or East Central's website. Ms. Schell commented that East Central's website is currently in the process of redevelopment. Mr. Buechel suggested that Ms. Schell contact Scott Schmitz for the Fond du Lac County website.

Ms. Schell discussed that the Fond du Lac MPO would need to do a Transportation Improvement Program for 2005. Mr. Winters felt that there would be value in doing a dry run of the TIP because then there would be a list of projects to begin working on for the 2005 TIP. Ms. Hickman also felt that doing a dry run for the TIP would be valuable.

Ms. Matze asked that the planning documents be available to the Village of North Fond du Lac. She also suggested burning CDs with pdf. files for the different planning documents as a cost efficient method for distributing information.

Ms. Schell commented that in there would be a mailing list in Appendix 1 for the Public Participation Process document. She asked that the Policy Board look over the current list and see if there were any townships or other companies that they would like to see on there. Ms. Schell also commented that more people could be put on the list at the public information meetings or as different issues come up. Ms. Matze asked that as issues arise, that they be discussed with the North Fond du Lac school district, the ambulance service, and the police department. Ms. Matze also suggested adding representatives from Moraine Park, Marian College, UW-Fond du Lac Campus, and the surrounding school districts. Other suggestions for representatives were from Brook Industries, Agnesian HealthCare, St. Agnes Hospital, Aurora Health Care, a representative from the senior residents, and someone with regard to the recreational trails around the area.

5. Review and approval of long-range transportation/land use Technical Advisory Committee

Ms. Schell asked for any comments regarding the long-range transportation/land use Technical Advisory Committee. Ms. Matze commented that as issues arise that staff should also discuss them with the North Fond du Lac school district and police department. It was noted that representatives from the Town of Lamartine and Byron were not included on this list and staff said that they would include a representative from those towns on a revised list. Ms. Schell also commented that the more people could be brought on to the committee at the public information meetings and as issues in the planning process come up. With no other objections or comments, Mr. Buechel asked for a motion of approval. Mr. Ahrens moved to approve and Ms. Matze seconded the motion. Motion for approval was passed unanimously.

6. Other Business

Ms. Hickman encouraged the committee member to take the public involvement policy to the different committees and get them more involved with the planning process. Ms. Matze requested that Ms. Schell send an updated version of the Public Involvement Process. Mr. Miller commented that the functional classification update for the adjusted urbanized planning area is almost complete. Approval for the functional classification update will be in the TAC in April and the Policy Board in May. Mr. Miller also commented of possibly moving up the date of the TAC meeting. Ms. Hickman stated the that Federal Highway Administration uses the updated Functional Classification for the Highway Improvement Program.

7. Adjourn

Mr. Buechel noted that the next Fond du Lac MPO Policy Board meeting is scheduled May 13, 2004 at 10:00 AM at the Fond du Lac City/County Government Center in room D and E. With no additional business, Mr. Winters moved to adjourn. The motion was seconded by Mr. Ahrens.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
TECHNICAL ADVISORY COMMITTEE
Fond du Lac City-County Government Center
April 8, 2004

The meeting was called to order at 10:00 a.m. by Mark Lentz, Chair.

Committee Members Present

Mark Lentz	City of Fond du Lac
Steve Michels	City of Fond du Lac
Lynn M. Gilles	Fond du Lac Area Transit
Wayne Rollin	Fond du Lac
Sam Tobias	Fond du Lac County
Ernest Winters	Fond du Lac County
Dick Flood	Fond du Lac County
Charles McCourt	Town of Friendship
Harold Manske	Town of Fond du Lac
Norbert Kolell	Town of Empire
Rick Raupp	WisDOT District 2
Kurt Miller	WisDOT Madison
Stephanie Hickman	FHWA

Committee Members Absent

Mike Tolvstad	Village of North Fond du Lac
Jerome J. Guelig	Town of Taycheedah

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Introductions

Mr. Lentz welcomed the group and began introductions. The TAC Committee acknowledged a new TAC member and new Supervisor from the Town of Empire, Norbert Kolell.

2. Approval of the minutes from the January 15, 2004 TAC meeting

Mr. Lentz asked if anyone had questions, changes or corrections to the summary. With no additional comments, Mr. Winters moved that the Summary of Proceedings be approved as presented. The motion was seconded by Mr. Flood and passed unanimously.

3. Public Involvement Policy Review

The Committee reviewed the material as Ms. Schell described the requirement of an approved public involvement document as part of the MPO planning process. She noted that a 45 day review period is required to insure that the public has an opportunity to comment on the plan. Some discussion followed relative to seeing recent newspaper ads informing citizens about the public involvement process and comment period. Mr. Raith asked if anyone had seen the newspaper ad for the long range plan public information meeting slated for April 27, 2004. It was noted that the ad was in three languages including Spanish and Hmong. Some questions followed regarding the need to advertise in different languages. Mr. Raith noted that the MPO is obligated to consider all sectors of the population including minorities and low income in the planning process.

Low income and minority populations are even more important when considering and planning for transportation opportunities or lack of. He added that Fond du Lac does not have a large minority population, but we are hopeful some will comment and provide input into the process. The idea is to collect as much information as possible for the MPO Policy Board to base transportation decisions on.

Mr. Rollin moved to recommend that the public involvement process be approved and forwarded to the MPO Policy Board for adoption. The motion was seconded by Mr. Tobias and passed unanimously.

4. Approval of functionally classified system

Mr. Raith stated that at the last meeting we discussed the proposed functional classification system with regard to the expanded urban area boundary. Those roadways originally classified as rural, now within the boundary, have been classified as urban. Staff has completed a proposed functional class map that was included in your packet. Over the past few weeks, staff has worked with WisDOT to finalize a proposed functional classification system for Fond du Lac. Once the new mileage is included in FHWA's Highway Performance Monitoring System (HPMS, information attached), we can establish what percent of the total system is classified. Ms. Hickman noted that FHWA would like to have the proposed system prior to June 1, 2004.

Mr. Raith referred to the map and noted that segment identification numbers relate to the spreadsheet provided by staff. Some discussion followed regarding the spreadsheet that describes the location, length, change and justification or criteria used to reclassify the segment. He noted that, with the exception of the routes needing traffic counts, the map is very close to the final product. We hope to approve the system and submit it to FHWA over the next week or so. Mr. Raith added that after FHWA acceptance, changes or updates can still be made after traffic counts have been taken on some of the roads in question. Mr. Raith stated that staff would always be open to suggested changes if requested through the MPO.

Mr. Michels moved to approve the functional classification system as presented. The motion was seconded by Mr. Manske and passed unanimously.

5. Long-range transportation/land use plan status report

Ms. Schell described the long range plan schedule as aggressive, with the proposed completion of the plan slated for October of 2005. She reiterated that the data collection and formatting required for the analysis is nearly ready for the visioning phase and citizen input and participation. The first public information meeting is scheduled from 5:00pm to 8:00pm on April 27, 2004, in rooms D and E at the Fond du Lac City/County building.

The Committee reviewed the national planning factors provided by FHWA that are considered as part of the planning process. The group reviewed and discussed the maps that relate to the TAZ census information tables. Mr. Raith encouraged the group to review the information closely and compare the populations within the TAZs between the maps and the spread sheets. Staff is also comparing the socioeconomic information against the land use to identify any discrepancies or errors. Mr. Raith stated that the socioeconomic data by TAZ is used in the travel demand model for trip generation. Staff also has the digital transportation network needed to begin the coding process. He explained that as part of model development the network must be coded for the speed, the number of lanes, the capacity, land use and other variables.

Mr. Raith stated that WisDOT recently retained a consultant to provide technical assistance to MPOs developing or updating the travel models. The consultant will be working closely with staff to prepare a new model for the Fond du Lac area. Mr. Miller said he did not know exactly when the consultant would start working with staff, but a kick-off meeting for the MPOs is being planned for the near future. Mr. Raith stated that staff is ready to begin as soon as the consultant schedule is established.

6. Status report on STH 23 Study

Mr. Raith explained that East Central has been involved in an access and land use study for STH 23 west over the last several months. He distributed maps showing the full build scenario for the STH 23 corridor. He described the existing vacant land adjacent to the corridor and explained that in this scenario it is fully developed with a mix of commercial, industrial, and residential land uses. The purpose of the study is to estimate the number of vehicles expected to use STH 23 when the area is fully developed at some time in the future. He added that, while most agree some day this area will be fully developed; the tricky question is when, 20 years, 50 years or more. He warned the Committee that the proposed land use map could unintentionally scare people if taken out of context.

The result of the analysis shows the anticipated traffic on STH 23 after the development has occurred. He referred to the map and noted that more than 20,000 vehicles per day could be expected on STH 23 near the Esterbrook intersection. This information will assist WisDOT in determining the design for the future roadway. Mr. Raith reminded the Committee that WisDOT District 2 has agreed to include the STH 23 west project for consideration in the next 6-year program that will be developed. That means that the highway could be scheduled for improvements in 8 to 10 years, although there are no guarantees relative to the state budget. Some discussion followed regarding the proposed access points that had been discussed at earlier meetings. Mr. Raith informed the group that the new church access to STH 23 had been granted and that the north leg of the new Streblow Drive intersection had been constructed. He indicated that the south leg of Streblow Drive could be constructed, if it mirrors the design of the north leg.

Mr. Manske wondered if additional study would be needed to construct the south leg. Mr. Raith told the group that he had met with Donna Brown from WisDOT District 2 to discuss the corridor study and future access to the highway. The study shows that the proposed Streblow Drive intersection between Esterbrook Road and Town Line Road would be fairly busy and would require, at a minimum, a design that would match the intersection approved for the church. Mr. Manske noted that the Town had passed the memorandum of understanding, but had not heard from WisDOT. Mr. Raith said he would contact Mr. Manske in a few days and see if a final determination had been made by the District.

Mr. Raith concluded by saying that the full build scenario would be revisited using the travel demand model after it is ready for use. He added that the model will give the locals an opportunity to test impacts to the transportation system by considering various development scenarios. He recommended that as part of the planning process that the Town of Fond du Lac start discussions regarding the second public road access point, between proposed Streblow Drive and Town Line Road, agreed to in concept by the Department.

7. Other business

Mr. Lentz reminded the Committee of the future schedule for TAC and Policy Committee meetings. It was noted that MPO TAC meetings are scheduled for 7-8-04 and 10-14-04. The MPO Policy Committee meetings are scheduled for 5-13-04, 8-12-04 and 11-11-04. All meetings are slated to begin at 10:00 A.M. at the Fond du Lac City/County building in rooms D and E.

With no additional business, Mr. Flood motioned that the meeting be adjourned. The motion was seconded by Mr. Manske and passed unanimously at 11:50 A.M.

SUMMARY OF PROCEEDINGS
Fond du Lac Area MPO
Long Range Plan Committee Meeting
April 27, 2004

The meeting was called to order at 1:30 p.m. by Ann Schell, ECWRPC.

Committee Members Present

Dennis Fortunato	City of Fond du Lac Police
Ernest Winters	Fond du Lac County
Harold Manske	Town of Fond du Lac
Jim Pierquet	Town of Empire
Joe Reitemeier	Fond du Lac Association of Commerce
Wayne Rollin	City of Fond du Lac
John Ramer	Fond du Lac Development Corporation
Lynn Gilles	City of Fond du Lac Transit
Donna Brown	WisDOT District 2

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Introductions

After introductions the group discussed the possible reasons more members of the business community were not present. Some discussion followed regarding the number of invitations that were mailed and potential participants in the process. Mr. Reitemeier explained that people of the business community have a difficult time attending meetings during business hours. The group decided that meetings early in the morning would provide a better opportunity for the business community to participate in the process.

2. Introduction to the MPO Status

Ms. Schell explained that the federal planning requirements started when the Fond du Lac area surpassed 50,000 in population. The process included the formal establishment of the Fond du Lac Area Metropolitan Planning Organization, consisting of a Policy Board representing the various communities and the County to direct long range planning activities.

In addition, a larger Technical Advisory Committee has been established to review and provide information and recommendations to the Policy Board. East Central Planning has been designated as staff for the MPO to assist the Policy Board in meeting federal planning requirements. Ms. Schell noted that East Central has been the MPO for both the Fox Cities and Oshkosh since the 1970s. There are three main requirements from the Federal Highway Administration for the MPO: (1) develop Transportation Improvement Program for five years, (2) develop a work program, and (3) develop a Long range Transportation and Land Use Plan.

Ms. Schell stated that what was being done for the Fox Cities and Oshkosh Urbanized Areas was just an update, but in the Fond du Lac Urbanized Area we will preparing new plan from scratch. Ann also explained that the MPO needs to function as one entity, not each jurisdiction, in order to complete this process.

3. Discuss Scope of the Long-range Transportation/Land Use Plan

Ms. Schell updated the Committee on work activities underway including the data collection for the socioeconomic and land use information. Over the last several weeks staff has been developing informational display materials including current transportation issues that can be presented to the public and the Long-range Plan Committee for consideration. Ms. Schell explained that staff will be analyzing all modes of transportation as a system.

Mr. Reitemeier asked if there were any performance measures, such as safety or enhancing existing roadways. Ms. Brown responded there were performance standards for safety. Some discussion followed regarding facility design standards based on crash rates and other criteria and standards. Other performance measures typically used to assess the transportation system include vehicle capacity for a given street design, level of service measurements that relate to a range traffic operation characteristic from free flow to congestion.

Mr. Raith described the display material that will be used at the first Public Information meeting to illustrate the planning process from start to finish. Displays show the progression of the process starting with the establishment of the study area. The next step is data collection including existing land use and socioeconomic information including population, dwelling units, school enrollment and employment by category, all by location. He added that the inventory and data collection phase is nearly complete and the next step is to share this information with local governments and the public, to initiate the visioning phases.

Ms. Schell began the discussion about general transportation issues that have been raised in other planning efforts. She noted that the issues illustrated were not specific to Fond du Lac, but to most communities. We intend to refine the issues and identify those specific to the Fond du Lac area. Mr. Ramer offered a number of issues including protecting air quality and the Niagara Escarpment, as well as economic viability. Mr. Rollin added that the city should be concerned about rail preservation as it is a big part of the Fond du Lac system. Some discussion followed regarding a potential inter-modal facility as a way to move truck trips to rail.

The group agreed that portions of the transportation system may be improved by designating specific routes and weight restrictions for trucking. Fond du Lac is served by USH 41 that provides excellent access to markets. Mr. Rollin wondered if USH 41 would ever become an interstate highway in the future. Ms. Brown added that it had been considered in the past but will most likely not happen.

Mr. Fortunato responded that from a law enforcement perspective, homeland security for rail and trucking from Canada will be an issue in the future. Mr. Rollin included that the enhancement of substandard roads and preserving the Highway 23 corridor would be important. He added that there were traffic congestion problems at Pioneer Road and STH 175, and Johnson Road.

Ms. Gilles noted that there were some transit issues, both long term and short term. Population projections identify aging populations that will likely be more dependent on public transportation and programs like shared-ride service. She added that in the near term we are experiencing congestion at some intersections including National and Johnson Streets. Mr. Rollin added that adequate planning should be done to include bike and pedestrian facilities on new projects, and also a bicycle bridge for the Wild Goose Trail over USH 41.

Discussion followed regarding a number of important regional highway corridors including USH 151 and STH 23, east and west of Fond du Lac. Mr. Reitemeier added that as a part of growth management the regionalization of services should be an important issue.

Ms. Schell stated the full list of issues will be included at the public information meeting, and also provided to the Long Range Plan Committee prior to the next meeting (attached).

4. Other Business

Ms. Schell stated that at the next meeting the Committee will be developing goals for the Fond du Lac Urbanized Area.

The group discussed possible ways to increase participation on the Long Range Plan Committee. It was decided that the next meeting would be held on June 3, 2004, at 7:30A.M. in order to be more conducive to members of the business community.

With no additional business the meeting was adjourned at 3:30 P.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
May 13, 2004

The meeting was called to order at 10:00 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel	Fond du Lac County Executive
Richard Flood	Fond du Lac County Highway Committee Chair
Rick Raupp	WisDOT, District 2
Karen Matze	Village of North Fond du Lac
Wayne Rollin	City of Fond du Lac
Lindie Kimball	City of Fond du Lac
Jim Pierquet	Town of Empire
Kurt Miller	WisDOT, Madison
Stephanie Hickman	Federal Highway Administration

Staff Present

Ann Schell	Assistant Director
Walt Raith	Principal Transportation Planner
Melissa Kraemer	Planning Specialist

Others Present

Ernest Winters	Fond du Lac County Highway Commissioner
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1. Introductions

2. Approval of the February 12, 2004 meeting summary of proceedings

Mr. Buechel asked the group for any comments or concerns with the meeting notes. Hearing none, Mr. Rollin moved for the approval of the summary of proceedings. The motion was seconded by Mr. Pierquet and passed unanimously.

3. Resolution No. 1-04: Approving the proposed functional classification street and highway system for the Fond du Lac Urbanized area

Mr. Raith referred to the functional classification maps that were included in the packets and noted that the local roads that the technical committee had requested to have added as collectors on the system were included. He added that traffic counts still needed to be taken on those roads this summer, and that they would be confirmed at a later date. He reminded the Board that the functional system can include up to 35% of the total road mileage, and that inclusion on the system makes projects on these roads eligible for federal funding.

Ms. Matze asked why we are using 1998 urbanized area as a base. Mr. Raith explained that the old boundary was the starting point and we needed to make changes from that point out to the new 2000 boundary. Mr. Raith tried, unsuccessfully, to explain that the boundary is updated every 10

years as a result of the decennial census. Ms. Hickman added that 1998 was probably the last time that the functional classification system was updated. Mr. Winters asked how often it can be amended. Ms. Hickman said that while FHWA does not encourage frequent amendments, an amendment can technically be made anytime a road reaches the criteria to be included.

A motion for the approval of the functionally classified system was made by Ms. Matze, seconded by Ms. Kimball, and passed unanimously.

4. Report and discussion regarding the April 27, 2004 long range plan public information meeting.

Ms. Schell told the Board that there were about ten people that signed in at the public information meeting, and there was one comment sheet received from a gentleman concerning some transit issues that will be taken into consideration in the planning process. She asked that if there were any suggestions to get more people to attend, staff would be happy to hear them. She noted that there was a large ad in both papers and fliers were mailed out widely. It was discussed that it is difficult to get people interested when there is not a particular project that is directly affecting them. Even then, the concern does not usually surface until the bulldozers show up. Mr. Flood asked if there were any particular comments made at the meeting. Mr. Raith said that there were some issues relative to rail crossings.

5. Progress report on regional comprehensive planning effort: Milestone Report #2, Issues Opportunities and Visioning

Ms. Schell explained that while Fond du Lac County is not a member of East Central, it is still within the region, and therefore included in the regional comprehensive plan. The report noted is the second in a series of 4 reports. It was presented to and accepted by the Commission at their April 30th quarterly meeting. East Central staff is in the process of compiling a summary report, which will be made available to the Board at their next meeting.

6. Other Business

Mr. Rollin noted that the attendance for this meeting was not very good, and suggested that it might be due to the light agenda. He asked if anyone thought we needed to reconsider the meeting time. Mr. Flood noted that there was sometimes a conflict with the County Highway Committee meeting, which has been on the second Thursday of the month, in the morning, for many years. It was suggested that the afternoon might be an option. Mr. Rollin asked that the issue be included on the next meeting agenda.

Mr. Raith provided information on the recent changes to the federal train horn rule, and offered to follow-up with additional information to interested Board members. Mr. Rollin noted that the City's concerns had to do with the standards, and who will enforce them, particularly the medians to keep people from driving around the gates. Some discussion followed regarding the Federal Railroad Administration web site and information available including the listing of current "whistle ban" crossings in Fond du Lac. Ms. Matze asked that staff e-mail the FRA web site address. Mr. Raith said he would forward the information when he returned to the office. Mr. Flood said that he would be interested in copies of the information for the County Highway Committee.

As an additional item, Ms. Schell stated that East Central staff had met with WisDOT's consultant that will be working with all the MPOs in the state, on the new transportation modeling software, TP+. She said that they were impressed with the amount of information that was already compiled, particularly for the Fond du Lac Urbanized Area.

It was agreed that we would lead with the Fond du Lac model, ahead of the Fox Cities/Oshkosh model, because it is a smaller model and we will be working with a clean slate. Also, the data is very nearly ready to run.

Mr. Rollin asked about having MPO information appearing on a website. Ms. Schell said that she had been working with the County website people, but had not gotten everything to them yet. It was agreed that the County website was the most appropriate place, and that other municipalities could include a link to the site on their respective sites if they so desired.

7. Adjourn

Mr. Buechel noted that the next meeting of the Policy Board is set for August 12th, 10:00 a.m., at the Fond du Lac City/County Government Center in room D and E. He added that the group would be discussing a new vice chair at that meeting. With no additional business, Mr. Flood moved to adjourn. The motion was seconded by Mr. Pierquet.

SUMMARY OF PROCEEDINGS
Fond du Lac Area MPO
Long Range Plan Committee Meeting
June 3, 2004

The meeting was called to order at 7:30 a.m. by Ann Schell, ECWRPC.

Committee Members Present

Ernest Winters	Fond du Lac County
Harold Manske	Town of Fond du Lac
Jim Pierquet	Town of Empire
Joe Reitemeier	Fond du Lac Association of Commerce
Wayne Rollin	City of Fond du Lac
John Ramer	Fond du Lac Development Corporation
Herb Kedingner	Mercury Marine
Stephanie Hickman	FHWA
Kurt Miller	WisDOT Madison

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Introductions

After introductions the group discussed possible reasons more members of the business community were not present. Mr. Reitemeier explained that businesses have a different concept of long range planning and are probably not thinking in terms of 25 years in the future. In most cases a business long range plan is more likely about 18 to 20 months. The group agreed that shorter term or existing transportation issues should be identified and discussed with the business community. Mr. Raith added that representatives of the business community including Mr. Reitemeier and Mr. Ramer will be very helpful in the discussion about current and future transportation system needs.

2. Approval of minutes from April 27, 2004

Ms Schell asked if anyone had questions or comments on the summary of proceedings from the last meeting. The group had no changes and approved the summary as presented.

3. Summary of public information meeting

Ms. Schell stated that the meeting was fairly well attended and included members of transportation service providers, city council and county board members, and the public. She explained that displays at the meeting included information regarding existing conditions for land use and socioeconomic information, the planning process, and a listing of transportation and land use issues. The displays were arranged in sequence from the existing information gathering phase, issues and opportunities, and finally goals, objectives and policies to implement the long range vision for the community and basis for the plan. In particular, Ms. Schell noted comments regarding transit and paratransit observations from users of those services.

4. Vision and Goal Development

Ms. Schell suggested that, as a starting point, the group consider what they would like the Fond du Lac area to look like in the year 2030. Some discussion followed regarding the vision statement and the importance of goal development. Mr. Kedingler added that most businesses have a vision statement. Mr. Raith asked if the City of Fond du Lac had a vision statement in the current plan. Mr. Rollin stated that he didn't recall a specific vision statement, but that the plan contains a vision and the associated goals. After some discussion the group agreed that a new vision should be developed and evaluated relative to the current plan. The group reviewed East Central's regional vision statement developed as part of the comprehensive plan, specific to the transportation system. "In 2030, an efficient regional transportation network provides options for the mobility needs of all people goods and services.

Mr. Reitemeier noted there was nothing in the statement having to do with safety and effectiveness. Ms. Hickman added that safety is a priority and should be explicitly incorporated into the planning process. The group agreed that safety would certainly be an important consideration for the transportation system. The group agreed the vision should include "... safe options for the mobility needs of all people goods and services."

The group discussed a list of planning issues raised at prior meetings and worked to develop goals. Mr. Kedingler said, as a large manufacturer, energy planning for the future will be needed to meet demands of expanding business. He suggested that the community consider a goal to investigate multiple options for reliable energy sources in the future. He noted that Mercury currently buys power from Canada and briefly explained the distribution method and benefits. Mr. Rollin developed a goal for environmental resources, to protect and preserve environmentally sensitive areas, air quality, and water resources.

Mr. Winters suggested a goal for streets and highways, to maintain and enhance strategic access to major highways for safe and efficient traffic management. The group agreed controlling access was a major issue.

Some discussion followed regarding growth management for the Fond du Lac area. Mr. Kedingler stated that he was not sure if there was enough infrastructure in place for 25 years of planning. Mr. Winters asked if the MPO responsibility was to define growth for an area or was the concern mainly transportation. The committee formed a goal to further define growth patterns, encouraging further regionalization and coordination, as a means for providing services efficiently and effectively. Mr. Kedingler added that the Fond du Lac airport needs to stay viable, and noted that events like EAA has spin-offs and brings money into the community. It was noted that airport expansion would be difficult given the location within an urbanizing area.

Mr. Rollin added that rail is also important to Fond du Lac and needed to be preserved. The group developed a goal to protect and enhance rail service along the main corridor, providing access to industries and distribution centers. Mr. Raymer stated that Fond du Lac might be too close to Chicago to create inter-modal facilities and be financially effective for the railroad. Mr. Kedingler added that Mercury Marine sends out 103 trucks a day, mostly going to shipping ports. Mr. Raith added that while truck to train, takes trucks off the road in general, an inter-modal facility could increase truck traffic in the area around the facility. The group agreed that freight would be an important component in the plan.

Mr. Pierquet asked if it was possible to build roads and highways better to withstand heavier loads. Mr. Winters stated that roads can be built more durable but costs increase. There were also concerns with safety as trucks are hauling excess weight. The group determined that a goal to handle freight, would be to build and maintain safe highway facilities to tolerate heavy loads and increasing traffic volumes.

Mr. Reitemeier added that the overall goal was for growth to occur, and that the area needs companies in order to have jobs. Mr. Miller stated that land-use and transportation are interrelated, so if growth occurs the transportation infrastructure will also need to grow. Mr. Rollin was concerned with the shift in demographics, less people relying on the transit system, but it still needs to be maintained. Passenger rail was also needed as an alternative mode of transportation for the area. From the discussion a goal was developed to promote land use development which encourages efficient transit service, including infill and more compact development. The committee continued with some discussion about pedestrian and bicycle facilities. Mr. Rollin stated there was a need to continue to build safe bike and pedestrian accommodations in heavy traffic areas and develop a trail network.

Mr. Kedingler suggested developing a frontage road system along Pioneer Road and along USH 151 on the east side of Fond du Lac. He speculated that these would be rapidly developing areas that would provide economic opportunities. He added that the area could include and promote business incubators as a means to enhance economic viability. Some discussion followed regarding other areas that are expected to be under the most pressure for development. Ms. Schell stated that more work would be done to identify future development areas at the next Committee meeting. Ms. Schell said that the next meeting will be a chance to discuss land use alternatives and future roads. It was decided that the next meeting should be held on July 20th at 3:00 P.M. in the same place.

With no additional business the meeting was adjourned at 9:00 A.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
TECHNICAL ADVISORY COMMITTEE
Fond du Lac City-County Government Center
July 8, 2004

The meeting was called to order at 10:00 a.m. by Wayne Rollin, Chair.

Committee Members Present

Steve Michels	City of Fond du Lac
Wayne Rollin	City of Fond du Lac
Lindee Kimball	City of Fond du Lac
Sam Tobias	Fond du Lac County
Charles McCourt	Town of Friendship
Harold Manske	Town of Fond du Lac
Norbert Koleil	Town of Empire
Rick Raupp	WisDOT District 2
Kurt Miller	WisDOT Madison
Stephanie Hickman	FHWA

Committee Members Absent

Ernest Winters	Fond du Lac County
Lynn M. Gilles	Fond du Lac Area Transit
Mark Lentz	City of Fond du Lac
Mike Tolvstad	Village of North Fond du Lac
Dick Flood	Fond du Lac County
Jerome J. Guelig	Town of Taycheedah

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Betty Nordeng	Land Use Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist

1. Introductions

Mr. Rollin welcomed the group and began introductions.

2. Approval of the minutes from the April 8, 2004 TAC meeting

Mr. Rollin confirmed that all received the minutes and asked if anyone had questions, changes or corrections. Mr. Koleil noted that he did not receive the information directly and ask that the mailing list be updated. Ms. Schell stated that staff would update the TAC membership list. With no additional comments, Mr. Manske moved to approve the Summary of Proceedings as presented. The motion was seconded by Mr. McCourt and passed unanimously.

3. Proposed Resolution NO. 2-04: ADOPTING THE FOND DU LAC AREA MPO PUBLIC INVOLVEMENT PROCESS

Ms. Schell briefly described the requirement of an approved public involvement document as part of the MPO planning process. She noted that a 45 day review requirement had been met to insure that the public is aware of the planning activities and has an opportunity to comment on the process. She noted that the document had been reviewed by the TAC at the last meeting, but was not on the agenda for the last Policy Board.

Mr. McCourt wondered why the Village of North Fond du Lac Ambulance was not listed with the City of Fond du Lac Ambulance on the *Public Involvement Contact List*. After some discussion the Committee noted additional agencies that should appear on the list including Advocap and the Salvation Army. The comments and additions were noted, and Mr. Rollin asked that the group contact staff if they think of any other groups or agencies that should be included.

Mr. Kolell suggested a couple of and/or changes in the document that would make the public involvement solicitation a bit more inclusive. Ms. Schell said that the changes would be made in the document. The group reviewed the proposed resolution to adopt the public involvement plan. After some discussion Ms. Schell stated that the resolution would be a recommendation from the TAC at the next Policy Board meeting.

Mr. Michels moved to approve the public involvement resolution for consideration by the Policy Board. The motion was seconded by Mr. McCourt and passed unanimously.

4. Long-range transportation/land Use plan status report

Ms. Schell said that the TAC and the Long Range Transportation Plan (LRTP) Committee were, in large part, the same people and wondered if the groups could be combined. Some discussion followed regarding the redundancy of information that is presented to the TAC, LRTP and Policy Board. The group agreed to consider a TAC meeting just prior to the LRTP Committee meeting. After some discussion it was decided that the next TAC would meet about ½ hour prior to the LRTP Committee if there are action items. Ms. Schell gave an update on the LRTP and noted that the existing conditions chapter and the goals that have been developed are nearly complete. After some discussion Ms. Schell stated that the draft chapters of the plan would be mailed and discussed at the July 20th meeting.

Mr. Raith explained that WisDOT has contracted with a consultant team to provide technical assistance to develop or update all the State's MPO travel models. Staff recently received the Fond du Lac network from the consultant and is currently reviewing it. He explained that as part of model development, the network must be coded for functional class, number of lanes, land use and other variables. He gave a brief review relative to how the model simulates trips on the transportation system based on generation rates for the various land uses. Some of the variables used in the model for trip generation include population, dwelling units, school enrollment and several types of employment. The calibration and validation process requires matching the trip generation from the model with actual traffic counts taken on the streets and highways.

Mr. Raith explained that the travel model uses land use to forecast future traffic volumes, rather than historic or trend information that is typically used. He added that if a large big-box type development is proposed adjacent to an existing roadway, the historic traffic counts and trends are of little value to predict future volumes. The group discussed the model and the ability to test various land use scenarios to determine the impacts to the transportation system. Ms. Schell suggested that before the group discusses the land use scenarios, that they review the population projections for the area.

5. Fond du Lac Area population projections

Ms. Nordeng stated that East Central is the designated clearing house for DOA population projections and charged with revising the projections for the various jurisdictions. The group reviewed the population forecast for the Fond du Lac area. Ms. Nordeng noted that the forecast shows the total population for the Towns surrounding the City of Fond du Lac and will be adjusted to reflect only the MPO planning area. Ms. Schell added that the population projections will be further refined to reflect the individual transportation analysis zone (TAZ).

The group discussed the projections and differences between the initial U.S. Census information and the later data in the table being reviewed. Ms. Nordeng stated that some of the differences are a result of the geo-coding done on mapping that is not quite locationally accurate. For example, in the Town of Friendship, some of the group quarters were not coded correctly. She explained that the census is implemented using surveys and noted that some discrepancies will exist based on the sample size and response rate. She described the model used to develop the forecast that includes assumptions about annexation rates and development trends in the area. She noted as an example, much more of the development could be proposed for the Town of Fond du Lac based on available sewer service area and a boundary agreements with the City. Mr. Manske thought the projections for the Town seemed low, given the number of housing starts over the last few years.

Some discussion followed regarding the DOA population projection for the area and the adjustments that are typically made. Ms. Nordeng stated that staff is considering a projection scheme that would allow a figure 10 percent above or below the projected population, but only for the purpose of sewer service facility planning. Some discussion followed regarding the control total for the area and the need to stay within that. Mr. Rollin stated that the projections are typically low, and expressed concerns with underestimating the population growth, and added that no facilities have been built with excess capacity in the area. Ms. Nordeng noted that some facilities in the region had been built with excess capacity.

Ms. Schell began discussion regarding the long range plan scenarios for land use and the population control total. She explained that staff has been discussing scenarios that may go beyond the 30 plan horizon. For example one scenario would consider a full build, and means that the area would be completely filled in, well beyond the 2030 projections, but according to local plans. In some areas that may not happen, but it would illustrate the impact on the transportation system in the long term. The second scenario would show that same population growth at build-out, but at a higher density of development, using less land. The third scenario would be largely of local land use plans or current trend, using the 30 year control total population. The Committee concurred it would be useful to test the future land use possibilities to the extent possible.

6. Introduction of Transportation Improvement Program

Ms. Schell explained that staff intends to prepare a dry-run of the transportation improvement program (TIP) that will ultimately be required in October of 2005. The TIP documents a 5 year program of all projects eligible for federal transportation funds including roadways, bridges, rail, and locally funded projects, on the functionally classified street and highway system. The group reviewed a candidate listing spreadsheet from the Oshkosh Area MPO as an example of the proposed Fond du Lac listing format. The committee discussed the Fond du Lac system and the roads that would be eligible for the STP-urban funds or should appear in the TIP under any funding program. It was noted that not all towns in the Fond du Lac Area MPO have streets on the designated functionally classified street and highway system.

The first step is to assemble a listing of projects currently programmed to receive urban funds and to solicit eligible future projects from WisDOT, the County, the City and the Towns. In 2005 when

communities submit projects for the TIP, staff and the Committee will be ranking and selecting projects based on the criteria developed for the Fox Cities and Oshkosh MPOs, and presented to the Fond du Lac Area MPO last year.

Mr. Raith said he would work with Mr. Raupp and other WisDOT District 2 staff, to obtain the current listing of WisDOT and local projects. Some discussion followed regarding Pioneer Road in the Town of Friendship, and whether it should be added to the system. Mr. Raith explained that a number of roads have been proposed for addition to the system, but only 35 percent of the total roadway mileage is eligible under this program. He added that total roadway miles had not been calculated for the new area. Ms. Hickman clarified that the total roadway miles for the new urbanized area will be provided by WisDOT. Mr. Raith concluded that after the mileage has been established, WisDOT would consider additions to the system, if the roadway meets the various classification criteria including daily traffic volumes. Based on the functionally classified system, most of the projects will be from the County and the City. Mr. Raith said he would work with Mr. Lentz and Mr. Winter to provide project description format information and compile a list of candidate projects.

7. Other business

Ms. Hickman provided a brief update on the federal transportation reauthorization process currently underway in Washington D.C. While bills have been proposed by Congress and the Administration, the final bill is still in Committee. In the meantime we will continue to operate under extensions of the prior TEA 21 authorization.

With no additional business, Mr. Manske motioned that the meeting be adjourned. The motion was seconded by Mr. McCourt and the meeting was adjourned 11:45 A.M.

SUMMARY OF PROCEEDINGS
Fond du Lac Area MPO
Long-range Transportation/Land Use Plan Advisory Committee Meeting
July 20, 2004

The meeting was called to order at 3:00 p.m. by Ann Schell, ECWRPC.

Committee Members Present

Ernest Winters	Fond du Lac County
Charles McCourt	Town of Friendship
Mike Tolvstad	Village of North Fond du Lac
Lynn Gilles	City of Fond du Lac
Wayne Rollin	City of Fond du Lac
Kurt Miller	WisDOT Madison

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	Planning Specialist
Betty Nordeng	Associate Planner

1, Introductions

There was some discussion as to why more members of the business community were not present. The group concluded that it was difficult to get interest in long-range planning.

2. Approval of minutes from June 3, 2004 meeting

Mr. Rollin moved to approve the minutes from the previous meeting. The motion was seconded by Mr. Miller and passed unanimously.

3. Summary of existing conditions chapter

Ms. Schell explained that these were the existing conditions for the jurisdictions surrounding the Fond du Lac Urbanized Area. The maps were still being prepared and were not included with the text. Mr. McCourt stated that he didn't believe that the Town of Friendship had 9 acres of quarries. Ms. Schell stated that these conditions were collected from air photos and there could be discrepancies. She noted the comment and mentioned that it would be looked in to. Mr. Rollin added that he feels the existing conditions seem fine.

4. Vision and Goal Development

Ms. Schell began the discussion by stating that the vision and goals were developed at the previous meeting. Mr. Rollin commented that it seemed there were more goals than previously thought. Ms. Schell added that the goals were added to the issues, and a goal was not developed for every issue.

Mr. Winters stated that the goals were very generic, and wondered if these goals get reviewed. Mr. Raith added that the goals do get reviewed every five years with the update of the plan. Mr. Winters asked what needed to be done to accomplish the goals that were developed. Ms. Schell continued by saying that by completing the plan, we will figure out what needs to be done to complete the goals.

5. Progress report on transportation modeling process

Mr. Raith began by stating that WisDOT had hired consultants to develop the models for the state, and to coordinate with the MPO's. Mr. Raith noted that the consultants were very responsive and were proceeding. The model standards were recently received and seemed to be well prepared.

6. Planning area population projections

Mr. Miller asked how the projections will compare to the Department of Administrations projections for 2025. Ms. Nordeng explained that it varies by community and that East Central's projection totals are the official numbers for the region. East Central uses the DOA's projections for control totals. Ms. Nordeng stated that it appears that there will be about 10,000 people in growth for the Fond du Lac area, and about 93% will be inside the urban area. Ms. Schell added that this data will be broken down to the TAZ level for analysis.

Mr. Rollin had a concern that the projections were not high enough, as he had stated in the past. Ms. Nordeng commented that the growth rate should be similar to past trends, but the problem is to determine where that growth will occur.

7. Future land use scenarios

Ms. Schell began the discussion by stating that how the land in the urbanized area develops affects the transportation system in various ways. East Central staff will develop three land use development scenarios for the urbanized area to present to the committee. The first scenario fills the urbanized area base on land use plans and estimate approximately when this will occur. The second scenario will study a compact development versus a sprawl development pattern. The final scenario will develop the jurisdictions according to population projections for 2030.

Mr. Miller asked if all networks would be tested as part of the modeling process. Mr. Raith confirmed that everything would be tested, as well as other various scenarios to determine what happens to the system. Mr. Raith noted that the extension of Esterbrook Road and also Country Lane would be studied as part of the process. Mr. Rollin mentioned that the extension of Esterbrook Road could have a significant impact on transportation system.

8. Next steps in the process

Ms. Schell determined the East Central staff would continue with the development of the land use scenarios now that the modeling process ongoing. Ann concluded that staff should have some analysis done by the next meeting, and that committee members should give some thought to the mock Transportation Improvement Program process that will be worked on in the future.

The next meeting was set for Tuesday, September 21 at 8:00 a.m.

The meeting was adjourned at 3:45 p.m.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
August 12, 2004

The meeting was called to order at 10:00 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel	Fond du Lac County Executive
Richard Flood	Fond du Lac County Highway Committee Chair
Rick Raupp	WisDOT, District 2
Mike Tolvstad	Village of North Fond du Lac
Wayne Rollin	City of Fond du Lac
Tom Ahrens	City of Fond du Lac
Jim Pierquet	Town of Empire

Staff Present

Ann Schell	Assistant Director
Walt Raith	Principal Transportation Planner
Dave Moesch	Transportation Planner
Jason Kakatsch	Transportation Planner
Melissa Kraemer	GIS/Planning Specialist

Others Present

Ernest Winters	Fond du Lac County Highway Commissioner
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1. Introductions

2. Approval of the May 13, 2004 meeting summary of proceedings

Mr. Buechel asked the group for any comments or concerns with the meeting notes. Hearing none, Mr. Flood moved for the approval of the summary of proceedings. The motion was seconded by Mr. Lentz and passed unanimously.

3. Selection of a Policy Board Vice Chair

Mr. Lentz questioned as to whether the vice board chair had to be a member of the city council. Ms. Schell replied that the vice board chair can be any member of the policy board. After no volunteers, Mr. Rollin volunteered to be vice chair of the policy board. Mr. Pierquet made a motion to approve, seconded by Mr. Tolvstad, and passed unanimously.

4. Review and approval of the 2005 Work Program

Ms. Schell told the policy board that the Work Program was basically the same as last year with some changes in the wording due to the plans being completed by October 2005. Ms. Schell also explained that the MPO can go for discretionary funds since we are doing everything for the Fond du Lac MPO for the first time. Mr. Raith suggested that if anything were absent from the Work Program that it should be brought up with staff.

Mr. Lentz made a motion to approve the Work Program, Mr. Pierquet seconded, and passed unanimously.

5. Proposed Resolution NO. 2-04: ADOPTING THE FOND DU LAC AREA MPO PUBLIC INVOLVEMENT PROCESS

Ms. Schell explained that while policy board is aware of the public involvement process, they haven't officially adopted it. Ms. Schell proceeded to go through the resolution.

Mr. Rollin made a motion to approve Resolution 2-04, Mr. Lentz seconded, and passed unanimously.

6. Long Range Transportation/Land Use Plan

Mr. Raith explained that East Central staff had met with WisDOT's consultant and was working on developing the model. Staff was going over socioeconomic data in the traffic analysis zones and loading data to calibrate the model to existing traffic counts. The model calibration will be done with 2004 traffic counts that will be provided by WisDOT. Walt noted that WisDOT had done an origin and destination study for the Fond du Lac area in order to determine what the external to external trips, as well as the external to internal trips were. This data will be included in the modeling process. Mr. Raith continued by explaining that from a national household survey, there is an average number of trips, number of autos and also children that are enrolled in school for each TAZ in the urbanized area. Walt stated that by analyzing this data in the transportation modeling process, it can be a helpful tool for the planning process. From this process, staff should be able to determine the long range needs of the Fond du Lac Urbanized Area.

Ms. Schell added that staff will be going over communities comprehensive plans in concert with the sewer service planning and transportation planning process. Mr. Raith added that this will all be considered as part of the development scenarios that will be studied.

7. Other Business

Mr. Lentz noted concern from City's accounting staff regarding the pass-through billing for the MPO. Ms. Schell stated that East Central bills to WisDOT, then WisDOT to the City of Fond du Lac, and then to the other jurisdictions that are in the urbanized area. She stated that East Central is not the MPO,

The City of Fond du Lac administers the funding. Ms. Schell that there was an allocation of costs, in part being dues to being a member of the regional planning commission. So if not being a member, there was a possibility that that jurisdiction would not be eligible for federal funding.

8. Adjourn

Mr. Lentz noted that the next meeting of the Policy Board will be set for November 11th, 10:00 a.m., at the Fond du Lac City/County Government Center in room D and E. He added that TAC would be meeting on October 14th at 10:00 a.m.. With no additional business, Mr. Flood moved to adjourn. The motion was seconded by Mr. Tolvstad, all approved.

SUMMARY OF PROCEEDINGS
Fond du Lac MPO
Technical Advisory Committee &
Long-range Transportation/Land Use Plan Advisory Committee Meeting
Fond du Lac City-County Government Center
January 13, 2005

The meeting was called to order at 9:00 a.m. by Mark Lentz, Chair.

Committee Members Present

Mark Lentz	City of Fond du Lac
Wayne Rollin	City of Fond du Lac
Ernie Winters	Fond du Lac County
Brenda Hicks-Sorenson	FCEDC
Jim Pierquet	Town of Empire
Norbert Kolell	Town of Empire
Charles McCourt	Town of Friendship
Harold Manske	Town of Fond du Lac
Sam Tobias	Fond du Lac County
Lynn Gilles	Fond du Lac Area Transit
Christine Kaup	Citizen
Stephaine Hickman	FHWA - Madison
Rick Raupp	WisDOT District 2
Don Uelmen	WisDOT – Madison
Kurt Miller	WisDOT - Madison

Committee Members Absent

Mike Tolvstad	Village of Fond du Lac
Dick Flood	Fond du Lac County
Jerome J. Guelig	Town of Taycheedah

Staff Members Present

Ann Schell	Assistant Director
Walt Raith	Principal Planner, Transportation
Jason Kakatsch	Associate Planner, Transportation
Dave Moesch	Planner, Transportation
Betty Nordeng	Associate Planner
Melissa Kraemer Badtke	GIS/Planning Specialist

1. Introductions

Mr. Lentz welcomed the group and began introductions.

2. Approval of the minutes from the July 8, 2004 TAC meeting and the minutes from the July 20, 2004 Long Range Plan Advisory Committee meeting.

Mr. Lentz confirmed that all received the minutes and asked if anyone had questions, changes, or corrections. With no additional comments, Mr. Winters moved to approve the Summary of Proceedings as presented. The motion was seconded by Mr. Manske and passed unanimously.

3. Review long range transportation/land use process to date

Mr. Raith explained that East Central staff continues to work on the travel demand model along with developing the future land use of the municipalities within the MPO. Mr. Raith stated additional meetings may be necessary to meet the current deadline for the Fond du Lac Long-Range Transportation/Land use Plan, which is October 1, 2005.

4. Highway model update

Mr. Raith explained that the travel model for the Fond du Lac MPO is almost calibrated for the base year. Mr. Raith explained that the Average Daily Traffic (ADT) counts are updated by WisDOT every three years. Calibrating the travel model means matching the output traffic assignments with the current Average Daily Traffic counts. Mr. Raith said he did not see very many capacity problems within urbanized area and the level of service for most facilities is at a Level C or better. Some discussion followed regarding the level of service (LOS) measurements that rank from A to F. An LOS of A means no one else is on the highway and a driver can make all moves freely. LOS B is still very good, with no congestion minimum travel times. LOS C means a lot of other traffic is around, but delays are minimal, an acceptable level of service. Congestion and delays start at LOS D and continue to get worst until LOS F is reached. LOS F means traffic is stopped and gridlock is the norm. Mr. Raith felt it would likely be a long time before Fond du Lac experienced LOS F.

Mr. Raith described the roadway capacity measurements and noted that the model will accept an hourly capacity or a 24 hour capacity. East Central staff is looking for feedback from the TAC and the Long Range Planning Committee regarding capacity issues for current network. Mr. Raith mentioned that the USH 151 bypass will be included in the future network and he feels the model will be a useful planning tool in making planning decisions for the MPO.

5. Review of existing land use map

Ms. Kraemer Badtke noted that an 11 x 17 map of the existing land use for the Fond du Lac MPO was mailed with the agenda. She explained the existing land use by TAZ would be used for the model scenarios. The acres would be calculated for each of the land use categories by traffic analysis zone (TAZ), which would allow Ms. Norderg to calculate how much land is developable for the model scenarios. Ms. Kraemer Badtke asked for any comments regarding updates or changes to the existing land use map to be made to East Central staff after the meeting.

6. Review of local plans proposed land use map

Ms. Kraemer Badtke explained that for the municipalities within the Metropolitan Planning Area, the proposed land use from their comprehensive plans were converted to a digital format. She explained that the proposed land use data from each of the municipalities' comprehensive plans would be used for the model scenarios.

She noted that some of the plans were adopted a few years back and East Central staff would appreciate any updates or changes that have been made since the adoption. She encouraged MPO committee members to contact East Central staff after the meeting regarding any changes.

Mr. Tobias commented that not all of the maps show wetlands, which should not be included in the developable acreage. Mr. Tobias was concerned with the agricultural land in some of the townships, i.e. Town of Taycheedah and Town of Empire allow 5-10 acre lots for residential use and wondered how will this be dealt with for modeling purposes? Another concern was the overlapping future land use mapping conflicts, i.e. around the airport between the townships and the city and how will this issue be resolved? Some discussion followed regarding the boundary agreement and details yet to be ironed out.

7. Discussion of projections and scenarios

Ms. Nordeng explained the three scenarios that will be used for the model. They included a full build-out, a current plan scenario, and the full build-out scenario into a more compact and mixed land use pattern. She explained that the final population projections for Fond du Lac are complete. She noted that the household projections are much more complicated to prepare than the population projections. Six different household projection methodologies were analyzed and staff selected the two methodologies with the fewest outliers. She explained that the Sewer Service Update (SSA) and the Transportation Long-Range Plan would use the household projection that generates the most households.

Ms. Nordeng explained that the hand out with the household projections is the one with the highest households. She explained that the MPO could also use the household projection methodology with the lowest household estimates. Some discussion followed regarding how the projections would be used for the various land use scenarios. Ms. Nordeng explained that the population in group quarters will increase with the aging population, but the Department of Administration (DOA) looks at the proportion of the population that is in group quarters and holds that constant. Staff felt this methodology was not realistic and will be adjusting the numbers for group quarters. Mrs. Nordeng reminded the Long Range Plan Committee and the Technical Advisory Committee that these are the final numbers for the household projections.

8. Update on commuting patterns

Mr. Kakatsch discussed the year 2000 commuting patterns for Fond du Lac County. Mr. Kakatsch mentioned that the study area used includes all ECWRPC counties, counties adjacent to the region, and Dane and Milwaukee counties. This study area is currently being used for the Northeastern Wisconsin Economic Opportunity Study, but Mr. Kakatsch stated that this study area could be altered to best represent commuting patterns to and from Fond du Lac County.

The committee felt it would be beneficial to include Waukesha County within the study area. Commuters going to counties within the study area were shown, as well as commuters coming into Fond du Lac County from these surrounding counties. Mr. Winters requested a copy of the commuting patterns to be included in the mail out for the next meeting.

9. Update on freight element

Mr. Kakatsch explained that we do have freight commodity tonnage data from WisDOT, but there are some restrictions on how the data can be presented. Mr. Kakatsch displayed graphics which showed the total tonnage of exports leaving Fond du Lac County and going to counties within the same study area defined in the commuting patterns.

He also showed the total tonnage of imports coming into Fond du Lac County from counties within the study area. These tonnage totals are from 1996. Mr. Kakatsch mentioned that there will be an updated freight commodity dataset in the spring or summer of 2005. Mr. Kakatsch also examined the origin of several key commodity imports into Fond du Lac County and the destination of several key exports from Fond du Lac County.

A request by the committee was made to send out the freight graphics and tables with the minutes and to include Waukesha County in the dataset.

10. Update on safety element

Mr. Kakatsch explained that East Central has crash data from WisDOT for the four counties surrounding Lake Winnebago. There were over 31,000 crash reports filed between 2001 and September of 2004. Mr. Kakatsch explained that the points are located by tenths of a mile from reference points on the State Highway System. Mr. Kakatsch mentioned that the MPO would be able to map these crash sites and identify major hotspots within the urbanized area. Mr. Kakatsch explained that if hotspots are identified, the Long Range Plan should address potential improvements to avoid liability issues if funding is not programmed or available. Mr. Winters added that not every crash means that there is a problem with the transportation system. Some discussion followed regarding crashes that are typically human error and not related to the design of the highway.

The Committee discussed pedestrian and transit safety that will also be addressed in the in Long-Range Transportation/Land Use Plan. Some discussion followed regarding other modes including air and freight transport. Ms. Hickman stated that freight crash data is available from the FHWA, but it would be difficult to locate the information on a map. She explained that the data included some location information and some idea about the type and severity of crashes. Ms. Hickman explained that, unfortunately, the 2000-2004 data would not be available in time to be considered in the plan.

11. Set next Long Range Plan Committee meeting date

The next Long-Range Planning Committee and TAC meeting was scheduled for Thursday, April 14, 2005 at 9:00 a.m.

12. Transportation Improvement Program project prioritization process demonstration and action

Mr. Moesch explained that the Transportation Improvement Program (TIP) for the Fond du Lac MPO is due October 1, 2005. He handed out a preliminary candidate project listing and functional class map to the TAC and the Long-Range Committee members. Mr. Moesch discussed the preliminary projects received from the municipalities, mainly the City and County of Fond du Lac. He explained that the projects received from the City of Fond du Lac were either on state highways in the city or were not on the functional classification and not eligible for the STP-Urban funding.

Mr. Moesch explained that anything on the functional classification system is eligible for funding. He described the methodology and process staff used ranking the County projects. By default, projects that were programmed in comprehensive plans, capital improvement programs, transit plans, etc. would receive a higher ranking than projects that are not. The criterion is bias for projects that include accommodations for multiple modes. Projects can be manipulated to score higher based on the ranking criteria.

Some discussion followed relative to adding a safety element to the project ranking criterion. Ms. Hickman said that FHWA strongly recommends that the MPOs add in a safety element, and that

FHWA is in the process of developing safety guidelines to be distributed to the MPOs. The Committee discussed staff creating a criterion based on number of crashes compared to the average crash rate of various types of urban streets.

Mr. Moesch described the TIP data submittal form and discussed the documentation needed when submitting a project for the TIP. He noted that some of the data is not readily available to staff and we ask that the locals fill out the submittal forms as completely as possible. Mr. Moesch requested that the Committee members provide staff with any comments regarding the selection criteria as soon as possible. He added that the TIP process would begin in early March.

13. Other Business

Mr. Lentz reminded the committee members that the Policy Board will be meeting Thursday, February 10, 2005 at 10:00 a.m.

14. Set TAC and Long-Range Committee meeting dates for 2005

The following dates are set for the TAC meetings for 2005:

Thursday, April 14, 2005 at 9:00 a.m.

Thursday, July 14, 2005 at 9:00 a.m.

Thursday, September 8, 2005 at 9:00 a.m.

The following dates are set for the Policy meetings in 2005:

Thursday, February 10, 2005 at 10:00 a.m.

Thursday, May 12, 2005 at 10:00 a.m.

Thursday, September 8, 2005 at 10:00 a.m.

Please note that additional meetings may be necessary to meet the October 1st deadline for the Fond du Lac Long-Range Transportation/Land Use Plan.

With no additional business, Mr. Winters motioned that the meeting be adjourned. The motion was seconded by Mr. Manske and the meeting was adjourned at 11:30 A.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
February 10, 2005

Policy Board Members Present

Richard Flood Fond du Lac County Highway Committee Chair
Wayne Rollin City of Fond du Lac
Tom Ahrens City of Fond du Lac
Jim Pierquet Town of Empire
Kurt Miller WisDOT
Stephaine Hickman FHWA
Mark Lentz City of Fond du Lac
Allen Buechel Fond du Lac County Executive

Staff Present

Walt Raith Principal Transportation Planner
Jason Kakatsch Associate Transportation Planner
Dave Moesch Transportation Planner
Melissa Kraemer Badtke GIS/Planning Specialist
Lori Agnew Executive Assistant, City of Fond du Lac

1. Introductions

Mr. Buechel welcomed the group and began introductions.

2. Approval of August 12, 2004 Summary of Proceedings

Mr. Buechel asked the committee for any comments or concerns regarding the meeting notes. Hearing none, Mr. Lentz moved for the approval of the summary of proceedings. The motion was seconded by Mr. Flood and passed unanimously.

3. Review of future land use for the Fond du Lac MPO

Ms. Kraemer Badtke explained that staff has created digital files of all of the completed future land use for each of the municipalities comprehensive plans. She noted that for the Town of Byron, zoning data was used since their comprehensive plan has not been completed. Ms. Kraemer Badtke explained that in some of the plans the future land use expands past the current municipality boundary. The City of Fond du Lac and the Town of Fond du Lac have a boundary growth agreement that was used as the boundary for the proposed land use in those communities. For the areas without such an agreement, current municipality boundaries were used. For the purposes of the model, a standard proposed land use legend was developed. Ms. Kraemer Badtke explained that land use acreages from the proposed and existing land use data files were calculated and compared to development and employment data for the model scenarios.

Mr. Raith referred to the mapping and stated that it reflects what the communities within the MPO are looking at for their future land use. We will be able to take this data and then apply it to the travel demand model and see what kind of an impact it will have on the transportation network. Mr. Raith discussed current deficiencies on the system and future projects, which includes the completion of the USH 151 bypass.

Ms. Hickman asked if there are going to be adjustments to the land use scenario. Some discussion followed regarding the existing development not illustrated on the future land use displays. Mr. Raith explained that it was really two different maps, but should probably be changed to reflect existing and future development. He noted that the existing land use data set used for the travel model does, and will include the information in the forecast.

Mr. Raith said that staff is preparing three land use scenarios that will be evaluated using the model. The current plan scenario is the proposed land use from the MPO communities as depicted on the display. Staff will spend the most time on the current plan scenario to identify future deficiencies and needs on the system.

Another will be called the full-build scenario that fills all the developable acreage within the MPO boundary. He added that the full build scenario is likely well beyond our target year of 2035, but will show the impact to the street and highway system when the area is fully developed. The third scenario is the compact development and focuses on infill at higher densities in those areas already urban. The compact scenario is proposed to demonstrate the efficiencies of dense development verses sprawl, in terms of vehicle miles traveled and cost for infrastructure and services.

Mr. Raith explained the socio-economic inputs and outputs from the base year travel demand model. Mr. Raith stated that the model produces auto and truck trips based on socioeconomic trip generation rates developed by WisDOT consultants. To calibrate the model, staff matches model outputs to the current traffic counts taken by WisDOT on all the classified streets and highways. Mr. Raith referred to the display and noted that in most cases the model is very close to the actual ground counts. Mr. Raith asked that the committee keep in mind that this is only a simulation model and will likely not be perfect on every roadway, but it is well within acceptable parameters for the software.

East Central staff will be meeting with WisDOT and their consultant to approve the base year model that will be used for future scenario testing. Mr. Raith added that the travel model is very clean in terms of turn penalties, link speed changes, or other methods typically used during calibration.

Mr. Raith explained that the model does not include transit or other modes of transportation. While many use transit, walk or bike, it is a very small percentage compared to vehicles and difficult to measure with confidence. Other modes are accounted for after person trip generation by applying auto occupancy factors for each type of trip. He noted that work continues with the consultant to expand and report the model output information.

Mr. Rollin asked if East Central staff would look at the at-grade intersections along USH 151 bypass, along with the on/off ramps in the travel demand model. Mr. Raith replied that staff would be looking at the USH 151 bypass both for the existing conditions and future land use scenarios. Mr. Raith noted that in the current model network USH 151 only has access at USH 41 and STH 23. After the model is validated for existing conditions we will begin testing the proposed intersection locations. A lot of safety concerns have been raised relative to the proposed at-grade access points.

4. Proposed Long Range Plan meeting schedule

The Board discussed the timeline for the Transportation/Land Use Plan that includes a public information meeting scheduled for March 10, 2005. Some discussion followed regarding a location for the public information meeting, possibly holding it at UW-Fond du Lac. The committee agreed that UW-Fond du Lac would be a good location to hold the public information meeting.

Mr. Miller asked if staff would have deficiencies for all three scenarios at the April 14, 2005 meeting. Mr. Raith replied that the staff may have the full build scenario by the next meeting, but likely not all three. He explained that staff is approximately 2 months behind based on major staffing changes at the Commission. Mr. Raith said he is confident the plan will still be completed by the October deadline.

5. Discussion of Transportation Improvement Program (TIP)

Mr. Moesch explained that to be eligible for the STP-Urban funds, the Fond du Lac MPO must have a completed Transportation Improvement Program (TIP). The Federal Highway Administration recommends enhancing the safety criteria for ranking projects. Mr. Moesch said that staff received crash data from WisDOT and are currently working with the fairly large data set. The crash rate for Fond du Lac will be developed based on 100 million vehicle miles driven on the functional classification system. Facilities with higher crash rates would rank higher under this scenario. Some discussion followed regarding the methods to apply the information. The safety criteria will take into consideration segment crash rates, high accident locations, and new facilities. Mr. Rollin asked if staff has ranked any projects using the safety criteria. Mr. Moesch stated that staff has discussed the criteria and developed a point system, but have not ranked the projects. The group continued to review and discuss the ranking criteria. Mr. Miller added that the new facilities criteria is the perfect test for the model because it provides forecast traffic on the new facility and possible intersection concerns.

Some discussion followed regarding compiling all the state and local candidate projects that will appear in the TIP. Mr. Lentz stated that he and Mr. Winters were still working on the ranking form and will be providing the list soon. Mr. Raith explained that the funding balance can also be used as a tie breaker or deciding factor. In the Fox Cities and Oshkosh MPO, the policy is if a community has a negative funding balance, they could not compete for a project. However, the Policy Board would still make the final decision on the projects selected for funding. The process allows staff to objectively rank the proposed projects and provide the information to the Board for discussion.

Mr. Lentz noted that the Towns of Empire, Friendship, and Taycheedah were not included in the TIP candidate project listing. Mr. Raith stated that those communities currently do not have any roads on the urbanized functional classification system, but they are part of the MPO and some day they may have projects.

6. Adjourn

Mr. Buechel said that the next Long Range Plan Committee and TAC meeting is scheduled for April 14, 2005, 9 A.M., at the Fond du Lac City/County Government Center in room D and E. He added that the next Policy Board Meeting is scheduled for May 12, 2005 at 10:00 a.m. With no additional business, Mr. Flood moved to adjourn. The motion was seconded by Mr. Ahrens and passed unanimously.

SUMMARY OF PROCEEDINGS
Fond du Lac MPO
Technical Advisory Committee &
Long-range Transportation/Land Use Plan Advisory Committee Meeting
Fond du Lac City-County Government Center
April 14, 2005

The meeting was called to order at 9:00 a.m. by Wayne Rollin, Vice-Chair.

Committee Members Present

Wayne Rollin	City of Fond du Lac
Ernie Winters	Fond du Lac County
Norbert Kolell	Town of Empire
Charles McCourt	Town of Friendship
Harold Manske	Town of Fond du Lac
Mike Tolvstad	Village of North Fond du Lac
Sam Tobias	Fond du Lac County
Stephanie Hickman	FHWA - Madison
Rick Raupp	WisDOT District 2
Kurt Miller	WisDOT - Madison
Jerome J. Guelig	Town of Taycheedah
Dick Flood	Fond du Lac County
Jeanette Cavanaugh	WisDOT- Dist 3
Lee Perrizo	Fond du Lac County Airport

Committee Members Absent

Mark Lentz	City of Fond du Lac
Lynn Gilles	Fond du Lac Area Transit
Jim Picequet	Town of Empire
Brenda Hicks-Sorenson	CEDC
Don Uelmen	WisDOT – Madison

Staff Members Present

Walt Raith	Principal Planner, Transportation
Jason Kakatsch	Associate Planner, Transportation
Dave Moesch	Planner, Transportation
Betty Nordeng	Associate Planner
Melissa Kraemer Badtke	GIS/Planning Specialist

Others Present

Christine Kaup	Citizen/League of Women Voters
M. Natalie Lambert	Citizen/League of Women Voters

1. Introductions/Approval of the summary of proceedings from the January 13, 2005 TAC and Long Range Plan Committee meeting.

Mr. Rollin welcomed the group and began introductions. The summary of proceedings from January 13, 2005 was reviewed. Ms. Hickman stated under the update on the safety element, the crash data available through FHWA is motor-carrier crash data, not freight crash data. Ms. Hickman also stated

that 2000-2004 motor-carrier data is available and has been provided to ECWRPC, therefore making the final sentence of the final paragraph in the safety element update inaccurate. East Central staff noted they would make these changes. A motion was made by Mr. Rollin to approve the summary of proceeding with the discussed corrections. The motion was seconded by Mr. Manske and passed unanimously.

2. Long Range Transportation and Land Use Plan status report

Mr. Moesch briefly went over comments from the Long Range Plan Public Information Meeting which was held at UW – Fond du Lac on March 10th. The majority of comments received dealt with bicycle and pedestrian issues, as well as sprawl. Mr. Rollin questioned how many individuals attended the public information meeting. East Central staff stated that roughly 30 to 40 people attended.

Ms. Lambert, a Town of Fond du Lac resident, stated it is important that transportation for the elderly be addressed, as well as the impacts of development on the transportation network. Mr. Raith stated staff will be using three different land use scenarios within a travel demand model to analyze how demographics and development will affect the transportation network. These three scenarios include: the current trend, a full build scenario, and a compact/high density scenario. Mr. Raith also mentioned that East Central will be conducting another public information meeting in July to present model results and a draft long range transportation/land use plan. Following the public information meeting, will be a 45 day public review and comment period.

Ms. Lambert questioned whether Fond du Lac County has or will be developing a Hazardous Materials Transport Plan. Mr. Tobias stated the County does not have a Hazardous Materials Transport Plan and any pursuit of a plan would occur through the Emergency Management Department. Mr. Raith noted transportation safety will be discussed throughout the plan and the transport of hazardous materials would be discussed within that text. Ms. Lambert stated it is important for the general public to be aware of the transport of hazardous materials. Ms. Hickman noted due to national security, information pertaining to the transport of hazardous materials is not accessible to the public.

The Committee reviewed maps and data produced by East Central staff that will be incorporated into the final long range plan. Mr. Raith initiated the discussion by handing out and explaining a sheet which displayed a variety of data which will be included within the model. Mr. Raith briefly discussed socioeconomic data, 24 hour trip generation outputs, auto trips, truck trips, vehicle miles traveled, and vehicle hours traveled. During review of the trails map, Mr. Tobias provided East Central staff with updates to the map which was distributed among committee members.

Mr. Kakatsch distributed copies of commuting pattern data to Committee and stated that these copies now included commuting patterns to and from Waukesha County at the request of the Committee from the previous meeting. Mr. McCourt questioned where this data comes from. Mr. Kakatsch explained that commuter data by county is made available by the U.S. Census Bureau. Mr. Rollin questioned how this data is collected by the Census Bureau. Ms. Hickman explained that the Census Bureau distributes long form census surveys randomly to gather a variety of data. This sampling is then used to produce the data.

The Committee reviewed the existing and proposed future land use maps. Mr. Tobias noted boundaries for the airport property are not correct and he would provide East Central staff with the correct boundaries. Mr. Rollin noted that comments on the existing land use were also received at the public information meeting. Mr. Tobias questioned why the existing land use does not show some areas of residential development. Ms. Kraemer Badtke noted the existing land use is a snap shot in time and the year 2000 was used as the base year. All development which has occurred since that time is not included within the existing land use. Staff will need to update the future land use maps to include development that existed in 2000.

Ms. Nordeng continued the discussion by further explaining the land use scenarios and population projections. Ms. Nordeng noted under the full build scenario, the Fond du Lac Urbanized Area would be projected to contain roughly 100,000 homes, 260,000 residents, and 180,000 employees. In terms of land use, no agricultural land would be left within the urbanized area, which would include an estimated 56,000 developed acres.

In terms of the compact scenario, land uses would be mixed. Employment densities would be slightly higher, residential development would be scattered and average roughly 11 housing units per acre. Much of the MPO area would remain as agriculture with supporting rural land uses.

Ms. Nordeng also discussed the current trend scenario, which would be a snap shot of what the urbanized area would look like in 2035. This scenario would include far less population, households, and employment than the previous scenarios.

Mr. Raith noted that within the travel demand model, current development does not highlight many transportation deficiencies. If the compact or full build scenarios occurred, it is anticipated that the current system would have a number of deficiencies. Mr. Rollin questioned what would be the anticipated year when the full build scenario population would occur. Ms. Nordeng stated that it could be over 100 years. Mr. Raith noted an increase in population of roughly 10,000 or 15,000 people under the current trend scenario is not going to pose a major threat to the transportation network by 2035. Ms. Nordeng stated undeveloped areas would need to be filled in to show any major impacts. Compact development and current trends will lead to different outcomes over the long term.

Mr. Raith began explaining model results for the USH 151 bypass. After a brief review and discussion, Mr. Raith noted it is anticipated that the USH 151 bypass will reduce a good portion of traffic on a number of roads in the Fond du Lac Urbanized Area. Mr. Miller questioned whether there are any committed projects that will have an impact on the USH 151 bypass. Mr. Raith noted all projects are committed, with the exception of STH 23 westbound. Ms. Lambert also questioned what the traffic patterns along Pioneer Road would look like. Mr. Raith explained there are currently 11,000 vehicles per day. Using the travel demand model and including the bypass, it is anticipated there would be approximately 4,000 vehicles per day if it were opened now.

Mr. Winters stated it will be important for WisDOT to look at at-grade separations on USH 151. Mr. Rollin noted that the intersection of USH 151 and 4th Street should be of great concern.

3. Transportation Improvement Program candidate project discussion

The Committee began discussing candidate projects which were submitted to East Central. Ms. Hickman noted projects of regional significance need to be included within the TIP. Mr. Tobias questioned whether that would include airport projects. Ms. Hickman explained that only projects affecting federally aided highways leading to airports would be included as projects of regional significance. Mr. Tobias discussed bicycle and pedestrian projects that are also eligible for TIP funds. Mr. Raith added that railroad crossings projects using federal funds should also be included. The idea is to develop a short range plan and cost estimate for the transportation system. Ms. Hickman noted only projects included on the functional classification system would be eligible. Mr. Rollin stated he would look into other projects of regional significance for the City of Fond du Lac, and verify with Mr. Moesch if there are any revisions or inclusions.

Mr. Miller briefly discussed the 2035 trip tables and output files being developed for the travel demand models statewide. Mr. Raith described current work efforts with WisDOT and their consultant on completing the travel demand model and the land use scenarios. He added that output results for the scenarios are slated to be discussed at the next meeting.

Revised based on comments received at the 7-7-05 TAC & LRTP meeting

4. Next Long Range Plan Committee and TAC meeting date

The next meeting was scheduled for Thursday, July 7th, 2005 at the Fond du Lac City-County Government Center at 9 a.m.

5. Other Business

With no additional business the meeting was adjourned at 11:15 am.

SUMMARY OF PROCEEDINGS
FOND DU LAC AREA MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
May 12, 2005

The meeting was called to order at 10:00 A.M. by Wayne Rollin, Vice-Chair.

Committee Members Present

Allen BuechelFond du Lac County Executive
Richard FloodFond du Lac County Highway Committee Chair
Rick RauppWisDOT, District 2
Kurt MillerWisDOT, Madison
Wayne RollinCity of Fond du Lac
Jeremy ThiesfeldtCity of Fond du Lac
Mel SmigielskiVillage of North Fond du Lac
Stephanie HickmanFHWA

Staff Present

Walt RaithPrincipal Transportation Planner
Jason KakatschAssociate Transportation Planner
David MoeschTransportation Planner
Melissa KraemerGIS/Planning Specialist

Others Present

Ernest WintersFond du Lac County Highway Commissioner

1. Introductions, including new MPO Policy Board Members

Mr. Raith noted there were changes to the members of the policy board. Mr. Rollin stated there were 10 voting members, 5 from the City, 2 representing the County, 1 representing the Towns, 1 from the Village of North Fond du Lac, and 1 from WisDOT.

Mr. Winters questioned whether the membership from WisDOT will change when the reorganization of WisDOT is completed. Mr. Raith stated that the member will change later this year, but until then both districts were participating in Fond du Lac MPO.

Mr. Raith stated he would update a listing of the Policy Board and Technical Advisory Committee to discuss at the next meeting.

2. Approval of the February 10, 2005 meeting summary of proceedings

Mr. Rollin asked the group for any comments or concerns with the meeting notes. Hearing none, Mr. Flood moved for the approval of the summary of proceedings. The motion was seconded by Mr. Miller and passed unanimously.

3. Review and discussion of proposed STP-Urban project listing/staff recommendations/project selection

Mr. Raith referred to the candidate project listing that was sent out prior to the meeting. He noted the number of projects far exceeds the 2008-2009 biennium funding amount of \$735,166. Mr. Winters requested an explanation regarding the funding entitlement and if a municipality can spend into a negative funding balance, or more than the \$735,166. Mr. Raith stated that the program is different for areas that exceed 50,000 in population. The entitlement is really to the MPO and is based on population. Mr. Raupp stated that the program for the urbanized area has more restrictions in terms of when the money must be programmed than that of the urban program. Some discussion followed regarding the amount of funding available and the difficulty in funding larger projects. Mr. Raith stated that as the TIP evolves it will provide a five year listing of prioritized projects for the area. The TIP identifies the need in the area for additional transportation funding. Locals will become familiar on how the program works to get projects into the pipeline or process. The projects are ranked and prioritized based on the TIP criteria.

Mr. Winters stated that he just wanted some clarification, as it changes many things as far as his process. Mr. Raupp mentioned that in the past you would get advanced dollars, but now that is limited. Mr. Winters stated that he would have built Scott Street, but can't with a negative funding balance. Mr. Raith stated that the projects could be done as smaller projects. Mr. Raupp confirmed that other urbanized areas do projects by a block at a time, if necessary.

Mr. Moesch stated that the candidate project listing was compiled through contact with Fond du Lac County, the City, the Village, the Towns, as well as WisDOT. Mr. Moesch described using the State Transportation Improvement Program to identify projects that were already programmed for years 2006 and 2007. He suggested that if any errors were noticed the Committee could contact staff and get them corrected. Mr. Winters stated that he sent projects later than the deadline and noticed they were not included in the listing. Mr. Moesch stated that they will be included in the tables, but were not ranked for STP-Urban funding.

Mr. Moesch went through project ranking criteria and Table A4 to demonstrate how staff had arrived at their recommendation. Mr. Moesch explained that CTH VV (Morris-Hickory) was ranked highest because of numerous criteria. The project had appeared in previous plans, there was also a serious safety issue with many vehicle crashes as well as numerous conflicts with trains. Mr. Raith mentioned that all modes of transportation were being considered as part of the project, and that there is a bias towards projects that are multimodal. The final criteria for determining funding would be funding availability, which Fond du Lac County was the only one with a positive balance. Mr. Rollin mentioned that this process might not represent the true priority for the group. Ms. Hickman stated that this is the way the ranking process works, but the policy board can select a different project if there is a consensus.

Mr. Raith suggested that staff submit the CTH VV project to WisDOT, and use the STP-Urban funding for the engineering portion of the project. Mr. Winters stated he thought the project needed to be funded at %80. Mr. Raith stated that WisDOT has been reluctant to fund projects below %50. Mr. Rollin suggested that ideally Mr. Winters should find projects in the future that total around \$900,000 to better utilize the process. Mr. Winters added that in the future he would go through the ranking process in more detail to determine which projects would be appropriate. Mr. Rollin stated that the City and County both agree that this is a very high priority for the urbanized area and will recommend the CTH VV project for funding. Mr. Rollin suggested someone make a motion to select the project for funding.

Mr. Smigielski moved to approve the CTH VV project. The motion was seconded by Mr. Thiesfeldt and passed unanimously.

Mr. Moesch mentioned that at the next meeting a draft transportation improvement program will be completed and available for review.

4. Review and discussion of Current Plan model results and analysis schedule.

Mr. Raith said that the 2035 socioeconomic data set was still being manipulated by staff and the consultants; therefore we are delayed somewhat in the process. He briefly described the variables that are added to the socioeconomic data to produce trip generation in the model. Mr. Miller added that the statewide model will be completed in the next week or two, then East Central staff will be able to continue with the planning scenarios. He added that the external stations around the MPO area must be developed based on the statewide model.

Mr. Raith continued with some discussion about future deficiencies throughout the system. He noted that from a modeling perspective, there were not many capacity issues or deficiencies on the system at this point. Mr. Rollin mentioned that presently Fond du Lac has few traffic problems, but there were many concerns about the USH 151 bypass having at-grade crossings at intersections. Mr. Rollin questioned what can be done to fix this before there is a problem. Mr. Raith stated that the MPO is in the position to give attention to this and get it into the plans for the future. Mr. Miller added that the travel demand model can evaluate this to show the need for improvements. Ms. Hickman stated that policy decisions were at the city and county level, and there needed to be policies for development in order to address this situation.

Mr. Raith mentioned that at the next TAC meeting they will discuss model data and this can be looked at. Mr. Rollin asked if this could be included on the agenda for the next meeting, in order to get the documentation to have it in the long-range plan. Some discussion followed regarding the need to address the access to land use adjacent to the USH 151 bypass.

Mr. Raith distributed a handout concerning level of service and volume to capacity being used in the model for the Fond du Lac Urbanized Area. Mr. Winters suggested that what is congested in Los Angeles, does not mean the same for Fond du Lac. Mr. Raith agreed that level of service is subjective and that the model uses capacity and roadway function to determine deficiencies or level of service. The volume to capacity is one way to measure congestion that is fairly consistent.

5. Review and discussion of MPO Plan status

Mr. Raith stated that another meeting may need to be scheduled in the next few months in order to address things in an appropriate manner to complete the long-range plan process. Mr. Kakatsch distributed an outline of the long-range plan and discussed the status of each chapter. Some discussion followed regarding the missing sections in the plan including the financial plan and the need to be fiscally constrained to the available funding. Mr. Rollin questioned whether projects have to be fiscally constrained to appear in the plan. Ms. Hickman responded that illustrative projects can be included with discussion about how additional funding might be acquired.

Mr. Rollin questioned when the plan will have to be completed. Ms. Hickman responded that the long-range plan is due on October 1st, 2005, and without a plan or TIP federal funds for projects in the MPO area could not be authorized.

6. Other Business

Ms Hickman mentioned that FHWA and FTA has put together a presentation on what the duties of an MPO policy board are, and wondered if members would be interested in viewing this at a future meeting. Mr. Rollin responded with a yes, and requested that it be put on the next agenda.

7. Adjourn

Mr. Flood made the motion to adjourn. Mr. Rollin seconded the motion and, hearing no objections, the meeting was be adjourned at 11:25 A.M.

SUMMARY OF PROCEEDINGS
Fond du Lac MPO
Technical Advisory Committee &
Long-range Transportation/Land Use Plan Advisory Committee
Fond du Lac City-County Government Center
July 7, 2005

The meeting was called to order at 9:00 a.m. by Walt Raith, ECWRPC.

Committee Members Present

Lynn Gilles City of Fond du Lac, Fond du Lac Area Transit
Jim Pierquet Town of Empire
Harold Manske Town of Fond du Lac
Kurt Miller WisDOT, Madison
Lee Perrizo Fond du Lac County Airport
Jeremy Theisfeldt..... City of Fond du Lac

Committee Members Absent

Stephaine Hickman FHWA
Curt Holman Canadian National Railroad
Jeanette Cavanaugh..... WisDOT, Northeast Region
Jerry Guelig Town of Taycheedah
Mark Lentz City of Fond du Lac, Dept. of Public Works
Charles McCourt Town of Friendship
Wayne Rollin City of Fond du Lac
Lindee Kimball City of Fond du Lac
Sam Tobias Fond du Lac County
Mike Tolvstad Village of North Fond du Lac
Mel Smigielski Village of North Fond du Lac
Ernie Winters..... Fond du Lac County Highway Department

Staff Members Present

Walt RaithPrincipal Planner, Transportation
Dave MoeschPlanner, Transportation
Melissa Kraemer Badtke..... GIS/Planning Specialist
Kara McGurk..... Intern

Others Present

Christine Kaup Citizen/League of Women Voters
Ruth Dauterman Citizen/League of Women Voters

1. Introductions and Approval of the Summary of Proceedings of the April 14, 2005 Technical Advisory Committee Meeting

Mr. Raith welcomed the group and began introductions. The summary of proceedings from April 14, 2005 was reviewed. Ms. Kraemer Badtke stated that Ms. Hickman had called to clarify under item number 3 that airport runaways are not eligible for STP-Urban funds, but the roads leading up to the airport are eligible for STP-Urban funds. Major airport projects can be listed, but are not eligible for STP-Urban funds.

Mr. Manske moved for approval of the April 14, 2005 summary of proceedings with the changes from Ms. Hickman. Ms. Gilles seconded the motion and the motion was passed unanimously.

2. Long-range Transportation and land use plan status including the review and discussion of 2035 preferred plan/compact/full build scenarios and 2035 deficiencies/preferred plan recommendations.

Mr. Raith stated the Long-Range Transportation/Land Use Plan for the Fond du Lac MPO is due October 1, 2005. Mr. Raith stated that staff has continued to work on the draft document and there are a few items that staff is still working on. Mr. Raith went over the checklist for the plan and which sections are completed and which are not. Sections still in progress include the alternative analysis, the environmental analysis for the travel demand model, and the financial plan.

Mr. Raith went over the travel demand model scenarios. Mr. Raith mentioned the current trend – 2035 is the scenario that staff is focusing on. Mr. Raith stated in 2035 the travel demand model is showing severe congestion on USH 41, so staff will recommend USH 41 would be 6-lane sometime in the future. Mr. Raith also recommended that on STH 23 there would be better signal progression and timing, perhaps putting camera activated signal lights. Mr. Raith said those are just a few of the recommended projects would be included in the plan. Ms. Kaup stated the committee should be looking at increasing densities of housing and the sprawl issues around the Fond du Lac MPO. Mr. Raith mentioned that staff is looking at a compact scenario that uses high densities of housing. Mr. Raith explained for the compact scenario there will be a population of 200,000 and the development will be denser. Mr. Raith also stated that the full build scenario is not a lot denser than the current trend scenario. Mr. Raith explained the housing densities will come down to the local officials and their decisions. Mr. Raith went over the differences between the travel demand model scenarios.

Mr. Raith mentioned that staff ran the travel demand model with USH 151 bypass closed and then with it open. Mr. Raith stated that the portion of USH 151 from Military Ave. to USH 41 will not be open for a number of years. Mr. Raith would like to see the MPO committee and the City of Fond du Lac reconsider some of the proposed land use next to the USH 151 bypass to include a grade separation. Mr. Raith would also recommend that the bridge on Martin Rd. be replaced. Mr. Raith stated concerns with regards to the at-grade intersections and the average daily traffic on roads perpendicular to the USH 151 bypass, particularly at STH 175. Mr. Manske stated that the Martin Rd. Bridge will be replaced and the road will be expanded in 2007. Mr. Manske mentioned that the town has talked to Canadian National regarding the railroad line that runs over Martin Road and they said it would continue to be in service. Mr. Moesch stated the portion of the USH 151 bypass from Military Ave. to USH 41 is programmed for 2007. Mr. Raith mentioned that staff ran the travel demand model with the USH 151 bypass open, including the portion from USH 41 to Military Ave. Mr. Raith would like to rerun the travel demand model with only the portion of USH 151 from STH 23 to USH 41 open to get a better idea of what will occur once the bypass is open. Mr. Manske noted a portion of the USH 151 bypass from STH 175 to USH 41 will be built over Hickory Rd. Mr. Raith was unaware of that and said that he would check into it. Mr. Manske stated that STH 175 would be undergoing a jurisdictional transfer to the town. Mr. Miller asked what if there was much of a difference between the parts of Hickory and STH 175 south of the USH 151 bypass. Mr. Raith replied that there was not much difference and there was more of a difference to the north of the USH 151 bypass. A discussion regarding the at-grade intersections on the USH 151 bypass occurred.

Mr. Raith mentioned that the Long-Range Transportation/Land Use Plan will be updated every 3-5 years. Mr. Raith explained there are other aspects including populations, the aging population, and other modes of transportation, which staff would like to look at, but does not have the time for. By updating the plan every 3-5 years would allow staff and the MPO to look at those variables. Mr. Manske stated the sewer will impact the rural development. Mr. Raith explained that the SSA plan does not exactly mirror the proposed land use.

3. Draft 2006 Transportation Improvement Program for the Fond du Lac Urbanized Area

Mr. Moesch went over the draft TIP for the years of 2008-2009. Mr. Moesch explained the CTH VV project was picked for the project to receive STP-Urban funds. Mr. Moesch explained that the projects from 2007 are from the state TIP and if the committee notices something that is missing to please let Mr. Moesch know. Mr. Moesch stated that a formal resolution will be going to the policy board Thursday, July 14, 2005 for approval of the TIP. Mr. Raith explained that with the ranking process, if a project that was selected fall through, the committee could assign the funds to the project that has the next highest ranking. Mr. Raith explained that with Fond du Lac becoming a MPO, the committee has more of decision as to what project get funding.

Mr. Manske asked if the STH 23 west project and the Esterbrook project is programmed in the TIP. Mr. Raith said that it did show up in the project listing. Mr. Miller said that he did not see the STH 23 in the candidate listing. Mr. Moesch said he would add it in. Mr. Raith also mentioned the Martin Rd. Bridge is scheduled for 2007 and the Reinhert Rd. Bridge is scheduled for 2006.

4. Next Long Range Plan Committee and TAC meeting dates for 2005

The policy board meeting is scheduled for July 14th, 2005 at the Fond du Lac City-County Government Center at 10 a.m. The next Long Range Planning Advisory and Technical Advisory Committee meeting is a joint meeting with the Policy Board on September 8, 2005 at the Fond du Lac City-County Government Center at 9 a.m. Mr. Raith noted that a Public Information Meeting will be held Monday, July 25, 2005 at UW-Fond du Lac from 6 p.m. to 8 p.m. The Long-Range Transportation/Land Use plan will have a 45-day review period after the public information meeting. The deadline for the Long-Range Transportation/Land Use plan is October 1, 2005.

5. Other business

With no other business, a motion to adjourn was made by Mr. Pierquet and a second was made by Mr. Manske. The motion was unanimously passed and the meeting adjourned at 10:00 a.m.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
July 14, 2005

The meeting was called to order at 10:00 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel	Fond du Lac County Executive
Richard Flood	Fond du Lac County Highway Committee Chair
Mark Lentz	City of Fond du Lac
Jim Pierquet	Town of Empire
Jeremy Theisfeldt	City of Fond du Lac
Wayne Rollin	City of Fond du Lac
Mell Smigielski	Village of North Fond du Lac
Mike Tolvstad	Village of North Fond du Lac
Ernest Winters	Fond du Lac County Highway Commissioner (Alternate)
Stephaine Hickman	FHWA
Kurt Miller	WisDOT, Central Office

Staff Members Present

Walt Raith	Principal Transportation Planner
Dave Moesch	Transportation Planner
Melissa Kraemer Badtke	GIS/Planning Specialist
Kara McGurk	Intern

1. Introductions, review and discuss MPO Policy Board Member List

Mr. Buechel welcomed everyone to the meeting and began introductions. Mr. Raith explained that staff was emailing and mailing the meeting agenda and the enclosures and if there was anyone who was not receiving these by email to please let staff know. Mr. Lentz mentioned that the City of Fond du Lac has been having problems with their email. Mr. Rollin mentioned that he would send Mr. Raith Lindee Kimbell's email address.

The policy board looked over the MPO Policy Board Member list and there were no additional changes or comments.

2. Approval of May 12, 2005 Summary of Proceedings

Mr. Raith stated that the summary of proceedings from the Technical Advisory Committee (TAC) and Long Range Planning (LRP) Committee as well as the Policy Board will be in the back of the Long-Range Transportation/Land Use Plan. Mr. Buechel asked if there were any comments or concerns with the summary of proceedings. Hearing none, Mr. Pierquet moved for approval of the summary of proceedings. The motion was seconded by Mr. Flood and passed unanimously.

3. Federal Highway Administration, Metropolitan Transportation Planning presentation

Ms. Hickman, with the Federal Highway Administration, provided a presentation of the Metropolitan Transportation Planning process and purpose, along with the responsibilities of the MPO and the role of the MPO Policy Board. Ms. Hickman handed out copies of the PowerPoint presentation. If anyone would like an additional copy, please contact Ms. Hickman or East Central staff.

4. Review and discussion of Draft Long Range Transportation and Land Use Plan

Mr. Raith said that the committee members should have received a matrix checklist of plan progress with the agenda. He explained that many of the sections are complete, however, the alternative analysis and the financial plan is still in progress. Staff is waiting for WisDOT to provide cost estimates for the state trunk highway system. Staff provided a copy of the draft plan for the committee to review. As the group paged through the document Mr. Raith asked the committee to let staff know of any changes or comments.

Mr. Raith described the travel model scenarios and explained the deficiencies for each of the land use alternatives. Mr. Raith commented that staff would be primarily looking at the Current Trend – 2035 scenario for the recommendations. A few recommendations that staff suggested would be to make USH 41 six lane facility, looking at USH 151 bypass and the grade separation of a few intersections, and then also looking at STH 23 and STH 175 with technology for signal lights and expanded capacity by removing parking or some other management strategy.

Ms. Hickman noted that FHWA is encouraging MPOs that are not a Transportation Management Area (TMA) to look at operational improvements first, second preserving the system and transit, and third looking at the expansion of the facility. Mr. Raith added that Fond du Lac MPO now has a travel demand model to test management strategies for future projects and for future work on the Long-Range Transportation/Land Use Plan.

Mr. Raith asked that the committee consider additional recommended projects that they would like to see that was not already identified in the plan. Mr. Raith explained that the TIP is one way to look at communities needs in addition to the plan. Mr. Rollin noted that some TIP projects were missing from the listing including the recommendation that Pioneer Road be grade separated with the rail crossing. After some discussion it was noted that at a minimum the projects table from the TIP would be included in the recommendations. Mr. Raith commented that staff would make note of that change and make the necessary adjustments in the plan.

Ms. Hickman asked for a date regarding providing comments to staff. Mr. Raith said that he would like all comments from the policy board to be received by August 15, 2005. He added that the draft document would be open for public comment after a public information meeting scheduled for July 25, 2005 from 6 – 8pm at UW-Fond du Lac. Mr. Miller asked when the public review period would start. Ms. Hickman stated that most MPOs begin their public review period with the public involvement meeting. Ms. Hickman also mentioned that if there were comments resulting in significant changes the document would have to be brought back to the public for another review period. A discussion regarding the review period followed. The public involvement plan calls for a 45 day review period, which would put the closure of the 45 day period after the next scheduled committee meeting on September 8th. Ms. Hickman stated that FHWA would work with the committee on the approval of the document.

Mr. Buechel suggested moving the upcoming Policy Board meeting from September 8 to September 15 at 10:00 A.M. The Committee agreed to reschedule the meeting to reflect the 45 day review period from the public information meeting.

Some discussion followed regarding supporting evidence for the recommendations that are currently in the plan. Mr. Raith replied that the many of the recommendations are part of current plans, with an additional number of projects driven by the model analysis. Mr. Raith mentioned that staff is continuing to work on the compact scenario and it will have denser development.

5. Review and discussion of **Proposed Resolution No. 01-05: Draft 2006 Transportation Improvement Program for the Fond du Lac Urbanized Area**

Mr. Moesch provided copies of the draft Transportation Improvement Program for the Fond du Lac Urbanized Area 2006. He explained that additional maps will be included in the Appendix. The group reviewed portions of the draft document as Mr. Moesch explained additional items for Transportation Improvement Program (TIP) including a signed resolution of adoption.

Mr. Moesch asked the policy board to review the draft and let staff know of any changes or comments. Mr. Moesch stated that the TIP had already been used as part of a Transit grant approval. Mr. Moesch asked the board if they would like to see a different logo on the front cover before the final is printed. After some discussion it seemed a lighthouse on the cover would be appropriate. The committee said that a lighthouse on the cover would be good.

Ms. Hickman asked what staff has done for public comment. Mr. Moesch replied that there has been an ad in the newspaper that specified the public comment period ending August 1. A discussion regarding when to approve the proposed resolution occurred. Ms. Hickman stated that approval for the proposed resolution must occur once the public review period is finished. The Policy Board agreed to adopt the resolution for the Transportation Improvement Program at the September 15, 2005 meeting.

6. Other Business/Adjourn

Mr. Raith noted that staff would email the Public Information Meeting notice as a .pdf file for those would like to distribute additional copies

Mr. Rollin made a motion to adjourn. Mr. Smigielski seconded the motion that passed unanimously and the meeting adjourned at 11:05 A.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
September 15, 2005

The meeting was called to order at 10:05 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel	Fond du Lac County
Jim Pierquet	Town of Empire
Lindee Kimball	City of Fond du Lac
Wayne Rollin	City of Fond du Lac
Tom Herre	City of Fond du Lac
Mell Smigielski	Village of North Fond du Lac
Ernest Winters	Fond du Lac County (Alternate)
Stephanie Hickman	FHWA
Kurt Miller	WisDOT, Madison

Staff Members Present

Walt Raith	Principal Transportation Planner
Jason Kakatsch	Associate Transportation Planner
Dave Moesch	Associate Transportation Planner
Melissa Kraemer Badtke	GIS/Planning Specialist

1. Introductions

Mr. Buechel welcomed the committee and started introductions.

2. Approval of July 14, 2005 Summary of Proceedings

Mr. Buechel asked if anyone had questions or comments on the Summary of Proceedings from the July 14, 2005 meeting. Hearing none, Mr. Rollin moved for approval of the July 14, 2005 summary of proceedings. The motion was seconded by Mr. Smigielski and passed unanimously.

3. Review and discussion of the July 25, 2005 public information meeting for the MPO Long Range Plan and the TIP

Mr. Raith described a Public Information Meeting that was held July 25, 2005 at the UW-Fond du Lac Campus. He commented that the turn out was good and East Central staff received a number of comments from the public. Some discussion followed regarding some of the issues discussed and how they are addressed in the Long-Range Plan. The majority of comments were about transit, bicycle and pedestrian facilities, and the need for long term planning.

Mr. Winters wondered how the committee would make a change in the document; does it have to be brought back to the Technical Advisory Committee, the Policy Board, and the public? Mr. Raith stated that an amendment should be done if there are any major changes. It should go back to the public if the amendment would significantly change the land use plan or major recommendations. Mr. Raith added that the plan is updated fairly often and changes are typically done at that time. The need to go to the public would be determined by the Policy Board, with assistance of staff and guidance from WisDOT and FHWA.

Some discussion followed regarding projects getting moved up or the money for a project changing. Ms. Hickman said that the Federal Highway Administration has no specific guidelines and that the Committee could take this up as part of their public involvement plan.

4. Discussion and action on the proposed **Resolution 1-05**, Adopting the draft *Transportation Improvement Program for the Fond du Lac Urbanized Area 2006*

Mr. Moesch stated the Transportation Improvement Program is an update of the draft presented at the July 14, 2004 meeting that reflects some changes in the funding. Some discussion followed regarding the recalculation of urban funds statewide, recently completed by WisDOT. Mr. Moesch stated that in addition some updates to the federal regulations noted in the document were provided by Ms. Hickman. Some discussion followed regarding other minor changes that were completed in the draft document. Mr. Moesch explained that this version contains the environmental justice maps and the urbanized functional classification system map. The functional class mapping shows all roadways that are eligible for the STP-Urban funding and TIP process.

Mr. Raith stated the *Transportation Improvement Program for the Fond du Lac Urbanized Area* would be updated annually. Mr. Buechel asked the committee for a motion regarding proposed Resolution 1-05, adopting the draft *Transportation Improvement Program for the Fond du Lac Urbanized Area 2006*.

Mr. Winters moved for the approval of the 2006 TIP. The motion was seconded by Mr. Pierquet and, with no further discussion, passed unanimously.

5. Discussion and action on the proposed **Resolution 2-05**, Adopting the draft *Long Range Transportation and Land Use Plan for the Fond du Lac Urbanized Area 2006*

Mr. Raith explained that the long-range plan addresses the national planning factors set out by the Federal Highway Administration. The MPO discussed and developed goals and policies during the planning process and those are addressed in the long-range plan. Mr. Kakatsch stated that about 95% of the document is complete and East Central staff is currently working on formatting the document along with working on the financial plan. Mr. Kakatsch provided a brief summary of each chapter in the document.

Mr. Rollin commented that on page 77, the first sentence should read "This is also evident by the nature of the collision where 90% of the accidents (instead of 90 accidents)". Some discussion followed regarding other minor changes that had been made or should be made in the plan. Staff noted the changes that would be completed for the final. Ms. Kraemer-Badtke said that the number listed on the intersection crash locations map is kind of confusing and identifies the location not the number of crashes. She stated it would be changed to clarify the identification number on the final map.

Mr. Winters noted that just because an intersection has a lot of crashes does not mean that the crash rate is high or there is a problem with the facility. Mr. Raith agreed and noted that the text had been changed from "Hot Spot" to intersection crash information and is designed to identify high crash intersections and give the committee and staff a starting point to doing more analysis at these locations. Mr. Kakatsch stated there are variables that the committee and staff can analyze to develop crash rates for the intersections. Mr. Raith stated that the travel demand model includes the traffic counts on the urbanized functionally classified system that can likely be used in the future to estimate the crash rates for the intersections. Some discussion followed regarding the analysis of the bike, pedestrian, and freight crashes included in the plan.

Mr. Kakatsch said that any additional recommendations from the committee will be included in the document. Ms. Hickman stated that it would be beneficial to see the transit routes with the census tract information on Exhibit 74 and Exhibit 75. She added it would also be beneficial to make sure that locations of minority and low to extremely low income populations are shown and discussed with regard to access to major employment, medical, post-secondary education, recreation and shopping centers.

Mr. Raith stated that East Central staff is working with WisDOT to prepare the financial plan for the Fond du Lac Area. He provided handouts showing 4 years of Department of Revenue expenditures for all the MPO communities and explained that the data would be used to establish expected annual revenues over the life of the plan. He described the Wisconsin Information System for Local Roads (WISLR) that will be used to estimate the annual cost for administration and maintenance on the local road system. Added to that number are the planned projects identified in the plan that amounts to over \$130 million. Staff is working with WisDOT to develop anticipated federal and state funds over the life of the plan. Some discussion followed regarding funding for the USH 151 bypass and just before that the Johnson Street (STH 23) overpass project that amounts to significant funds in the Fond du Lac area. The group discussed anticipated cost over the life of the plan and the need to be fiscally constrained in terms of anticipated revenues to match anticipated expenditures.

Mr. Rollin asked if the numbers in the financial plan commit locals to those expenditures. Mr. Raith replied that the locals decide what the actual expenditures are and that the plan is just that, a plan. Ms. Hickman explained that the TIP is for committed projects, while the financial plan looks at the cumulative costs of those projects to insure that locals have enough money to complete what is proposed.

Mr. Herre wondered what impact Fond du Lac being the smallest MPO has. Mr. Raith stated that it seems to be problematic in terms of transit funds and will require some changes in perspective and funding sources. Programs may be available now that were not before, but the new process has a learning curve. As an example the FTA has already referenced the MPO TIP in a grant to Fond du Lac Transit. The administration of the STP-Urban program has shifted from WisDOT to the Policy Board in terms of what projects are selected for the STP-Urban program, but with more funding caps and specific schedules in place. On the bright side, being a smaller area there is not a lot of traffic congestion, or for that matter, major transportation issues.

Mr. Herre asked what would happen if Fond du Lac would drop below the 50,000, would it not be an MPO for the next census. Ms. Hickman stated it rarely happens that an area becomes a MPO and then drops MPO status at the next census.

Mr. Buechel asked the group to consider action regarding Resolution 2-05, adopting with the discussed changes. A motion was made by Mr. Winter and seconded by Ms. Kimball to approve the *Long-Range Transportation and Land Use Plan for the Fond du Lac Urbanized Area*. The motion passed unanimously.

6. Next steps in the process, MPO Policy Board, WisDOT, FHWA and public review, monitoring, data collection, analysis, and studies

Mr. Raith handed out and described a draft work program for the Fond du Lac MPO. The work program elements list planning activities slated for 2006. Mr. Raith asked that the group review the activities and consider any additional studies that should be added. He added that at the next Policy Board meeting the group will be asked to consider approving the work program. Some discussion followed regarding the next years activities. Mr. Raith stated that the Transportation Improvement Program for the Fond du Lac Urbanized Area would be done every year. Most of the work items in the program reflect studies recommended in, and are consistent with implementing, the plan.

Some discussion followed regarding the funding anticipated for 2006. Mr. Raith noted that the discretionary funds for the Fond du Lac MPO start-up are no longer in the work program. Mr. Raith stated that there is a lot of work that still needs to be done on the travel demand model and hoped that WisDOT could provide some additional funds. He summarized by saying that the final numbers would not be known until work program meetings with FHWA and WisDOT. Mr. Raith asked Ms. Hickman when the transportation bill SAFETEA-LU takes effect. Ms. Hickman stated the requirements for SAFETEA-LU must be met for any plan adopted after July 1, 2007. Ms. Hickman reminded the Board that the deadline for the Fond du Lac work program is November 1, 2005. Mr. Raith suggested scheduling another meeting for approving the Fond du Lac work program. Mr. Buechel asked the committee if Thursday, October 20, 2005 at 10:00 A.M. would work for the Board members. The group agreed that the meeting will be held on October 20, 2005, at the Fond du Lac City/County building in Room D/E.

7. Other business/next meeting dates/adjourn

The next Policy Board meeting will be at 10:00 A.M. on October 20, 2005 at the City/County Government Building in Rooms D/E. Meeting dates for the upcoming Technical Advisory Committee and the Policy Board were made and are listed as follows:

Policy Board: February 9, 2006; May 11, 2006; August 10, 2006; October 11, 2006

Technical Advisory Committee: January 12, 2006; April 13, 2006; July 13, 2006; September 14, 2006

With no other business, Mr. Rollin moved to adjourn. The motion was seconded by Mr. Herre and passed unanimously. The policy board adjourned at 11:05 A.M.

SUMMARY OF PROCEEDINGS
FOND DU LAC MPO
POLICY BOARD MEETING
Fond du Lac City/County Government Center
October 20, 2005

The meeting was called to order at 10:05 A.M. by Allen Buechel, Chair.

Committee Members Present

Allen Buechel.....	Fond du Lac County Executive
Wayne Rollin	City of Fond du Lac
Tom Herre.....	City of Fond du Lac
Mell Smigielski	Village of North Fond du Lac
Stephaine Hickman	FHWA-WI
Kurt Miller	WisDOT, Madison
Jeanette Cavanaugh.....	WisDOT, Northeast Region

Staff Members Present

Walt Raith	Principal Transportation Planner
Dave Moesch	Associate Transportation Planner
Melissa Kraemer Badtke.....	GIS/Planning Specialist

1. Introductions

Mr. Buechel welcomed the committee and started introductions.

2. Approval of September 15, 2005 Summary of Proceedings

Mr. Buechel asked if there were any questions or comments on the Summary of Proceedings from the September 15, 2005 meeting. Hearing none, Mr. Rollin made a motion for approval of the September 15, 2005 summary of proceedings. Mr. Herre seconded the motion and the motion was passed unanimously.

3. Discussion and action on proposed 2006 Transportation Planning Work Program

Mr. Raith handed out a revised Fond du Lac Work Program and went over the new elements. The new elements included 1355: Urban Transit/Transportation Service Planning and 1356: Fond du Lac MPO Model Maintenance/Development. Mr. Raith explained that for work item 1355, that East Central staff would assist the Fond du Lac Area Transit on grant applications and continue to look at studies with regards to the transit system. For work item 1356, Mr. Raith explained that even though the Fond du Lac area has a travel demand model that there is still a lot of work to be done, including adding a transit model and a freight model. Mr. Raith stated that the travel demand model could be used to look at special studies that the Technical Advisory Committee or the Policy Board or Technical Advisory Committee might have. East Central staff will continue to work with WisDOT in Madison on the travel demand model. Mr. Raith noted that there are changes in the amount of funding available, which includes discretionary funds for the travel model. Mr. Raith stated the committees can look at a particular corridor or the impact of a new development on the existing transportation system with the

travel demand model. Ms. Hickman emphasized that federal highway is focusing on maintenance/development and safety. East Central staff would do more analysis on the crash data with the Fond du Lac Committees.

Mr. Rollin asked if the work program has to be approved. Mr. Raith replied that the deadline for the Work Program is November 1, 2005. Mr. Buechel asked if there were any questions or comments on the 2006 Work Program. Hearing none, Mr. Rollin made a motion for approval. Mr. Smigielski seconded the motion and it was passed unanimously.

4. Discussion of possible 2006 special studies for the Fond du Lac MPO

Mr. Raith explained that there is money for a study with the USH 151 bypass for addressing the at grade intersections. Ms. Cavanaugh explained that WisDOT, Northeast Region will be hiring a consultant to look at the at grade intersections on the USH 151 bypass. Mr. Rollin asked if there will be any MPO interaction. Ms. Cavanaugh explained that this study would be similar to the STH 21 study. For the STH 21 study, the consultant had modified part of the travel demand model for Oshkosh and is taking a look at intersection locations. There has been work done with ECWRPC and with WisDOT in Madison. Ms. Cavanaugh noted that there would be press releases, public information meetings, and input from the MPO committees for the USH 151 study. Mr. Raith explained that the study will provide a lot of information regarding changing the at-grade intersections and the MPO will decide what they want to take a look at.

Mr. Raith stated that East Central staff is working with the Village of North Fond du Lac and the Canadian National on Lakeshore Dr. Canadian National would like to close access across the railroad tracks at Lakeshore Dr. East Central staff and the Village of North Fond du Lac is currently using the travel demand model to see if a possible grade separation would be a solution.

Mr. Miller stated that WisDOT in Madison will work with ECWRPC and WisDOT, Northeast Region on the travel demand model. Mr. Raith explained that each Metropolitan Planning Organization (MPO) has a travel demand model and the WisDOT has also developed a statewide travel demand model. The statewide travel demand model has each of the MPO models built into the statewide model. If a municipality is looking for a future traffic count, they can contact either ECWRPC or WisDOT and it will be consistent. One example where this is being used is looking at access for a commercial business on STH 23 west of the City of Fond du Lac in the Town of Lamartine. East Central staff is currently working with the town and WisDOT to take a look at the impact of adding access to STH 23 and they are also looking at alternatives that could be used to avoid adding access to STH 23.

5. Long Range Plan publication and distribution

Mr. Raith explained that East Central staff will be formatting and making additions to the draft copy of the Fond du Lac Long-Range Transportation/Land Use plan. Mr. Raith stated that the final document will be published in November and each municipality within the MPO will be receiving a copy, as well as those organizations on the Technical Advisory Committee.

6. Other business

Ms. Hickman asked if a website had been established for the MPO. Mr. Raith stated that it has not. Ms. Hickman explained that under the SAFETELU legislation that public information materials will need to be displayed on the web. Ms. Hickman suggested that the website be put under the County or the City's websites, since East Central staff is contracted by the MPO. Mr. Raith suggested that East Central would maintain the website with regards to updated materials, but it would be linked to

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Mr. Buechel asked if there was any other business. Mr. Buechel noted that the next Technical Advisory Committee meeting is January 12, 2006 and the next Policy Board meeting is February 9, 2006. Mr. Rollin said that he would make sure the room was available for the meetings next year. With no other business, Mr. Smigielski made a motion to adjourn. Mr. Herre seconded the motion and passed unanimously. The policy board adjourned at 10:30 A.M.

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APPENDIX D

Resolution of Adoption

RESOLUTION NO. 2-05

ADOPTION OF THE LONG RANGE TRANSPORTATION AND LAND USE PLAN FOR THE FOND DU LAC URBANIZED AREA

WHEREAS, the Fond du Lac Urbanized Area has been designated by the Governor of the State of Wisconsin as a Metropolitan Planning Organization (MPO) for the purpose of carrying out cooperative, comprehensive and continuing urban transportation planning; and

WHEREAS, a plan was prepared to meet the requirements of the Transportation Equity Act for the 21st Century, as prescribed in the U.S. Code, Title 23 Section 134 and in accordance with joint Federal Highway Administration and Federal Transit Administration Metropolitan Planning Rule in the Code of Federal Regulations, Title 23, Part 450 and Title 49, Part 613, effective November 29, 1993; and

WHEREAS, the principal elected officials of local governments including Fond du Lac County, the City of Fond du Lac, the Village of North Fond du Lac, the towns of Byron, Empire, Friendship, Fond du Lac, Taycheedah, their designated staffs, technical and transportation plan advisory committees and the public, have participated in the planning process; and

WHEREAS, the public participation was consistent with a formally adopted Public Involvement Plan that included local newspaper advertising, radio coverage, special needs accommodations, and public information meetings in locations with access to public transportation; and

WHEREAS, the long range plan considers all modes of transportation and reflects the forecast growth, land use and transportation plans, goals, objectives and policies of the member communities; and

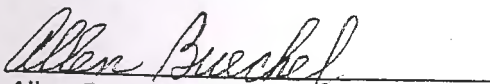
WHEREAS, the plan includes reasonably anticipated funding to meet the long term transportation needs, protect the environment and improve the quality of life for the citizens of the Fond du Lac Urbanized Area; **Now, Therefore:**

BE IT RESOLVED BY THE FOND DU LAC METROPOLITAN PLANNING ORGANIZATION THAT THE POLICY BOARD ADOPT THE LONG RANGE TRANSPORTATION AND LAND USE PLAN FOR THE FOND DU LAC URBANIZED AREA:

Effective Date: September 15, 2005

Submitted By: MPO Staff

Prepared By: Walt Raith, ECWRPC



Allen Buechel, Chair

Fond du Lac MPO Policy Board

APPENDIX E

Documentation of Public Involvement Notices

Fond du Lac Area MPO Public Involvement Process

Background

The Fond du Lac Area MPO was formed in late 2002, based on the 2000 Census. The urbanized area includes the City of Fond du Lac, the Village of North Fond du Lac, and portions of the towns of Empire, Friendship, Fond du Lac, and Taycheedah. The MPO policy board and technical advisory committee were established with representation from these municipalities, and from various other transportation modes, WisDOT, and FHWA. An agreement was made with East Central Wisconsin Regional Planning Commission (ECWRPC) to serve as staff to the MPO.

Purpose

The purpose of the Public Involvement Process (PIP) is to set out the parameters to allow for, encourage, and monitor participation of all citizens in the urbanized area, including but not limited to low income and minority individuals, and those with limited English proficiency. While traditional means of soliciting public involvement may not reach such individuals, or might not allow for meaningful avenues of input, it is the intent of this policy to take reasonable actions throughout the planning process to provide opportunities for historically under-served populations to participate.

This document will lay out procedures to provide opportunities for all area citizens to participate in the development of the Transportation Improvement Program (TIP) for the Fond du Lac urbanized area, and the Long-range Transportation/Land Use Plan (LRP) for the Fond du Lac urbanized area, and other planning documents that may be developed. The TIP is produced annually, which compiles all federally-, state-, and significant locally-funded transportation projects and programs in the urbanized area, and documents the selection of transportation projects under the STP-Urban program. The LRP is a document which is updated every five years, and looks at a 20+ year horizon. The LRP relates future land use expectations to transportation needs in the urbanized area and makes recommendations for projects and programs to meet those demands.

Also, this document is intended to meet federal civil rights requirements included in Title VI – Civil Rights Act of 1964. Environmental Justice provisions, adopted in Executive Order #12898, require that no population, particularly minority and low-income, be subject to a disproportionate share of adverse impacts, or are denied benefits of a program. Environmental Justice adds specific protected status of low income individuals to the Title VI requirements, to provide all members of the public equal access to federal aid programs.

Goals and Objectives for the Public Involvement Process

Goal: The goal of the PIP is to offer real opportunities for the engagement of all citizens of the Fond du Lac area in the development of transportation plans and programs.

Objectives:

- To determine what non-English languages and other cultural barriers exist to public participation within the Fond du Lac area.
- To provide a general notification of meetings, particularly forums for public input, in a manner that is understandable to all populations in the area.
- To hold meetings in locations which are accessible and reasonably welcoming to all area residents, including, but not limited to, low-income and minority members of the public.
- To provide avenues for two way flow of information and input from populations which are not likely to attend meetings.
- To provide a framework of actions appropriate to various types of plans and programs, as well as amendments or alterations to any such plan or program.

Identification of Stakeholders

Stakeholders are those who are either directly, or indirectly, affected by a plan, or the recommendations of that plan, or by the projects included in a program of projects. Those who may be adversely affected, or who may be denied benefit of a plan's recommendation(s) or project(s), are of particular interest in the identification of specific stakeholders. As an example, the long-range transportation/land use plan for the urbanized area requires a fairly wide brushstroke in identifying stakeholders. Because of the geographically broad area covered, the entire metropolitan planning area, and the multi-modal nature of the plan, stakeholders include everyone who makes, funds, or provides trips in the area, or deals with the transportation of goods into, out of, or around the area. For the purposes of this document, stakeholders are broken down into several groups: general citizens, minority and low-income persons, public and transportation agencies, and private organizations and businesses.

General Citizens: There are 50,058 residents in the Fond du Lac Urbanized Area (U.S. Census, 2000), comprising the smallest urbanized area in the country. Over 94% of the population of the urbanized area consider themselves to be of solely of a white race. Over 99 percent of the households have someone over the age of 14 who speaks English, with 93 percent speaking only English in the home.

Some of the techniques that can be used to engage the general population are public notices of meetings in the local newspaper, open house format public information meetings. While these techniques will continue, staff will make a greater effort to engage the general public, possibly with techniques such as, nominal group exercises, surveys, use of local news media, etc.

Minorities: Minority populations make up a fairly small percentage of the population in the Fond du Lac urbanized area. (See Table 1.) Hispanics make up the largest minority, with nearly 3% of the total population of the urbanized area. Black and Asian persons account for 1.6 % and 1.3% of the population, respectively. There are also a small number of American Indian/Alaska native and Hawaiian/Pacific Islander

individuals, accounting for less than ½% each. Persons who consider themselves to be of more than one race account for just over 1% of the population.

Engaging minority, and low-English proficiency populations can be challenging. Language and cultural differences may not be compatible with the more traditional means of engaging the public in the planning process. The Fond du Lac Area MPO will make reasonable efforts to engage minority populations using techniques, such as including notations in public notices in appropriate non-English languages that will provide a contact where the individual can be informed of the process/project, and will have the opportunity to give input. Focus groups may also be established for the purpose of gaining input from a particular defined portion of the community. Also, advocacy groups can be a good resource for contacts and dissemination of information to minority and low-English proficiency populations. Such advocacy groups or agencies can have insight into the needs of the under-represented populations, as well as providing valuable contacts or arenas for input. Contacts with local translators should also be maintained, and used as requested and needed.

Fond du Lac urbanized area - Race

Category	Number	Percent of Pop.
Total	50,058	100.00%
Total one race	49,479	98.84%
White	47,224	94.34%
Black	798	1.59%
American Indian/Alaska native	242	0.48%
Asian	644	1.29%
Hawaiian & Pac. Islander	13	0.03%
Other	558	1.11%
Two or more races	579	1.16%
Hispanic	1,415	2.83%

Source: U.S. Bureau of the Census, 2000.

Low-income: Low income households, those under 150% of the poverty level, account for over 15 percent of all households in the urbanized area, and seven percent of the population were actually below the poverty level, based on 1999 incomes. Low income population of the Fond du Lac urbanized area should be given every reasonable opportunity to provide input on transportation plans and programs, to avoid disproportionate harm, or lack of benefit, of transportation programs and projects.

While low-income individuals may have access to all of the traditional means of public involvement, discussed under " general public", they may be less likely to become involved, or offer input. Some methods of gaining input either directly or indirectly from

this portion of the population include focus groups, informal interviews, and agency/advocacy group contacts.

Public and Transportation Agencies: Public agencies can provide valuable input to the planning process, in addition to assisting in gaining participation from traditionally under-represented populations. Pertinent public agencies include those that provide funding for transportation services, provide actual transportation services for their clients, or have clients who fall into under-represented populations, including but not limited to minorities, low-income, and limited English proficiency households. These agencies have great insight into the transportation needs of their clients and are useful partners in overcoming difficult barriers that may not be understood by professionals dealing more distinctly with the provision of transportation services.

Transportation agencies are obviously critical to the planning process. All agencies and private providers of transportation services have a vested interest in the plan's recommendations, and their input to the process helps to smooth implementation of those recommendations. Special efforts should be made to include representatives from all modes of transportation on technical committees. Fond du Lac Area Transit and an existing paratransit coordinating committee serve as valuable resources.

Private Organizations and Businesses: Private organizations and businesses offer a number of perspectives that are valuable to the transportation planning process. Participation from privately operated modes, such as railroads and trucking companies can be more difficult to attain than from those that are publicly owned and operated, but these modes are especially critical in topics related to highway congestion and freight movement. Often, transportation for employees is of critical concern to private sector employers. What is frequently a larger issue is freight movement. The ability to access major highways, and the proper mode of transportation (truck or rail), is at the root of business decisions and, of concern to local officials, economic development potential. For these reasons, representation of private business interests will be included in the planning process, particularly on long-range plan committees. A good resource for making contacts and sparking participation of this group is the Fond du Lac Area Chamber of Commerce.

Milestones

Public Involvement Plans:

This document, upon its adoption, is to serve as the PIP for the Fond du Lac Area MPO. The adoption of this process will not occur before the public review and comment period of at least 45 days. Availability of the policy for review will be advertised in a manner reasonably expected to reach the general public, as well as minority populations, low-income persons, and other traditionally under-served populations. This could occur through contacts mentioned earlier in this document, notification of contacts available in English, Spanish, and Hmong languages, in addition to traditional public notices in local newspapers.

Any comment received during the 45-day comment period will be considered by the MPO Policy Board, and incorporated as appropriate. If such comments prompt significant change to the policy, or if significant changes are prompted by internal review, such that a population protected by under Title VI is adversely affected, or disproportionately loses benefits included in the original policy, a 30-day review period will follow prior to final action by the MPO Policy Board.

Long Range Plans: A public involvement activity plan should be developed at the beginning of each long range planning process. This will consist of a preliminary schedule of the planning process, public involvement activities, key meetings, public information meetings, review periods, and anticipated approvals.

Public involvement is key at all stages of plan development. An initial input session and at least one review and comment period, at a minimum, will be offered, but it is suggested that there be some input opportunity at each major stage of the process, including: needs identification, plan goals and objectives, alternatives, policies, draft document, and amendments to the plan. At some stages, particularly needs identification and alternatives, particular techniques could be used to gather valuable input directly from the public at large or from under-represented subgroups of the population, such as nominal group exercises, focus groups, a citizens' advisory committee, surveys, and an interactive website. Through a website, people can obtain information about each plan element and provide input to the process immediately.

Other stages of the planning process, like reviewing objectives or policies compiled by the MPO staff and the MPO TAC, or reviewing a draft documents or summaries, are more conducive to other techniques. Printed materials, in English, Spanish, Hmong, and/or Braille, if requested and necessary, available for review at libraries and/or community centers, and other locations that may be frequented by low-income or minority citizens with comment cards or some appropriate contact to submit comments can be useful. Presentations to targeted groups or representative organizations, and availability on a website are also good techniques for this review and comment function.

Other techniques could also be determined to be useful at any particular stage of the process, and new and different techniques will be utilized as deemed appropriate.

TIP: The Transportation Improvement Program (TIP) is compiled annually, and therefore lends itself to a more structured schedule of planning process, as well as the public input to that process. The TIP compiles all federally- and state-funded projects, as well all significant locally-funded transportation projects. Another purpose of the TIP is to document the prioritization and selection of STP-Urban projects. The following rough schedule presents a framework for the compilation of the TIP and key points for public involvement opportunities.

MPO staff will determine if any proposed projects will affect minority and low-income populations using U.S. Census data. More contacts will be made if an affect is detected. In any case, appropriate language notation will occur in each public notice, likely in Spanish and/or Hmong, which would inform the reader of a contact for further information.

**TIP Process Schedule
Fond du Lac Area MPO**

Time	Public Involvement Opportunity	MPO Action
late April	public notice of request for projects	projects requested of municipalities and state
late May	deadline for project submittal	deadline for project submittal
June		STP-Urban projects prioritized by MPO staff, draft TIP compiled
late June	45-day public review and comment period	TAC receives draft TIP
mid July	TAC meeting	TAC meets to recommend STP-Urban projects for funding and review draft document
mid August	end of 45-day public review period	MPO approval

TIP Amendments: The MPO will amend the TIP when new projects are added to the program following its adoption and when projects shift between programming years.

Major Amendments

A major TIP amendment will be necessary when a project that is approved for federal funds in the TIP is replaced by another project in the TIP's priority list (Table B-12 of the TIP) *or* when a project is moved into the first three years of the TIP.

A major amendment will require the following steps:

- MPO staff will begin the amendment process by releasing the proposed amendment for a 30-day public review period. Staff will inform the public of the proposed amendment by sending notices to the organizations on the Policy and Technical Advisory Committee, and other public agencies and private transportation providers mailing lists, and by publishing legal notices in local newspapers. These notices will be distributed before the 30-day review period begins.
- The public notices in local newspapers will include contacts for more information as well as a mailing and email address to submit comment, and the date of anticipated action by the MPO Policy Committee.
- The amendment will be reviewed by the MPO TAC with a recommendation to the MPO Policy Board for approval.
- MPO staff will present the proposed amendment to the MPO Policy Board for approval.

Minor Amendments

Minor TIP amendments will be necessary when projects any projects are added to the outyears of the TIP, and do not affect approved projects or projects that are within the TIP's first three years. Also, minor amendments can cover projects that are changing years or changing dollar amounts of not more than 10 percent of that program. Minor amendments will also be necessary when additional projects are added to existing project categories (e.g. Hazard Elimination and Safety and Interstate Maintenance).

MPO staff will inform the MPO TAC and the agencies and private providers mailing list of proposed minor amendment by letter, and given the opportunity to comment. The MPO TAC will review the minor amendment, and pass a recommendation on to the MPO Policy Board for action.

Planning Studies: The MPO's major planning studies will typically involve the following components, though a specific determination of public involvement actions will be determined as appropriate to each study:

Issue Identification

The Issue Identification element of the MPO's studies will be a cooperative effort between staff and some or all of the following:

- The public (through visioning sessions, neighborhood meetings, transit surveys, etc.).
- Professionals in various fields (planners, engineers, transit managers, educators, social service providers, businesspeople, etc.).
- Elected officials and appointed board members (common council members, planning commission members, etc.).

The Issue Identification phase of MPO studies can involve the creation of an advisory committee comprised of citizens, professionals, elected officials, and/or appointed board members. These committees will typically meet within the area being studied (at a municipal building or within a neighborhood, preferably accessible by public transportation, and staff will hold as many meetings as appropriate.

Goals and Objectives

The goals and objectives of studies will typically be based on the information collected during the Issue Identification phase, and they will be presented to advisory committees at public meetings when advisory committees are a part of the process.

Alternatives and Policies

Alternatives and policies that are developed and recommended during planning studies will be presented to advisory committees at public meetings when these committees are a part of the process, as well as to the MPO TAC.

Draft Documents

After completing draft documents, the documents will be made available for public review after being sent to the study advisory committees, if advisory committees exist, or to the MPO TAC. The public will also be invited to attend presentations of the documents to the appointed and/or elected bodies that will adopt them, usually the MPO Policy Board.

Amendments

The MPO will ensure that the public has an opportunity to comment before its planning studies are amended by informing the public of proposed amendments, establishing a 30-day public review period, and holding an open house/public hearing. The public will also be invited to attend the amendment adoption meetings.

Outreach Efforts

In addition to the outreach efforts identified earlier in this policy, MPO staff will use the following techniques during its planning studies, as deemed appropriate by staff and the MPO Policy Board:

- Presentations to professional, citizen, and student organizations.
- Articles in community newsletters.
- Press releases and meetings with local media representatives.
- "Drop-in" meetings with business owners and others.
- Informal conversations with individuals and small groups.
- Interviews with people who are or could be affected by study recommendations.
- Presentations by experts on various transportation-related subjects.
- Telephone and on-board transit surveys.
- Surveys and questionnaires concerning various planning issues.
- Posting transportation-related studies and plans on the MPO website.

The MPO will also experiment with other techniques to determine the best methods of involving all segments of the metropolitan area population in the planning process.

Evaluation Criteria and Process

The MPO will use the following evaluation criteria for its public participation techniques, as deemed appropriate for each project:

<u>Participation Techniques</u>	<u>Evaluation Criteria</u>	<u>Performance Goals</u>	<u>Methods of Meeting Goals</u>
Public Participation Process.	None – required by TEA-21.	N/A	MPO staff will review the PIP annually to determine if modifications are necessary.
Citizens Advisory Committees.	Attendance.	Average committee meeting attendance of at least 50 percent during a planning effort.	Distribute committee materials before meetings, establish consistent meeting schedules, when possible.
Direct Mailings (letters, fliers, etc.).	Completed flier surveys returned, number of people reached by the mailings, etc.	Minimum 1 percent of flier surveys returned or mailings reach at least 90 percent of the people who are affected by a project.	Design the fliers and other mailings in ways that encourage people to open and read them.
Community Visioning Sessions/Public Informational meetings	Attendance.	Minimum 1 percent of affected population attends each session.	Schedule at convenient times and accessible locations
Website	Number of hits; comments received	Minimum of 20 hits per month	Advertise the site in public notices and other, encourage people to obtain information from the site.
Project-Specific Newsletter Articles.	Comments from project participants and others.	newsletter reaches at least 50 percent of people who are affected by a project.	Encourage publishers to place articles in prominent locations within newsletters.

<u>Participation Techniques</u>	<u>Evaluation Criteria</u>	<u>Performance Goals</u>	<u>Methods of Meeting Goals</u>
Open House Meetings.	Attendance.	Minimum 1 percent of affected population attends during each project.	Schedule the meetings at convenient times and accessible locations.
Public Hearings.	None - required by Wisconsin Statutes, (not required under TEA-21 for attainment areas	N/A	Schedule meetings at convenient times and accessible locations.
Legal Advertisements.	None – required by Wisconsin Statutes.	N/A	N/A
Presentations to Professional, Citizen, and Student Organizations.	Comments from participants.	Most comments indicate that presentations are clear and informative.	Use pictures and other visuals to demonstrate concepts.
Press Releases, Meetings with Local Media Representatives.	Publication and broadcasting of planning-related stories.	No standard.	Inform media representatives of planning issues, be available to answer questions, develop and maintain relationships with media representatives, etc.
Presentations by Experts on Transportation-Related Subjects.	Attendance, comments from attendees.	Most comments indicate that presentations are clear and informative.	Hold presentations at convenient times and accessible locations, publicize the presentations thoroughly.
Surveys (mailed).	Number of responses.	At least 25 percent of recipients return the surveys.	Keep surveys short, include self-addressed stamped envelopes with the surveys

<u>Participation Techniques</u>	<u>Evaluation Criteria</u>	<u>Performance Goals</u>	<u>Methods of Meeting Goals</u>
Surveys (telephone).	Number of responses.	At least 90 percent of target number.	Call at times when people are often home (evenings, weekends, etc.), keep surveys relatively short, inform people of importance of survey.
Surveys (transit patrons).	Number of responses.	At least 10 percent of average daily ridership.	Keep surveys relatively short, work with operator to determine best distribution method, offer to help riders complete the surveys.

These criteria will be reviewed and modified each year as necessary. If new techniques are tried and found to be successful between review periods, the list will be updated to include the new techniques.

Documentation

Availability of Planning Documents: Hard copies of documents prepared by the MPO will be available at the City of Fond du Lac and Village of North Fond du Lac Community Development Offices, and the Taycheedah, Empire, Fond du Lac, and Friendship town halls. Electronic versions of the documents will be available on the Fond du Lac website. Significant plans and studies will also be made available at public libraries and other public agencies in the metropolitan area, as deemed appropriate. The locations of the documents will be public noticed in the local newspaper.

Methods of Addressing Comments: The MPO will document comments, present them to decision-making bodies, modify the contents of the document as necessary, and include the comments in the appendices of planning products after they are approved and published. Comments received after studies and other planning products are completed and approved will be documented and referenced when amending or updating the planning products.

Responses to Information Requests and Comments: Information can be requested from MPO staff in person and by phone, fax, e-mail, and U.S. mail. A small fee to cover the cost of printing, copying, and mailing the information may be required.

Appendix A Public Involvement Contact List

Transportation Providers-Public

Fond du Lac Area Transit & JobTrans

Elderly Transportation
Fond du Lac County Senior Services

Transportation Providers-Private

Greyhound Bus Lines

City Taxi Dispatch

Quality Cab

Nichols Five Star Charter

Lamers Bus Lines, Inc.

Kobussen Buses Ltd.

GoldStar Tours & Charters

Johnson School Bus Service

Fond du Lac City Ambulance Service

Canadian National Railroad

Other Private Entities

Forest Mall, Management

Mr. Steve Ditter, President
Fond du Lac County Snowmobile Association

Fond du Lac Cyclery

Attitude Sports

Other Public Agencies

Fond du Lac Area Job & Career Center

Fond du Lac Co. Dept. of Social Services

City of Fond du Lac Housing Authority

Other Public Agencies, cont.

Fond du Lac Public Library

Spillman Library

Fond du Lac Co. Shelter Care Facilities

Fond du Lac Co. Employment Training

Brothertown Nation, Inc.

Fond du Lac Adult Literacy Program

United Migrant Opportunities (UMOS)

N. Fond du Lac Ambulance

University Relations
UW-Fond du Lac

UW-Extension-Fond du Lac County

Fond du Lac Co. Econ. Development Corp.

Fond du Lac Area Association of Commerce

Fond du Lac Area Catholic Education System

Moraine Park Technical College

Marian College of Fond du Lac

Brooke Industries, Inc.

Northgate Senior Apartments

St. Agnes Hospital - Adult Day Services

Aging and Disability Resource Center

Aurora Health Center

Director of Transportation
Fond du Lac School District

North Fond du Lac School District

We're developing the Fond du Lac Area
Transportation/Land Use Plan

and

We need your help!

Trains

Bicycles

What would you like the transportation
system to look like in 2030?

Come to our Open House and tell us what you think.

Automobiles

5:00 p.m. to 8:00 p.m.

Tuesday, April 27th

Buses

City/County Government Center, Rm. D

Paratransit
Vehicles

Walking

sponsored by

Fond du Lac Area Metropolitan Planning Organization

Special assistance for those of limited English proficiency, is available through the following contacts:

Para más información, o está interesado en participar en el planeamiento del proceso de transporte en su comunidad y necesita asistencia con el idioma, por favor comuníquese al Donald Mueller, al 921-0580.

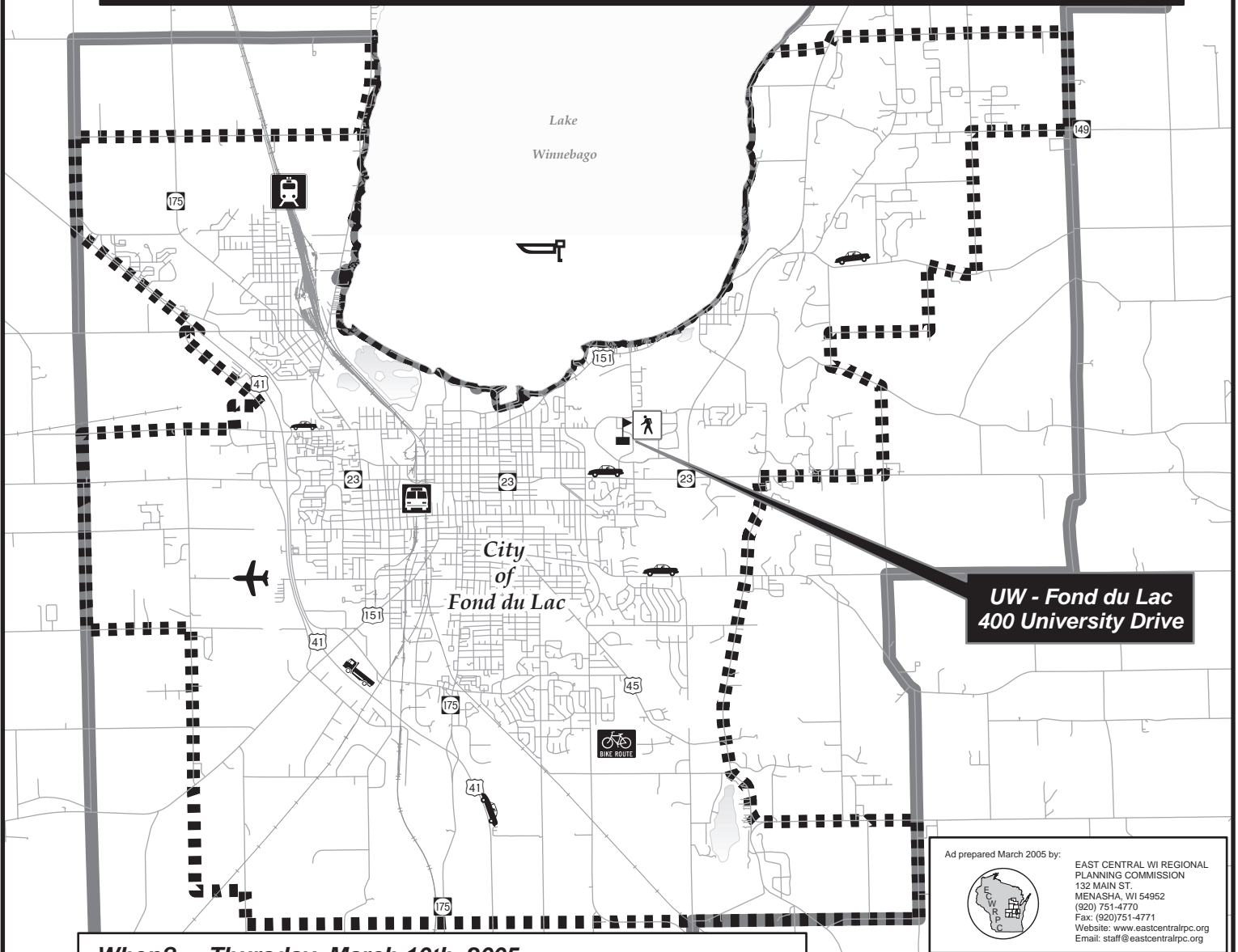
Yog xav paub ntau tsaj no, los yog xav koom ntes rau bus transportation nyob rau nej lub zos los yog xav paub hu rov nom hawj vaj 921-1869.

Reasonable accommodation for persons with disabilities will be made upon request and if feasible. For such accommodations or other information, call: ECWRPC, (920)751-4770

Fond du Lac 2030

**What will Fond du Lac look like in the year 2030?
What we need from YOU ?**

**We need *YOU* to review and comment on the proposed Long-Range
Transportation/Land Use Plan for the Fond du Lac Urbanized Area!**



When? *Thursday, March 10th, 2005
From 6:00 to 8:00 P.M.*

Where? *UW - Fond du Lac, Main Entrance
400 University Drive, Fond du Lac*

Who are we? *The Fond du Lac Area
Metropolitan Planning Organization (MPO):
City of Fond du Lac, Village of North Fond du Lac,
Towns of Empire, Friendship, Fond du Lac, and
Taycheedah.*

For special accommodations or questions, please call ECWRPC at (920) 751-4770.

LEGEND

■■■ Adjusted Urbanized Planning Boundary

— Metropolitan Planning Boundary

0 0.25 0.5 1 1.5 2
Miles



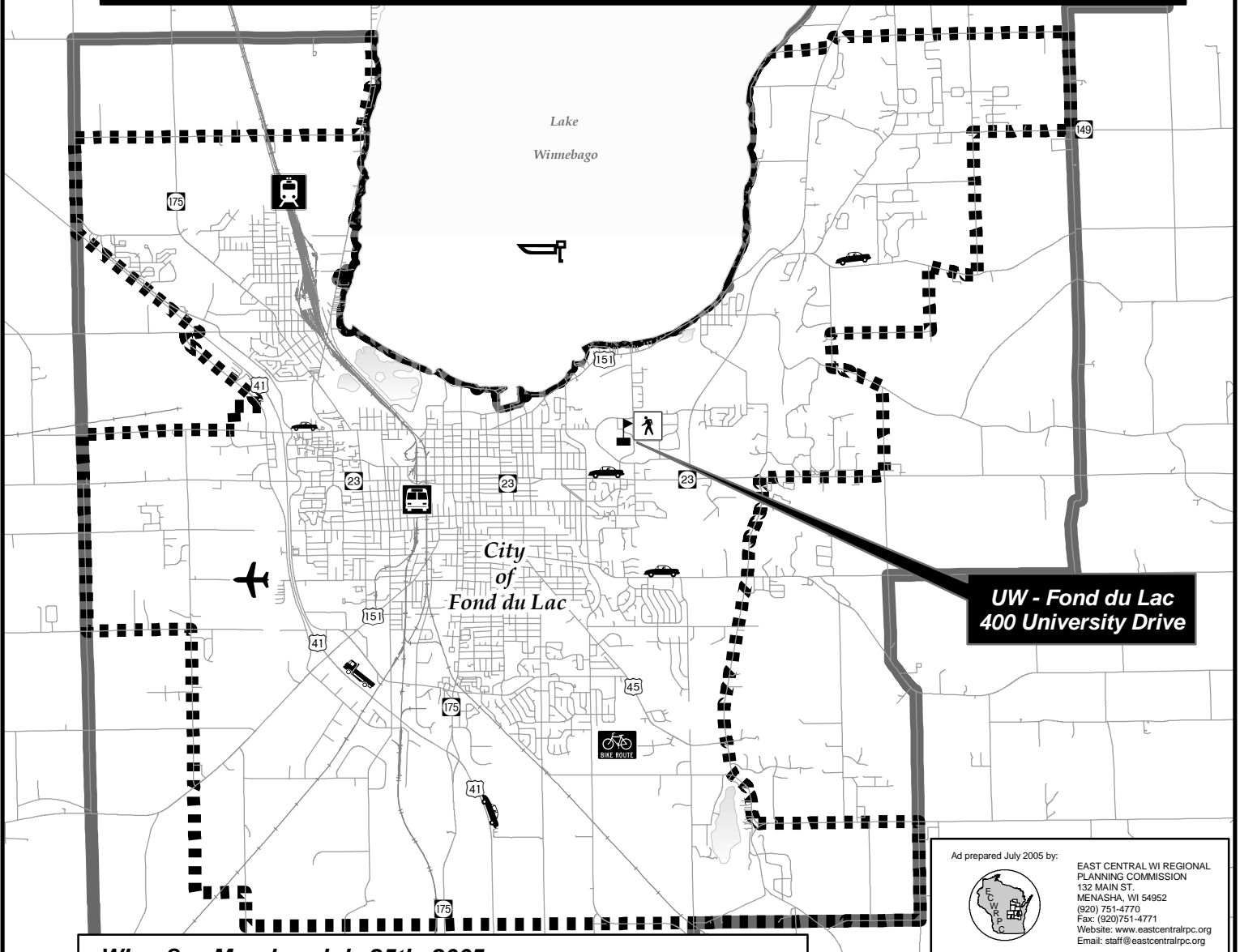
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Source: Centerline and hydrology files provided by Fond du Lac County. The adjusted urbanized and MPO planning areas provided by ECWRPC and WisDOT.

Fond du Lac 2035

**What will Fond du Lac look like in the year 2035?
What we need from YOU ?**

**We need *YOU* to review and comment on the proposed Long-Range
Transportation/Land Use Plan for the Fond du Lac Urbanized Area!**



When? *Monday, July 25th, 2005
From 6:00 to 8:00 P.M.*

Where? *UW - Fond du Lac, Main Entrance
400 University Drive, Fond du Lac*

Who are we? *The Fond du Lac Area
Metropolitan Planning Organization (MPO):
City of Fond du Lac, Village of North Fond du Lac,
Towns of Empire, Friendship, Fond du Lac, and
Taycheedah.*

For special accommodations or questions, please call ECWRPC at (920) 751-4770.

LEGEND

■■■■ Adjusted Urbanized Planning Boundary

———— Metropolitan Planning Boundary

0 0.25 0.5 1 1.5 2
Miles



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Source: Centerline and hydrology files provided by Fond du Lac County. The adjusted urbanized and MPO planning areas provided by ECWRPC and WisDOT.