

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
<hr/> Total	<hr/> 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
<hr/> Total	<hr/> 3,942,592
Bike and Ped	
In-street accommodations	
STP-Enhancements	359,604
<hr/> Total	<hr/> 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 000)	\$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 established 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.