

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 four years of data from the Wisconsin Department of Revenue, Municipal Expenditure and Revenue report, with additional funding and cost information provided by the Wisconsin Department of Transportation (WisDOT). The Oshkosh 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 analysis builds on the previous plan to identify the cost of preservation and maintenance for the street and highway system. The previous study used the PASERWARE pavement management system to estimate the average per mile cost for preservation and maintenance. The PASERWARE system has been discontinued and incorporated into the Wisconsin Information System for Local Roads (WISLR). 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 in part on historic spending identified in the 2000-2003 *State Transportation Improvement Program (STIP)*, WisDOT, and the *Transportation Improvement Program (TIP) for the Fox Cities (Appleton) Oshkosh 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 Oshkosh MPO study area spend nearly \$10 million annually on the preservation, maintenance and administration of the street and highway system (Exhibit 80). Federal, state and local construction and capacity expansion projects typically amount to about \$16 million, for an annual expenditure of over \$26 million dollars. The study shows that from 2005 to 2035 the cost to the MPO jurisdictions to provide, maintain and improve the transportation system could be more than \$270 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 Winnebago County, all of the City of Oshkosh and portions of the towns of Algoma, Black Wolf, Nekimi, Oshkosh and Vinland. 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 TIP 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 Oshkosh 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 Urbanized 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 Oshkosh Urbanized Area had approximately 35 percent of the system classified or just over 129 of the total 369 miles. Local streets account for the balance, amounting to about 239 miles (Exhibit 78). 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 78

2005 OSHKOSH URBANIZED AREA MILEAGE

Principal Arterials	39.45
Minor Arterials	46.72
Collectors	43.01
Total Classified System	129.18
Local Streets and Highways	239.86
Total Urbanized Mileage	369.04
Percent Total Miles Classified	35%

Source: WisDOT, 2005

For the purpose of this study, street and highway miles are adjusted to reflect the larger Oshkosh Urbanized Area in the year 2035, the MPAB. The principal arterials and/or state trunk or connecting highways were adjusted by WisDOT and MPO staff. 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 (MPAB) out to the year 2035. The proposed 2035 system includes 45 miles of principal arterials, 52 miles of minor arterials, 48 miles of collectors, leaving about 260 miles defined as local streets and highways (Exhibit 79). 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 79

2035 OSHKOSH URBANIZED AREA MILEAGE

Principal Arterials	45.00
Minor Arterials	52.00
Collectors	48.00
Total Classified System	145.00
Local Streets and Highways	260.00
Total Urbanized Mileage	405.00
Percent Total Miles Classified	35%

Source: WisDOT, ECWRPC, 2005

Estimated Long Range Funding

The following analysis is based in part on 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 or county for the principal arterials, connecting highways and county trunk highways within the MPAB. To isolate local expenditure, the state and federal highway aids are separated from the total transportation costs reported. The historic local expenditure is then projected in constant dollars over the life of the plan and is assumed to a reasonable estimate of anticipated local revenue.

On average jurisdictions in the Oshkosh study area spend over \$9 million on the transportation system annually (Exhibit 80). The largest portion, over \$8.5 million and nearly 95 percent, was spent by the City of Oshkosh. The total anticipated local revenue over the life of the plan based on historic revenues amounts to nearly \$273 million.

EXHIBIT 80

AVERAGE LOCAL TRANSPORTATION EXPENDITURES PROJECTED REVENUE 2005 TO 2035 Oshkosh Metropolitan Area

Oshkosh Study Area	Average Annual Transportation Expenditure	Percent of Total Expenditure
City of Oshkosh	8,523,700	94%
T. Algoma	297,700	3 %
T. Oshkosh	61,200	1 %
T. Nekimi	103,000	1 %
T. Black Wolf	58,900	1 %
T. Vinland	54,500	1 %
Total Local Expenditure	9,099,000	100%
Projected Local Revenue	\$9,099,000 X 30 Years	\$272,970,000

Source: DOR, ECWRPC 2005

Projected state and federal funding for the Oshkosh Metropolitan Area is provided by WisDOT and shows specific annual programs based on current funding levels (Exhibit 81). *The data shows over \$4 million every year based on the currently enumerated USH 41, 6-lane project in both the Fox Cities (Appleton) and Oshkosh Urbanized Areas. The projection assumes other major projects will be enumerated in the Urbanized Areas over the 30 year period.

EXHIBIT 81

WISDOT ANNUAL FUNDING PROJECTIONS
Oshkosh Metropolitan Planning Area

*Major Highway Expansion	
Based on Current Enumerated Urbanized Area Projects	\$4,833,333
STH Preservation, Maintenance and Operations	
Backbone Rehab	1,071,600
Non-Backbone 3R	1,155,156
STH "Low Cost" Bridges	150,000
STH Maintenance and Operations	1,368,000
Total	\$3,744,756
Local Road Expansion and Preservation	
STP-Urban	519,377
General Transportation Aids	3,092,862
Connecting Highway Aids	258,667
Municipal Streets Portion of LRIP	137,000
Federal Safety Programs	158,586
Local Bridges	398,138
Total	\$4,564,630
Bike and Pedestrian	
Includes On/Off-Road Improvements	
STP-Enhancements	359,604
Total	\$359,604
Transit	
FTA 5307 Program	1,114,938
FTA 5309 Program (Capital)	332,402
State Operating Assistance	1,161,596
Total	\$2,608,936
Grand Total	\$16,111,259

Source: WisDOT 2005

Three 10 year time frames project the annual funding amounts (Exhibit 82). Based on annual expenditures it is estimated WisDOT will fund over \$483 million in transportation improvements over the life of the plan. State and federal funding for the local road system is expected to amount to over \$136 million and includes WisDOT General Transportation Aids provided to all jurisdictions.

EXHIBIT 82

PROJECTED STATE/FEDERAL LONG RANGE FUNDING
Oshkosh Metropolitan Planning Area

	2005 – 2015	2015 – 2025	2025 – 2035	Plan Total
Highway Expansion*	48,333,330	48,333,330	48,333,330	144,999,990
Preservation/Maintenance	37,447,558	37,447,558	37,447,558	122,342,673
Local Road Improvements	45,646,300	45,646,300	45,646,300	136,938,900
Bike and Pedestrians	3,596,040	3,596,040	3,596,040	10,788,120
Transit	26,089,360	26,089,360	26,089,360	78,268,080
Total Funding	161,112,587	161,112,587	161,112,587	483,337,763

Source: WisDOT, 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 \$756 million (Exhibit 83). Additional funding is anticipated from other sources such as Winnebago County and the Oshkosh Transit System, but the amounts are difficult to identify do to the mix of local, state and federal funds.

EXHIBIT 83

PROJECTED LONG RANGE FUNDING
Oshkosh Metropolitan Planning Area

Anticipated Revenues	2005 - 2015	2015-2025	2025-2035	Plan Total
Local	90,990,000	90,990,000	90,990,000	272,970,000
State and Federal	161,112,587	161,112,587	161,112,587	483,337,763
Total Revenue	252,102,587	252,102,587	252,102,587	756,307,763

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 Urbanized 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 84 shows a listing of major projects that originated from local land use and transportation plans, and/or capital improvement programs from all jurisdictions, the Oshkosh 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 high cost planned projects amount to over \$320 million in needs and include state trunk and connecting highways and a number of local streets in the Urbanized Area (Exhibit 84). 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 E, and are subject to maintenance agreements with the various jurisdictions along the route.

Maintenance and Preservation

Preservation needs are estimated on a dollar per mile basis, using the prior PASERWARE analysis, supplemented and validated with the newer WISLR information. The data shows 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 preservation and maintenance data 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 prior 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 400 miles near the end of the 30 year planning period. The principal arterial preservation estimate of \$34,500 annually, applied to 45 miles over the thirty year planning period, amounts to over \$46 million over the life of the plan (Exhibit 85). The same method applied to the 100 miles of minor arterials and collectors converts the \$28,500 annual expenditure, to \$85.5 million over the life of the plan.

The analysis shows 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 260 miles of local roads to estimate a preservation cost of nearly \$200 million over the life of the plan. The grand total for the identified preservation need amounts to over \$330 million.

EXHIBIT 84
HIGH COST PLANNED PROJECTS

Facility	Segment	Cost
USH 41*(Part of 6-Lane Neenah-Oshkosh)	USH 26 to MPAB	\$200,000,000
USH 45	Waukau Ave to Ripple Ave	\$1,752,000
USH 45	Jackson St to Algoma Blvd (UW-O)	\$8,350,000
USH 45	Fox River to Algoma	\$735,000
USH 45/CTH T INTERCHANGE	CTH T and Ryf Road	\$4,593,000
STH 21	USH 41 to Oshkosh Ave	\$776,000
STH 21	UAB to Leonard Point Road	\$1,300,000
STH 21	Leonard Point to USH 41	\$772,000
STH 44	Wisconsin Street Lift Bridge	\$19,138,000
STH 44	Wisconsin Street to Fox River Bridge	\$2,675,000
STH 76	USH 41 to Murdock	\$2,186,000
STH 21 FREEWAY CONVERSION	USH 41 to West UAB	\$18,450,000
CTH A	CTH Y to MPAB	\$3,250,000
CTH GG	CTH A to STH 76	\$12,480,000
CTH I	Ripple Ave. to Fisk Ave	\$975,000
CTH Y	STH 76 to CTH A	\$2,825,000
BOWEN STREET	Ceape Avenue to Sterling Avenue	\$1,750,000
FERNAU AVENUE	STH 76 to Stillman Drive	\$4,750,000
FISK AVENUE	USH 41 to CTH I	\$2,350,000
IRVING AVENUE	Wisconsin Street to Hazel St	\$1,850,000
MAIN STREET	New York to Murdock Ave	\$650,000
NEW YORK AVENUE	High Avenue to Hazel Street	\$800,000
OAKWOOD ROAD	CTH E to STH 21	\$1,403,000
OHIO STREET	Witzel Avenue to South Park Avenue	\$850,000
SNELL ROAD	CTH A to Vinland Rd	\$1,758,000
VINLAND ROAD	Smith Street to Snell Road	\$2,350,000
WASHBURN STREET	STH 21 to Witzel Ave	\$4,206,000
WASHBURN STREET	Dickinson Ave. to 20th Ave	\$1,110,000
WESTFIELD STREET	Witzel Ave to 9th Ave	\$750,000
WEST SIDE ARTERIAL	STH 91 to STH 21	\$11,500,000
9TH AVENUE	Oakwood Road to Linden Oaks Dr	\$980,000
20TH AVENUE	Oakwood Road to Oregon St	\$3,220,000
Total		\$320,534,000

Source: WisDOT, ECWRPC 2005

EXHIBIT 85

ESTIMATED LOCAL PRESERVATION NEEDS FORMULA

Facility Type	Total Miles Year 2035	Annual Cost Per Mile Times 30 Years	Anticipated (\$) Need
Principal Arterial	45.00	x \$34,500 x 30 Years =	\$46,575,000
Minors/Collectors	100.00	x \$28,500 x 30 Years =	\$85,500,000
Local Roads	260.00	x \$25,500 x 30 Years =	\$198,900,000
Grand Total	405.00		\$330,975,000

Source: WisDOT, ECWRPC 2005

Cost projections for transit and other modes reflect a balance in need and funding identified by WisDOT over the life of the plan. The analysis shows that as much as \$740 million may be needed to maintain and improve the transportation system over the 30 year planning period (Exhibit 86).

EXHIBIT 86

LONG RANGE FINANCIAL NEED SUMMARY
Oshkosh Metropolitan Planning Area

Anticipated Need	Plan Total
Street and Highway Maintenance	\$330,975,000
Recommended Projects	\$320,534,000
Transit	\$78,268,080
Other Modes Bikes/Pedestrian/Freight	\$10,788,120
Grand Total Need	\$740,565,200

Source: WisDOT, ECWRPC, 2005

A comparison of funding and need shows that monies will be available to implement the proposed actions over the life of the plan. The state and federal revenue of about \$394 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 87).

EXHIBIT 87

LONG RANGE FUNDING SUMMARY
Oshkosh Metropolitan Planning Area

Revenue Sources	Plan Total
State and Federal Street and Highway	\$394,281,563
State and Federal Transit	\$78,268,080
Other Modes/Bikes/Pedestrian/Freight	\$10,788,120
Local Funds	\$272,970,000
Grand Total Funding	\$756,307,763

Source: WisDOT, ECWRPC, 2005

Relative to the 30 year plan horizon, estimated expenditures are fairly balanced, with some flexibility to consider a number of projects that are not critical in the near term. The roughly \$15 million difference between funding and need allows the area to utilize the planning process. Major projects that would tip the scale within the plan horizon could include overpasses of the railroad tracks in a number of locations in the Oshkosh area. In addition, many of the recommended projects associated with the bicycle and pedestrian plan may require additional right-of-way not included in the estimating procedure.

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.