FIGURE 3 RECOMMENDED PROJECTS



Project	-				Estimated Total	Total Estimated Cost Share				
Number	туре	Route	From/To	Year	Cost \$ '05	Federal/State	Local	Pro	gram	
1	Р	Black Hawk Creek Bridge	Located on CTH A	2008	\$256,000	205,000	51,000	BR		
2	Р	Centerway	N. Parker Drive / Five Points Intersection	2006	\$1,551,000	1,538,000	13,000	STH	COJ	
3	Е	Deerfield	Sandhill / Rotamer Rd	2006	\$1,070,000	0	1,070,000	COJ		
4	Р	Division Street	Hwy 59 / Lamar 2008 \$43,600 0 43,600 CC				СОМ			
5	Р	E. Court Street	Main St / Garfield Ave	ain St / Garfield Ave 2007 \$1,553,000 1,242,000 311,000				URB	COJ	
6	Р	East Milwaukee St	Lexington Dr Intersection	2006	\$122,000	110,000	12,000	STH	COJ	
7	Е	East Rotamer Road	N. Wright Rd/Town Hall Rd	2008	\$1,817,000	1,453,000	364,000	URB	COJ	
8	Р	I-39 / I-90	STH 26 / USH 51	2006	\$1,070,000	1,070,000	0	STH		
9	E	I-39/I-90	USH 14 & STH 26 overpass	2011	\$5,191,000	5,191,000	0	STH		
10	Р	Mineral Point Avenue	Parker H.S. / Austin Rd	2007	\$170,000	0	170,000	COJ		
11	Р	N. John Paul Rd	Madison Ave Intersection	2007	\$137,000	0	137,000	СОМ		
12	Е	North Wright Road	USH 14 / E. Rotamer Rd	2006	\$730,000	0	730,000	COJ		
13	Р	Ruger Ave Bridge	Also known as Spring Brook Bridge	2007	\$1,817,000	1,453,000	364,000	BR		
14	Р	S. Randall Ave	Ruger Ave / East Milwaukee St	2007	\$320,000	153,300	166,700	LRIP	COJ	
15	Р	STH 11	Footville / Janesville Bypass	2010	\$711,500	711,500	0	STH		
16	Е	STH 11/USH 14	Wright Rd / CTH O	2008	\$2,315,000	1,788,000	527,000	STH	COJ	
17	E	STH 26 - Phase 2	CTH Y / Town line Road	2012	\$3,000,000	3,000,000	0	MAJ		
17	Е	STH 26 - Phase 3	CTH N / Townline	2013	\$12,540,000	12,540,000	0	MAJ		
17	E	STH 26 - Phase 4 & 5	Town line Road / South Fort Interchange	2014	\$22,130,000	22,130,000	0	MAJ		
17	Е	STH 26- Phase 1	STH 59 Relocation	2009	\$1,700,000	1,700,000	0	MAJ		
18	Р	USH 14	Janesville limits / STH 89	2010	\$2,239,000	2,239,000	0	STH		
Total - Cor	nmitted F	rojects			\$60,483,100	\$ 56,523,800	\$ 3,959,300			

TABLE 2 COMMITTED EXPANSION PROJECTS

J:\Development\Planning\MPO\Long Range Plan\2004\Streets & Highways\Crash Data\[Major Crash sites.xls]Sheet1

E: Expansion P: Preservation

STH 26 Projects: Elaboration of activity planned within each phase and maps illustrating proposed alignment provided in appendix.

Project	Route	From/To	Year	Estimated Total	Possible Fund	Funding		
Number				Cost \$ '05	Fed / State	Local	Program	
19	Memorial Drive	N. Washington St / Parker Dr. Bridge	2010	\$731,000	585,000	146,000	BR	COJ
20	Pearl St	Court St. / Rockport Rd	2010	\$506,000	153,300	352,700	LRIP	COJ
21	Jackson Street	Bridge over Rock River	2010	\$2,000,000	1,600,000	400,000	BR	COJ
22	Palmer Drive	Sharon Rd./ Mohawk Road	2010	\$96,000	77,000	19,000	URB	COJ
23	E. Milwaukee St Bridge	Bridge over Rock River	2010	\$150,000	120,000	30,000	BR	COJ
24	СТН М	CTH MM / COM Limits	2011	\$1,286,200	1,029,000	257,200	RU- STP	RC
25	CTH F	USH 14 / MPO Boundary	2008	\$1,956,250	1,484,000	472,250	RU-STP	RC
26	Garden Lane	Greenhill to Cul-de-sac	2007	\$8,000	4,000	4,000	LRIP	COM
27	Wallace Way	Greenhill West to Dead-end	2007	\$26,000	13,000	13,000	LRIP	COM
28	Homestead	Greenhill West to Dead-end	2007	\$28,000	14,000	14,000	LRIP	COM
29	First Street	Hwy 59 /Vernal	2007	\$42,000	0	42,000	СОМ	
30	Burdick St	Clear Lake Ave. / Termi.	2007	\$36,000	18,000	18,000	LRIP	COM
31	Greenhill Drive	High St / Larch Lane	2007	\$850,000	425,000	425,000	LRIP	COM
Total - P	lanned Short Range F	Preservation Projects		\$7,715,450	5,522,300	2,193,150		

TABLE 3 SHORT RANGE PLANNED PRESERVATION

TABLE 4 RECOMMENDED EXPANSION PROJECTS & STUDIES

					Functional	Proposed Cross-	Proposed Number of		Estimated	Total Possible F	unding Splits	
Project Number	Route	From/1o	Length (FI)	Project Type	Classification	section	Lanes	Year	Cost \$	D5 Fed / State	Local	Funding Program
New Roads - ex	stension of existing roadways to incre	ease connectivity and provide for orderly growth.			(Functional classification of adjoining segment if extension)							
32	Kettering Street	Kennedy Rd/N Brentwood Dr	2750	NEW ROAD	Collector	н	2	2012-2035	\$ 1,4	35,593 1,148,474	287,119	URB
33	McCormick Dr	McCormick Dr Termi. / New Wright Rd	2200	NEW ROAD	Local	G	2	2012-2035	\$ 1,1	48,474 0	1,148,474	сој
34	NEW ROAD Rd (by airport)	HWY 51/ CTH G	5300	NEW ROAD		н	2	2012-2035	\$ 2,7	66,779 0	2,766,779	сој
35	North Wuthering Hills Drive	Mackinac / HWY 14	2500	NEW ROAD	Collector	н	2	2012-2035	\$ 1,3	05,085 1.044.068	261.017	URB
36	Randolph Road	Holly Dr/Wuthering Hills Dr	300	NEW ROAD	Local	н	2	2012-2035	\$ 1	56,610 0	156.610	COJ
37	Sandhill Road	Wuthering Hills / Townhall	2000	NEW ROAD	Local	н	2	2012-2035	\$ 1,0	44,068 0	1.044.068	COJ
38	Sandhill Road	Deerfield / Sandhill Termi	3000	NEW ROAD	Local	н	2	2012-2035	\$ 1,5	66,102 0	1.566.102	COJ
39	Todd Drive	Todd Dr Termi/Conde St	2260	NEW ROAD	Local	G	2	2012-2035	\$ 1,1	79,796 0	1 179 796	COL
40	Venture Dr	Venture Drive Termi/ HWY 51	4750	NEW ROAD	Local	н	2	2012-2035	\$ 2,4	79.661 0	2,479,661	COJ
41	Waveland Road	Waveland Termi/CTH A	3500	NEW ROAD	Local	н	2	2012-2035	\$ 1.8	27.118 0	1 827 118	COL
42	Wright Rd	E. Rotamer Rd / CTH Y	8500	NEW ROAD	Collector	E	2	2012-2035	\$ 4,4	37,288 2,218,644	2 218 644	UPB
Total - New Ro	ads								\$ 19.3	46.574 \$ 4.411.1	2,210,044	UKB
									•	• • • • •		
Planned or Pot	ential Expansion Projects On E	cristing Roadways										
Expansion Pro	jects - capacity expansion projects of	on existing roadways.										
43	Austin Road	W. Court St/Rockport Rd	2500	EXPANSION	Collector	н	2	2012-2035	\$ 9	66,729 773,383	193,346	URB
44	CTH G	HWY 11 / South MPO boundary	13074	EXPANSION	Minor Arterial	E	4	2012-2035	\$ 5,0	55,608 3,121,745	1,933,863	URB
45	* HWY 14 (Rec. For Study)	HWY 11 to Wright Rd	18500	EXPANSION	Principal Arterial	D	4	2012-2035	\$ 7,1	53,797 7,153,797	0	STH
46	* HWY 14 (Rec. For Study)	Wright Rd to HWY 51	17000	EXPANSION	Principal Arterial		6	2012-2035	\$ 6,5	73,760 6,573,760	0	STH
47	I-39/I-90	Through Rock County		EXPANSION	Principal Arterial	_	6	2012	\$ 58,8	53,900 58,853,900	0	MAJ
47 b	Ryan Rd (part of I-39 project)	Morse / Deerfield		NEW ROAD	Local	_	2	2012	_		_	
48	Ruger Ave	S. Wright Rd / Wuthering Hills Dr	3000	EXPANSION	Collector	F	4	2010	\$ 1	17,000 94,000	23,000	URB
49	Ruger Ave	Wuthering Hills Dr / USH 14	2500	EXPANSION	Collector	F	4	2010	\$ 1	00,000 80,000	20,000	URB
50	Town Hall Rd	HWY 14 /HWY 26	15500	EXPANSION	Collector	E	4	2012-2035	\$ 5,9	93,722 3,872,237	2,121,485	URB
51	* USH 51 North (Rec. For Study	Russell Rd. / USH 14	5250	EXPANSION	Principal Arterial		4	2012-2035	\$ 2,0	30,132 2,030,132	0	STH
52	* USH 51 North (Rec. For Study) Black Bridge Rd / USH 14	7920	EXPANSION	Principal Arterial	E	4	2012-2035	\$ 3,0	3.062,599	0	STH
		5 Deinte Ferenibility Otymby (Mars 2007)		OTUDY	Principal Artenal /					.,		
53	Westside Gateway	5 Points Feasibility Study (Fear 2007)	_	STUDY	Minor Arterial		-		-	-	-	_
I otal - Expansi	on Projects								\$ 89,9	07,246 \$ 85,615,5	52 \$ 4,291,694	·
												1
Under Study												
Map Number	Route	From / To	Propo	osed Final Project	Listed In			Year	Cost	Federal	Local	Funding Program
54	I-39 / I-90	Illinois State Line / Madison	E	XPANSION	2006 TIP			2006	\$ 3	75,000 375,000	0	MAJ
55	USH 14	Janesville / Interstate 43	EXPANS	SION & NEW ROAD	2006 TIP			2006	\$ 7	50,000 500,000	250,000	STH & COJ
55 b	West Side Bypass	STH 11 / HWY 14		New Road	2006 TIP			2011	_		_	
Total - Under S	tudy								\$ 7	50,000 \$ 875,0	00 \$ 250,000	
Recommended	for Future Consideration											
	Route	From/To	Length (FT)	Project Type	Functional	Proposed Cross-	Proposed Number of	Year	Estimat	ed Possible F	unding Splits	Potential Fundin
Map Number	Routo	11010/10	Longur (FT)	110,000 1990	Classification	section	Lanes	roui	'05	Fed / State	Local	Program
56	E Klug Rd Extension	HWY 26 / CTH M	21120	NEW ROAD	Primary Arterial		2	2015-2045	\$ 2,2	05,071 1,764,057	441,014	URB
57	HWY 14	HWY 51 to future HWY 11 Bypass	12000	EXPANSION	Principal Arterial	D	4 Divided	2015-2045	\$8	35,254 835,254	0	STH
58	Milton-Shopiere	E HWY 11/14/Townline Rd	5333	EXPANSION	Local	D	2-4 Divided	2015-2045	\$ 3	71,201 296,961	74,240	URB
50	North Bypass	USH 51 to Kidder Rd to CTH M From HWY 14/ I-90	21120	EXPANSION	Minor Arterial / Local	F	2	2015-2045	\$ 7	35.024 735.024	0	MAJ
03	Town Line Rd	Milton - Shopiere / County Y	10560	EXPANSION	Local	E	4	2015-2045	s 7	35.024 588.019	147.005	URB
					Principal Arterial /						,	
61	Westside Gateway	5 points	-	EXPANSION	Minor Arterial			2015-2045	-	-		DEMO / SAF
Total - Illustrativ	ve Projects								\$ 4,8	81,573 \$ 4,219,3	14 \$ 54,901,963	
J:\Developme	ent\Planning\MPO\Long Rar	nge Plan\2004\Streets & Highways\Ci	rash Data\[Ma	aior Crash sites.xls]	Sheet1							

 Cross-sections:
 E:52-56' Primary or Standard
 G: 44' Standard

 A: Divided Rural Expressway/Primary
 C:22' Rural Collector D: Divided Urban Expressway/Primary
 Arterial
 Arterial

 B:24' Rural Standard Arterial
 Arterial
 H: 40' Standard Arterial or Collector
 J: 26' Local

*State projects recommended for study.

Note: On the corresponding map the alignments shown for all new roads are for general illustrative purposes only. The final alignment has not been determined, nor is it being indicated.

RECOMMENDED PLANNED EXPANSION PROJECTS

The recommendations for expansion projects were drawn from several sources including: project recommendations from the *1987-2005 Traffic Circulation Plan*, the *Urban Corridors Needs Study*, local roads inventory listings, and recommendations from the State, County, and participating jurisdictions. Table 4 lists recommended planned expansion projects and their projected total costs. The projects are separated into capacity expansion projects, new roadway projects and projects recommended for future action. Those recommended for future action are projects that do not have an identified project scope, such as the 5 Points project, or are thought to be outside of the current planning period. By identifying the projects early, benefits and costs can evaluated in a timely manor, and, should the project be justified, funding gathered. The projects that are under study, and recommended for future action are not included in the financial analysis.

Due to the difficulty associated with estimating future pavement conditions the assumption was made that any existing pavement would be in good condition at the time of the proposed expansion project, and any additional lanes would be added to the existing roadway. Project costs were estimated using the project type, new road or expansion, the number of lanes being added and the projects lineal feet. The type of project, expansion or new roadway, dictated the per lane cost used. The per foot cost of expanding a roadway was provided by WisDOT in their cost estimating worksheet entitled, "Statewide Average Highway Improvement Costs for 2004", also provided in the appendix.

Explanation of Planned Costs

The cost of expansion projects was based on the assumption that the majority of the cost would be for adding additional lanes, based on the previously stated assumption that the existing roadway would be of a condition that would allow it to be used in its current state. The cost of adding the additional lanes to the existing roadway was assumed to be similar or equal to complete reconstruction costs. This premise works on the assumption that the right of way has already been acquired and is therefore not part of the equation. As mentioned, the base of the planned costs was provided by WisDOT. The per mile reconstruction cost was used to estimate the per foot reconstruction cost, which was translated into the per foot expansion cost.

In the past WisDOT provided a per foot cost estimate for reconstruction and rehabilitation projects in their *Concept Definition Worksheet* (\$225 to \$450 for urban reconstruction projects in 2005 dollars). It was found that these estimates were consistently low, so their use by WisDOT was discontinued. The estimates arrived at in the above method were higher than the afore mentioned costs, but within a reasonable range, making them seem on target and their use rational.

Method

The reconstruction cost per mile for 2 lane and multi lane, urban and rural roads was averaged and then inflated to 2005 dollars using Robert Sahr's conversion factors, available online at <u>http://oregonstate.edu/Dept/pol_sci/fac/sahr/sahr.htm</u>. The average cost per mile of reconstructing a two lane and multi lane roadway was then inflated by 17.5% to incorporate design engineering costs. (17.5% is the average between the 15% and 20% range given by WisDOT for design and engineering). The total per mile cost, with design and engineering, was then converted into a per foot cost.

			2 Lane Cost				
	200)3 \$	2005 \$				
	Urban	Purual	Urban/Rural Average	W/ enginering costs	Per Foot Cost		
	Ulball	Nulual	of ball/reliaid / weilage	11.070	1 61 1 661 6661		
Reconstruction	\$2,100,000	\$1,205,000	\$1,737,645	\$2,041,732	\$387		

			Multi Lane* Cost				
	200)3 \$	2005 \$				
			W/ enginering costs				
	Urban	Rural	Urban/Rural Average	17.5%	Per Foot Cost		
Reconstruction	\$4,000,000	\$2,300,000	\$3,312,303	\$3,891,956	\$737		

Assumes average lane width of 12 feet.

* Assumes 4 lanes

The per foot cost of both type of projects was calculated by dividing by the number of lanes.

One Lane Cost (per ft) Based					
on Averages					
2 Lane	\$193				
Multi Lane	\$369				

As the final per foot expansion cost, the actual 2 and 4, or multi lane, costs were used. For the purposes of planning the cost of a new roadway was assumed to be 35% more than expanding a roadway of the same number of lanes.

Expansion	Cost	New Road	Cost
1 lane	\$193	2 lane	\$522
2 lane	\$387	4 lane	\$995
3 lane	\$580		
4 lane	\$737		

RECOMMENDED PLANNED PRESERVATION PROJECTS

The planned preservation budget is intended to cover the preservation needs within the MPO. Because it is difficult to project the priority of preservation projects more than a few years into the future, the budget acts as a comprehensive listing of perseveration projects. As projects are identified and moved into the TIP, a federal or state funding source will be identified, when applicable, and the local funds made available. In the LRTP's financial analysis the long range preservation projects are considered to be operations and maintenance activities since they preserve the current system.

When readily accessible the average miles actually rehabilitated per year, average resurfacing budget and average per mile cost were used to project the 30 year preservation budget. This was felt to be the most accurate representation of the spending and activity level that is likely to be funded in the future. However, when these figures were not available, the planned preservation budget was based on the average number of miles that that should be rehabbed in the MPO, assuming a 22 year lifespan, and the average rehabilitation cost.

Townships- Roadways are local roads, non-CTH	Roadway Miles within MPO	Avg Miles to Rehabilitate / Resurface a year		
T. Harmony	46	2.1		
T. Milton	32	1.5		
T. Janesville	37	1.7		
T. Rock	19	0.9		
T. La Prairie	26	1.2		
STH	75	3.4		
County	44	2.0		

Source: WisDOT Correspondence, 2005

The Rock County Highway Commissioner was able to supply the average paving and reconstruction costs within the Townships and County, and the portion of the total activity devoted to each. These figures were used to compute the average amount spent, on one mile of rehabilitation (repaved or reconstructed).

	Towns		
Activity	Avg. Cost Per Mile	Portion of Total Activity	1 Mile
Paving	\$50,000	75%	\$37,500
Reconstruction	\$125,000	25%	\$31,250
Avg. Rehab.	\$70,000	100%	\$70,000
	County		
Activity	County Avg. Cost Per Mile	Portion of Total Activity	1 Mile
Activity Paving	County Avg. Cost Per Mile 100,000	Portion of Total Activity 75%	1 Mile \$75,000
Activity Paving Reconstruction	County Avg. Cost Per Mile 100,000 250,000	Portion of Total Activity 75% 25%	1 Mile \$75,000 \$62,500

TABLE 5 LONG RANGE PLANNED PRESERVATION PROJECTS

Town of Janesville	l.					City of Janesville				
	Average Miles		Average							
	Rehabbed Per	Average Cost	Annual	23 Year			Average Annual	Average Miles	Average Cost Per	
	Year	Per Mile	Budget	Budget			Budget	Rehabbed Per Year	Mile	23 Year Budget
Rehabilitation	1.7	\$70,000	\$118,300	\$2,720,900		Rehabilitation	\$1,000,000	11.4	\$90,000	\$2,070,000
Town of La Prairie						City of Milton				
	Average Miles		Average							
	Rehabbed Per	Average Cost	Annual	23 Year			Average Annual	Average Miles	Average Cost Per	
Data di l'incenta a	Year	Per Mile	Budget	Budget		Data di Marta	Budget	Rehabbed Per Year	Mile	23 Year Budget
Renabilitation	1.2	\$70,000	\$83,714	\$1,925,414		Renabilitation	\$105,000	1.0	\$105,000	\$2,415,000
Town of Milton						State Highways				
	Average Miles		Average							
	Rehabbed Per	Average Cost	Annual	23 Year			Average Annual	Average Miles	Average Cost Per	
	Year	Per Mile	Budget	Budget			Budget	Rehabbed Per Year	Mile	23 Year Budget
Rehabilitation	1.5	\$70,000	\$102,168	\$2,349,868		Rehabilitation	\$1,182,955	3.4	\$347,000	\$27,207,955
Town of Rock						County Highways				
	Average Miles		Average							
	Rehabbed Per	Average Cost	Annual	23 Year			Average Annual	Average Miles	Average Cost Per	
	Year	Per Mile	Budget	Budget			Budget	Rehabbed Per Year	Mile	23 Year Budget
Rehabilitation	0.9	\$70,000	\$60,964	\$1,402,164		Rehabilitation	\$280,000	2.0	\$140,000	\$3,220,000
Town of Harmony						MPO - Total				
	Average Miles		Average							
	Rehabbed Per	Average Cost	Annual	23 Year					Average Annual	23 Year MPO
	Year	Per Mile	Budget	Budget					Budget	Budget
Rehabilitation	2.1	\$70,000	\$147,477	\$3,391,977		Rehabilitation			\$3,080,577	\$70,853,277
State Highways: base	d on the assumptio	n that the 75 miles ir	n the MPO have	a 22 year life sp	an.					
Budget amounts are b	ased on local decis	ions and may vary.								
LR Bridge Projects	;	Location				Year	Total	Fed/State	Local	Funding Source
Sharon Rd Brido	е	Spring Brook				2012-2035	\$3,000.000	1,500,000	1,500,000	BR
USH 51 - Cente	r St	CNW RR				2012-2035	\$500.000	250,000	250.000	BR
Total - BR Funds	3						\$3,500.000	1,750,000	1,750,000	BR

FINANCIAL PLAN Introduction

Federal statutes require that all projects listed in the LRTP be fiscally constrained. In other words, it must indicate that resources from public and private sources can be reasonably expected to be available to carry out the planned projects along with the operations and maintenance of the existing system. The financial plan was developed with the goal of providing an accounting of expected roadway related expenditures and revenues over the next 30 years.

For each of the recommended projects identified in the Streets and Highways section of the LRTP funding sources were identified. The total projected federal/state allocation for each funding program was greater than or equal to the total amount the MPO expects to need. Based on historical activity it is likely that the local funds needed as a match for the approved federal/state projects will be made available (most programs require a 10% - 20% local match).

The funding expected to be available, along with the needs of the MPO are summarized in the table below. Estimating costs and revenues over 30 years is an imprecise process, and the financial analysis will be revisited in each plan update. Currently the MPO forecasts a yearly surplus of approximately \$250,000 or \$7.4 million over the 30 years. Should a funding shortfall arise, the MPO will seek to secure additional federal and state funds, and examine the possibility of applying additional fees and taxes.

Line	Anticipated Funding Over 30 Years	
1	Federal and State Funding (project specific) 1	\$183,579,112
2	General Transportation Aids (GTA - State Funds)	\$88,513,620
3	£ ½ Ο & M - Non-Preservation ##########	
4	[™] Q & M - Local Preservation + \$56,928,682	
	د Total Local O & M \$166,458,095	
5	Local O & M (Not paid for by GTA)	\$77,944,475
6	STH O & M (includes STH LR preservation)	\$61,560,000
7	Local Match (excludes local preservation projects)	\$26,083,687
8	Total Funding	\$437,680,894
	Yearly Average	\$14,589,363
	Anticipated Needs Over 30 years	
9	O & M (Local and STH)	\$228,018,095
10	Urban Surface Transportation Program	\$23,094,025
11	State Trunk Highways	\$31,977,787
12	Major	\$98,223,900
13	Bridge	\$7,005,000
14	Local Road Improvement	\$5,162,800
15	Connecting Highway Aids	\$13,203,225
16	Rural Surface Transportation Program	\$3,242,450
17	Federal Safety Programs	\$5,946,975
18	Local Projects (excluding preservation)	\$14,361,209
19	Total Needs	\$430,235,465

TABLE 6 30-YEAR REVENUE AND COST SUMMARY

¹ Includes the following funding sources: URB, STH, MAJ, BR, LRIP, CHA, RU-STP, & SAF. Excludes GTA & STH O & M b/c they are accounted for in the O & M spending lines.

Assumptions / Data Sources

- The funding projections and expected cost splits were provided by WisDOT.
- The historical operations and maintenance costs were extrapolated from the *Revenues & Expenditures by Wisconsin Counties, Cities, Villages & Towns (2000 2003).*
- MPO will maximize federal/state funding by supplying the required local match on all qualifying projects.
- Future operations and maintenance needs, or expenditures, will be equal to historical levels.
- Future local spending on operations and maintenance will be equal to historical spending.
- All final costs and revenues are in 2005 dollars.
- For the financial plan, it was assumed that the recommended projects would be constructed as listed with the corresponding costs. However, the needs and priorities of the MPO may change and there is the possibility that the order projects in which projects are constructed, their final costs or the projects themselves may vary from this document.

* In this section, the "MPO" is used to refer to both the Metropolitan Planning Organization as a governmental entity, and the individual municipalities responsible for projects within their jurisdictions.

Method

What follows is a discussion of the rationale, assumptions, and methods used to complete each line of Table 6, using the numbers listed in the first column, entitled "Line."

Line 1 – Projected Federal and State Spending

The estimated available federal/state funds are taken from Table 7. The federal/state funding forecast for each category listed in Table 7 was supplied by WisDOT. WisDOT's funding forecasts are also listed in Table 8. (Table 7 illustrates what the MPO expects to receive in funding and what they expect to spend).

TABLE 7 ESTIMATED AVAILABLE FUNDS & EXPENDITURES

Funding Source					Estimated Av	ailable Fund	s				
Program	2005-2006		2007-2	2008	2009-:	2011	2012	-2035	Total Av	ilable * Local \$3,825,888	
	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local	
STP - Urban (URB)	\$0	\$0	\$2,695,000	\$675,000	\$1,454,256	\$363,564	\$11,149,296	\$2,787,324	\$15,298,552	\$3,825,888	
STH Preservation	\$2,984,000	\$13,000	\$2,984,000	\$527,000	\$4,476,000	\$0	\$34,316,000	\$0	\$44,760,000	\$540,000	
Majors Program	\$0	\$0	\$0	\$0	\$1,700,000	\$0	\$96,523,900	\$0	\$98,223,900	\$0	
Bridge Replacement & Rehabilitation (BR)	\$0	\$0	\$1,658,000	\$415,000	\$2,305,000	\$576,000	\$1,025,500	\$1,025,500	\$4,988,500	\$2,016,500	
Local Road Improvement Program (LRIP)	\$165,000	\$165,000	\$165,000	\$165,000	\$247,500	\$247,500	\$1,897,500	\$1,897,500	\$2,475,000	\$2,475,000	
СНА	\$704,172	\$176,043	\$704,172	\$176,043	\$1,056,258	\$264,065	\$8,097,978	\$2,024,495	\$10,562,580	\$2,640,645	
STP - Non Urban (RU- STP)	\$0	\$0	\$1,484,000	\$472,250	\$1,029,000	\$257,200	\$0	\$0	\$2,513,000	\$729,450	
SAF	\$317,172	\$79,293	\$317,172	\$79,293	\$475,758	\$118,940	\$3,647,478	\$911,870	\$4,757,580	\$1,189,395	
Local Projects**	\$0	\$1,800,000	\$0	\$392,600	\$0	\$0	\$0	\$54,119,532	\$0	\$56,312,132	
Total	\$4,170,344	\$2,233,336	\$10,007,344	\$2,902,186	\$12,743,772	\$1,827,268	\$156,657,652	\$62,766,220	\$183,579,112	\$69,729,010	

Funding Source		Expenditures From Recommended Projects								
Program	2005-2006		2007-2008 2009		-2011 201		2035	Total Programmed		
	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local	Fed/State	Local
STP - Urban (URB)	\$0	\$0	\$2,695,000	\$675,000	\$251,000	\$62,000	\$12,352,551	\$7,058,473	\$15,298,551	\$7,795,473
STH Preservation	\$2,688,000	\$13,000	\$1,788,000	\$527,000	\$8,141,500	\$0	\$18,820,287	\$0	\$31,437,787	\$540,000
Majors Program	\$0	\$0	\$0	\$0	\$1,700,000	\$0	\$96,523,900	\$0	\$98,223,900	\$0
Bridge Replacement & Rehabilitation (BR)	\$0	\$0	\$1,658,000	\$415,000	\$2,305,000	\$576,000	\$1,025,500	\$1,025,500	\$4,988,500	\$2,016,500
Local Road Improvement Program (LRIP)	\$0	\$0	\$627,300	\$640,700	\$153,300	\$352,700	\$1,694,400	\$1,694,400	\$2,475,000	\$2,687,800
СНА	\$704,172	\$176,043	\$704,172	\$176,043	\$1,056,258	\$264,065	\$8,097,978	\$2,024,495	\$10,562,580	\$2,640,645
STP - Non Urban (RU- STP)	\$0	\$0	\$1,484,000	\$472,250	\$1,029,000	\$257,200	\$0	\$0	\$2,513,000	\$729,450
SAF	\$317,172	\$79,293	\$317,172	\$79,293	\$475,758	\$118,940	\$3,647,478	\$911,870	\$4,757,580	\$1,189,395
Local Projects**	\$0	\$1,800,000	\$0	\$392,600	\$0	\$0	\$0	\$54,119,532	\$0	\$56,312,132
Total	\$3,709,344	\$2,068,336	\$9,273,644	\$3,377,886	\$15,111,816	\$1,630,904	\$142,162,094	\$66,834,269	\$170,256,898	\$73,911,395

* Does not include GTA, or STH O & M funds. These may be used to cover funding shortfalls.

**Projects have the potential to be funded with GTA funds. These projects include LR preservation projects for the townships, county and cities.

Explanation of Table 7

Expected Funding

The expected federal/state funds shown in Table 7 are based on the funding projections supplied by WisDOT, as shown in Table 8.

	Yearly Allocation 2005	30 Year Allocation	Funding Cycle
URB	\$484,752	\$15,298,552	Biannual
MAJ - Con	Variable	\$98,223,900	Variable
STH	\$1,492,000	\$44,760,000	Annual
STH O&M	\$2,052,000	\$61,560,000	Annual
BR	Variable	\$4,988,500	Biannual
LRIP	\$82,500	\$2,475,000	Biannual
CHA	\$352,086	\$10,562,580	Biannual
RU-STP	Variable	\$2,513,000	Biannual
SAF	\$158,586	\$4,757,580	Biannual
GTA	\$2,950,454	\$88,513,620	Annual
Planning Are	ea Total	\$333,652,732	

TABLE 8 WISDOT'S FUNDING PROJECTIONS

Maximum potential allocations. Based on need, qualifications, and availablity of funds at time of application.

(The recommended Major projects dictated each year's Major funding.)

In Table 7, the local funds expected to be available are based on the minimum required local matches, which are described in the text of the Streets and Highways Element. The STH Preservation projects and the STP-Rural projects are exceptions. The first does not require a cost share, and WisDOT did not provide any cost estimates for the second. However, in the 2006-2011 TIP, projects using both of these funding sources list local funds. Since the TIP is a locally adopted document it is reasonable to expect that the local funds listed in the TIP will be made available and were therefore listed as available funds in Table 7.

Expected Spending

To estimate the cost of the recommended projects, the projects were divided into their funding categories and the cost of each project was listed within the appropriate funding period.

The local long range (LR) Preservation projects have not been specifically identified and do not fit into a specific funding category for that reason. (The STH LR preservation projects have their own funding category). Therefore, the LR preservation budgets for the towns, County, and cities were listed in the outyears of the local projects category of Table 7.

Janesville Area Long Range Transportation Plan Streets & Highways: Appendix

TABLE 9 ADDITIONAL LOCAL FUNDS

Additional Local		
Total LR Preservation (no STH)		\$43,645,323
LRIP not spent on specific projects	-	\$1,694,400
Remaining LR Preservation		\$41,950,923

It is likely that a some of these projects will qualify for other funding. Therefore, the remaining LRIP money (that not spent on specific projects) was used to decrease the local LR preservation spending, as shown in Table 9. The additional LRIP funds and the required local match were applied in the outyears of the LRIP category within Table 7. The remaining local LR preservation cost was applied to the local spending line, in 2012-2035, of Table 7.

Line 2 - GTA

General Transportation Aids (GTA) are a state reimbursement of state-collected transportation revenues (fuel taxes and vehicle registration fees). GTA funds can be used by the recipients for a variety of transportation related activities. Because of their varied uses they are normally put into the local budgets and treated as local dollars as soon as they are received, making it difficult to track what percentage of each activity is paid for with GTA funds. For the financial analysis, it was assumed that the GTA would be applied to the Operating and Maintenance expenses (O & M).

Line 3 – O & M Non-Preservation

Non-Preservation O & M is for everything but capital expenditures. The non-preservation O & M activities are things like snow removal, street cleaning, and sign repair. Historical expenditure data from the City of Janesville, Milton, the Towns, and the County was used to calculate an average per mile O & M cost for each area. The County contracts with the Towns to complete all of their O & M activities, and was able to supply the needed data for those areas. The average spending reported in each jurisdiction was divided by the number of center lane miles to come up with an average O &M cost per center lane mile. The average per center lane mile O & M cost was then multiplied by the miles within the MPO (this became important for the Towns and the County) to find the average O & M spending in the MPO.

The historical costs associated with preserving the City of Janesville's 330 center lane miles is given below. The data comes from the City's 2005 and 2004 budgets and indicates that Janesville spends about \$1.1 million on non-preservation O & M.

Janesville

	2003 Actual	2004 Actual	2005 Estimated	Average
Emergency Cleanup	\$7,846	\$5,761	\$4,800	\$6,136
Leaf Collection	\$112,931	\$129,794	\$118,680	\$120,468
Roadside Pickup	\$5,296	\$5,366	\$5,200	\$5,287
Storm Damage	\$17,095	\$13,315	\$13,600	\$14,670
Street Cleaning	\$143,168	\$154,236	\$142,280	\$146,561
	2003 Actual	2004 Actual	2005 Estimated	Average
Snow Plowing	\$197,122	\$288,649	\$322,405	\$269,392
Chemical Spreading	\$329,052	\$282,584	\$331,400	\$314,345
Snow Removal	\$23,041	\$38,886	\$59,080	\$40,336
Sidewalk Shoveling	\$37,141	\$45,977	\$52,265	\$45,128
Snow Removal	\$586,356	\$656,096	\$765,150	\$669,201
	2003 Actual	2004 Actual	2005 Estimated	Average
Concrete Street (Crack Seal & Patch Fill)	\$79,271	\$63,549	\$76,205	\$73,008
Bituminous Streets (Crack Seal & Patch Fill)	\$207,706	\$185,999	\$167,260	\$186,988
Curb/ Gutter/Sidewalk	\$8,525	\$12,242	\$8,205	\$9,657
Bridge Maintenance	\$8,473	\$12,410	\$7,300	\$9,394
Railroad Crossing	\$8,215	\$589	\$0	\$2,935
Shoulder maintenance	\$6,612	\$8,531	\$11,000	\$8,714
Gravel Streets	\$5,180	\$8,087	\$10,620	\$7,962
Street Maintenance	\$323,982	\$291,407	\$280,590	\$298,660

 $\label{eq:construction} \mbox{ Excludes City's Resurfacing/Reconstruction Budget which is covered in LR Preservation budget.$

The amounts historically budgeted to maintain the City of Milton's 27 center lane miles, as they reported them to the MPO, are given below.

Milton

	2004 Actual	2005 Estimated	Average
Street Maintenance	\$63,730	\$63,587	\$63,659

Excludes Milton's Resurfacing/Reconstruction Budget which is covered in LR Preservation budget.

The County completes operations and maintenance work on roads within their jurisdiction and the townships. Because of data constraints, the O & M costs for the Towns and County were reported together as a "rural cost." The average spending on both county and town roads were divided by the total number of centerline miles that they do work on to come up with an average O & M cost per rural mile of \$4,428.

County & Municipal Operations	2003	2004	2005	Average
Routine Maintenance	1,807,154.48	1,750,165.67	1,742,628.42	1,766,649.52
Winter Maintenance (incl 17 towns)	735,871.67	851,045.58	1,530,058.49	1,038,991.91
Crack Sealing	41,776.42	43,530.67	27,067.97	37,458.35
Bridge Maintenance	118,904.98	143,705.83	210,805.26	157,805.36
Seal Coating	320,342.25	419,742.07	325,662.04	355,248.79
Grader Patching	66,622.22	54,916.72	69,479.56	63,672.83
Shouldering	50,145.97	1,344.72	116,913.58	56,134.76
Equipment Storage	206,642.13	127,454.76	138,143.00	157,413.30
Special	1,048,672.77	1,125,902.85	774,090.49	982,888.70
Total - (1042.5 Center Lane Miles)	1,118,807.04	1,668,913.11	2,246,278.04	4,616,263.52

Line 4 – O & M Preservation

O & M Preservation expenditures are for the reconstruction of existing roadways and are given in Table 10. These projects have already been listed, along with the methodology for deriving them, in the previous section entitled "Recommended Planned Preservation Projects."

Town of Janesville	•				City of Janesville				
	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget		Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	1.7	\$70,000	\$118,300	\$2,720,900	Rehabilitation	\$1,000,000	11.4	\$90,000	\$2,070,000
Town of La Prairie	1				City of Milton				
	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget		Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	1.2	\$70,000	\$83,714	\$1,925,414	Rehabilitation	\$105,000	1.0	\$105,000	\$2,415,000
Town of Milton					State Highways				
	Average Miles		Average						
	Year	Average Cost Per Mile	Annual Budget	23 Year Budget		Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	1.5	\$70,000	\$102,168	\$2,349,868	Rehabilitation	\$1,182,955	3.4	\$347,000	\$27,207,955
Town of Rock					County Highways				
	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget		Average Annual Budget	Average Miles Rehabbed Per Year	Average Cost Per Mile	23 Year Budget
Rehabilitation	0.9	\$70,000	\$60,964	\$1,402,164	Rehabilitation	\$280,000	2.0	\$140,000	\$3,220,000
Town of Harmony					MPO - Total				
	Average Miles Rehabbed Per Year	Average Cost Per Mile	Average Annual Budget	23 Year Budget				Average Annual Budget	23 Year MPO Budget
Rehabilitation	2.1	\$70,000	\$147,477	\$3,391,977	Rehabilitation			\$3,080,577	\$70,853,277

The local preservation funding was arrived at by taking the average annual budget for the townships, County, and cities and multiplying it by 30 to account for all preservation funding over the plan's life.

Summary – Line 3 & 4

Below is an O & M summary, for the cities, and rural areas.

Janesville	
Miles	330
O & M / Mile	\$3,377
Avg O & M Yearly (non-preservation	\$1,114,422
Preservation Budget (yearly) +	\$1,000,000
Total O & M Budget (yearly)	\$2,114,422
Total O & M Budget (30 years)	\$63,432,650
Milton	
Milton Miles	27
Milton Miles O & M / Mile	27 \$2,322
Milton Miles O & M / Mile Avg O & M Yearly (non-preservation)	27 \$2,322 \$63,659
Milton Miles O & M / Mile Avg O & M Yearly (non-preservation) Preservation Budget (yearly) +	27 \$2,322 \$63,659 \$105,000
Milton Miles O & M / Mile Avg O & M Yearly (non-preservation) Preservation Budget (yearly) + Total O & M Budget (yearly)	27 \$2,322 \$63,659 \$105,000 \$168,659

Rural (County and Towns)	
Miles	558
O & M / Mile	\$4,428
Avg O & M Yearly (non-preservation)	\$2,472,900
Preservation Budget (yearly) +	\$792,623
Total O & M Budget (yearly)	\$3,265,523
Total O & M Budget (30 years)	\$97,965,690

Summing the tables above results in the table below.

County, Town and City O & M	
109,529,413	Non Preservation (30 years)
56,928,682	Preservation (30 years)
\$166,458,095	30 Year O & M

Line 5 - Local O & M

In lines 3 and 4 we assumed that O &M would be paid for with GTA funds, which aren't enough to cover all of the costs. In line 5, the GTA funding is subtracted from the total city, county, and town O & M spending. The result is the amount of O & M funding that will be paid for out of non state/federal dollars or 'local' dollars.

Line 6 - STH O & M

The DOT supplied a projection for STH O & M funding (\$61,560,000).

The table below illustrates how the funds will be split between preservation and non-preservation activities.

State O & M		
	61,560,000	Total STH O & M Funding
	35,488,636	STH Preservation (30 years)
	26,071,364	STH Non-Preservation (30 years)
	61,560,000	Total STH O & M

Line 7 – Local Match

The local match figure was taken from the total local spending as reported in Table 7. In Table 7, the Local Projects line includes the recommended non-STH LR Preservation spending (Table 10) which has been included in the O & M figures given in the "30-Year Revenue and Cost Summary" (Table 6). To minimize double counting the local LR preservation spending was subtracted from the total local spending reported (\$69,729,010 - \$43,645,323).

Line 8 – Total

Sum of Federal and State funding, GTA, Local O & M, STH O & M and Local Match funds. Janesville Area Long Range Transportation Plan Streets & Highways: Appendix

Line 9 – O & M

Line 9 is the County, Town, City, and State O & M funding.

Line 10 -18

Line 10 -18 are taken from Table 7.

Line 10 - URB

The estimated federal/state and local cost shares for recommended projects expected to receive Urban Surface Transportation (URB) funds were summed.

Line 11 - STH

The estimated federal/state and local cost shares for recommended projects expected to receive State Highway funds (STH) were summed.

Line 12 - Major

The estimated federal/state and local cost shares for recommended projects expected to receive Major funds were summed.

Line 13 - Bridge

The estimated federal/state and local cost shares for recommended projects expected to receive Bridge (BR) funds were summed.

Line 14 - LRIP

The estimated federal/state and local cost shares for recommended projects expected to receive Local Road Improvement (LRIP) funds were summed. The recommended projects did not exhaust all of the funds available. The additional \$1,694,400 left in the LRIP fund was applied to the out years, 2012-2035, of Table 7, along with the necessary local match (Illustrated in Table 9).

Line 15 - CHA

WisDOT's projection for Connecting Highway Aids (CHA) was used to calculate amount of federal/state dollars available for this category. A local match of 25% was then applied.

Line 16 – Rural STP

The estimated federal/state and local cost shares for recommended projects expected to receive Rural Surface Transportation (Rural STP) funds were summed.

Line 17 - Safety

WisDOT's projection for Federal Safety Funding (SAF) was used to calculate amount of federal/state dollars available for this category. A local match of 20% was then applied.

Line 18 - Local

The estimated cost of projects not receiving federal funding. The long range preservation costs for the Townships, the County and the cities were included in the out years, 2012-2035, of Table 9. It was assumed that non-project specific LRIP funds would be spent in the out years. And were used to decrease the preservation spending included in 2012-2035 (Illustrated in Table 9). The long range preservation costs were taken from Table 10.

Line 19 - Total The sum of lines 9 through 18.

Conclusion

The current projected need for funds is in alignment with what we can reasonably expect to receive in funding from both federal and local sources based on WisDOT's projections of available state and federal funds, and historical local spending on streets and highways.