

Financial Capacity Analysis

Introduction

Federal transportation planning rules require that metropolitan area transportation plans include a financial capacity analysis to demonstrate that the plan is fiscally constrained. That is, it must be demonstrated that the estimated costs of recommended projects and maintenance and preservation of the existing transportation system can be covered using available and projected revenue sources. If projected funding shortfalls exist, new sources of revenue must be identified.

The plan cannot simply be a wish list of projects. This requires prioritizing potential projects, realistically assessing the ability of transportation providers in the metropolitan area to fund particular projects, and balancing the needs of new facilities or capacity expansion projects with system preservation needs. Estimated project costs and funding must be in year-of-expenditure dollars reflecting an assumed inflationary factor. For this 2035 plan update, an inflationary factor of 2.8% for both project costs and program funding has been assumed in accord with WisDOT and FHWA guidance.

The same financial capacity analysis methodology used for the 2030 plan has been used for this update. The analysis takes into account recent trends in sources and uses of funds and estimates the ability of existing funding sources to meet the maintenance, preservation, and improvement needs of the transportation system.

The current federal surface transportation legislation, SAFETEA-LU, which provides the transportation funding program and planning framework, is up for reauthorization. SAFETEA-LU, in fact, expired in 2009, but

has been under extension. It is uncertain at this time what changes the new legislation will bring. However, given that the current basic framework has been in place since 1991 when ISTEA was passed, it is safe to assume for now that this basic framework will continue. Any changes that are made with the next reauthorization legislation will be incorporated into an updated financial analysis as part of the next major plan update.



There may also be transportation funding changes at the state level. The Wisconsin Commission on Transportation Finance and Policy was created in the 2011-2013 biennial state budget and is charged with examining issues related to the future of transportation finance in Wisconsin. Issues to be examined include:

- Highway maintenance, rehabilitation and expansion projects;
- Local aid and assistance programs, including General Transportation Aids (GTA);
- Transportation fund revenue projections;
- Transportation fund debt service; and
- Options to achieve balance between revenues, expenditures and debt service.

The Commission will look at a study period of ten years and is required to submit a report to the Governor and state legislature by March 1, 2013.

Funding Trends

Municipal Streets/Roadways Funding

Municipal streets are mostly financed by local funding sources. These include special assessments, impact fees, general revenues, bonds, and tax increment financing. WisDOT distributes state funding to municipalities through the state's General Transportation Aids program and other local programs such as the Local and County Road Improvement Programs. Federal funding sources available for local street projects include the Surface Transportation Program (STP), Highway Safety Improvement Program, and the Bridge Replacement and Rehabilitation Program.

An important subcategory of the STP program is the STP Urban program, which provides a designated funding amount to the Madison Urban Area. The Madison Area TPB's allocation of STP Urban funds averaged \$5.9 million from 2007-2011. Funding increased to \$6.3 million from 2010-2012, but dropped to \$5.9 million for 2013-2014. Future funding levels are uncertain, but are assumed to continue at \$5.9 million with inflationary adjustments.

Table 35, Historical Local Street and Roadway Expenses, shows the amount of expenses for operating and maintenance, construction, and other street-related facilities for those municipalities in the Madison Metropolitan Planning Area from 2005 to 2009. The source of the information is the County and Municipal Revenues and Expenditures by Wisconsin Cities, Villages & Towns reports published by the Wisconsin Department of Revenue. Total annual costs for Dane County

and all municipalities during this 5-year period ranged from \$77.4 million in 2005 to \$109.6 million in 2009 with an annual average of \$89.2 million.

Federal and State Funding for Non-Transit Projects

Federal program funding sources under the current surface transportation legislation, SAFETEA-LU, that have been used for roadway improvements include the following:

- Interstate Maintenance (I/M);
- National Highway System (NHS);
- Surface Transportation Program (STP) Flexible;
- Highway Safety Improvement Program (HSIP) (including four sub-categories);
- Surface Transportation Program – Rural (used for projects outside the urban area); and
- Bridge Replacement & Rehabilitation Program (BR).

The I/M, NHS, and STP Flexible programs have been used almost exclusively for state highway projects, while the HSIP and BR programs are available for funding both state and local projects. State transportation funding is also available for state highway projects. The funding is derived primarily from the state motor fuel tax, driver license fees, and vehicle registration fees.



Table 35
Historical Local Street/Roadway Expenses (\$000's)

County/ Municipality	2005				2006				2007				2008				2009			
	O & M ¹	Const.	Other ²	Total	O & M ¹	Const.	Other ²	Total	O & M ¹	Const.	Other ²	Total	O & M ¹	Const.	Other ²	Total	O & M ¹	Const.	Other ²	Total
Dane County	6,050.7	2,058.5	986.5	9,095.7	6,229.3	3,569.9	956.6	10,755.8	7,718.7	865.0	976.2	9,559.9	6,959.4	2,383.6	789.4	10,132.4	7,738.9	2,846.6	419.5	11,005.0
C. Fitchburg ³	1,253.4	572.7	108.6	1,934.7	1,223.2	1,115.3	114.8	2,453.3	1,524.7	914.0	114.5	2,553.2	1,598.1	2,637.9	128.3	4,364.3	1,693.2	4,148.9	128.0	5,970.1
C. Madison	15,958.1	9,230.5	3,303.6	28,492.2	16,785.7	11,215.4	2,203.9	30,205.0	19,800.8	20,366.6	3,718.9	43,886.3	22,123.9	23,154.2	4,945.0	50,223.1	24,047.7	19,119.7	5,440.8	48,608.2
C. Middleton	1,351.7	27.1	741.0	2,119.8	1,596.2	4,863.7	274.6	6,734.5	2,046.5	1,348.0	555.5	3,950.0	2,077.7	1,561.0	353.6	3,992.3	1,933.5	1,523.4	301.6	3,758.5
C. Monona	1,040.5	276.9	90.2	1,407.6	883.5	1,701.2	83.3	2,668.0	710.7	992.1	68.8	1,771.6	762.8	2,027.6	70.4	2,860.8	735.1	4,452.6	91.7	5,279.4
C. Stoughton	1,271.9	363.5	926.7	2,562.1	1,182.2	464.4	342.5	1,989.1	1,332.8	509.8	407.8	2,250.4	1,436.7	527.7	663.5	2,627.9	1,197.0	722.0	633.5	2,552.5
C. Sun Prairie	2,681.7	6,770.2	2,363.3	11,815.2	2,469.8	5,663.4	587.4	8,720.6	2,883.1	2,188.2	467.7	5,539.0	2,799.7	1,092.5	504.0	4,396.2	4,973.6	9,693.6	506.5	15,173.7
C. Verona	2,410.6	2,129.3	270.2	4,810.1	1,781.7	332.3	136.3	2,250.3	2,744.4	188.4	155.2	3,088.0	2,611.7	269.0	154.9	3,035.6	1,107.8	703.5	304.9	2,116.2
V. Cottage Grove	452.8	1,010.6	431.2	1,894.6	534.1	2,530.6	105.6	3,170.3	486.3	259.6	73.6	819.5	508.5	117.2	115.9	741.6	343.8	1,919.0	423.4	2,686.2
V. Maple Bluff	148.3	1,286.8	864.5	2,299.6	302.8	71.8	75.2	449.8	147.6	0.0	34.8	182.4	181.6	13.0	75.5	270.1	228.9	165.2	78.2	472.3
V. McFarland	978.3	521.1	184.3	1,683.7	906.4	103.5	130.2	1,140.1	934.0	230.1	108.1	1,272.2	791.6	1,541.9	102.4	2,435.9	980.5	14.3	96.7	1,091.5
V. Shorewood Hills	381.6	68.4	39.0	489.0	204.6	284.6	32.1	521.3	388.2	202.9	34.7	625.8	194.0	617.4	22.3	833.7	384.6	598.6	22.8	1,006.0
V. Waunakee	842.4	466.5	1,056.8	2,365.7	701.8	2,472.8	1,704.9	4,879.5	904.3	1,147.6	524.5	2,576.4	1,016.1	1,551.3	480.2	3,047.6	959.3	1,396.5	273.6	2,629.4
T. Blooming Grove	124.2	100.6	10.7	235.5	235.5	47.8	12.9	296.2	153.4	52.2	14.6	220.2	178.7	374.9	15.3	568.9	147.9	68.8	13.5	230.2
T. Bristol ⁴	83.0	0.0	2.5	85.5	69.7	0.0	2.5	72.2	111.5	0.0	2.6	114.1	74.4	0.0	3.2	77.6	95.5	0.0	3.3	98.8
T. Burke	271.5	463.5	16.1	751.1	243.1	738.0	16.9	998.0	326.5	460.7	22.2	809.4	312.5	100.6	22.4	435.5	326.1	1,119.3	30.1	1,475.5
T. Cottage Grove ⁵	166.6	61.5	0.0	228.1	141.6	53.0	0.0	194.6	169.6	55.2	0.0	224.8	156.2	67.2	0.0	223.4	166.7	53.8	0.0	220.5
T. Dunkirk ⁶	56.3	-	1.1	57.4	66.0	0.0	1.4	67.4	83.0	-	1.3	84.3	86.7	0.0	1.4	88.1	75.7	0.0	1.6	77.3
T. Dunn ⁷	312.2	173.2	7.6	493.0	403.6	264.6	8.0	676.2	412.7	209.4	7.7	629.8	373.7	163.4	8.8	545.9	326.2	88.3	8.8	423.3
T. Madison	332.6	1,880.2	255.9	2,468.7	296.9	129.9	27.7	454.5	440.5	89.8	26.3	556.6	391.8	89.2	27.5	508.5	401.6	1,370.5	32.5	1,804.6
T. Middleton	304.2	291.9	30.5	626.6	356.2	482.1	74.2	912.5	307.8	118.1	14.6	440.5	482.3	1,101.6	21.0	1,604.9	544.0	669.9	39.3	1,253.2
T. Pleasant Springs ⁸	60.4	0.0	0.2	60.6	137.9	0.0	0.2	138.1	124.4	0.0	0.3	124.7	97.8	0.0	0.3	98.1	145.6	0.0	0.3	145.9
T. Rutland ⁹	28.3	23.3	0.9	52.5	25.1	30.5	0.5	56.1	24.5	31.2	0.5	56.2	42.4	29.4	0.5	72.3	50.0	19.3	0.5	69.8
T. Springfield ¹⁰	161.9	1.7	0.6	164.2	185.6	-	0.7	186.3	189.8	5.8	0.7	196.3	254.0	29.4	0.8	284.2	157.0	4.4	0.8	162.2
T. Sun Prairie ¹¹	108.8	77.1	0.0	185.9	56.8	119.3	0.0	176.1	183.9	275.7	0.0	459.6	187.8	30.7	0.0	218.5	156.2	3.9	0.0	160.1
T. Verona ¹²	264.4	198.1	2.7	465.2	262.5	284.5	10.9	557.9	265.2	45.4	13.7	324.3	301.3	255.2	5.1	561.6	301.6	93.4	7.2	402.2
T. Westport ¹³	221.4	222.6	2.3	446.3	252.2	270.5	2.3	525.0	221.4	348.5	2.1	572.0	271.9	159.7	2.7	434.3	348.1	276.7	2.7	627.5
T. Windsor ¹⁴	47.8	54.0	27.6	129.4	46.6	27.9	11.0	85.5	60.3	9.8	4.0	74.1	76.1	0.0	2.4	78.5	44.4	0.0	14.3	58.7
Planning Area	37,365.6	28,329.8	11,724.6	77,420.0	37,580.6	36,837.0	6,916.6	81,334.2	44,696.6	30,914.1	7,350.9	82,961.6	46,349.4	39,895.6	8,516.8	94,761.8	49,610.5	51,072.2	8,876.1	109,558.8

¹ Operations and maintenance costs.² Road related facilities costs, including limited purpose roads, street lighting, sidewalks, storm sewers, and parking.³ Estimated at 97.25%.⁴ Estimated at 28.21%.⁵ Estimated at 36.21%.⁶ Estimated at 23.50%.⁷ Estimated at 78.12%.⁸ Estimated at 27.56%.⁹ Estimated at 15.77%.¹⁰ Estimated at 37.92%.¹¹ Estimated at 47.23%.¹² Estimated at 65.16%.¹³ Estimated at 94.59%.¹⁴ Estimated at 8.00%.

Source: Wisconsin Dept. of Revenue, County and Municipal Revenues and Expenditures Reports.



The federal STP Enhancements and Safe Routes to School programs are the primary funding sources for independent bicycle and pedestrian projects. WisDOT administers these programs with projects competing on a statewide basis for use of these funds. WisDOT administered an STP Discretionary program to foster alternatives to single-occupant vehicle trips from 2002-2005, but funding for the program was eliminated after that. A new Bicycle and Pedestrian Facilities Program was created in 2008 with the former STP Discretionary program funding and state funding. The 2011-2013 biennial state budget eliminated the state funding for the program, but added some federal funding for a net reduction of \$1.5 million from \$5.2 to \$3.7 million annually.

Table 36 shows the federal and state funding programmed for non-transit projects in the Madison Metropolitan Planning Area from 2007 to 2011. The one-time infusion of federal funding through the American Recovery & Reinvestment Act (ARRA) of 2009 is not included (see pages 7 and 8 for more information on projects funded through ARRA). Total annual federal and state roadway funding during this period ranged from \$32.6 million to \$88.0 million with a 5-year average of \$57.6 million. Federal and state funding for non-roadway and non-

transit projects ranged from \$2.3 million to \$20.7 million for an average of \$10.3 million. The large amount of funding for such projects in 2007 and 2008 was primarily due to some major UW-Madison projects, including parking ramps or ramp additions, the East Campus Pedestrian Mall, and the Campus Drive path. These federal and state expenditures are further summarized in Table 37 with annual averages shown for four categories of funding that were used to generate estimates of potential future revenues.

Public Transit Funding

The major transit operator in the Madison area is Metro Transit, which is owned by the City of Madison and operates within the oversight of the Mayor, Common Council, and the City's Transit & Parking Commission. Metro contracts with other communities and public institutions (including UW-Madison and the Madison Metropolitan School District) to provide service. The City of Monona contracts with a private provider for limited commuter service and a circulator service designed for the elderly and persons with disabilities. The cities of Sun Prairie and Stoughton contract with private providers for shared-ride taxi service. Sun Prairie also operates limited shuttle service to East Towne and other locations.

Metro's capital and operating costs are funded through a combination of federal funding, state operating assistance, passenger fares, and local funds primarily derived from the property tax. Federal funding may be used for capital project expenses and planning/administrative and maintenance costs.

The majority of Metro's federal funding comes from the Section 5307 Urbanized Area Formula Program. Metro also receives Federal Section 5309 Fixed Guideways program funding based on the miles of bus

Table 36

**Federal and State Transportation Funds Programmed in the Madison Metropolitan Planning Area
Non-Transit Projects (2007-2011)**

	Funds Programmed (\$000s)						
	2007	2008	2009	2010	2011	5 Yr. Total	Avg./Year
A. ROADWAY FUNDS							
Federal							
Interstate Maintenance (I/M)	416	9,298	1,057	34,330	1,289	46,390	9,278
National Highway System (NHS)	5,820	5,088	1,265	7,926	14,508	34,607	6,921
Surface Transportation Program (STP) State Flexible	7,399	8,127	3,232	6,068	23,089	47,915	9,583
STP Urban (Madison Urban Area) ¹	6,227	5,242	5,242	6,338	6,338	29,387	5,877
STP Safety	1,711	11,388	5,495	3,635	875	23,104	4,621
Bridge Replacement & Rehabilitation	32	1,006	1,067	165	244	2,514	503
Special Funding Allocations ²	0	0	0	986	1,609	2,595	519
Subtotal Federal	21,605	40,149	17,358	59,448	47,952	186,512	37,302
State	10,981	14,327	26,899	28,561	20,588	101,356	20,271
Subtotal Federal & State (roadway)	32,586	54,476	44,257	88,009	68,540	287,868	57,574
B. Federal & State Transportaiton (non-roadway, non-transit)							
STP Transportation Enhancements	5,975	3,309	1,459	1,334	177	12,254	2,451
Safe Routes to School (SRTS)	115	230	230	305	1,006	1,886	377
Other State (WisDOA, WisDNR, UW-Madison, Ped/Bike, Rail)	13,135	17,163	4,150	1,594	1,116	37,158	7,432
Subtotal Federal & State (non-roadway, non-transit)	19,225	20,702	5,839	3,233	2,299	51,298	10,260
Total Federal and State Expenditures	51,811	75,178	50,096	91,242	70,839	339,166	67,833

¹ Annual allocation versus amount spent in each year.

² Excludes one-time American Recovery & Reinvestment Act (ARRA) funding.

Source: Transportation Improvement Programd (TIPs) for the Madison Metropolitan Area & Dane County (2007-2011)

Table 37

**Summary of Federal and State Transportation Funds Programmed in the Madison Metropolitan Planning Area
Non-Transit Projects (2007-2011)**

Federal and State Funds	Funds Programmed (\$000s)						
	2007	2008	2009	2010	2011	5 Yr. Total	Avg./Year
Highway Construction, Maintenance, etc.	26,359	49,234	39,015	81,671	62,202	258,481	51,696
STP Urban (Madison Urban Area) ¹	6,227	5,242	5,242	6,338	6,338	29,387	5,877
STP Transportation Enhancements & SRTS	6,090	3,539	1,689	1,639	1,183	14,140	2,828
Other State (WisDOA, WisDNR, UW-Madison, Ped/Bike, Rail)	13,135	17,163	4,150	1,594	1,116	37,158	7,432
Total Federal and State Expenditures	51,811	75,178	50,096	91,242	70,839	339,166	67,833

¹ Annual allocation versus amount spent in each year.

Source: Transportation Improvement Program (TIPs) for the Madison Metropolitan Area & Dane County (2007-2011)



lanes and other dedicated transit facilities such as the State Street pedestrian and transit mall. Metro has also received discretionary funding through the Section 5309 Capitol program, but the level of that funding has dropped significantly in recent years. The cities of Monona, Sun Prairie, and Stoughton have from time to time received Section 5309 funding to purchase vehicles and also receive state operating assistance.

Funding, in particular operating funds, has been and continues to be a major challenge for Metro and the other small transit systems. Increases in state operating assistance have not come close to keeping pace with annual increases in operating costs. In the 2011-2013 biennial state budget, state transit operating assistance

was reduced 10%. While the share of Metro's fixed-route operating costs covered by passenger fares has increased from 22% in 2005 to almost 27% in 2010, about 27% of Metro's total system operating costs (including paratransit) must still be covered by local funds. Given tight local budgets and the many other competing demands for property taxes, it is very difficult to cover inflationary cost increases let alone meet the service improvement and expansion needs of the growing metro area. A regional transit governance structure with a dedicated local source of transit funding is needed in order to make major service improvements such as express commuter service to outlying communities, increased service frequency in the core area, and new "rapid transit service" such as BRT or rail.

The state legislature adopted legislation in 2009 authorizing the creation of the Dane County Regional Transit Authority (DCRTA) with the authority to implement an additional local sales tax up to ½ percent. The DCRTA was formed in 2010, but did not have funding for staff. The DCRTA developed a draft short-term plan for improved transit service to support a referendum on a ¼ percent sales tax with assistance from City of Madison Planning, Metro Transit, and MPO staff. The DCRTA decided not to move forward with the sales tax referendum in the Spring of 2011. Assembly Bill 40 (Act

Table 38
Metro Transit Operating Revenues and Expenses (2007-2011)

	Funds Programmed (\$000s)						Avg./Year
	2007	2008	2009	2010	2011	5 Yr. Total	
Expenditures							
Capital Costs ¹	13,835	15,180	11,448	12,701	19,156	72,320	14,464
Operating Costs	39,762	42,213	44,505	43,195	43,798	213,473	42,695
Total Costs	53,597	57,393	55,953	55,896	62,954	285,793	57,159
Revenues							
FTA Section 5307 and 5309 Capital ¹	11,297	12,500	9,678	10,211	15,520	59,206	11,841
State s. 85.20 Operating	15,780	16,095	17,158	17,243	18,021	84,297	16,859
Farebox & Other Revenue	12,288	13,965	15,083	16,240	15,879	73,455	14,691
Local Funds - City of Madison	11,485	12,023	11,010	9,192	10,622	54,332	10,866
Other Local Funds	2,747	2,810	3,024	3,010	2,912	14,503	2,901
Total Revenues	53,597	57,393	55,953	55,896	62,954	285,793	57,159

¹ Excludes one-time American Recovery & Reinvestment Act (ARRA) funding and costs.

Source: Transportation Improvement Programd (TIPs) for the Madison Metropolitan Area & Dane County (2007-2011)

32) was passed in 2011, eliminating the RTA authorizing legislation and thereby dissolving the DCRTA. It is anticipated that efforts will continue to pursue new RTA enabling legislation in the future. For purposes of the MPO's fiscally constrained plan, however, new revenue from an RTA is not assumed.

Table 38 shows Metro Transit's capital and operating expenses and revenues form 2007-2011, which ranged from a low of \$53.6 million in 2007 to a high of \$63.0 million in 2011. The five-year average was

\$57.2 million. The costs and revenues do not include the one-time ARRA funding used in 2010 to support the purchase of new hybrid buses, cover some operating costs, and some other small items.

Projected Transportation Expenses and Revenues

Table 39 shows the projected total expenses and revenues for transportation projects for the next 24-year period from 2012 to 2035 assuming that recent (2007-2011) spending and funding levels shown in Tables 36 through 38 for non-transit and transit projects remain relatively constant other than inflationary increases.

It is estimated that a total of \$8.18 billion dollars could potentially be available to finance projects. The state and federal highway revenue estimates are based on funds programmed from 2007-2011 with annual averages calculated and then projected for each funding source for the three future periods (2012-2015, 2016-2025, and 2026-2035). Dane County and local community revenues for street operations/ maintenance, construction, and related facilities are based on annual average



Table 39
Projected Expenses and Revenues of Transportation Projects
Madison Metropolitan Planning Area (2012-2035)

Projected Expenses (\$000s)

	2012-2015	2016-2025	2026-2035	Planning Period Total
State and Federal				
Highway Construction, Maintenance, etc.	209,133	593,068	781,327	1,583,528
STP Urban (Madison Urban Area)	36,288	81,172	106,939	224,399
STP Transportation Enhancements & SRTS	10,825	34,277	45,158	90,260
Other State	4,026	12,748	16,796	33,570
Subtotal	260,272	721,265	950,220	1,931,757
Dane County & Communities				
Street Operations and Maintenance	187,425	593,473	781,860	1,562,758
Street Construction	162,603	514,876	678,314	1,355,793
Street-Related Facilities	37,715	119,423	157,331	314,469
Subtotal	387,743	1,227,772	1,617,505	3,233,020
Metro Transit				
Capital Expenses	62,868	201,575	265,561	530,004
Operating Expenses	185,575	639,890	1,132,853	1,958,318
Subtotal	248,443	841,465	1,398,414	2,488,322
Total Projected Expenses	896,458	2,790,502	3,966,139	7,653,099
Projected Revenues (\$000s)				
State and Federal				
Highway Construction, Maintenance, etc.	224,699	711,499	935,537	1,871,735
STP Urban (Madison Urban Area) ¹	37,712	80,886	106,562	225,160
STP Transportation Enhancements & SRTS	12,292	38,992	44,441	95,725
Other State	32,303	102,288	134,757	269,348
Subtotal	307,006	933,665	1,221,297	2,461,968
Dane County & Communities				
Street Operations and Maintenance	187,425	593,473	781,860	1,562,758
Street Construction	162,603	514,876	678,314	1,355,793
Other Street-Related Facilities	37,715	119,423	157,331	314,469
Subtotal	387,743	1,227,772	1,617,505	3,233,020
Metro Transit				
Capital Expenses	62,868	201,575	265,561	530,004
Operating Expenses	185,575	639,890	1,132,853	1,958,318
Subtotal	248,443	841,465	1,398,414	2,488,322
Total Projected Revenues	943,192	3,002,902	4,237,216	8,183,310

¹ Revenue for 2012-2015 includes \$10.8 million in carryover funding from 2011.

expenditure trends from 2005-2009 shown in Table 35 on page 121. Metro Transit revenues assume continued state and federal funding for operations and capital projects at average ratios and percentages reflected in budgets from 2007-2011.

Expenses for transportation projects are estimated at \$7.66 billion. State and federal highway cost estimates are based on the average annual amount of state and federal funding programmed for 2012-2015 in the Transportation Improvement Program (TIP) multiplied by the number of years in the following two project periods. Dane County and local community revenues for street operations/ maintenance, construction, and related facilities are based on annual average expenditure trends from 2005-2009 shown in Table 35.

Metro Transit expenses are based on the average annual costs from 2007-2011 shown in Table 38. Operating expenses reflect only relatively minor increases in total service hours similar to those implemented during this period. They do not reflect capital and operating costs associated with major increases in service from the implementation of new rapid transit service (rail or BRT), new commuter express service, and improved local service. A new regional transit governance structure and a new dedicated source of funding would be necessary to implement these improvements. The capital costs also do not reflect a new or expanded Metro administrative and maintenance facility. Metro is currently studying options for such a facility and attempting to secure special funding for it.

Metropolitan Area Roadway Projects

Table 33 on page 83 lists the recommended arterial street and roadway improvements for 2012-2035. The table includes major capacity expansion projects and other

system preservation, TSM, and safety projects. Sections 1 and 3 of the table list the potential capacity expansion and other projects already programmed for 2012-2015 in the Transportation Improvement Program, while Sections 2 and 4 list other planned projects in the 2016-2035 time period. Estimated project costs in year-of-expenditure dollars and the primary source of funding are identified.

Table 33 shows that \$38.6 million is programmed for local roadway capacity expansion projects in the four-year period from 2012-2015. A total of \$29.0 million was programmed for such projects in the prior six-year period from 2006-2011. This includes the Pleasant View Road extension project, which was funded with a one-time ARRA grant but was originally programmed with local funding. As an indicator of likely available funding for capacity expansion projects, the total is still conservative because STP Urban funding—the primary non-local source of funding for local arterial projects—was used for only one minor capacity expansion project (new roundabout at the CTH M/Valley View/Pleasant View Rd. ext. intersection) during this period. Most of the STP Urban funds were used for the 5-phase East Washington Avenue



reconstruction project. The total for the 10-year period from 2006-2015 is \$67.6 million or \$6.8 million per year.

This level of funding, if continued, would provide \$83.7 million in inflation-adjusted funding for the period from 2016-2025 and \$110.4 million from 2026-2035. This level of funding is sufficient to cover the estimated costs of the local roadway capacity expansion projects over the 20-year period identified in Section 2 of Table 33 and illustrated in Figure 27.

Federal and state funds programmed for state capacity expansion projects include the \$67.8 million for the Verona Road/West Beltline interchange reconstruction project and \$4.3 million for the replacement and expansion of the Hoepker Road and Cottage Grove Road bridges over Interstate 39/90. The Verona Road/West Beltline interchange project also includes the expansion of Verona Road (USH 18/151) to eight lanes from the interchange south to the Summit Road intersection and the expansion of the Beltline to six lanes from Verona Road to Whitney Way. The only other major state capacity expansion project identified at this time in the MPO planning area is the planned new interchange at Verona Road and McKee Road (CTH PD). The project, which also involves the expansion of Verona Road to six lanes from Raymond Road to CTH PD, is currently planned for construction in 2019. The estimated inflation-adjusted cost is \$65.5 million. The S. High Point Road Bridge over the Beltline is also planned for replacement and expansion in 2016 at an estimated cost of \$5.6 million.

No other capacity expansion projects on the state roadway system in the Madison Metropolitan Planning Area have been identified at this time due to one ongoing major EIS study (USH 51 from McFarland to Stoughton) and three other major EIS studies that were just approved and will be



starting in 2012. The three new studies are for: (1) the Beltline (USH 12/14/18/151) from USH 14/University Ave. to CTH N east of the Interstate; (2) Stoughton Road/USH 51 from the Beltline north to STH 19; and (3) Interstate 39/90/94 from the Beltline north to USH 12/16 in the Wisconsin Dells. All of the studies will look at potential new or improved interchanges. The Beltline and Interstate will also look at other capacity improvements in the corridors. The recommended improvements in these corridors, estimated costs, and sources of funding are unknown at this time. The plan recommends the completion of these studies and advancement of the recommended improvements, with the timing dependent upon ongoing needs assessment through the congestion management process and available funding. The plan also identifies another potential future major EIS study in the general STH 19 corridor between USH 151 and USH 12, including the North Mendota Parkway corridor (STH 113 and CTH M).

Section 3 of Table 33 lists \$70.7 million in system preservation, TSM, and safety projects on local roadways programmed from 2012-2015 and another \$5.3 million in local intersection or bridge projects for a total of \$76.0 million or \$19 million per year. This level of funding, if continued, would

provide \$234.3 million in inflation-adjusted funding for the period from 2016-2025 and \$308.8 million from 2026-2035. This is more than sufficient for the potential projects identified in Section 4 of the table.

The list of projects is not comprehensive as it is impossible to identify long-term needs for these types of projects. Many of the local projects listed are collector or minor arterial roadways on the periphery of the Madison area that currently have rural cross-sections and will need to be reconstructed to urban standards as development occurs in these areas. Long-term system preservation needs in existing developed areas will be identified as part of ongoing pavement management programs by local communities. TSM and safety projects will be identified as part of the region's congestion management process and ongoing crash analysis.

Section 3 of Table 33 lists \$40.8 million in system preservation, TSM, and safety projects on state roadways, \$18.4 million in interchange or intersection projects, and another \$27.4 million in bridge projects for a total of \$86.6 million, or \$21.7 million per year programmed from 2012-2015. This level of funding, if continued, would provide \$270.4 million in inflation-adjusted funding for the period from 2016-2025 and \$356.5

million from 2026-2035. This is more than sufficient to cover the projects identified in Section 4 of the table. As with the local projects, the list is not comprehensive and projects in the last time period are unknown at this time.

One of the planning factors under SAFETEA-LU emphasizes preservation of the existing transportation system. Among the overall MPO goals for the transportation system is safety and achieving a system that is cost efficient and financially feasible with sufficient ongoing financial support for operations and maintenance. The MPO also emphasizes use of TSM and TDM strategies prior to consideration of major capacity expansion projects. For the first time as part of preparation of the 2030 Plan, a comprehensive database and map of the 2005 pavement condition of the arterial and collector roadway system in the county were prepared. As part of this plan update, a 2009 database and map were created and compared to 2005 (see Figure 13 on page 34). The analysis showed that the state and local agencies are doing an excellent job of maintaining the major roadway system. The MPO will continue to monitor the pavement condition of roadways and bridges as part of the MPO's transportation system performance monitoring program.



Off-Street Bicycle Facility Projects

Table 34 on page 106 lists the recommended off-street bicycle facility projects for 2012-2035. Section 1 of the table lists projects that are already programmed and Section 2 lists recommended projects included in the regional bikeway system plan. The list of recommended projects does not include all planned projects, but is a priority list of projects with a strong potential to be funded and implemented over the next 20+ years if recent levels of funding for such projects continue to be available in the future. The

primary non-local source of funding for off-street bicycle facility projects is the federal Transportation Enhancements (TE) program.

Section 1 of Table 34 lists \$26.3 million in off-street bicycle facility projects programmed from 2012-2015. These include the Cannonball Trail, Ice Age Junction Path extension on the west side in the CTH M corridor, and the Lower Yahara River Trail Phase 1. The Cannonball and Lower Yahara River Trail projects are funded through the Transportation Enhancements Program, while the Ice Age Junction path project is being funded with a combination of STP Urban and local funding and mostly constructed in conjunction with the CTH M street reconstruction project. A total of \$14.6 million was programmed for off-street bicycle projects in the prior six-year period from 2006-2011. The total for the 10-year period from 2006-2015 is \$40.9 million or \$4.09 million per year. This level of funding, if continued, would provide \$51.9 million in inflation adjusted funding for the period from 2016-2025 and \$68.4 million from 2026-2035. This level of funding is more than sufficient to cover the estimated costs of the priority off-street bicycle projects identified in Section 2 of Table 34 and illustrated in Figure 30 on page 104.

