



APPENDIX

- A: Project and Policy Recommendations
- B: Environmental Justice Analysis
- C: Environmental Analysis
- D: Map Book
- E: MPO Composition and History
- F: Pedestrian Facilities Toolbox
- G: Public Participation and Responses to Comments
- I: Travel Model Summary Statistics
- H: Performance Measures Report

APPENDIX A: PROJECT AND POLICY RECOMMENDATIONS

Figure A-1

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017 - 2050							
1. Capacity Improvements & Studies Already Programmed							
FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3) (000s)	PRIMARY FUNDING SOURCE(S)	COMMENTS	
Roadway Segments (4) State				2017 to 2020	2021 to 2035	2036 to 2050	
Verona Rd. (US 18/151)	Nakoma St. to Raymond Rd.	6 to 8-lane divided facility	0.7	Cont.	NHPP	Beltline, Beltline interchange completed	
Verona Rd. (US 18/151)	Raymond Rd. to McKee Rd./CTH PD	6-lanes w/ new interchanges	1.2	89,600	NHPP	Interchanges at Williamsburg Way, CTH PD	
WIS 19	River Rd. to Interstate 39/90	4-lane divided facility	0.7	7,309	NHPP	Includes Yahara R bridge replacement	
		State Project Subtotal	2.6	96,909			
Local							
CTH M (S. Pleasant View Rd.)	Valley View Rd. to Cross Country Rd.	4 to 6-lane divided facility	2.7	40,263	STBG Urban	Incl. grade sep. intersection at CTH PD	
Cottage Grove Rd. (CTH BB)	North Star Dr. to Sprecher Rd.	4-lane divided facility	1.0	6,102	STBG Urban		
McKee Rd. (CTH PD)	Menier Way to Maple Grove Dr.	4-lane divided facility	1.6	13,342	STBG Urban		
Nine Mound Rd.	Cross Country Rd. to CTH PD	4-lane divided facility	1.4	Cont.	Local		
		Local Projects Subtotal	11.9	19,444			
		Total Roadway Segments	14.5	116,353			
Interchanges and Bridges							
W. Beltline (US 12/14)	S. High Point Rd. Bridge	Replace, expand to 4 lanes		Cont.	NHPP		
Interstate 39/90	Cottage Grove Rd. Bridge	Replace, expand to 4 lanes		3,917	NHPP	Const. of second structure	
Verona Rd. (US 18/151)	Williamsburg Way, CTH PD Interchanges	New Interchanges			NHPP	Part of Verona Rd. expansion project	
		Subtotal Bridges		3,917			
Studies							
W. Beltline (US 12/14/18/151)	US 14 to CTH N	Major corridor study (EIS)		15,918	NHPP	Possible continuation until 2024	
Interstate 39/90	Beltline interchange area	Major corridor study (EIS)		3,641	State	Incl. US 12/18 from US 51 to CTH AB	
US 51 (Stoughton Rd.)	Terminal Dr. to WIS 19	Major corridor study (EIS)		Cont.	NHPP	Ongoing	
US 51	McFarland to Stoughton	Major corridor study (EIS)		Cont.	State	Recommended alternative identified	
		Subtotal Studies		19,560			
		Grand Total		139,830			

- (1) For planning level cost estimating purposes only. Design, magnitude of improvement, and cost is subject to more detailed levels of planning and environmental study.
- (2) Projects may not be able to be implemented or the schedule may be modified due to future changes in available revenue, priorities, or other factors not known at this time.
- (3) Costs are for construction only and are year-of-expenditure assuming a 2.0% annual inflationary factor.
- (4) Projects outside of the MPO Planning Area, not included in the financial analysis are as follows:
 - (a) Interstate 39/90 (Siggekkow Rd. Bridge to Rock County Line), Reconstruct and expand to 6 lanes w/ new bridges and interchanges

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017 - 2050 (CONTINUED)								
2. Planned Capacity Improvements	FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3)		PRIMARY FUNDING SOURCE(S)	COMMENTS
					2017 to 2020	2021 to 2035		
	Roadway Segments (4)							
	<u>State</u>							
	[Note: Projects to be identified following completion of environmental studies of the Bellline, US 51/Stoughton Road, US 51 (McFarland to Stoughton), and WIS 19/WIS 113/CTH M. See Section 5 of this table listing "illustrative" projects pending environmental study and identification of funding.]							
	<u>Local</u>							
	Buckeye Rd. (CTH AB)	Relocated Sprecher Rd. to US 12/18	4-lane divided facility	2.6		27,143	STBG Urban or Local	
	CTH D (Fish Hatchery Rd.)	Lacy Rd. to Nobel Dr.	4-lane divided facility	0.4	3,151		STBG Urban or Local	
	CTH M	Willow Rd. to CTH K	4-lane divided facility	1.1	8,429		STBG Urban or Local	
	CTH PD	CTH M to West of Shady Oak Ln.	4-lane divided facility	1.2	9,454		STBG Urban or Local	
	CTH Q	Oncken Rd. to CTH M (Century Ave.)	4-lane divided facility	1.8	14,181		STBG Urban or Local	
	CTHT (Commercial Ave.)	N. Thompson Dr. to Reiner Rd.	4-lane divided facility	1.7		18,025	STBG Urban or Local	
	Hoepfker Rd.	US 51 to Portage Rd.	4-lane divided facility	1.0	7,878		STBG Urban or Local	
	Hoepfker Rd.	Portage Rd. to Rattman Rd./American Pkwy.	4-lane divided facility	0.5	3,939		STBG Urban or Local	
	Hoepfker Rd.	US 51 to CTH CV	4-lane undivided facility	0.5	2,679		NHPP, STBG Urban, or Local	Part of US 51 imp.
	Lien Rd.	City View Dr. to Felland Rd.	4-lane divided facility	0.6	3,361		STBG Urban or Local	Southern section only
	Lien Rd. Extension	Felland Rd. to Reiner Rd.	New 4-lane divided facility	0.5	3,861		STBG Urban or Local	
	Mid town Rd.	Muir Field Rd. to CTH M (S. Pleasant View)	New 4-lane divided facility	1.3		14,102	STBG Urban or Local	Pt. on new alignment
	Mineral Point Rd. (CTH S)	S. Pleasant View Rd. to Veritas Dr.	4-lane divided facility	0.9	7,090		STBG Urban or Local	
	Mineral Point Rd. (CTH S)	Veritas Dr. to Pioneer Rd.	4-lane divided facility	0.8		8,482	STBG Urban or Local	
	Nelson Rd.	High Crossing Blvd. to Reiner Rd.	4-lane divided facility	0.9		9,224	STBG Urban or Local	
	Packers Ave. (CTH CV)	Tennymon Ln. to Wheeler Rd.	4-lane undivided facility	0.9		6,362	STBG Urban or Local	
	N. Pleasant View Rd.	US 14 to Greenway Blvd.	4-lane divided facility	0.9	13,787		STBG Urban or Local	
	N. Pleasant View Rd.	Greenway Blvd. to Timber Wolf Trail	4-lane divided facility	0.6	4,197		STBG Urban or Local	
	N. Pleasant View Rd.	Timber Wolf Trail to Mineral Point Rd.	4-lane divided facility	0.9	6,422		STBG Urban or Local	
	Reiner Rd.	O'Keeffe Ave. to Lien Rd. extended	4-lane divided facility	2.5		25,977	STBG Urban or Local	

2. Planned Capacity Improvements									
ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)									
FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2)				PRIMARY FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035	2036 to 2050	AND PRELIMINARY COSTS (3)		
Reiner Rd.	Lien Rd. extended to CTH	4-lane divided facility	1.0			10,391	STBG Urban or Local		
Sprecher Rd.	CTHT to Milwaukee St.	6-lane divided facility	0.5	5,357			STBG Urban or Local		
Sprecher Rd.	Shapsburg Dr. to Buckeye Rd. (CTH AB)	4-lane divided facility	1.2	9,454			STBG Urban or Local		
Watts Rd.	CTH M to Pleasant View Rd.	4-lane divided facility	0.6	4,727			STBG Urban or Local		
	Subtotal Roadway Segments		24.8	107,966		119,705			
Interchanges and Bridges									
Interstate 39/90	Beltline (US 12/18) Interchange (BIC)	Reconfigured Interchange		550,000			Majors program	Part of I-39/90 project	
Interstate 39/90	Hoepker Rd. Bridge	Replace, expanded to 4 lanes		6,217			NHPP		
US 12/18	CTH AB Interchange	New Interchange					Majors program	Phase 3 of BIC Proj	
	Subtotal Interchanges			556,217		0			
Studies									
WIS 19/WIS 113/CTH M	US 12 to US 151	Future Major corridor study (EIS)						Funding undetermined	
	Subtotal Studies								
	Grand Total		24.8	664,183		119,705		783,888	

(1) For planning level cost estimating purposes only. Design, magnitude of improvement, and cost is subject to more detailed levels of planning and environmental study.

(2) Projects may not be able to be implemented or the schedule may be modified due to future changes in available revenue, priorities, or other factors not known at this time.

(3) Costs are year-of-expenditure assuming a 2.0% annual inflationary factor.

(4) Projects outside of the MPO Planning Area, not included in the financial constraint requirement are as follows:

(a) I-39/90 (Beltline (US 12/18) to County Line), 6-lane freeway, 20.1 miles; IM funds (2026 to 2035 time period); part of larger project to IL State line.

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017 -2050 (CONTINUED)

3. Arterial System Preservation, TSM, and Safety Projects Already Programmed (Cost > \$1.0 million)						
FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3) (000s)	PRIMARY FUNDING SOURCE(S)	COMMENTS
Roadway Segments (4) State				2017 to 2020		
W. Beltline (US 12/14/18/151)	Verona Rd. to Fish Hatchery Rd.	Resurfacing	2.0	6,610	NHPP	
US 51 (Stoughton Rd.)	Broadway St. to Milwaukee St.	Resurfacing of SB lanes	3.5	Cont.	NHPP	NB lanes const. in 2015
US 51 (Main St.)	Page Street to Hoel Avenue	Pavement rehabilitation	1.2	1,675		
US 151	Main St. to CTH VV	Resurfacing w/ bridge decks overlay	3.9	9,635	NHPP	
	State Projects Subtotal		10.6	17,920		
<u>Local</u>						
CTH CV	CTHV to Vinburn Rd.	Reconstruct to urban standards	1.0	2,576	Local	
CTH MN (Farwell St.)	US 51 to Lake St.	Resurfacing	0.6	936	Local	
CTH MS (University Ave.)	Cayuga St. to Allen Blvd.	Pavement replacement	1.6	4,000	Local	
CTH Q (S. Century Ave.)	Woodland Dr. to WIS 19 (W. Main St.)	Resurfacing	1.0	2,000	Local	
CTH V (North St.)	North Towne Rd. to N. Main St. (CTH CV)	Reconstruct to urban standards	0.8	2,463	Local	
Atwood Avenue	First St. to Winnebago St.	Reconst. with intersection improvements	0.2	2,621	Local	
Atwood Avenue	Fair Oaks Ave. to Walter St.	Reconstruct to boulevard street	0.7	5,688	STBG Urban	Includes Walter intersec. imp.
Buckeye Rd. (CTH AB)	Monona Dr. to Stoughton Rd. (US 51)	Reconstruct to urban standards	0.8	2,216	STBG Urban	
Garmon Rd.	Mineral Point Rd. to Beltline (US 12/14)	Pavement replacement	0.4	3,714	Local	
E. Johnson St.	Baldwin St. to First St.	Reconstruction w/ First St intersection imp.	0.5	5,056	STBG Urban	
Lacy Rd.	Fitchburg City Hall to Syene Rd.	2-lane facility w/ bike lanes	1.3	4,726	STBG Urban	Incl. roundabout at Fahy Glen
McKee Rd. (CTH PD)	Commerce Park Dr. to Seminole Hwy.	Reconstruction w/ intersection imp.s	0.6	6,165	STBG Urban	Incl. ped/bike underpass
Milwaukee St.	Stoughton Rd./US 51 to Thompson Dr.	Resurfacing	1.4	874	Local	
Mineral Point Rd.	Beltline to S. High Point Rd.	Pavement replacement	0.2	1,411	STBG Urban	
Monroe Street	Odana Rd. to Regent St.	Resurfacing	1.7	15,208	Local	
Outer Capitol Loop (South)	MILK Jr Blvd. to S. Webster St.	Reconstruction	0.1	1,920	Local	
S. Park Street	Badger Rd. to Union Pacific RR	Concrete joint repair	0.6	2,531	Local	
S. Park Street	Olin Ave. to W. Washington Ave.	Concrete joint repair	0.7	2,679	Local	

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)						
3. Arterial System Preservation, TSM, and Safety Projects Already Programmed (Cost > \$1.0 million)						
FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3) (000s)	PRIMARY FUNDING SOURCE(S)	COMMENTS
Stiegelkow Rd.	Marsh Rd. to Terminal Dr.	Reconstruction to urban standards	0.8	2,585	Local	
W. Washington Avenue	Regent St. to Bedford St.	Pavement replacement	0.2	2,232	Local	
E. Wilson St./Williamson St.	Franklin St. to Blount St.	Reconstruction	0.2	1,955	Local	
Winnabago St.	Atwood Ave. to Bashford St.	Reconstruction	0.3	1,649	Local	
University Ave.	Aurora St. to Pamenter St.	Reconstruction	0.1	1,298	Local	
	Local Projects Subtotal		15.8	76,504		
	Total Roadway Segments			94,424		
Interchanges/Intersections						
State						
US 51	WIS 138 and Silverado/Hoel Ave Intersections	Reconstruct w/ roundabouts		5,566	NHPP	
WIS 19	Broadway Dr. Intersection	Reconstruct, reconfigure intersection		1,464	HSIP	
WIS 19	WIS 113 and CTH I Intersection	Reconstruct, reconfigure intersection		4,685	NHPP/HSIP	
Local						
Atwood Ave.	Williamson St./Winnabago St. Intersection	Reconstruct (pt), reconfigure intersection		2,621	Local	
	Interchanges/Intersections Subtotal			14,336		
Bridges						
State						
S. Beltline (US 12/18)	Yahara River Bridges	Bridge deck overlay		Cont.	NHPP	
W. Beltline (US 12/14)	Terrace Ave. Bridges	Bridge deck rehab or replacement		2,296		
Interstate 39/90	Milwaukee St. Bridge	Bridge deck replacement		1,357	NHPP	
Interstate 39/90/94	CTH DM Bridge	Bridge replacement		2,339	NHPP	
Interstate 39/90/94	River Rd. Bridge	Bridge deck overlay		Cont.	NHPP	
Interstate 94	Bridge(s) east of CTH N	Bridge replacements		3,566	NHPP	Cost includes other bridges
US 12/18	New Meier Rd. Bridge	Street extension and new bridge		4,714	State	Part of I-39/90 expansion project
US 14	McCoy Rd. and Byrne Rd. Bridges	Bridge deck repl., WB bridge repl.		4,385	NHPP	
Local						
CTH AB	Yahara River Bridge	Bridge replacement		1,208	BR	

CTH/PB	Badger Mill Creek Bridge	Bridge replacement	407	NHPP
		Bridges Subtotal	17,975	
Studies				
US 12	Parmenter St. to WIS 19	Freeway conversion study	Cont.	
		Subtotal Studies		
		Grand Total	26.4	144,655

- (1) For planning level cost estimating purposes only. Design, magnitude of improvement, and cost is subject to more detailed levels of planning and environmental study.
- (2) Projects may not be able to be implemented or the schedule may be modified due to future changes in available revenue, priorities, or other factors not known at this time.
- (3) Costs are year-of-expenditure assuming a 2.0% annual inflationary factor.
- (4) Projects outside or mostly outside of the MPO Planning Area, not included in the financial analysis are as follows:
 - (a) US 151 (CTHV to WIS 73), Resurfacing, Const. in 2018

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)								
FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3)			FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035	2036 to 2050		
Roadway Segments (4) State								
W. Beltline (US 12/14)	Whitney Way to Gammon Rd.	Resurfacing w/ structure work	1.5	2,143			NHPP or State	Const. in 2021
US 14	WIS 138 to WIS 92	Resurfacing w/ intersection improvements	4.9	3,494			State	Const. scheduled in 2021
US 18/151	CTH PD to W. Verona Ave.	Resurfacing	7.0	9,826			NHPP	Const. scheduled in 2022
US 18/151	W. Verona Ave. to Town Hall Rd.	Resurfacing	6.7	8,691			NHPP	Const. scheduled in 2022
US 51/Stoughton Rd.	E. Washington Ave. to Pierstorff St.	Concrete joint repair and overlay	0.8	3,954			NHPP or State	
US 151	East Springs Dr. to Main St.	Resurfacing	5.4	6,856			State	Const. scheduled in 2022
US 151 (Blair St.)	E. Washington Ave. to Williamson/Wilson St.	Pavement replacement w/ intersection imp	0.3	1,773			Federal/State, Local	
US 151 (Park St.)	Union Pacific RR to Olin Ave.	Reconstruction	0.5	4,165			State and Local	
US 151 (Park St.)	Union Pacific RR to Badger Rd.	Reconstruction	0.6	5,121			Federal/State, Local	
US 151 (Park St.)	Olin Ave. to W. Washington Ave.	Reconstruction	0.7	5,974			Federal/State, Local	

4. Planned Arterial System Preservation, TSM, and Safety Projects (Cost > \$1.0 million)

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)

4. Planned Arterial System Preservation, TSM, and Safety Projects (Cost > \$1.0 million)

FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2) AND PRELIMINARY COSTS (3)				FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035	2036 to 2050	2050		
WIS 19	CTH N to CTH YW	Resurfacing	2.0	1,050			State	Larger project to WIS 73	
		State Projects Subtotal	28.9	50,906					
<u>Local</u>									
Aberg Ave.	Sherman Ave. to Rail Line	Reconstruction	0.3	1,576			STBG Urban or Local		
Allen Blvd.	Century Ave. to University Ave.	Reconstruction	1.0	7,878			STBG Urban or Local		
Anderson St.	Hoffman St. to Pankratz St.	Reconstruction to urban standards	0.8	3,676			STBG Urban or Local		
Atwood Ave.	First St. to Winnebago St.	Reconstruction	0.1	525			STBG Urban or Local		
Atwood Ave.	Division St. to Fair Oaks St.	Reconstruction	0.5	2,626			STBG Urban or Local		
Atwood Ave.	Walter St. to Cottage Grove Rd.	Reconstruction	0.5	3,615			STBG Urban	Const. scheduled in 2021	
Bird St.	W. Main St. to Linnerud Dr.	Reconstruction	0.5	4,153			STBG Urban or Local		
N. Blair St.	Johnson St. to E. Washington Ave.	Pavement replacement	0.2	919			Local		
N. Bristol St. (CTH N)	Stonehaven Dr. to Klubertanz Dr.	Reconstruction	0.2	2,121			STBG Urban or Local		
Buckeye Road (CTH AB)	Thompson Dr. to relocated Sprecher Rd.	Reconstruction to urban standards	1.0	5,301			STBG Urban or Local		
Cottage Grove Rd.	Stoughton Rd./US 51 to S. Thompson Dr.	Reconstruction	1.2	12,723			STBG Urban or Local		
CTH BB (W. Cottage Grove Rd.)	N. Main St. to Sandpiper Trail	Reconstruction	0.8	4,202			STBG Urban or Local		
CTH CV (N. Main St.)	Winburn St. to Windsor Rd.	Reconstruction	1.5	5,909			STBG Urban or Local		
CTH CV (N. Main St.)	Windsor Rd. to WIS 19	Reconstruction	1.5	7,952			STBG Urban or Local		
S. Division St.	E. Main St./WIS 19 to Woodland Dr.	Reconstruction	1.0	5,301			STBG Urban or Local		
Eastwood Dr.	Division St. to First St.	Reconstruction	0.3	1,182			Local		
N. Fair Oaks St.	Lexington Ave. to Commercial Ave.	Reconstruction	0.2	1,237			Local		
Femrite Dr.	Meier Rd. to CTH AB	Reconstruction to urban standards	1.0	5,301			STBG Urban or Local		
Fish Hatchery Rd.	S. Park St. to Wingra Dr.	Reconstruction	0.5	2,626			STBG Urban or Local		
Fitchrona Road	Lacy Rd. to Nesbitt Rd.	Reconstruction to urban standards	0.5	2,127			STBG Urban or Local		

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)

4. Planned Arterial System Preservation, TSM, and Safety Projects (Cost > \$1.0 million)

FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2)			FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035	2036 to 2050		
Janesville St. (CTH CC)	Main St. to Wolfe St. (CTH MM)	Reconstruction	0.8	4,241			Local	
Jefferson St. (CTH CC)	N. Main St. to Ash St.	Reconstruction to urban standards	0.4	1,855			Local	
John Nolen Drive	North Shore Dr. to Lakeside St.	Reconstruction	0.8	7,353			STBG Urban or Local	
N. Main St. (CTH MM)	S of CTH M to Janesville St.	Reconstruction	1.5	7,952			Local	
N. Main St. (former CTH N)	S of Limestone Pass to Cottage Grove Rd.	Reconstruction to urban standards	1.0	3,939			STBG Urban or Local	
Mid Town Rd.	CTH M (S. Pleasant View) to Meadow Rd.	Reconstruction to urban standards	1.7	9,012			STBG Urban or Local	
N. Midvale Blvd.	University Ave. to Regent St.	Reconstruction	0.5	3,939			STBG Urban or Local	
S. Midvale Blvd.	Regent St. to Nakoma Rd.	Reconstruction	2.0	15,756			STBG Urban or Local	
Milwaukee St.	E. Washington Ave. to Schenk St.	Reconstruction	1.3	5,974			Local	
Milwaukee St.	Thompson Dr. to Sprecher Rd.	Reconstruction to urban standards	1.1	4,490			STBG Urban or Local	
Milwaukee St. Extension	Wind Stone Dr. to CTH T	New 2-lane facility	1.0	3,939			Local	Excludes ROW
Mineral Point Rd.	Glenway St. to Whitney Way	Reconstruction	1.7	8,928			STBG Urban or Local	
North Shore Dr./Proudfitt St.	John Nolen Dr. to W. Washington Ave.	Reconstruction	0.6	6,362			STBG Urban or Local	
W. North St. (CTH V)	N. Main St. to River Rd.	Reconstruction to urban standards	1.2	4,727			STBG Urban or Local	
Odana Rd.	Gannon Rd. to Whitney Way	Reconstruction	1.6	8,403			STBG Urban or Local	
Old Sauk Rd.	Bear Claw Way to Pioneer Rd.	Reconstruction to urban standards	1.1	5,991			STBG Urban or Local	
W. Olin Ave.	S. Park St. to Gilson St.	Reconstruction	0.3	1,379			Local	
Parmenter St.	Century Ave. to Greenbriar Rd.	Reconstruction to urban standards	0.6	2,363			Local or STP-Urban	4 Lanes
Pflaum Rd.	Monona Dr. to Stoughton Rd./US 51	Reconstruction	0.8	3,676			Local	
Pioneer Rd./Meadow Rd.	Mid Town Rd. to Old Sauk Rd.	Reconstruction to urban standards	3.2	16,964			STBG Urban or Local	
Rattman Rd.	Hoepker Rd. to W. Main St.	Reconstruction to urban standards	0.8	4,241			STBG Urban or Local	
Raymond Rd.	Muir Field Rd. to Verona Rd./US 18-151	Reconstruction	2.4	25,447			Local	

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)

4. Planned Arterial System Preservation, TSM, and Safety Projects (Cost > \$1.0 million)

FACILITY	SEGMENT	IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2)			FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035	2036 to 2050		
Regent St.	Highland Ave. to Park St.	Reconstruction	1.4	7,353			STBG Urban or Local	
N. Sherman Ave.	Sherman Ave. to Commercial Ave.	Reconstruction	0.3	1,379			Local	
Siggelkow Rd.	Catalina Pkwy. to CTH AB	Reconstruction to urban standards	1.1		6,044		STBG Urban or Local	
Speedway Rd.	Mineral Point Rd. to Regent St.	Reconstruction	0.7	3,676			Local	
S. Syene Rd.	McCoy Rd. to Lacy Rd.	Reconstruction to urban standards	1.2	6,302			STBG Urban or Local	
University Ave.	Shorewood Blvd. to Campus Dr.	Reconstruction	0.7	7,353			STBG Urban or Local	
S. Whitney Way	Mineral Point Rd. to West Beltline	Reconstruction	1.0		14,137		STBG Urban or Local	
E. Wilson St.	Franklin St. to King St.	Reconstruction	0.1		707		Local	
Williams Drive	CTH B to N. Page St.	Reconstruction to urban standards	0.8		4,241		STBG Urban or Local	
Winnabago St.	Williamson St. to Atwood Ave.	Reconstruction	0.2	919			Local	
Woods Rd.	CTH PD to Mid Town Rd.	Reconstruction to urban standards	1.1		5,832		Local	
		Local Projects Total	48.7	142,864	152,963			
		Total Roadway Segments	77.6	193,769	152,963			
Interchanges/Intersections								
WIS 19	Westmount Dr. Intersection	Reconstruct w/ turn lanes, signals		1,530			State	Const. scheduled in 2022
Grand Ave. (former CTH C)	Hoepker Rd. Intersection	Reconstruct, add capacity		1,697			STBG Urban or Local	
		Interchanges/Intersections Subtotal		3,227				
Bridges								
Interstate 39/90	Milwaukee St. Bridge (B-13-0477)	Bridge deck replacement		2,555			Other structure in '17.	Const. scheduled in 2030
		Bridges Subtotal		2,555				
		Grand Total		196,324	152,963			

(1) For planning level cost estimating purposes only. Design, magnitude of improvement, and cost is subject to more detailed levels of planning and environmental study.

(2) Projects may not be able to be implemented or the schedule may be modified due to future changes in available revenue, priorities, or other factors not known at this time.

(3) Costs are year-of-expenditure assuming a 2.0% annual inflationary factor.

ARTERIAL STREET/ROADWAY IMPROVEMENTS: 2017-2050 (CONTINUED)

5. Illustrative Capacity Improvements (Pending EIS Study and/or Identified Funding)

FACILITY	SEGMENT	POTENTIAL IMPROVEMENT (1)	EST. MILES	ESTIMATED TIMING (2)		PRIMARY FUNDING SOURCE(S)	COMMENTS
				2017 to 2020	2021 to 2035 (000s)		
Roadway Segments State							
W. Beltline (US 12/14/18/151)	US 14 to Interstate 39/90	6 to 8-lane freeway w/ interchg imp.s	15.0		>1,600,000	Major Program	Planned EIS Study
US 51/Stoughton Road	Terminal Drive to Interstate 39/90/94	4 to 6-lane expressway w/ interchg imp.s	9.5	375,000		Major Program	Current EIS Study
US 51	Terminal Dr. to Interstate 39/90 E of Stgn.	Reconstruction w/ intersection imp.s and expansion to 4-lanes E of Stoughton	17.7	180,289		Majors Program	EA to be completed in '17
State Projects Subtotal				42.2	555,289	>1,600,000	
Local							
CTH CV	Wheeler Rd. to Hoepker Rd.	4-lane undivided facility	1.7		12,000	STBG Urban or Local	
CTH Q	Meffert Rd. to Orucken Rd.	4-lane divided facility	2.2		23,000	STBG Urban or Local	
North Mendota Parkway (West Segment)	CTH M to US 12	4-lane divided limited access facility w/ interchanges	4.1		112,000	Unknown	Part of recommended future EIS Study; cost excludes ROW
Local Projects Total				8.0		147,000	

(1) For planning level cost estimating purposes only. Design, magnitude of improvement, and cost is subject to more detailed levels of planning and environmental study.

(2) Scope of improvement and timing is preliminary, subject to environmental study and identification of funding source. Projects not currently part of federally recognized, fiscally constrained plan.

(3) Costs are year-of-expenditure assuming a 2.0% annual inflationary factor.

Figure A-2

Regional Priority Path Projects: 2017-2050				
Programmed Projects	Limits	ESTIMATED TIMING AND PRELIMINARY COSTS (000s)		
		2017 to 2020	2021 to 2035	2036 to 2050
NE Connector Path along Century Ave.	Pheasant Branch Trail to CTH Q	\$ 368		
Zander Park Trail Expansion	Paved path and boardwalk through park in Cross Plains	829 \$		
CTH M (S. Pleasant View Rd.) Corridor Path	Valley View Road to Cross Country Road	\$ 4,651		
West Beltline Path Extension	Grand Canyon Drive to Junction Road	\$ 7,209		
Ice Age Junction Path	CTH PD (McKee Rd) overpass east west of High Point Road to be constructed as part of CTH PD reconstruction	\$ 2,234		
Badger State Trail	CTH PD (McKee Rd) underpass to constructed as part of CTH PD reconstruction	\$1,665		
Seminole Hwy Path	Dawley Park Bike Hub to Cannonball Path	\$ 255		
Cannonball Path Extension	Fish Hatchery Road to Wingra Creek Path	\$ 790		
Grandview Marsh Path	Pheasant Run to Creamery Road, McFarland	\$ 87		
Capital City Trail Extension	Buckeye Road to I-39/90	\$ 1,804		
Glacial Drumlin Trail Extension	I-39/90 to Cottage Grove	\$ 2,197		
Goodman Path	Webb Ave. to WIS 30	\$810		
WIS 19 Path	CTH C to Thompson Dr	\$ 230		
Lower Yahara River Trail (Phase 1)	Lussier Family Heritage Center to McDaniel Park in McFarland	Ongoing		
Total		\$23,129		

Regional Priority Path Projects: 2017- 2050

Planned Regional Shared Use Paths	Limits	ESTIMATED TIMING AND PRELIMINARY COSTS (000s)		
		2017 to 2020	2021 to 2035	2036 to 2050
WIS 19 Path	Waunakee to DeForest			5,206
WIS 19 Path	DeForest to Heatherstone Dr, Sun Prairie			1,622
North Mendota Path	Pheasant Branch Conservancy to CTH Q		748	
North Mendota Path	Hwy 12 to Hwy Q		2,156	
North Mendota Path	Hwy Q to Hwy 113		1,902	
Upper Yahara River Path	Hwy 113 to Hwy 19			4,694
Bishops Bay - Waunakee Path	Bishops Bay to Waunakee		1,078	
Allen Boulevard Path	Mendota Avenue to Century Avenue		380	
Pheasant Branch West Path Paving	Century Avenue to 1.2 miles north		507	
Good Neighbor Trail	Farley Avenue to Ridge Street		2,093	
Good Neighbor Trail	Eau Claire Ave to Middleton		5,644	
Good Neighbor Trail	Middleton to Cross Plains			4,267
Good Neighbor Trail	Cross Plains to Wisconsin Heights HS, Mazomanie			11,863
US 12 Path	Rauls Road to Dunlap Hollow Road		2,536	
WIS 78 Path	Mazomanie to Sauk City			4,523
Lower Badger Mill Creek Path	McKee Rd to Hwy 14 / Good Neighbor Path			6,230
Elderberry-Junction Path	Junction Road to Lower Badger Mill Creek Path			1,109
1,000 Oaks Path	High Point to LBMC Path			1,366
West Beltline Path	Whitney Way to Southwest Path		2,536	
University Research Park I Path	Research Park Drive to West Towne		557	
Elver Connector	Raymond Road to Elver Park		507	
Southwest Path Widening	Randall Avenue to Midvale Boulevard		1,078	
CTH PD Corridor Path	CTH M (S. Pleasant View Rd.) to Nine Mound Road / Northern Lights Boulevard		469	
Military Ridge Path Paving	Old PB to Epic		1,458	
Paoli to Verona Path	Badger State Trail at Hwy A to Military Ridge Trail		2,854	
Fish Hatchery Road Path Extension	Whalen Road to Hwy M		1,078	
Oregon to Badger State Path	3,000 feet west of Alpine Pkwy to Badger State Path		1,458	
Fitchburg to Oregon Path	Lacy Road to Oregon via Syene Road and RR corridor			9,644

Regional Priority Path Projects: 2017- 2050 (continued)

Planned Regional Shared Use Paths	Limits	ESTIMATED TIMING AND PRELIMINARY COSTS (000s)		
		2017 to 2020	2021 to 2035	2036 to 2050
Campus Drive Path	Easterday Lane to Babcock Drive		613	
Lower Yahara River Trail (Phase 2)	McFarland to Stoughton		5,010	
US 12 Path	Milpond Rd to Vilas Rd			9,303
Capital City Path Gap Connection	Cottage Grove Road to Buckeye Road		571	
Blooming Grove Drumlin Path	Owl Creek to I-94			12,887
Cottage Grove to Sun Prairie Path and Route	Path from Hwy BB to Town Hall Rd, on-street along Town Hall Rd, and path along Hwy N from Bailey Rd to Sun Prairie HS		1,268	
Cambridge to Glacial Drumlin Path	Cambridge to Glacial Drumlin Path		3,361	
Commercial Path	Thompson Rd. to I-39		571	
Interstate Path	SP rail corridor to Milwaukee Street underpass			4,182
Pipeline Path	Commercial to O'Keefe			2,134
Hiestand Path	Olbrich to East Towne		7,927	
Goodman Path	WIS 30 to East Towne		4,883	
Goodman Path	East Towne to US 151 Path / West Sun Prairie		4,946	
West Sun Prairie Path	Hazelnut Trail to WIS 19		317	
Milwaukee Road Path	Burke Road / Good Neighbor Path to Sun Prairie			2,134
Milwaukee Road Path	Sun Prairie to Marshall			9,132
Packers Path	Yahara River to Dane County Airport		1,395	
Token Creek Path	Dane County Airport to WIS 19		10,273	
North Street Corridor Path, DeForest	Main Street to WIS 51		1,332	
Lake Road Corridor Path, DeForest	WIS 19 to Vinburn Rd			2,987
Hartmeyer Path	Aberg Avenue to Commercial Avenue		254	
Sherman Flyer Path	Johnson to Aberg (Sheridan / Steensland)		1,078	
Sherman Flyer Path	Aberg Ave to Troy Drive			4,097
Sherman Flyer Path	Troy Drive to Waunakee			2,134
Capital City Path Widening	Lakeside Street to Starkweather Path		7,166	
James Madison Path	Lake Street to James Madison Park			13,826
Howard Temin Lakeshore Path Paving	Elm Drive to Memorial Union			427
Total			80,003	113,764

Recommendations and Supporting Actions

Land Use and Transportation Integration

Recommendations and Supporting Actions		Timeframe	Implementing Party
1	Adopt local land use plans and policies that support RTP goals and policies.		
A	Update land use ordinances, street design, and parking standards to remove barriers to mixed-use, pedestrian-friendly development, where appropriate.	Ongoing	Local governments
B	Prepare detailed neighborhood development plans in areas slated for growth prior to development in order to ensure good street connectivity, adequate bicycle accommodations, and efficient transit routes (where appropriate).	Ongoing	Local governments
C	Require or provide incentives for including pedestrian, bicycle, and transit facilities (where appropriate) in (re)developments.	Ongoing	Local governments
D	Plan, zone for, and encourage transit-supportive development in planned transit corridors.	Ongoing	Local governments
2	Develop urban areas with a mix of housing types and land uses to provide walkable, affordable neighborhoods.		
A	Plan for mixed-use centers of varying scales and types to provide housing in proximity to a mix of uses.	Ongoing	Local governments
B	Develop new employment centers and government/institutional developments in mixed-use settings, where compatible, to provide for housing near jobs and schools.	Ongoing	Local governments
C	Support the revitalization of downtown areas and walkable neighborhoods with infrastructure investments and incentives.	Ongoing	Local governments
D	Promote new development in multi-modal mobility corridors to maximize the efficiency of transportation system and the accessibility of jobs and services.	Ongoing	Local governments

Streets/Roadways

Recommendations and Supporting Actions		Timeframe	Implementing Party
1	Preserve and maintain the region's street and highway system in a manner that minimizes life cycle cost, maintains safety, and minimizes driver costs while reducing their impact on the environment.		
A	Monitor regional roadway system pavement and bridge condition and coordinate with WisDOT to establish performance targets.	1-5 years	MPO, WisDOT
B	Develop and implement asset management plans to facilitate cost-effective decision-making concerning the maintenance and rehabilitation of roadways, bridges, and associated infrastructure.	Ongoing	WisDOT, Dane County, local governments
C	Provide for ongoing maintenance activities in major state and local arterial corridors planned for future potential expansion until capacity is needed and major project funding can be secured.	Ongoing	WisDOT, Dane County, local governments
D	Continue enforcement of truck weight regulations to reduce premature deterioration of roadways and bridges.	Ongoing	WisDOT
E	Support additional research and demonstration projects, including use of emerging technologies, to provide safe roadways in the winter while minimizing the use of road salt.	1-5 years	WisDOT, Dane County, local governments
2	Build a well-connected network of regional roadways to accommodate future growth and avoid the need for overly wide streets and intersections that create barriers for pedestrians and bicyclists.		
A	Conduct detailed planning for new collector streets and utilize official mapping, right-of-way dedications, and other methods to preserve existing and planned regional roadway corridors for potential expansion.	Ongoing	Local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
3 Incorporate complete streets and green streets concepts for regional and local roadways.			
A	Utilize evaluation criteria and scoring guidelines for selecting MPO funded projects that encourage the inclusion of complete and green streets elements.	Ongoing	MPO
B	Adopt and implement a formal complete streets policy.	1-5 years	WisDOT, Dane County, Local governments
4 Expand regional roadway system capacity to address critical bottlenecks and accommodate future planned growth consistent with RTP goals and policies.			
A	Continue or initiate detailed planning, design, and construction of state and local arterial capacity roadway, bridge, and interchange projects shown in Figure 5-2 and listed in Figure A-1 as needed with consideration given to project phasing where appropriate.	Ongoing	WisDOT, Dane County, Local governments
B	Complete study of the Beltline/Interstate interchange. Upon completion of accepted EIS, advance recommended alternative, with consideration given to phasing, compatibility of the design with potential Beltline/Stoughton Road interchange improvements, and planned US 12/18 freeway conversion east to CTH AB.	1-10 years	WisDOT
C	Complete major corridor studies of the Beltline and Stoughton Road/US 51. Upon completion of accepted EISs, seek enumeration as Majors projects and advance recommended alternatives using a phased approach. Continue to implement short-term TSM, safety, and multi-modal improvements in the corridors in the interim until Majors program funding is secured.	1-10 years	WisDOT
D	Complete environmental assessment and refine the design for the preferred alternative for the US 51 (McFarland to Stoughton) corridor, which includes reconstruction of most of the roadway, intersection improvements, and expansion to 4 lanes between WIS 138 and CTH B. Upon completion, seek enumeration as Majors project or alternative funding and advance project using a phased approach. Implement safety and TSM improvements and maintenance work in corridor in the interim if Majors program or other funding is not secured.	1-10 years	WisDOT
E	Initiate major study of the WIS 19/WIS 113/CTH M corridor to identify the long term solution to existing and future congestion and safety issues in the east-west corridor north of Lake Mendota. Officially map the corridor and initiate detailed planning of the recommended alternative, including appropriate phasing and funding strategies. Continue in the meantime to implement TSM, safety, and multi-modal improvements.	1-10 years	WisDOT, Dane County, MPO
F	Identify the appropriate limits and initiate study of the I-39/90/94 corridor north of the Beltline to address safety, operations, and congestion issues and in the meantime implement TSM and safety improvements.	1-10 years	WisDOT, MPO
5 Address safety needs on the regional roadway system through a comprehensive “3-E” approach that includes implementation of cost-effective engineering counter measures (i.e., roadway reconfiguration, new or modified traffic control devices, etc.), education, and enforcement.			
A	Implement WisDOT’s 2014-2016 Wisconsin Strategic Highway Safety Plan (SHSP) and future updates to the plan.	Ongoing	WisDOT, Dane County, local governments, state agencies, law enforcement agencies, private organizations
B	Undertake planning process to identify regional roadway corridors and intersections with the highest crash rates and conduct further detailed study of these locations to identify countermeasures and prioritize projects for federal and state Highway Safety Improvement program funding.	1-5 years	MPO, Dane County, local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
C	Continue efforts to implement short-term safety-related and TSM improvement recommendations from preservation/safety studies in state highway corridors, including US 14 (West), WIS 19, and WIS 138.	Ongoing	WisDOT
D	Develop and implement access management plans and standards for existing and future arterial roadways as development and street reconstruction occur.	Ongoing	WisDOT, Dane County, Local governments
E	Continue to implement cost-effective changes to traffic signals and signs that have been found to reduce crashes (e.g., use of light emitting diode (LED) lighting, overhead street signs on arterials, etc.).	Ongoing	WisDOT, Local public works/traffic engineering agencies
F	Officially map the US 12 (Parmenter St. to WIS 19 West), US 12/18 (Interstate to CTH N), and US 18/151 corridors for potential future freeway conversion based on recommended study alternatives. Continue to implement interim access management improvements, with future conversion dependent upon ongoing needs assessment and available funding.	Ongoing	WisDOT
G	Continue to expand state and local safety education efforts, including neighborhood-based initiatives.	Ongoing	WisDOT, local governments, non-profit organizations
H	Continue to support and expand local traffic enforcement activities such as use of local traffic teams and undertaking special enforcement initiatives.	Ongoing	Dane County and local law enforcement agencies
6 Address security needs related to the regional roadway system.			
A	Update the vulnerability assessment of critical transportation infrastructure in the state as part of development of the State Highway Investment Plan. Monitor identified facilities and make improvements as needed.	Ongoing	WisDOT
B	Complete current update and update as necessary Dane County Hazard Mitigation Plan to reduce risk of disruptions to the regional roadway system due to severe weather conditions, flooding, terrorism, hazardous material spills, civil disorder, climate change, and other events.	1-5 years	Dane County, Local governments
C	Initiate study to identify transportation facilities that are susceptible to flooding, identify alternate routes when flooding occurs, and identify improvements to make the facilities more resilient to flooding.	1-5 years	MPO, Dane County, Local governments
D	Update the county's Emergency Evacuation Plan, as necessary.	1-5 years	Dane County
7 Address roadway naming inconsistency along corridors.			
A	Initiate a study of regional roadway naming conventions to simplify wayfinding in the region.	1-5 years	MPO

Public Transit

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Implement a Bus Rapid Transit System.			
A	Complete an alternatives analysis and project planning, leading to an initial BRT Project.	1-5 years	City of Madison and other Local Governments, Metro, MPO
B	Expand the BRT network to fulfill the BRT Vision in the Madison area.	5-15+ years	Cities of Madison and Fitchburg, Metro, MPO
C	Plan for the expansion of BRT into other corridors, including Middleton, southwest Madison, Fitchburg, southeast Madison, and Sun Prairie.	15+ years	Metro, MPO, Local Governments
D	Expand the use of transit priority treatments, focusing on the BRT corridors.	Ongoing	Metro, MPO, Local Governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
2 Improve the local bus network.			
A	Continue to optimize the local bus network to maximize its utility with available resources.	Ongoing	Metro, MPO
B	Measure and monitor the effects of service changes on low-income and minority populations.	Ongoing	Metro, MPO
C	Improve integration with bordering transit systems in Monona and Sun Prairie.	Ongoing	Metro, MPO
D	Reduce travel times and simplify service.	Ongoing	Metro
E	Expand and enhance the network of frequent local service in central Madison.	5-15 years	Metro
F	Make changes to local routes when BRT is opened in order to reduce duplication and enhance connections.	5-15+ years	Metro, MPO
G	Improve and expand data collection and analysis to support service planning.	Ongoing	Metro, MPO
3 Add service in developing neighborhoods.			
A	As developing neighborhoods are built out, enhance limited-service routes so that they provide regular service throughout the day.	Ongoing	Metro, Local governments
B	Add new all-day service in unserved peripheral neighborhoods and suburban communities such as Sun Prairie, McFarland, and Verona.	5-15+ years	Metro, Local governments
4 Enhance transit stops with improved pedestrian/bicycle access and amenities.			
A	Coordinate with municipalities, businesses, and neighborhood associations to plan and provide funding for stop improvements.	Ongoing	Metro, MPO, Local governments
B	Utilize TID funding and other alternative financing mechanisms to fund stop improvements.	Ongoing	Local governments
C	Plan and reserve space for transit stops/stations as part of new developments where appropriate.	Ongoing	Local governments
5 Utilize alternative service delivery models to serve low-demand areas.			
A	Analyze bus route productivity and identify service with low use and high travel times that may better serve neighborhoods with alternative transit models.	1-5 years	Metro, MPO
B	Develop peripheral routes with small vehicles that can deviate from their route with the goal of providing service in low density areas at a lower cost and reducing multiple-transfer trips.	1-5 years	Metro, MPO, Private Providers, Non-Profits
C	Investigate using transportation network companies and shared-ride taxi service to connect to transfer points, BRT, and regional express service.	1-5 years	Metro, MPO, Private Providers, Non-Profits
D	Plan for the use of driverless shuttles in low-density transit markets and niche areas like business parks and campuses.	1-5 years	Madison Traffic Eng, UW, Metro, MPO
6 Maintain, expand, and enhance bus rolling stock and supporting facilities.			
A	Renovate and remodel the existing Metro maintenance/bus storage facility and address maintenance issues.	1-5 years	Metro
B	Build a new satellite bus facility on Nakoosa Trail to accommodate a larger fleet, including articulated buses and electric buses.	1-5 years	Metro
C	Replace buses on a regular cycle to ensure reliability and comfort.	Ongoing	Metro
D	Expand the use of alternative fuel vehicles with a goal of having a fully emission-free electric fleet by 2050.	Ongoing	Metro
E	Introduce articulated 60-foot buses to the fleet to reduce overcrowding and accommodate BRT.	5-15 years	Metro
7 Implement a regional express bus network.			
A	Expand and optimize the existing regional express service to Middleton and Verona.	5+ years	Metro, Local governments, MPO
B	Operate new routes primarily during the morning and afternoon peak periods to suburban Madison communities.	5-15 years	Metro, Local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
C	Optimize the regional express transit service to provide service from Madison to suburban job centers as well as from residential areas to central Madison.	5-15 years	Metro, MPO, local governments
D	Provide limited stop service within City of Madison to provide fast service within Madison and connections to BRT and local service.	5-15 years	Metro, Local governments
8 Expand park-and-ride facilities in conjunction with BRT and express services.			
A	Investigate opportunities to share space at shopping centers, churches, and other private facilities as well as public facilities such as parks, where appropriate. See Fig. 5-5, Planned transit System .	1-5 years	Metro, MPO, Local governments
B	Explore partnerships with local communities and agencies to maintain park-and-ride facilities.	1-5 years	Metro, Local governments
9 Implement a regional transit entity with stable funding and representative governance.			
A	Ensure that funding for transit remains equitable and that decisions are made fairly, with communities represented appropriately.	Ongoing	Metro, Local governments
B	Explore alternatives to supplement or replace the property tax for local public funding, including a vehicle registration fee and sales tax (if state enabling legislation passed).	1-5+ years	Local governments
C	Implement a new regional transit authority or district with the mission of providing regional transit service if state enabling legislation is passed.	1-5+ years	Metro, Local governments

Bicycles

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Expand the bikeway network with new shared-use paths and on-street facilities.			
A	Construct new off-street shared-use paths to complete the bikeway network envisioned in the Bicycle Transportation Plan.	Ongoing	Dane County, Local governments
B	Construct new shared-use paths in developing neighborhoods so that facilities are available as soon as new residents move in.	Ongoing	Dane County, Local governments
C	Retrofit existing corridors like railroad and utility rights-of-way with bicycle facilities as appropriate.	Ongoing	Local governments
D	Provide enhanced or premium bicycle facilities in key urban arterial corridors within right-of-way where feasible.	Ongoing	Local governments
E	Expand the use of bicycle boulevards, bicycle priority streets, and priority treatments at intersections.	Ongoing	Local governments
F	Prepare and implement local bicycle plans.	Ongoing	Local governments
G	Include paved shoulders of at least 4 feet in width on rural highways where appropriate and economically feasible.	Ongoing	WisDOT, Dane County
2 Maintain and modernize existing bicycle facilities.			
A	Repave and repair bicycle facilities with similar standards as collector streets.	Ongoing	WisDOT, Dane County, local governments
B	Include bicycle facilities on all new bridges and highway crossings.	Ongoing	WisDOT, Dane County, local governments
C	Use innovative bike facility designs that meet or exceed state and national guidelines.	Ongoing	Local governments
D	Develop and implement local policies and practices to clear snow, ice, and debris from bike facilities.	Ongoing	Dane County, Local governments
3 Eliminate bicycling barriers and hazards in the bikeway network.			
A	Close regional bikeway network gaps and address barriers (see Figure 5-9).	Ongoing	Dane County, Local governments
B	Evaluate intersections with a history of safety concerns or complaints, and plan and implement improvements.	Ongoing	WisDOT, Dane County, local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
C	Complete the local street network where barriers prevent direct travel.	Ongoing	Local governments
D	Ameliorate conflicts between bikes and buses, delivery trucks, and pedestrians.	Ongoing	Local governments
4 Provide adequate bicycle parking.			
A	Require bicycle parking as a condition of new development.	Ongoing	Local governments
B	Provide public bicycle parking in business districts, on campuses, and at high-use transit stations.	Ongoing	Local governments
5 Improve bicyclist safety through a "3E" approach .			
A	Conduct studies of intersections and other areas with high crash rates or documented safety issues to identify appropriate countermeasures.	Ongoing	Local governments, MPO
B	Update 1991 City of Madison study of vehicular crashes involving pedestrians and bicyclists, expanding it to the metro area, to obtain up-to-date information on common patterns for crashes. Utilize the information in crash prevention efforts.	1-5 years	MPO, City of Madison Traffic Engineering
6 Continue bike share, education, and bicyclist supportive policies.			
A	Continue supportive policies like producing bicycle maps and accommodating bicycle-themed events.	Ongoing	MPO, Local governments, NGOs
B	Implement wayfinding system for bicyclists using the recently developed Bicycle Wayfinding Design Guidelines for Dane County.	Ongoing	Dane County, Local governments
C	Expand the bike share program, working with the provider, by expanding the coverage and increasing the density of stations.	Ongoing	BCycle, Local governments
D	Support and expand education and encouragement programs that promote safety and encourage all residents to bicycle for commuting and other trips.	Ongoing	MPO, Local governments

Pedestrians

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Provide sidewalks and appropriate pedestrian amenities in developing neighborhoods.			
A	Require sidewalks on both sides of all streets in new urban developments.	Ongoing	Local governments
B	Adopt land use ordinances to ensure new developments provide for adequate pedestrian circulation and are integrated with adjacent land uses.	Ongoing	Local governments
C	Connect bordering, developing neighborhoods with sidewalks and shared-use paths.	Ongoing	Local governments
D	Prepare and implement local pedestrian plans.	Ongoing	Local governments
2 Retrofit regional streets with modern, safe pedestrian accommodations .			
A	Prioritize the addition of missing sidewalks on arterial and collector streets with higher demand for walking (See Fig. 5-11).	Ongoing	WisDOT, Local governments
B	Identify pedestrian needs and gaps, as well as safety problems, and implement solutions.	Ongoing	WisDOT, Local governments
C	Reduce cost share required of property owners to retrofit in sidewalks in existing neighborhoods.	Ongoing	Local governments
D	Prepare and implement ADA compliance plans to retrofit non-conforming facilities to ADA standards.	Ongoing	Local governments
E	Identify and install accessible pedestrian signal systems and other ADA accessibility treatments where necessary.	Ongoing	WisDOT, Local governments
F	Provide for a more comfortable pedestrian experience with wider sidewalks and appropriate separation on high-volume regional roads with pedestrian traffic.	Ongoing	WisDOT, Local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
3 Improve safety and usability for pedestrians at intersections and crossings.			
A	Evaluate pedestrian improvements at major street crossings and implement as opportunities are available. See Fig. 5-11 identifying many of these high conflict locations.	Ongoing	Local governments, MPO
B	As intersections are designed and reconstructed, consider pedestrian safety improvements.	Ongoing	WisDOT, Local Governments
C	Use pedestrian design tools to improve crossings such as enhanced crosswalks, refuge islands, and rapid flashing beacons. See Pedestrian Facilities Toolbox in Appendix F .	Ongoing	WisDOT, Local Governments
D	Identify and prioritize new grade-separated crossings where streets and shared-use paths with substantial pedestrian traffic intersect with highways and other barriers.	Ongoing	WisDOT, Local Governments
4 Maintain sidewalks and pedestrian facilities for year-round use.			
A	Provide and enforce snow removal policies, particularly around intersections and bus stops.	Ongoing	Local Governments
B	Implement program to identify and repair broken and substandard sidewalks.	1-5 years	Local Governments
5 Design new streets and retrofit existing streets to reduce speeding.			
A	Ensure that local street standards do not require unnecessarily wide streets.	Ongoing	Local Governments
B	Retrofit existing overly wide streets to reallocate space for other uses as part of reconstruction.	Ongoing	WisDOT, Dane County, Local Governments
C	Incorporate traffic calming features into new local streets where appropriate.	Ongoing	Dane County, Local Governments
D	Implement traffic management programs to address speeding and cut-through traffic problems on existing streets.	Ongoing	Dane County, Local Governments

Inter-Regional Travel

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Build an inter-city bus terminal.			
A	Construct a new high-quality inter-city bus terminal in central Madison.	5-15 years	City of Madison
B	Ensure the new facility has convenient access to downtown Madison and the UW.	5-15 years	City of Madison, UW
C	Ensure that passengers can conveniently transfer to BRT and local buses.	5-15 years	City of Madison, Metro
2 Support new and improved inter-city bus service.			
A	Improve service frequency to Minneapolis / St Paul and Appleton / Green Bay.	1-5 years	WisDOT, Private Providers
B	Improve connections to Amtrak services.	1-5 years	WisDOT, Private Providers
C	Provide direct service to Davenport, Des Moines, Omaha, and other cities to the west.	1-5 years	WisDOT, Private Providers
3 Maintain and preserve the rail network for future passenger rail service.			
A	Identify inter-city passenger rail routes to Milwaukee, Chicago, and Minneapolis / St Paul.	15+ years	WisDOT
B	Identify station locations for passenger rail service.	15+ years	Local Governments, Metro MPO, Dane County, WisDOT

Specialized Transportation

Recommendations and Supporting Actions		Timeframe	Implementing Party
1	Expand the coverage of accessible fixed-route bus and paratransit service and address other identified service related needs.		
A	Implement the recommendations in the Transit Development Plan and address needs identified in the Dane County Coordinated Public Transit - Human Services Transportation Plan	Ongoing	Metro, MPO
B	Explore opportunities to expand paratransit and accessible shared-ride taxi service in urban areas beyond the fixed-route bus service area	5-15 years	Metro, MPO, Dane County
2	Work collaboratively with private taxi operators to ensure accessible taxi service is available and costs for the service are shared equitably.		
A	Work collaboratively with private taxi operators to ensure accessible taxi service is available and costs for the service are shared equitably	Ongoing	MPO, City of Madison, Private Taxi Operators, Non Profits
3	Continue and expand specialized work-based transportation for low-income people.		
A	Work with the non-profit organizations to ensure funding remains available for people to get to work who don't have traditional options.	Ongoing	MPO, City of Madison, non-profit organizations
B	Continue to maximize efficiency by optimizing vehicles and timetables.	Ongoing	Non-profit organizations
4	Utilize emerging technologies to lower operating costs and expand travel options.		
A	Modify policies as needed to ensure that autonomous vehicles can adequately serve seniors and people with disabilities.	5-15 years	MPO, City of Madison, WisDOT
5	Improve interagency coordination of the various specialized transit services and private services.		
A	Plan for the advent of Family Care in Dane County, including for IRIS (self-directed services) members to prevent cost-shifting to Metro Transit.	Ongoing	MPO, City of Madison, Metro Transit
B	Improve coordination of medical trips, including inter- and intra-community trips and from surrounding counties.	Ongoing	City of Madison, WisDOT

Travel Demand Management (TDM)

Recommendations and Supporting Actions		Timeframe	Implementing Party
1	Expand the regional network of park-and-ride lots to encourage carpooling, transit use, and bicycling.		
A	Explore partnerships with local communities and agencies to develop park-and-ride facilities.	1-5 years	WisDOT, Dane County, Local governments
2	Expand the state vanpool program and support development of additional vanpool programs.		
A	Support expansion of WisDOA vanpool program and development of additional vanpool programs.	5-15 years	WisDOA, WisDOT, Local Governments, Non-Profits, Private Providers
3	Continue to encourage and provide support to large employers, institutions, and municipalities to develop and promote strategies to reduce single occupant motor vehicle trips.		
A	Support establishment of Transportation Management Associations in major employment centers.	1-5 years	MPO, Local governments
B	Encourage and provide assistance to local communities interested in requiring TDM plans as a condition of approval for large commercial developments, with specific criteria and standards for such plans.	1-5 years	Local governments, MPO
C	Continue to encourage telecommuting and alternative work schedules.	Ongoing	Local governments, MPO

Recommendations and Supporting Actions		Timeframe	Implementing Party
4 Provide financial incentives for people to use alternative transportation and increase funding for marketing programs.			
A	Continue efforts to expand employer participation in alternative transportation incentive programs such as Metro's Commute Card program, parking cash-out programs, or other financial reward programs.	Ongoing	MPO, Metro, Local Governments
B	Increase funding for support services such as Guaranteed Ride Home, occasional parking programs, and marketing of the programs.	1-5 years	MPO, Dane County, Local Governments
C	Increase funding for advertising and marketing programs, including individualized marketing programs such as Love to Ride and SmartTrips.	1-5 years	MPO, Dane County, WisDOT, Metro
5 Support transportation options at schools through Safe Routes to School programs.			
A	Secure sustainable funding for a regional Safe Routes to School program, utilizing resources such as mini-grants, CIP funding, local operating budget funding, private funding, and/or federal funding.	1-5 years	MPO, Non-Profits, School Districts, Local Governments
B	Develop and implement a regional Safe Routes to School program.	1-5 years	MPO, Non-Profits, School Districts, Local Governments

Transportation System Management (TSM) and Operations and ITS

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Implement and periodically update the adopted Congestion Management Process.			
A	Continue and improve monitoring of system performance, including post-construction project impact evaluation, utilizing the methodology outlined in the plan.	Ongoing	MPO, Dane County, Local governments, WisDOT
B	Identify, prioritize, and implement corridor and intersection TSM projects to improve traffic and transit operations and safety on the arterial roadway system.	Ongoing	MPO, WisDOT, Dane County, Local Governments
C	Investigate the feasibility, benefits, and costs of an expanded incident detection and response program for additional state roadways (e.g., Verona Road) and selected local arterials.	1-5 years	WisDOT, Dane County, Local Governments, MPO
D	Update the CMP to account for new federal rules, data sources, and MPO resources.	1-5 years	MPO
2 Implement access management plans and standards for existing and planned future arterial roadways as development and street (re)construction occur.			
A	Initiate access management plans on congested corridors as development and street reconstruction occur	1-5 years	MPO
B	Develop a regional access management plan that identifies standards for future arterials roadways, best practices, and safety considerations	1-5 years	MPO
3 Modernize the multimodal transportation network using technology.			
A	Include as part of new urban roadway projects infrastructure for connected and autonomous technologies, where appropriate.	Ongoing	WisDOT, Dane County, Local governments
B	Replace obsolete traffic signal controllers with "smart" controllers when replacing traffic signals or constructing new signalized intersections.	Ongoing	WisDOT, Local governments
C	Implement adopted process to identify and integrate ITS infrastructure into planning and design of major state roadway projects.	Ongoing	WisDOT

Recommendations and Supporting Actions		Timeframe	Implementing Party
4 Implement and periodically update the Regional Intelligent Transportation Systems Strategic Plan.			
A	Continue planning efforts to advance the recommendations listed in the ITS plan .	Ongoing	WisDOT, Dane County, Metro, Local governments
B	Continue to engage with the ITS Plan Implementation Subcommittee to facilitate cooperation and coordination among state and local agencies.	Ongoing	MPO
C	Continue efforts to provide comprehensive real-time traveler information to people and businesses.	Ongoing	WisDOT, City of Madison
D	Implement a smart card payment system that can be expanded to include a common fare media for other civic uses, as well as an open payment system that accepts fares using personal electronic devices.	1-5 years	Metro

Freight, Air, and Rail

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Maintain and promote new industrial uses along freight corridors.			
A	Work with stakeholders to determine significant transportation issues that negatively impact freight focused businesses within the region.	1-5 years	MPO, WisDOT
B	Work to cluster similar industrial uses to promote efficiency of the freight network.	Ongoing	Local governments
2 Maintain and expand infrastructure on the multimodal freight network, prioritizing projects that improve safety and efficiency, and minimize lifetime costs.			
A	Investigate and implement vehicle-to-infrastructure technologies to increase safety along freight corridors.	1-5 years	WisDOT, Dane County, Local governments
B	Investigate and implement vehicle-to-infrastructure technologies that reduce delay for passenger and freight vehicles in freight corridors.	1-5 years	WisDOT, Dane County, Local governments
C	Investigate ways in which new technologies, such as 3D printing, may impact the demand for future transportation facilities when planning improvements to the network.	1-5 years	WisDOT, Dane County, Local governments
D	Continue enforcement of truck weight regulations to reduce premature deterioration of roadways and bridges.	Ongoing	WisDOT
3 Increase focus on freight planning for regional and local transportation facilities.			
A	Continue to incorporate freight considerations into corridor and planning studies.	Ongoing	WisDOT, Dane County, Local governments
B	Plan for and implement recommendations from the Wisconsin State Freight Plan.	Ongoing	WisDOT, Local governments
C	Ensure local and regional freight-centric projects are listed in Wisconsin State Freight Plan to maintain eligibility for enhanced federal matching funds.	1-5 years	WisDOT, Dane County, MPO, Local governments
D	Consider first and last mile(s) implications for freight when approving site plans for freight focused facilities.	Ongoing	Local governments
4 Maintain the availability of rail facilities for current and future uses.			
A	Preserve rail corridors for freight uses, acquiring excess land when available to ensure availability for future transportation uses.	Ongoing	WisDOT, Rail Transit Commissions
B	Replace ties, ballast, and jointed rail with modern materials to accommodate heavier loads and higher speeds.	Ongoing	WisDOT, Rail Transit Commissions, Private Operators
C	Plan for improvements to accommodate high speed, high volume passenger service on routes to Milwaukee, Chicago, and St Paul, such as positive train control, double-tracking, and electrification.	15+ years	WisDOT

Recommendations and Supporting Actions		Timeframe	Implementing Party
5 Mitigate conflicts between rail and other uses			
A	Identify high-conflict rail crossings and mitigate conflicts, when possible.	Ongoing	WisDOT, Dane County, Local Governments
B	Continue to implement quiet zones in residential neighborhoods within urbanized areas.	Ongoing	Local Governments
C	Work with rail companies to grade-separate high-use rail crossings.	Ongoing	WisDOT, Dane County, Local Governments
6 Ensure compatibility of uses near airports.			
A	Ensure land use plans within airport influence areas are compatible with existing and planned airport plans.	Ongoing	Local Governments
B	Ensure Airport Master Plans consider existing and future uses identified in community comprehensive plans.	Ongoing	Dane County
C	Continue to implement the Airport Master Plan.	Ongoing	Dane County
7 Improve airport facilities to enhance usability and convenience for passenger traffic.			
A	Improve connections to the airport for all modes of transportation, including increasing frequency and speed of transit connections between Dane County Airport, downtown Madison, and the UW campus.	Ongoing	WisDOT, Dane County, Metro, Local Governments
B	Consider how future transportation technologies may influence the way that passengers travel to and from airports when building new parking lots and passenger pickup/drop off facilities.	1-5 years	MPO, Dane County, Local governments
8 Improve airport facilities freight accommodations and connections			
A	Survey businesses to determine if Dane County Airport is adequately serving their needs and determine what could be done to improve service.	1-5 years	Dane County
B	Contact freight shippers operating out of Dane County Airport to determine if needs are being met with current facilities and identify improvements that must be made for future success.	1-5 years	MPO, Dane County, Local governments
C	Survey local businesses to determine if air freight needs are being met and what types of improvements would improve business viability.	1-5 years	MPO, Dane County, Local governments

Parking

Recommendations and Supporting Actions		Timeframe	Implementing Party
1 Use parking management strategies to reduce congestion within downtown areas and major activity centers.			
A	Develop and implement a downtown Madison parking management plan.	1-5 years	City of Madison
B	Implement technologies and associated policies, such as demand responsive pricing, that increase access and convenience to parking, and reduce vehicle idling and circling to find parking.	5-15 years	Local governments
C	Encourage ridesharing by developing and implementing policies that reduce parking rates and/or provide preferential parking spots to carpools and vanpools.	1-5 years	Local governments
2 Modify parking requirements to encourage multi-modalism, using a more market-based approach while addressing potential spillover impacts.			
A	Review minimum parking requirements to ensure an appropriate balance between parking needs and continuity of the built environment.	1-5 years	Local governments
B	Allow deviation from parking minimums, particularly in dense urban areas, to accommodate innovative project designs that maximize access to alternative modes of transportation and incorporate TDM strategies.	1-5 years	Local governments

Recommendations and Supporting Actions		Timeframe	Implementing Party
3	Ensure flexibility of parking facilities to accommodate future technologies.		
A	Ensure that streets are designed with future flexibility in mind and that parking policies allow for conversion to loading zones if/when autonomous vehicle technologies are implemented.	1-5 years	Local governments
B	Ensure new parking structures are designed to allow for conversion to other uses if/when autonomous vehicle technologies are implemented.	5-15 years	Local governments