

Meeting of the :

Transportation Projects Commission

*Joe Nestler, P.E.
Administrator,
WisDOT Division of Transportation Investment Management*

December 6, 2019

Importance of Major Highway Projects

Program Goals:

- Enhance Wisconsin's Economy***
- Improve Highway Safety***
- Improve Highway Service***
- Minimize Environmental Impacts***
- Serve Community Objectives***

Importance of Major Highway Projects

Program Enables Necessary Reconstruction & Modernization:

- *DOT evaluates and leverages asset management and uses Performance-Based Practical Design alternatives prior to modernization*
- *Mode choices are leveraged to the extent practicable: Intelligent transportation system (ITS) technology, mass transit, rail, water, bike and pedestrian, etc.*
- *Major projects are sometimes necessary to adequately address safety and congestion needs on key corridors*

Importance of Major Highway Projects

Program Benefits:

- *Projects result in significant safety and travel time benefits, and makes travel reliable:*
- *Lowers cost for system users, which helps keep existing businesses cost competitive and helps keep WI attractive for new businesses*
- *Economic analysis shows proposed Major projects are superior to their non-Major improvement alternatives*
- *Projects benefit infrastructure condition by eliminating system rehab costs that would need to occur in the absence of the Major project.*

Overview of Major Project Requirements and Roles and Responsibilities

The Definition of a Major Highway Project 84.013(1)

A highway project that...

1. **Costs more than \$30* million and *\$40.9 million**

- ✓ Relocates or builds a new highway at least 2.5 miles long
- ✓ Adds lanes to an existing highway for 5 miles or more
- ✓ Converts at least 10 miles of divided highway to a freeway

or.....

2. **Costs more than \$75* million *\$102.3 million**

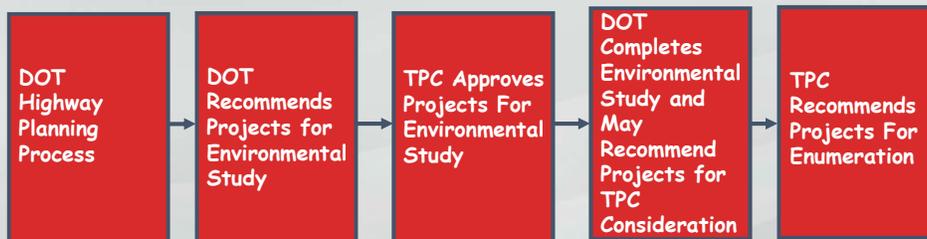
**Indexed to current year using WisDOT's Construction Cost Index*

The Role of the Transportation Projects Commission 13.489(4)

1. Approve potential Major projects for environmental study
2. Recommend potential projects for enumeration after environmental study
3. Approve 84.013(1)(a)(2m) high cost projects for construction as Major Projects
4. Monitor ongoing project costs and schedules

The Process to Become a Major Highway Project

Traditional Major Projects



Step 1

Step 2

Step 3

Step 4

Step 5

Typical Timeline:

Ongoing

Odd # Years

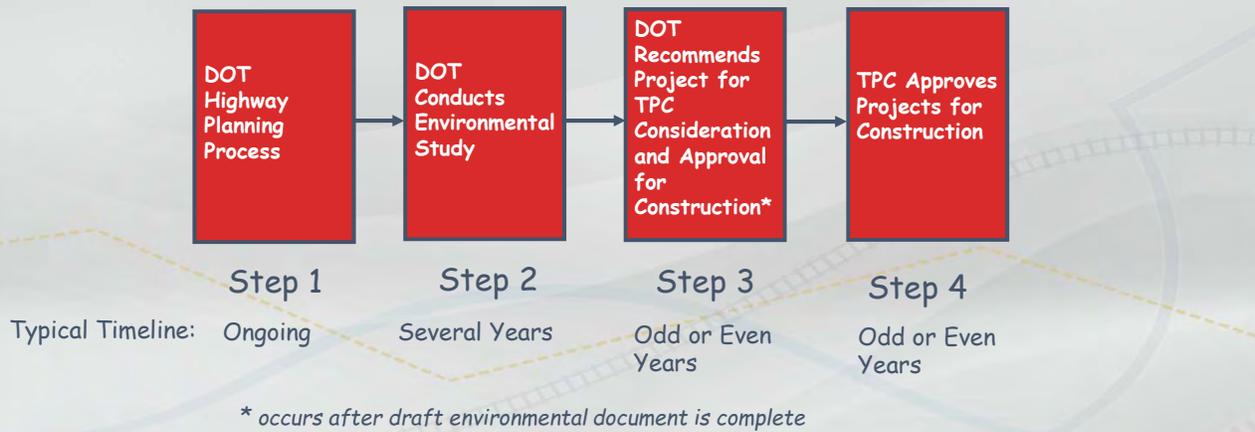
Odd # Years

Several Years

Even # Years

The Process to Become a Major Highway Project

84.013(1)(a)(2m) high cost projects for construction as Major Projects



Key Major Highway Statutes

1. Definition of a Major Highway Project

84.013 (1)

(a) "Major highway project" means a project, except a project providing an approach to a bridge over a river that forms a boundary of the state, a high-cost state highway bridge project under s. 84.017, or a southeast Wisconsin freeway megaproject under s. 84.0145, that satisfies any of the following:

1m. The project has a total cost of more than \$30,000,000, subject to adjustment under sub. (2m), and involves any of the following:

- a. Constructing a new highway 2.5 miles or more in length.
- b. Reconstructing or reconditioning an existing highway by either relocating 2.5 miles or more of the existing highway or adding one or more lanes 5 miles or more in length to the existing highway.
- c. Improving to freeway standards 10 miles or more of an existing divided highway having 2 or more lanes in either direction.

2m. The project has a total cost of more than \$75,000,000, subject to adjustment under sub. (2m), and is not described in subd. 1m.

84.013(2)

(2m) The department shall annually adjust the amounts specified in sub. (1) (a) 1m. and 2m. to reflect the annual change in the Wisconsin Department of Transportation Price Index, Yearly Moving Average, as maintained by the department or, if at any time the department no longer maintains this index, another suitable index as determined by the department. Beginning in 2012, prior to October 1 of each year, the department shall compute the annual adjustment required under this subsection and shall publish the new adjusted amount applicable under sub. (1) (a) 1m. and 2m., which amount shall become effective on October 1 of that year. The department may not adjust the amounts specified in sub. (1) (a) 1m. and 2m. to an amount less than that specified in sub. (1) (a) 1m. and 2m.

2. TPC Approves Environmental Studies

13.489 (1m) APPROVAL OF COMMISSION REQUIRED FOR STUDY OF POTENTIAL MAJOR HIGHWAY PROJECTS.

(b) Not later than October 15 of each odd-numbered year, the department of transportation shall provide to the commission a list of potential major highway projects that the department has initially determined may be recommended under par. (c) for approval to prepare an environmental impact statement or an environmental assessment and a list of potential major highway projects that could be studied for possible recommendation under sub. (4). The commission may conduct public hearings on potential major highway projects identified by the department of transportation or by the commission.

(c) Not later than March 15 of each even-numbered year, the department of transportation shall report to the commission those potential major highway projects that the department recommends be approved by the commission for preparation of an environmental impact statement or an environmental assessment.

(d) Not later than April 15 of each even-numbered year, the commission shall notify the department of those potential major highway projects that the commission approves for preparation of an environmental impact statement or an environmental assessment or shall notify the department that it does not approve any potential major highway projects for preparation of an environmental impact statement or environmental assessment.

(e) The department of transportation may not prepare an environmental impact statement or an environmental assessment for a potential major highway project unless the commission notifies the department under par. (d) that the project is approved.

(f) This subsection does not apply to major highway projects described in s. 84.013 (1) (a) 2m.

3. DOT Makes Enumeration Recommendations to the TPC

13.489 (2) DEPARTMENT TO REPORT PROPOSED PROJECTS. Subject to s. 85.05, the department of transportation shall report to the commission not later than September 15 of each even-numbered year and at such other times as required under s. 84.013 (6) concerning its recommendations for adjustments in the major highway projects program under s. 84.013

4. TPC Reviews and Recommends Projects for Enumeration in the Biennial Budget

13.489 (4) REVIEW OF PROJECTS.

(a)

1. All reports submitted as provided by sub. (2) shall be reviewed by the commission. The commission shall report its recommendations concerning major highway projects to the governor or governor-elect, the legislature and the joint committee on finance no later than December 15 of each even-numbered year or within 30 days following submission of a report under s. 84.013 (6). The commission may recommend approval, approval with modifications, or disapproval of any project, except that the commission may not recommend the approval, with or without modifications, of any project unless any of the following applies:

a. The commission determines that, within 6 years after the first July 1 after the date on which the commission recommends approval of the project, construction will be commenced on all projects enumerated under s. 84.013 (3) and on the project recommended for approval and the commission has been notified that a final environmental impact statement or environmental assessment for the project has been approved by the federal highway administration.

b. The report recommending approval of the project is accompanied by a financing proposal that, if implemented, would provide funding in an amount sufficient to ensure that construction will commence on all projects enumerated under s. 84.013 (3) and on the project within 6 years after the first July 1 after the date on which the commission recommends approval of the project and the commission has been notified that a final environmental impact statement or environmental assessment for the project has been approved by the federal highway administration.

2. In determining the commencement date for projects under subd. 1. a. and b., the commission shall assume that the appropriation amounts under s. 20.395 (3) (bg) to (bx) for the current fiscal year will be adjusted annually to reflect adjustments to the U.S. consumer price index for all urban consumers, U.S. city average, as determined by the U.S. department of labor.

(b) The commission may include in the report in par. (a) its designation of highway improvement projects under s. 84.013 (6m) as major highway projects.

(c) No project may be enumerated under s. 84.013 (3) or approved under s. 84.013 (5) unless the commission recommends approval, with or without modifications, of the project under par. (a) or, with respect to a project under s. 84.013 (6m), designates the project under par. (b).

(d) This subsection does not apply to major highway projects described in s. 84.013 (1) (d) 2m.

5. TPC Approves 84.013(1)(a)(2m) High Cost Projects for Construction as Major Projects

13.489(4)

(4m) REVIEW OF HIGH-COST MAJOR HIGHWAY PROJECTS.

(a) Notwithstanding sub. (4), for any major highway project described in s. 84.013 (1) (a) 2m, the department of transportation shall submit a report to the commission, prior to construction of the project, which report may request the commission's approval to proceed with the project. The department may submit this request at any time following completion by the department of a draft environmental impact statement or environmental assessment for the project.

(b) After receiving a request under par. (a) for approval to proceed with a major highway project described in s. 84.013, the commission shall meet to approve, approve with modifications, or disapprove the request. The department may implement the request only as approved by the commission, including approval after modification by the commission.

(c) The department of transportation may not proceed with construction of a major highway project described in s. 84.013 (1) (a) 2m unless the project is approved by the commission as provided in par. (b).

(d) The procedures specified in this subsection shall apply to all major highway projects described in s. 84.013 (1) (a) 2m in lieu of the procedures described in sub. (4).

Thank You!

Additional Questions ?

Next: Program Status Information

Improvements to the TPC Report

Jeffrey Gust

Bureau of State Highway Programs,
Director

TPC Meeting

December 6th, 2019



The TPC Report has had many changes since 2014

- As a result of the 2017 Legislative Audit
- Addressed from 2017 Wisconsin Act 247
- General improvements/clarifications



TPC project status report

Major Project Status Report August 2019												
Project:		USH 10 and USH 10/STH 441					Enumeration Year: 2011				Region: NE	
Project Description:		This project reconstructs USH 10/STH 441 from IH 41 to Onaida Street. Expansion for an additional through lane and auxiliary lanes on 10/441 from STH 47 to approximately Onaida Street will occur on the median side. This project also constructs an additional bridge over Little Lake Butte des Morts and a new connection to IH 41.										
Cost Category	Current Status		PROJECT COST ESTIMATE INFORMATION									
	Cost to Date (\$Million)	Estimated Cost to Complete (\$Million)	Current Estimate		Change Since Last Report				Percent	Reason for Change in Cost Estimate		
		February 2019 (\$Million)	August 2019 (\$Million)	Scope (\$Million)	Design & Quantity Revisions (\$Million)	Inflation (\$Million)						
Design	\$47.6	\$2.9	\$51.5	\$50.5	\$0.0	-\$1.0	\$0.0	-1.9%	Projects nearing completion; adjusting to current costs.			
Real Estate	\$20.0	\$1.5	\$22.0	\$21.5	\$0.0	-\$0.5	\$0.0	-2.3%	Projects nearing completion; adjusting to current costs.			
Construction	\$287.2	\$22.8	\$311.5	\$310.0	\$0.0	-\$1.5	\$0.0	-0.5%	Projects nearing completion; adjusting to current costs.			
Total:	\$354.8	\$27.2	\$385.0	\$382.0	\$0.0	-\$3.0	\$0.0	-0.8%				
COST TO COMPLETE EXPENDITURE SCHEDULE												
Encumbered or Committed, not yet Expended*		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Current Year \$	\$3.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
YOE \$	\$3.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Current Year Dollar Costs (Current Year \$) represent a schedule of estimated future costs listed at current market prices (see Page ii for budget assumption).
 Year of Expenditure Costs (YOE \$) represent current year costs inflated to a projected year of expenditure cost.
The Year of Expenditure (YOE) Total Cost Estimate (inflated) for this project is \$382.0M (see Pages i-ii for budget and inflation assumptions).
 *Due to conversion to a new financial operating system, some encumbered and committed values may have been estimated. The numbers herein are expected to be very accurate.

Enhancements consistent with recommendations from the 2017 Legislative Audit Bureau audit and 2017 Wisconsin Act 247

- Costs for all Major and Southeast Megaprojects adjusted for inflation between now and the proposed construction date

COST TO COMPLETE EXPENDITURE SCHEDULE												
Encumbered or Committed, not yet Expended*		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Current Year \$	\$2.0	\$3.0	\$47.2	\$31.0	\$24.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
YOE \$	\$1.7	\$2.0	\$3.1	\$49.3	\$33.2	\$27.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Current Year Dollar Costs (Current Year \$) represent a schedule of estimated future costs listed at current market prices (see Page ii for budget assumption).
 Year of Expenditure Costs (YOE \$) represent current year costs inflated to a projected year of expenditure cost.
The Year of Expenditure (YOE) Total Cost Estimate (inflated) for this project is \$141.5M (see Pages i-ii for budget and inflation assumptions).

Year of Expenditure Cost (YOE \$): The year of expenditure costs in this report are based on current schedules, inflated to a projected year of expenditure dollar value using Global Insight's Chained Price Index for State and Local Gross Investment in Highways and Streets. The Global Insight rates used to project current estimates to year of expenditure estimates in this report are as follows:

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2.11%	2.23%	2.49%	2.51%	2.44%	2.41%	2.41%	2.34%	2.27%	2.22%

Enhancements consistent with recommendations from the 2017 Legislative Audit Bureau audit and 2017 Wisconsin Act 247

- A summary of pre-enumeration costs, initial completion year, current completion year, and indication of delay introduced into the current report for Majors projects enumerated in or after 2011

Major Projects Cost and Schedule Summary

Project	Cost Summary - All Costs in \$Millions						Schedule Summary								
	Pre-enumeration costs	Initial TTC estimate (enumeration year costs)	TTC estimate - Aug 2018 (current year costs)	Additional assistance costs outside of Majors program	Total cost estimate (TTC + outside Majors, current year costs)	TTC estimate - Aug 2018 (year of expenditure)	Initial estimate fiscal year	Last full fiscal year (initial schedule)	Last full fiscal year (revised schedule)	Last full fiscal year (Aug 2018 TTC)	Schedule change introduced in this report (initial report)	Anticipated traffic opening year ¹	Initial schedule completion - initial schedule de	Would additional funding change no to year?	
USD 10- USD 30 and USD 10/STH 441	\$5.6	\$960.0	\$832.0	\$0.0	\$1832.0	\$832.0	2011	2019	2019	2019	none	November 2019	yes	no	
STH 15- STH 76 to New London	\$5.5	\$125.0	\$134.7	\$0.0	\$134.7	\$141.5	2011	2016	2024	2024	none	November 2024	no	no	
USD 18/101 Verona Rd	\$27.2	\$150.0	\$268.2	\$2.2	\$420.4	\$268.2	2011	2019	2019	2019	none	November 2019	yes	no	
STH 23- STH 67 to USD 41	\$0.0	\$39.5	\$156.5	\$0.0	\$196.0	\$157.6	1999	2017	2021	2021	none	November 2021	no	no	
189/90 USD121 to Illinois	\$5.5	\$715.0	\$1,212.8	\$5.1	\$1,937.9	\$1,214.6	2011	2019	2020	2021	1 year later ¹	November 2021	no	no	
I 41- STH 86 to Schaefer Rd	\$0.0	not available ¹	\$10.0	not available ¹	not available ¹	\$10.1	not available ¹	N/A	not available ¹	N/A	not available ¹	N/A	not available ¹	N/A	
I 43 Silver Spring to STH 60	\$13.7	\$511.6	\$551.6	\$0.0	\$551.6	\$530.2	2020	2023	N/A	2023	N/A	November 2023	yes	no	
STH 50- I94 to 45th Ave	\$5.9	\$93.0	\$118.7	\$10.4	\$124.1	\$130.9	2018	2023	2023	2021	1 yr earlier ¹	Spring 2023	yes	no	
USD 53- Lacrosse Corridor	not available ¹	\$67.1	\$143.2	\$1.6	\$148.0	\$160.2	1997	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A	N/A	
Totals			\$2,877.7												

Enhancements consistent with recommendations from the 2017 Legislative Audit Bureau audit and 2017 Wisconsin Act 247

- State Highway Rehabilitation and local program costs associated with Majors and Southeast Megaprojects

Major Projects Cost and Schedule Summary

Project	Cost Summary - All Costs in \$Millions						Schedule Summary								
	Pre-enumeration costs	Initial TTC estimate (enumeration year costs)	TTC estimate - Aug 2018 (current year costs)	Additional assistance costs outside of Majors program	Total cost estimate (TTC + outside Majors, current year costs)	TTC estimate - Aug 2018 (year of expenditure)	Initial estimate fiscal year	Last full fiscal year (initial schedule)	Last full fiscal year (revised schedule)	Last full fiscal year (Aug 2018 TTC)	Schedule change introduced in this report (initial report)	Anticipated traffic opening year ¹	Initial schedule completion - initial schedule de	Would additional funding change no to year?	
USD 10- USD 30 and USD 10/STH 441	\$5.6	\$960.0	\$832.0	\$0.0	\$1832.0	\$832.0	2011	2019	2019	2019	none	November 2019	yes	no	
STH 15- STH 76 to New London	\$5.5	\$125.0	\$134.7	\$0.0	\$134.7	\$141.5	2011	2016	2024	2024	none	November 2024	no	no	
USD 18/101 Verona Rd	\$27.2	\$150.0	\$268.2	\$2.2	\$420.4	\$268.2	2011	2019	2019	2019	none	November 2019	yes	no	
STH 23- STH 67 to USD 41	\$0.0	\$39.5	\$156.5	\$0.0	\$196.0	\$157.6	1999	2017	2021	2021	none	November 2021	no	no	
189/90 USD121 to Illinois	\$5.5	\$715.0	\$1,212.8	\$5.1	\$1,937.9	\$1,214.6	2011	2019	2020	2021	1 year later ¹	November 2021	no	no	
I 41- STH 86 to Schaefer Rd	\$0.0	not available ¹	\$10.0	not available ¹	not available ¹	\$10.1	not available ¹	N/A	not available ¹	N/A	not available ¹	N/A	not available ¹	N/A	
I 43 Silver Spring to STH 60	\$13.7	\$511.6	\$551.6	\$0.0	\$551.6	\$530.2	2020	2023	N/A	2023	N/A	November 2023	yes	no	
STH 50- I94 to 45th Ave	\$5.9	\$93.0	\$118.7	\$10.4	\$124.1	\$130.9	2018	2023	2023	2021	1 yr earlier ¹	Spring 2023	yes	no	
USD 53- Lacrosse Corridor	not available ¹	\$67.1	\$143.2	\$1.6	\$148.0	\$160.2	1997	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A	N/A	
Totals			\$2,877.7												

¹ Additional costs outside of program include costs not born by the Major project but needed for the project. Costs are funded via the local program or State Highway Rehabilitation program

Enhancements consistent with recommendations from the 2017 Legislative Audit Bureau audit and 2017 Wisconsin Act 247

- Initial estimate, Record of Decision (ROD) year, pre-ROD costs, initial completion year, current completion year, and indication of delay introduced into the current report for Southeast Megaprojects.

Southwest Megaprojects Summary - All Costs in \$Millions

	Initial estimate* (VDE)	Initial estimate year	Record of Decision (ROD) ¹ Year	Pre-ROD costs	Last let fiscal year (initial schedule)	Last let fiscal year Feb 2018 TPC	Last let fiscal year Aug 2018 TPC	Schedule change introduced in this report	Anticipated mainline open to traffic (calendar year)	Current estimate - Aug 2018 (VDE)	Initial schedule comparison - can initial schedule be met?	Would additional funding change no to yes?
I-94 North-South Freeway	\$1,912.0	2007	2008	\$27.0	2015	2021*	2020*	1 year earlier ²	Memorial Day 2020*	\$1,617.5	no	no
Zoo Interchange	\$1,717.8	2007	2012	\$26.1	2017	2023*	2023*	none	December 2022	\$1,546.0	no	no

Enhancements consistent with recommendations from the 2017 Legislative Audit Bureau audit and 2017 Wisconsin Act 247

- WisDOT is now required to submit the TPC report annually, no later than February 1st, to the joint committee on finance, the joint legislative audit committee, and the standing committees of the legislature with jurisdiction over transportation matters
- Since August 2018, WisDOT has been submitting every TPC report to these members

WisDOT made additional changes In August 2019 to bring the report in compliance with 2017 Wisconsin Act 247

Major Projects Cost and Schedule Summary

Project	Cost Summary - All Costs in \$Millions						Schedule Summary						Anticipated mainline open to traffic (calendar year)	Will be scheduled completion - calendar schedule as met?	Actual additional funding change net to year?
	Pre-construction costs	Initial TFC estimate (fiscal year 2018)	TFC estimate - Aug 2019 (calendar year dollar)	Additional associated costs (calendar year dollar)	Total cost estimate (TFC + outside Major program) (calendar year dollar)	TFC Estimate - Aug 2019 (year of Superfund dollar)	Initial estimate fiscal year	Last mt fiscal year (Fiscal 2018 TFC)	Last mt Fiscal year (Fiscal 2019 TFC)	Schedule change anticipated in this report					
USD 10 USD 18 and USD 10/TH Q43	52.6	3990.0	5353.0	50.0	5353.0	5353.0	2011	2019	2019	2019	none	November 2019	yes	no	
STH 15 STH 78 to New London	53.3	5133.0	5134.7	50.0	5134.7	5141.5	2011	2019	2024	2024	none	November 2024	no	no	
USD 14/14 Wagona Rd	249.2*	2160.0	2160.2	22.2	2220.4	2260.2	2011	2019	2019	2019	none	November 2019	yes	no	
STH 13 STH 67 to USD 43	56.0*	599.3	5194.5	50.0	5194.5	5157.6	1999	2017	2011	2011	none	November 2011	no	no	
I 90/90 USD112 to I10/43	53.5	5715.0	5123.8	58.1	5123.8	5123.8	2011	2019	2020	2021	1 year later	November 2021	no	no	
I 43 STH 88 to Scheuing Rd	26.0	not scheduled	210.0	not scheduled	210.0	not scheduled	N/A	not scheduled	N/A	not scheduled	N/A	not scheduled	N/A	N/A	
I 43 Silver Spring to STH 80	518.7	5051.6	5051.6	50.0	5051.6	5050.2	2020	2023	N/A	2023	N/A	November 2023	yes	no	
STH 10 I-43 to 43rd Ave	23.9	289.0	5111.7	50.0	5120.9	5120.9	2016	2015	2015	2021	2 yrs earlier	Spring 2021	yes	no	
USD 13 Lakeside Corridor	567.1	not scheduled	5413.2	21.8	5415.0	5400.2	1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total:															

[13.489\(5\)\(a\)2.g.](#) The opinion of the department as to whether the project will be completed as originally scheduled without the allocation of additional funds.

What is completion?

Mainline open to traffic:

- All mainline pavement construction, traffic control devices, and pavement markings are in their final position.
- Mainline open to traffic is generally consistent with the public's perception of project completion.
- Note: typical Majors projects will have adjacent minor road work, landscaping, or jurisdictional transfer work being completed just after the mainline work is completed. This work is typically completed within two years of mainline open to traffic.



Major Highway Program Projects

Major projects expenditure schedule

Region	Hwy	Project Name	Enum	Fiscal Year										
				2020	2021	2022	2023	2024	2025	2026	2027	2028		
NE	10/441	CTH B – Oneida Street	2012	■										
NE	15	WIS 76 – New London	2012	■										
SW	18/151	Verona Road	2012	■										
NE	23	WIS 67 – US 41	1999	■										
SW	39-90	US 12 – Illinois State Line	2012	■										
NE	41	WIS 96 – Scheuring Road	2019	■	■	■	■	■	■	■	■	■	■	■
SE	43	Silver Spring Drive – WIS 60	2019	■	■	■	■	■	■	■	■	■	■	■
SE	50	I-41 – 43 rd Avenue	2014	■	■	■	■	■	■	■	■	■	■	■
SW	53	La Crosse Corridor	1997	■	■	■	■	■	■	■	■	■	■	■

Data as of November 1, 2019

■ Planned Expenditure

■ The costs beyond this biennium will be identified in a future TPC report.

US 10 and US 10/WIS 441

County CB to Oneida Street
Calumet, Outagamie and Winnebago County

TPC Project Update

December 6, 2019



Project location

- Project Limits: County CB – Oneida St.
- Five interchanges
- Second Little Lake Butte des Morts bridge
- Six miles of mainline
- Intersection reconstruction



Project need

- Vital regional transportation link serving the Fox Cities
- Increase capacity to meet existing and future traffic demands
- Address existing and emerging safety problems



Project concept

I-41 Interchange Construction

- Reconstruct I-41/US 10/WIS 441 system interchange
- Free-flow movements all directions
- Freeway split for US 10 WB and WIS 441 SB
- Add auxiliary lanes on I-41

Mainline US 10/WIS 441

- Expand to six lanes
- Second Little Lake Butte des Morts bridge
- Additional auxiliary lanes
- Improve design speed of curves to 70 mph

Improved Interchanges

- Reconstruct interchanges at Appleton Road, Midway Road, and Racine Road
- Diverging Diamond Interchange at US 10/WIS 441/Oneida Street – First in NE Wisconsin



Project timeline

Function	2012	2013	2014	2015	2016	2017	2018	2019
Design	■	■	■	■	■	■		
Real Estate		■	■	■	■	■		
Utilities		■	■	■	■	■	■	
Construction			■	■	■	■	■	■

- November 2019, mainline opened to traffic.
 - Incidental work to be completed in 2020 because of poor weather at end of construction season.

Financial status

Cost to date and remaining costs

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
	Design	\$50.5	\$47.6
Real Estate	\$21.5	\$20.0	\$1.5
Construction	\$310.0	\$287.2	\$22.8
Totals^{2,3}	\$382.0	\$354.8	\$27.2

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

² Total cost of project expected to be below the current budgeted amount.

³ Total project cost is less than the original budget of \$390 million when enumerated in 2011.

Project highlights: Construction



Appleton Rd. interchange



Oneida St. DDI interchange

WIS 15

WIS 76 to New London
Outagamie County

TPC Project Update

December 6, 2019



Project location

- Limits: WIS 76 (Greenville) to New London
- Length: 11 Miles



Project need: Traffic

- Traffic volumes warrant expansion
 - Current AADT 9,800 – 16,400
 - 2034 AADT 14,100 – 20,400
- Future traffic operational issues
 - LOS F east of Hortonville (2040)
 - LOS E west of Hortonville (2040)
- Important regional route
 - WIS 15 connects Appleton metropolitan area to Greenville, Hortonville, New London, and other communities to the west



Project need: Safety

- Elevated crash rates
 - Rates from 2006-2016 significantly above statewide average
 - Three separate fatal accidents in rural areas from 2016-2019
- High number of access points
 - Roughly 290 access points including 165 in middle segment between County T and County JJ



Project concept

- Two-lane to four-lane expansion
 - Northern bypass of Hortonville with limited access
 - No public street connections (overpasses of Nash St and County M)
- Improved vertical/horizontal alignment and side road intersections
- Multi-use trail connecting Hortonville to Greenville
 - Asphalt trail along south side of WIS 15



Project concept

- Roundabouts
 - Located at each end of bypass to provide access into Hortonville

West Roundabout (rendering)



East Roundabout (rendering)



Project timeline



Financial status

Cost to date and remaining costs

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$8.5	\$6.2	\$2.3
Real Estate	\$25.0	\$18.7	\$6.3
Construction	\$101.2	\$0.1	\$101.1
Totals	\$134.7	\$25.0	\$109.7

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

Project highlights: Design

- Provide improved traffic flow and safety by expanding to four lanes and eliminating more than 55 percent of the existing access points within the corridor (includes a limited access bypass)

Existing traffic flow in Hortonville



Bypass (Nash St & County M overpasses)



Remaining risks and issues

- Railroad coordination
 - Coordinating with Wisconsin Central Limited Railroad for path for farm equipment access beneath railroad overpass

US 18/151 (Verona Road)

County PD to US 12/18 (Madison Beltline)
Dane County

TPC Project Update

December 6, 2019



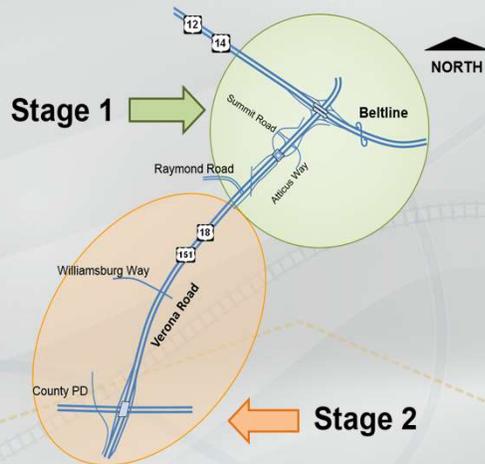
Project location

Stage 1 (Completed 2016)

- Verona Road between Raymond Road and Nakoma Road
- Madison Beltline between Whitney Way and Seminole Highway
- Construction: fall 2013 – summer 2016

Stage 2

- Verona Road from County PD to Raymond Road
- County PD between Commerce Park Drive and Fitchrona Road
- Construction: fall 2016 – fall 2020



Project need

- Enhance safety
 - Total crash rate was 2.5 to 3.3 times the state average
- Improve mobility and efficiency
 - 60,000 vehicles per day on Verona Road
 - 120,000 vehicles per day on the Madison Beltline
 - Significant traffic backups and delays daily on the Beltline and Verona Road.
- Address pavement and bridge needs
 - Beltline bridge over Verona Road was constructed in 1957.



Project concept

- Improvements will:
 - Eliminate at-grade signalized intersection with high-crash rate.
 - Add grade-separated interchanges at Williamsburg Way and County PD.
 - Expand Verona Road to six lanes.
 - Provide additional capacity on the Madison Beltline from Seminole Highway through Whitney Way.
 - Replace deteriorated pavement.
 - Increase clearance height at Seminole Highway bridge and Beltline bridges over Verona Road.
 - Include pedestrian and bicycle accommodations throughout the project.



Project timeline

- Final Environmental Impact Statement (FEIS): **June 2011**
- Project Enumeration: **October 2011**
- Record of Decision (ROD): **Fall 2011**
- First Construction LET: **November 2013**
- Opening of Single Point Urban Interchange (Stage 1 completion): **November 2016**
- Opening of new Verona Road to three lanes: **November 2019**
- Anticipated construction completion: **October 2020**



Financial status

Cost to date and remaining costs

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$25.7	\$25.4	\$0.3
Real Estate	\$26.7	\$26.5	\$0.2
Construction	\$215.8	\$175.4	\$40.4
Totals ²	\$268.2	\$227.3	\$40.9

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

² Total cost of project expected to be below the current budgeted amount.

Project highlights: Design

- Improve local connectivity for all modes of transportation.
 - Tunnel under Verona Road for pedestrians and bicyclists
 - Jug-handle/roundabout under Verona Road to access frontage roads
 - Improved neighborhood access with bike and pedestrian improvements and with increased bus stops and bus pullouts
- WisDOT conducted more than 500 public outreach meetings between 2001 and 2019.



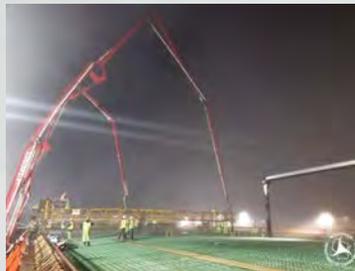
Project highlights: Construction

- Wisconsin's second Single Point Urban Interchange (pictured in the top right)
- Approximately 410,000 square yards of concrete.
- 12 bridges and five noise barriers.
- Approximately 51 lane miles reconstructed.
- Added three new grade-separated interchanges.
- November 2019: Opened Verona Road to three lanes each way, under Williamsburg Way and over County PD/McKee Road.



Remaining risks and issues

- Completing County PD construction in major commercial corridor



WIS 23

US 151 to County P
Sheboygan and Fond du Lac Counties

TPC Project Update

December 6, 2019



Project location

- Limits: Fond du Lac to Plymouth
- Length: 19.1 Miles



Project need

- System Linkage and Route Importance

- Major East-West link between Interstates 41 and 43
- Long Truck/Oversize Overweight Route
- Only two-lane segment of WIS 23 between I-41 and I-43



- Regional Economic Development

- Over \$20 billion worth of commodities originate or terminate in Fond du Lac and Sheboygan Counties (2018 estimate).

Project need

- Legislative and Transportation Planning History

- Enumerated by Legislature as a major project in 1999
- Included in local transportation plans
- Supported by local governments and the public

- Traffic Volumes

- Existing and future traffic volumes result in less than desirable LOS for some segments

Project need

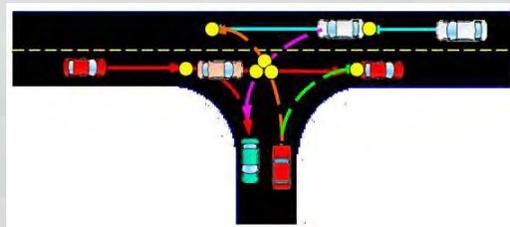
- Existing Highway Geometric Characteristics
 - The majority of WIS 23 is marked as no passing.
 - In passing zones, opposing traffic volumes limit opportunities to pass slow moving vehicles.



- Safety
 - Some segments have crash rates higher than the statewide and fatal/severe injury crash rates.

Project need

- Access
 - WIS 23 has more access points per mile than desirable



- 235 access points:
 - 16 County highway intersections
 - 51 Local roads and street intersections
 - 95 Commercial and residential driveways
 - 73 Field entrances

Project concept

- Two-lane to divided four-lane expansion
- Safety and operations improvements including:
 - Improving 67 intersections for safety – adding interchanges at County K, County UU, and County G; upgrading other high volume intersections to Restricted Crossing U-Turn intersections.
 - Eliminating or relocating turning movements/conflicts at many private access points
 - Incorporating safety countermeasures to address the types of crashes occurring on WIS 23
- Extending Old Plank Road Trail to connect Greenbush to Fond du Lac
- Grade separating the Ice Age Trail from WIS 23

Project concept

- Restricted Crossing U-Turn (RCUT)
 - Formerly known as J-Turns
 - RCUT allows Right-In/Right-Out/Left-In movements
 - Reduces hazardous movements from the intersection
 - Reduces conflict points from 42 to 24



Project timeline

- 1999 Major Project Enumerated
- 2015 Construction Let – Project terminated due to lawsuit
- Environmental Document supplemented
- October 2018 Record of Decision
- Fall 2019 Re-Evaluation – Fond du Lac County segment
- 2019 Construction Let – Sheboygan County segment
- 2019-2021 Complete remaining final design, purchase right-of-way and relocate utilities
- 2019-2022 Construction
- Anticipated open to traffic – November 2022



Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$14.4	\$12.7	\$1.7
Real Estate ²	\$25.5	\$21.2	\$4.3
Construction ²	\$116.6	\$6.3	\$110.3
Totals	\$156.5	\$40.2	\$116.3

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

² The budgeted amount will be increased with the February TPC report.

The increase is expected to be in the \$15M range. The cost increases are predominantly due to:

- More extensive marsh excavation and poor soils found on site.
- Increased unit prices on concrete pavement and other materials.
- Real estate prices higher than anticipated.
- Design details finalized after the two-year suspension of project was lifted.

Project highlights: Design

- Improved traffic flow and safety by expanding from a two-lane to a divided four-lane highway
- Improved geometrics at intersections with high crash rates
- Working with WDNR to create two on- project wetland mitigation sites

Example: County G & WIS 23 at-grade intersection will become an interchange



Wetland Mitigation Site



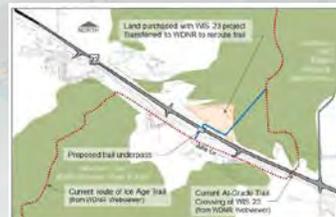
Project highlights: Design

- Working with Fond du Lac County and St Mary's Springs Academy to realign County K to provide safer crossings for students
- Extending Old Plank Road Trail west to Fond du Lac's Prairie Trail
- Grade separating the Ice Age Trail

Jug-Handle intersection at County K



Ice Age Trail Grade Separation



Risks and issues

- Extended schedule due to record rainfall
- Poor quality soils
- Availability of waste/borrow sources



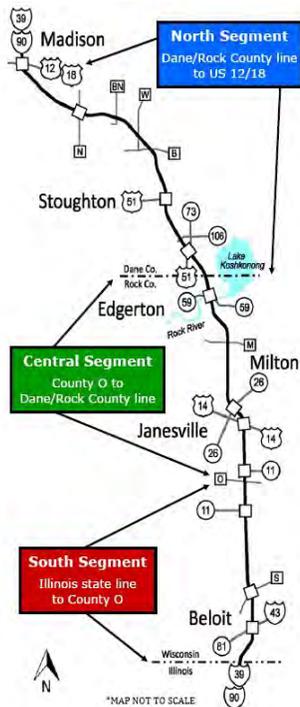
I-39/90 Expansion

US 12 (Beltline) to Illinois State Line
Dane and Rock Counties

TPC Project Update

December 6, 2019





Project location

- US 12/18 (Beltline) interchange to the Illinois state line, Dane and Rock counties
 - 45 miles of four-lane Interstate
 - 11 interchanges
 - More than 100 bridges
- Three segments/design teams
- Originally built in the late 1950s and early 1960s.
- Mainline Construction: 2013 – 2021

Project need

- Enhance safety
 - Crash rate is much higher than statewide average.
- Improve efficiency for tourism and movement of goods
 - 51,000 – 54,000 vehicles per day (vpd)
 - Projected: 65,000 – 88,000 vpd
 - \$1.2 billion tourism impact
 - About 30% heavy truck traffic (2014)
- Meet current design standards
 - Upgrade cloverleaf interchanges, inadequate merge lanes, etc.



Project concept

- Reconstruct and expand 45 miles of I-39/90 from four to six lanes.
- Expand from four to eight lanes from WIS 11 (Avalon Road) to the WIS 26 interchange in Janesville.
- Reconfigure 11 interchanges.
- Construct:
 - 97 bridges;
 - 58 retaining walls;
 - 84 sign structures; and
 - 11 box culverts.



Project timeline

- Environmental Assessment (EA) signed: **July 2008**
- Project Enumeration: **October 2011**
- First Construction LET: **May 2013**
- FASTLANE (Janesville) grant authorized: **June 2017**
- Beltline interchange EA/FONSI signed: **May 2019**
- Last Construction LET: **June 2020**
- Anticipated opening of I-39/90, Beloit to Madison: **November 2021**



Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$144.6	\$135.5	\$9.1
Real Estate	\$45.5	\$36.2	\$9.3
Construction ²	\$1,022.7	\$462.9	\$559.8
Totals	\$1,212.8	\$634.6	\$578.2

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

² \$40 million FASTLANE Grant awarded 9/03/2016.

Project highlights: Design

- Maintain two lanes open in each direction during daytime hours and weekends.
- Strive to keep access open to businesses via interchange ramps.
- Hundreds of public and business meetings as well as extensive coordination with various stakeholders and interest groups.
 - Outreach via area media, website, email updates and social media

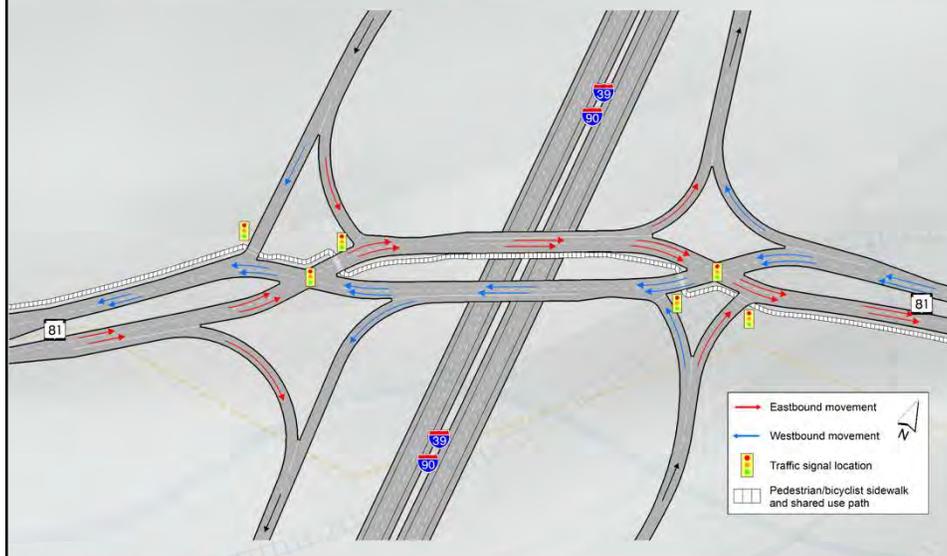


Project highlights: Construction

- Wisconsin's first Diverging Diamond Interchange (DDI) opened in November 2016 at WIS 11/Avalon Road, south of Janesville
 - Two more DDIs will be built in Beloit and Janesville.
- Mid-November 2019: Open I-39/90 to three lanes each way from Edgerton to Madison



Diverging diamond interchange, WIS 81 (Beloit)



Remaining risks and issues

- Market conditions
- Contractor resourcing
- Earthwork and drainage conditions



I-41

WIS 96 to Scheuring Road (County F)
Brown and Outagamie Counties

TPC Project Update

December 6, 2019



Project location

- Limits: WIS 96 (Appleton) to County F in De Pere
- Length: 23 Miles



Project need

- Major north-south route between Fox Cities and Green Bay
- Deteriorating pavement structures
- Substandard geometrics and cross section features for an interstate
- Level of service and safety issues
- Coordination with Brown County on Southern Bridge Interchange
- Municipalities support of expansion through passage of resolutions



Project concept

- Modernization – Interstate Capacity Expansion
- Improve safety and operations
- Project Status
 - State budget enumerated project for construction
 - Tentative 2022 approved environmental document
 - Cost available after completion of environmental study
- Project Highlights
 - 23 miles of mainline, expand lanes to median, add auxiliary lanes
 - 10 existing interchanges, one new interchange
 - 16 overpass/underpass locations
 - Noise walls
- Great local support for project



Project timeline (preliminary)

- January 2020 Begin preliminary design
- 2020-2022 conduct environmental study
- 2023-2024 complete final design, purchase right-of-way and relocate utilities
- 2025-2029 tentative construction schedule



Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$10.0	\$0.0	\$10.0
Real Estate	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0
Totals	\$10.0	\$0.0	\$0.0

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

Risks and issues

- Desire to expedite schedule
- Poor soils
- Local development
- Stormwater management
- Development of WIS 441 interchange alternatives



I-43

Silver Spring Drive to WIS 60
Milwaukee and Ozaukee Counties

TPC Project Update

December 6, 2019



Project location

- Milwaukee and Ozaukee counties
- 14 miles from Silver Spring to just south of WIS 60



Milwaukee County



Ozaukee County



Project need

- System linkage and route importance
 - Busiest four lane freeway in the State of Wisconsin
 - Major north-south route for Milwaukee metro area commuters, access for multiple municipalities
 - Connects Milwaukee with the Sheboygan, Manitowoc, and Green Bay metropolitan areas
 - Tourist route to northern Wisconsin including Door County



Project need

- Pavement and geometric deficiencies
- Safety
- Existing and future traffic volumes



Project concept

- Reconstruct, modernize, and expand I-43 to six lanes
- Improve safety and traffic operations
- Six service interchanges including new Highland Road Interchange
- Significant local road reconstruction work



Project timeline

Calendar Year	2019	2020	2021	2022	2023	2024
Environmental Re-evaluation	Orange	Orange				
Design Engineering		Green	Green	Green		
Early Lets (FY 22)			Yellow			
Mainline (FY 22, 23, 24 Lets)				Blue	Blue	Blue



Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$40.0	\$0.0	\$40.0
Real Estate	\$26.0	\$0.0	\$26.0
Construction	\$485.6	\$0.0	\$485.6
Totals	\$551.6	\$0.0	\$551.6

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.



Project highlights: Design

- New Union Pacific Railroad Bridge
- Noise Barriers
- New Highland Road Interchange
- Retrofit Brown Deer Road and Good Hope Road Interchange Bridges
 - Preserves existing infrastructure
 - New Diverging Diamond Interchange at Brown Deer Rd



Project highlights: Design

- Full Access at County Line Road Interchange (plan view below)
- Retaining walls due to tight urban sections
- Addresses largest safety issues at the Brown Deer Road Interchange and along Milwaukee County mainline
- Communications and local coordination an emphasis – six municipalities



Project highlights: Construction (preliminary)

- Early lets (FY 22)
 - Mitigation routes
 - Ozaukee County Bridges
 - Work zone prep
- Mainline/Major lets (FY 22)
 - Highland Road Interchange
 - Railroad Bridge (pic on right)
 - Port Washington Road
 - Segments in Milwaukee and Ozaukee counties
- Mainline lets (FY 23 and 24)
 - Segments in Milwaukee and Ozaukee counties
- Commitment to maintain two lanes of traffic in each direction during construction and focus on work zone safety



Remaining risks and issues

- Risks
 - Railroad coordination and schedule
 - Bridge and crossings
- Issues
 - Real estate acquisition
 - Stormwater management
 - Maintenance of traffic
 - Utilities relocation



WIS 50

I-94 to 43rd Avenue
Kenosha County

TPC Project Update

December 6, 2019



Project location

- Limits: I-94 to 43rd Avenue
- Length: 4.4 Miles



Project need

- Major east-west route between I-94 and communities along Lake Michigan
 - City of Kenosha
 - Village of Pleasant Prairie
- Destination corridor
 - 60 percent of traffic traveling to local destination



Project need

- Mobility, safety, and access needs
- Insufficient mainline lane capacity
- Deteriorating pavement and bridge structures
- Substandard mainline and intersection geometrics



Project concept

- Widen road from four to six lanes
 - 116th to 57th Avenues (3.6 miles)
- Reconstruct four-lane road
 - 57th to 43rd Avenues (0.8 miles)
- Provide more capacity at local road intersections
- Implement access management
 - Driveway and median modifications
- Improve access road connections
- Add sidewalk and bicycle accommodations throughout



Project timeline

- Design:

- West Segment: (118th to 70th)
 - PS&E: August 1, 2020
 - Let: December 8, 2020
- East Segment: (70th to 43rd)
 - PS&E: August 1, 2020
 - Let: December 8, 2020



- Construction:

- West Segment (118th to 70th): Start spring of 2021
- East Segment (70th to 43rd): Start spring of 2022

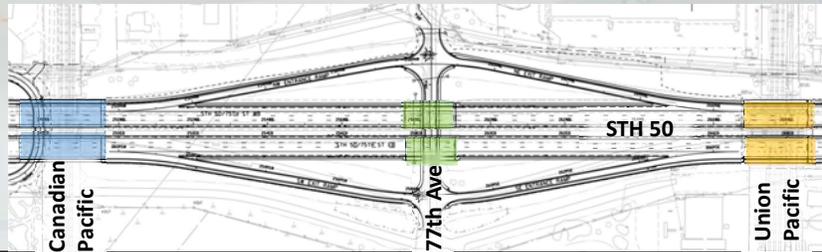
Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$0.2	\$0.0	\$0.2
Real Estate	\$12.5	\$6.2	\$6.3
Construction	\$106.0	\$0.2	\$105.8
Totals	\$118.7	\$6.4	\$112.3

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

Project highlights: 77th Avenue interchange

- Add acceleration and deceleration for ramps
- Adjust profile to improve vertical clearance over 77th Avenue and railroads
- Replace six bridges
 - Two over Union Pacific Railroad
 - Two over Canadian Pacific Railroad
 - Two over 77th Avenue

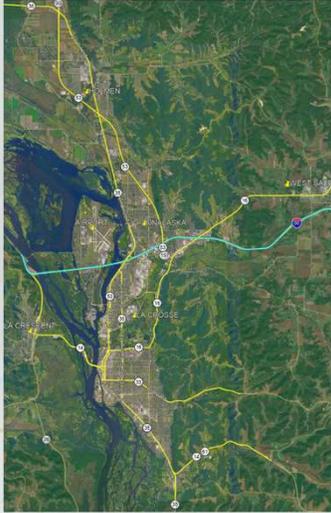


Remaining risks and issues

- Risks
 - Coordination with Union Pacific Railroad
 - Real estate (R/E) litigation
- Issues:
 - WIS 50/WIS 31 intersection reevaluation
 - Reviewing intersection geometrics because of new traffic data
 - Updates to geometrics could affect R/E acquisition schedule.
 - Access to parcels adjacent to project
 - Utility relocations

US 53, La Crosse corridor

La Crosse County



Project timeline

- Project enumerated: 1997
- Begin Planning and Environment Linkages (PEL) process: 2015
- Pause project: 2017
- Operations and safety study: 2019

Project Status

- Enumerated in 1997, the US 53 La Crosse Corridor project lacks local consensus for a preferred alignment and scope.
- The region is performing a safety and operation study in the project area. The results of the new study will be compared with the results of the Draft PEL Document (2017). The new study will assist in determining if WisDOT recommends moving forward with this project.



Southeast Mega Program Projects

I-94 North-South Freeway

Kenosha, Milwaukee and Racine County

TPC Project Update

December 6, 2019



Project location

- The I-94 NS Corridor is located in Kenosha, Racine and Milwaukee counties



Project need - traffic

- Current traffic Annual Average Daily Traffic (AADT) volumes in the I-94 North-South Corridor range from 86,900 to 166,100 vehicles per day (vpd)
- AADT forecasts for 2038 are 107,000 to 171,000 vpd
- Currently operating at Level of Service D during periods of heavy traffic



Project need - safety

- Elevated crash rates
 - South Segment – I-94 NB at WIS 11 of 100.6
 - 66 percent higher than the statewide average (60.75)
 - Central Segment – I-94 SB at County K of 86.7
 - 43 percent higher than the statewide average (60.75)



Project need - roadway, bridge and geometric condition

- Pavement structure and bridges exceeded their life expectancy. It is no longer cost effective to resurface the roadway
- Substandard bridge clearance
- Substandard vertical and horizontal curves
- Substandard ramp design



Project concept

- South Package
 - Reconstruct I-94 with four travel lanes in each direction

WIS 142 interchange to WIS 20 interchange



Project concept

- Central Package
 - Reconstruct I-94 with four travel lanes in each direction

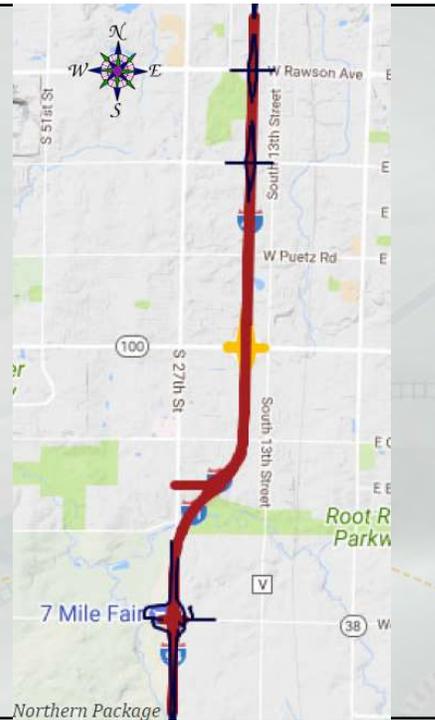
WIS 20 interchange at County C overpass to 7 Mile Road interchange at 6-1/2 Mile Road



Project concept

- North Package
 - Reconstruct I-94 with four travel lanes in each direction

7 Mile Road interchange to College Avenue Interchange



Project timeline

South Package (WIS 142 to WIS 20)

- Mainline open to traffic December 2019

Central Package (WIS 142 to WIS 20)

- Mainline open to traffic December 2019

North Package (WIS 142 to WIS 20)

- Mainline open to traffic May 2020



Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$136.0	\$135.9	\$0.1
Real Estate	\$67.5	\$67.1	\$0.4
Construction ²	\$1,413.9	\$1,088.5	\$325.4
Totals³	\$1,617.4	\$1,291.5	\$325.9

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

² \$160 million INFRA Grant awarded 9/04/2018.

³ 2017 Wisconsin Act 58 authorized \$252.4 million in general obligation bonds.

Project highlights

Existing condition
Substandard interchange geometrics

- “Scissor” ramps



After construction

- Interchange ramps reconstructed to remove conflict with frontage road traffic.



Project highlights

Existing condition

Bridges

- Beyond service life
- Substandard geometrics



After construction

- Reconstructed bridges designed to accommodate current geometric standards



Project highlights

Existing condition

- Three lanes
- Congestion during peak traffic hours
- Level of Service E or F



After construction

- Four lanes
- Additional traffic capacity
- Improved Level of Service



Remaining issue

- Work Zone Safety and Speed Enforcement
 - Monitoring public perception of work zone safety and enforcement of the speed limits throughout project limits.
 - Action already taken:
 - Lowered speed limits
 - Additional signage
 - Additional pavement markings
 - Increased law enforcement presence throughout the corridor



Zoo Interchange

(North leg construction remains)

Milwaukee County

TPC Project Update

December 6, 2019



Project need - traffic

- In 2009, AADT volumes varied between 172,000 and 154,000
- Current traffic volumes in the Zoo Interchange range up to 350,000 vehicles per day
- By the design year of 2035 volumes are expected to increase by up to 18 percent



Project need - safety

- Several segments of the freeway system had crash rates two to five times higher than the statewide average for urban freeways
- Completing the North Leg will reduce crashes an estimated 40% (280 crashes/year to 170 crashes/year)

NORTH LEG SAFETY/CRASHES

2005-2009

280
CRASHES/YEAR

236%
of STATEWIDE
AVERAGE

ESTIMATED CRASH
REDUCTION of
COMPLETED NORTH LEG*

40%
REDUCTION

112 LESS
CRASHES/YEAR

* opportunity cost of delay



Project concept

North Leg construction remaining



Project timeline

Zoo Interchange Core I and II substantially complete in fall 2018

Remaining North Leg construction will begin in 2020, and conclude in September 2023

SFY	Project	Let Date	Construction End Date
2019	• Traffic Mitigation Reversal (various locations)	April 2019	November 2019
	• Roundabout at Swan Blvd & Discovery Parkway	May 2019	September 2019
	• Swan Blvd. Roadway Maintenance	May 2019	September 2019
2020	• Detention Pond at North Avenue	March 2020	November 2020
	• North Leg Prep Work (Swan Blvd to North Avenue)	May 2020	December 2020
2021	• I-41 (Mayfair Road (STH100) to Burleigh Street)	Oct/Nov 2020	November 2023
	• Center Street Sidewalk Improvements	Oct/Nov 2020	November 2023
	• North Avenue	Oct/Nov 2020	November 2023
2022	No New Lets		
2023	• North Leg Landscaping	December 2022	September 2023

Financial status

Cost Category	Cost Summary as Reported in the Aug 2019 TPC Report ¹ (Millions)		
	Budgeted	Cost to Date	Estimated Cost to Complete
Design	\$135.0	\$133.7	\$1.3
Real Estate	\$96.2	\$93.7	\$2.5
Construction	\$1,310.3	\$1,087.2	\$232.1
Totals	\$1,541.5	\$1,305.6	\$235.9

¹ Costs documented in the Aug 2019 TPC report are through June 30, 2019.

Project highlights

Zoo Interchange 2010

- Outdated service interchanges and ramps



Project highlights

Zoo Interchange 2018

- Improved service interchanges and ramps



Project highlights

Zoo Interchange 2010

- Bridge deterioration



Project highlights

Zoo Interchange 2018

- New bridges



Project highlights

Zoo Interchange 2010

- Traffic congestion, Traffic Level of Service (LOS) D to F



Project highlights

Zoo Interchange 2018

- Improved traffic LOS



Remaining risks and issues:

- Ability to maintain three lanes of traffic in each direction during construction.
- Completing the Zoo Interchange Environmental re-evaluation for the North Leg.
- Union Pacific Railroad (UPRR) coordination





Major Highway Studies

Major highway studies



Major highway studies

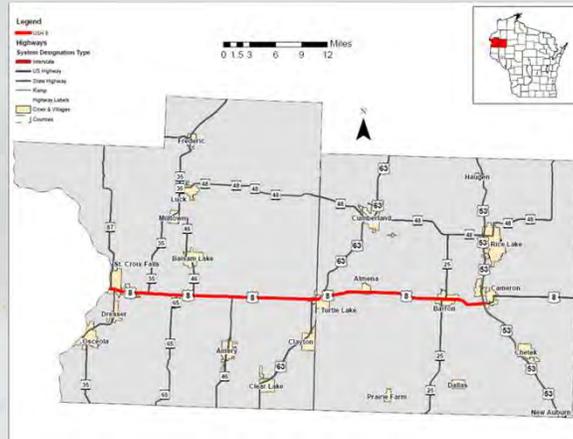
Number	Highway	Termini	Status	Approved by	Date
Studies recommended for removal					
1	US 8	WIS 35 to US 53	EIS Complete	TPC	12/05/2000
2	WIS 11/US 14	Janesville to I-43	Suspended	TPC	1/26/2001
3	US 12	Fort Atkinson Bypass	Suspended	Act 9 grandfathered in, first reported to TPC	5/23/2000
Studies recommended to remain					
4	US 12/18	US 14 to County N (Madison Beltline)	In Progress	TPC	11/02/2011
5	US 12	WIS 67 (Elkhorn) to WIS 59 (Whitewater)	Suspended	Legislature	2013-15 Budget
6	I-39/90	US 12 (Madison) to US 12 (Wis Dells)	Cancelled	TPC	11/02/2011
7	US 51	Stoughton to McFarland	EA In Progress	TPC	11/26/2001
8	US 51	US 12 to WIS 19 (Stoughton Road)	EIS In Progress	TPC	11/02/2011
9	I-94	70 th Street to 16 th Street	EIS Rescinded	TPC	11/02/2011
10	I-94	US 12 to WIS 65	EA Complete	TPC	11/02/2011

Study projects recommended for removal from Majors Program

- US 8, WIS 35 to US 53
- WIS 11/US 14 (Janesville to I-43)
- US 12 (Fort Atkinson bypass)

US 8, WIS 35 to US 53

Barron and Polk counties (40 miles)
St Croix Falls - Cameron



Project timeline

- Begin study: December 2000
- Tier I Final Environmental Impact Statement (FEIS): October 2007
- Record of Decision (ROD): Fall 2007
- Tier II Environmental documents suspended: April 2014

US 8, WIS 35 to US 53

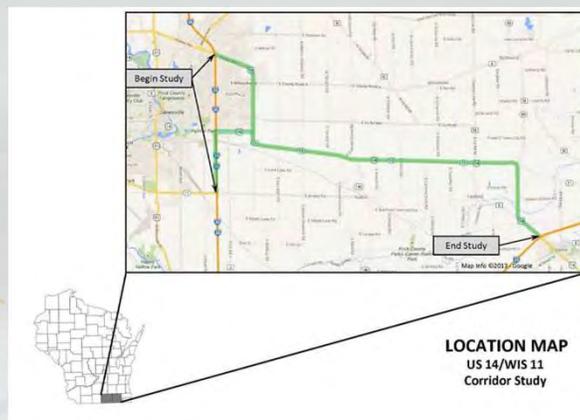
Barron and Polk counties

Recommended Action:

- US 8 Tier 1 corridor environmental study has been completed and the Tier II documents were suspended. The corridor does not warrant an enumeration recommendation from the department at this time.
- Identified needs on this project can be satisfactorily addressed with rehabilitation projects that will not qualify for Majors funding.
- The department is recommending that this study be removed from the list of approved Major Highway Studies.

WIS 11/US 14 (Janesville to I-43)

Rock and Walworth counties (15 miles)



Project timeline

- Begin study: November 2001
- Study paused: August 2014

WIS 11/US 14 (Janesville to I-43)

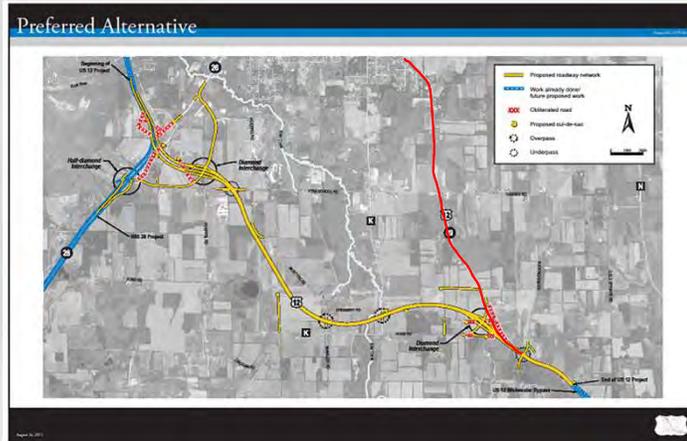
Rock and Walworth counties

Recommended Action:

- There are higher priority corridors that should be funded before this corridor. This is expected to be the case for the foreseeable future
- The department is recommending that this study be removed from the list of approved Major Highway Studies.

US 12 (Fort Atkinson bypass)

Jefferson county (12 miles)



Project timeline

- Study begins: May 2000
- Draft Environmental Impact Statement: October 2005
- Study stopped: May 2012

US 12 (Fort Atkinson bypass)

Jefferson county

Recommended Action:

- The department was directed to stop work on this corridor in 2012.
- The department is recommending that this study be removed from the list of approved Major Highway Studies because needs for this bypass are not expected to be warranted until after 2035.

Study projects recommended to remain in Majors Program

WisDOT is conducting additional review on several projects recommended to remain in the Majors program. The review will assist with a future recommendation to the TPC regarding study status of those projects.

Study projects recommended to remain in Majors Program

- US 12, WIS 67 to WIS 50 (Elkhorn to Whitewater)
- I-39/90, US 12 (Madison) to US 12 (Wisc Dells)
- I-94, US 12 to WIS 65 (Hudson to Roberts)
- I-94 East-West Freeway, 70th Street to 16th Street
- US 12/18 (Madison Beltline), US 14 to County N
- US 12, Stoughton to McFarland
- US 51, Stoughton Road

Questions?