

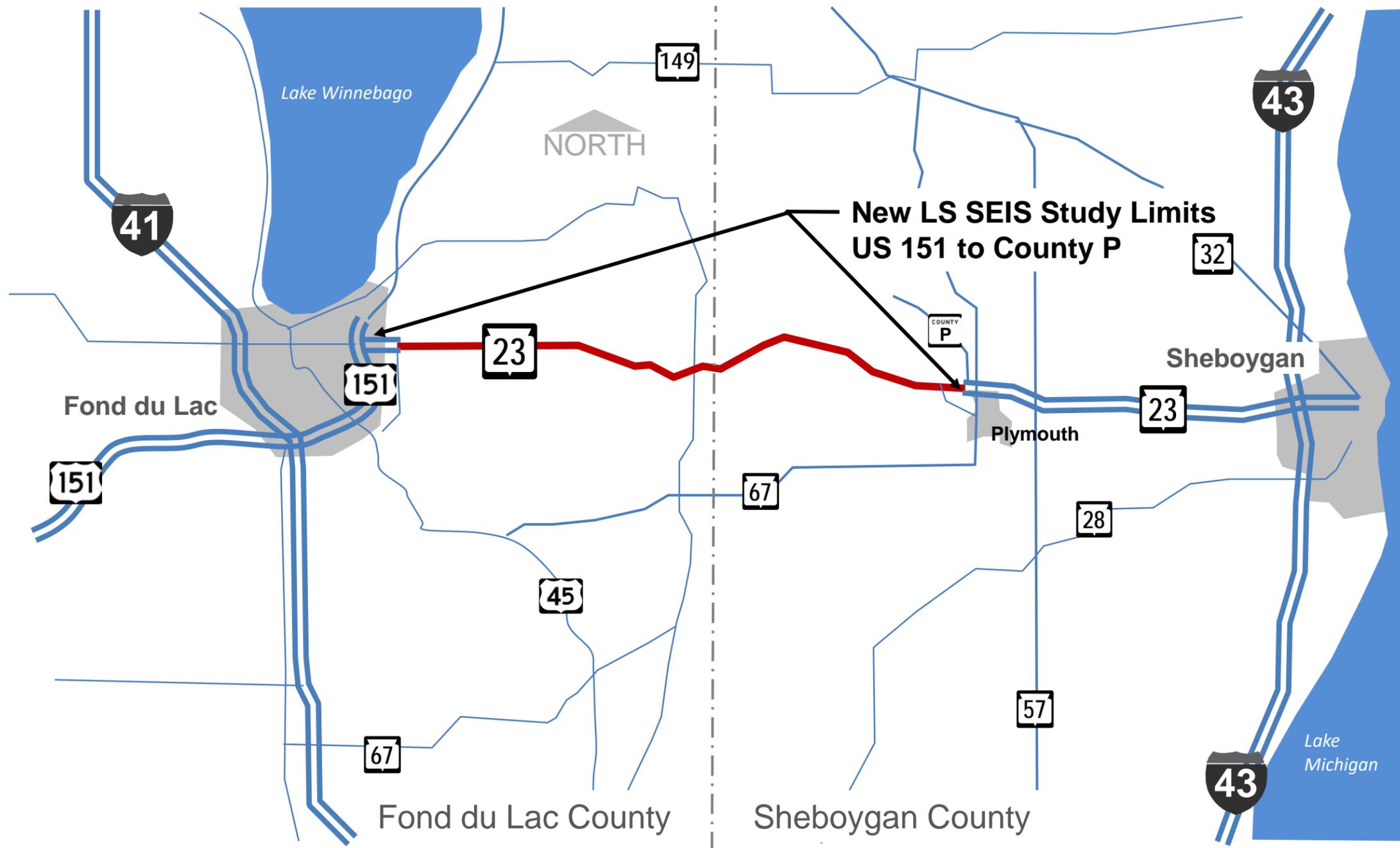


Public Involvement Meeting

October 12, 2017

UW-Fond du Lac

Project Location – Fond du Lac to Plymouth



What has happened since the 2014 Record of Decision (ROD)

Environmental document and ROD approved by FHWA and WisDOT.

March 17, 2014

United States District Court for the Eastern District of Wisconsin issued a decision and order vacating the March 17, 2014 ROD.

May 22, 2015

Construction contract for WIS 23 cancelled.

Summer 2015

Request to reinstate Record of Decision is denied.

April 29, 2016

WisDOT appeal to 7th Court of Appeals dismissed for procedural reasons.

June 19, 2017

WisDOT and FHWA to prepare a new Limited Scope Supplemental Environmental Impact Statement (LS SEIS) that will address the issues raised in the US district court decision.

Begin summer 2017

What will a WIS 23 LS SEIS do?

The new LS SEIS will:

- Update the traffic forecast and explain the methodology used to develop it.
- Explain the role of demographic data in traffic forecasts.
- Evaluate and provide additional analysis, if needed, on any new or changed impacts to the human and natural environment since the 2014 LS SEIS.
- Review the evaluation of reasonable alternatives.

The study will obtain additional public, state and federal agency, tribal and local unit of government input and comments through meetings and public hearing(s).

Project Purpose

Provide additional highway capacity (i.e., to provide appropriate and effective Level of Service) to serve existing and projected traffic volumes and improve operational efficiency and safety for local and through traffic while avoiding or minimizing environmental effects.

Project Need

- System linkage and route importance
- Transportation demand and economic development
- Legislative and planning history
- Existing and future traffic volumes and resulting operation
- Existing highway geometric characteristics
- Access
- Safety
- Accommodations for non-motorized travel

Need – System Linkage and Route Importance

- WIS 23 is part of the National Highway System (NHS) to serve major population centers, intermodal transportation facilities, and major travel destinations and provide connections to the national defense highway network.
- WIS 23 is a state-designated, long-haul truck route.
- WIS 23 is a 2030 Connector Routes whose purpose is to connect key communities and regional economic centers to the Corridor 2030 Backbone routes such as I-41 and I-43.



Need

- **Transportation Demand and Economic Development**

- WIS 23 should meet the operational and safety needs to serve the manufacturing, tourism, recreation, agriculture, and trade economic sectors it connects as traffic increases.
- Improved travel routes to recreational facilities benefit tourism in east central Wisconsin recreational areas through reduced travel time, increased safety, and more relaxed and predictable travel.
- Existing deficient access conditions should be improved to provide new business and employment opportunities.

- **Legislative and Transportation Planning History**

- WIS 23 was first identified as a Connector route in the state highway plan in 1989. Connector routes connect key communities and economic centers and should meet standards for roadway width, level of service (LOS), alignment, and managed access.
- The Wisconsin State Legislature in the 1999 Biennial Budget enumerated WIS 23 as a major project.

Level of Service (LOS)

LOS is a measure that quantifies the amount of delay or congestion a particular travel mode experiences. It ranges from LOS A (very little delay) to LOS F (congested). The Highway Capacity Manual provides methodologies for calculating LOS for different modes (ie walking, biking, and motor vehicles) as well as different highway types (ie urban streets, two-lane highways, and freeways).

For WIS 23, currently a two-lane highway, LOS is measured in percent time spent following (PTSF) as well as average speed.

Level of Service for Two-lane Highways

Level of Service	Flow Conditions	Operating Speed mph (PTSF)*	Technical Descriptions
A		>55 mph (<35%)	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. No delays
B		50 to 55 mph (35-50%)	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. No delays
C		45 to 50 mph (50-65%)	Stable traffic flow, but less freedom to select speed, change lanes or pass. Minimal delays
D		40 to 45 mph (65-80%)	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. Minimal delays
E		<40 mph (>80%)	Unstable traffic flow. Speeds change quickly and maneuverability is low. Significant delays
F		Demand Exceeds Capacity	Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. Considerable delays

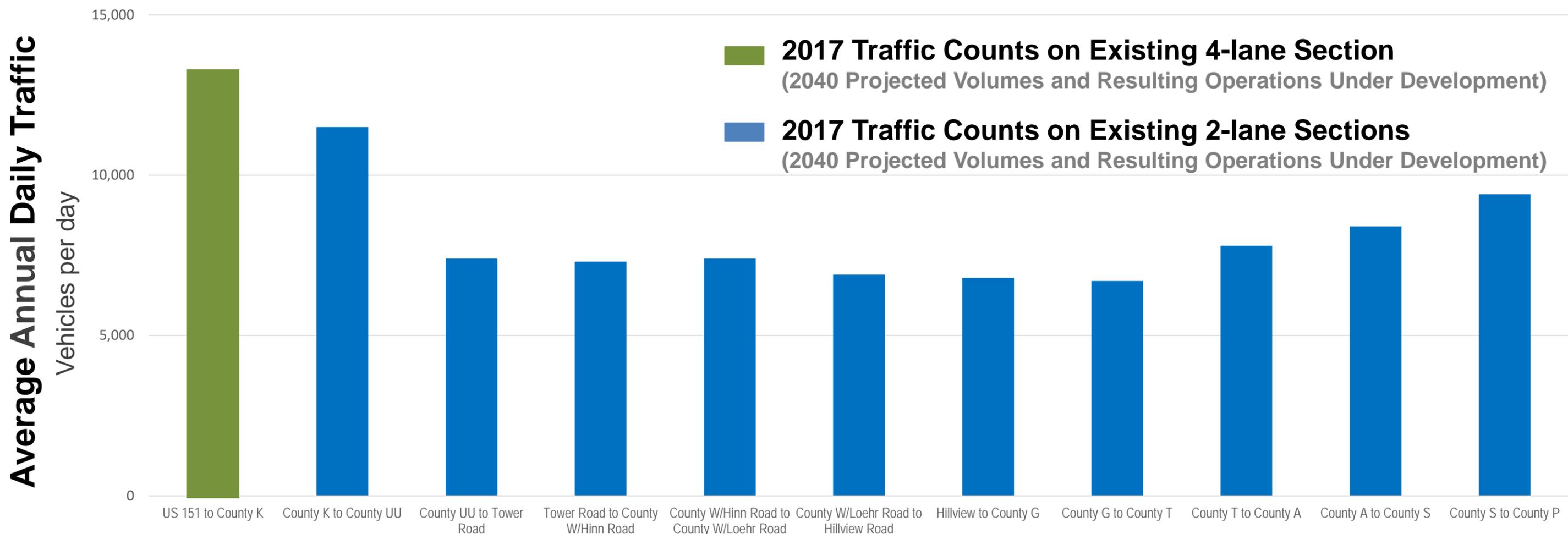
*Percent Time Spent Following

Adapted from graphic from Caltrans

<http://www.dot.ca.gov/ser/downloads/LOS/LOS%20for%20two%20lane%20highways.gif>

Need – Traffic and Resulting Operations

Provide sufficient capacity for existing and future traffic volumes and resulting operations.



WIS 23 Section

Need – Highway Geometric Characteristics

Roadway factors, such as shoulder widths, lateral clearances, and horizontal and vertical alignments, influence the capacity and safety of the road.



East of County UU, WIS 23 shoulder widths range from 3 to 8 feet. A 10-foot width is desirable to provide:

- Storage for disabled vehicles
- A recovery area for errant vehicles
- A space for crash avoidance



The clear zone, an unobstructed traversable roadside area, is less than standard width in some areas. A 30-foot minimum is desirable to:

- Provide a recovery area for vehicles to stop safely.
- Increase the likelihood a roadway departure results in a safe recovery rather than a crash.
- Mitigate severity of crashes that do occur.



The corridor has some horizontal and vertical features that influence the capacity of the roadway, such as steep grades.

Need– Access

- There is a direct relationship between access points (driveways, intersections) and crashes. As access points increase, so does the crash rate.
- There are 235 access points within the WIS 23 project limits, an average of 12 access points/mile.
- Vehicles entering and exiting WIS 23 at access points interrupt the flow of traffic.
- Drivers must adjust their travel speed to accommodate entering and exiting vehicles, and each access point creates potential for conflict and subsequent crashes.

Existing WIS 23 Access Summary

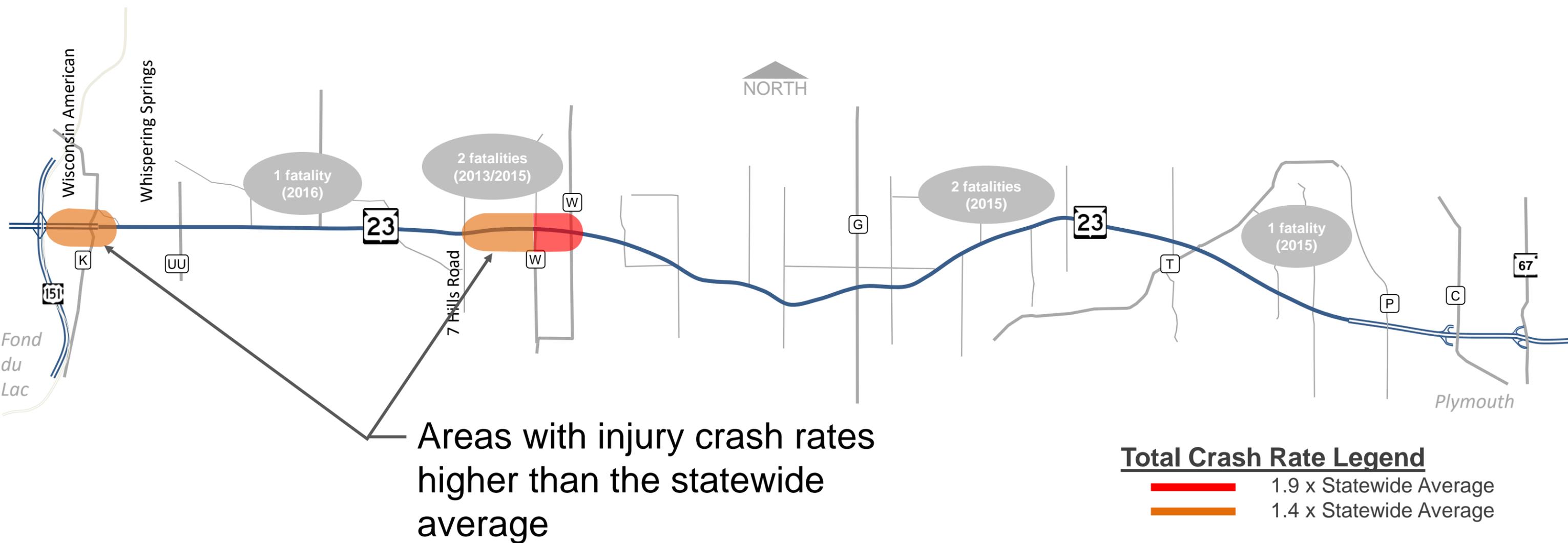
Access Type	No. of Access Points	WIS 23 Access Density (No. of access points per mile)	Mean Access Density for 2030 Connector Route
State Trunk Highway Intersections	0	0	--
County Trunk Highway Intersections	16	0.8	--
Local Roads and Street Intersections	51	2.7	--
Subtotal	67	3.5	2.9
Commercial, Residential Driveways	95	5	--
Field Entrances	73	3.8	--
TOTAL	235	12.3	--

WIS 23 access density is higher than other 2030 Connector Routes.

Need - Safety

Injury and Fatality Crash Rates

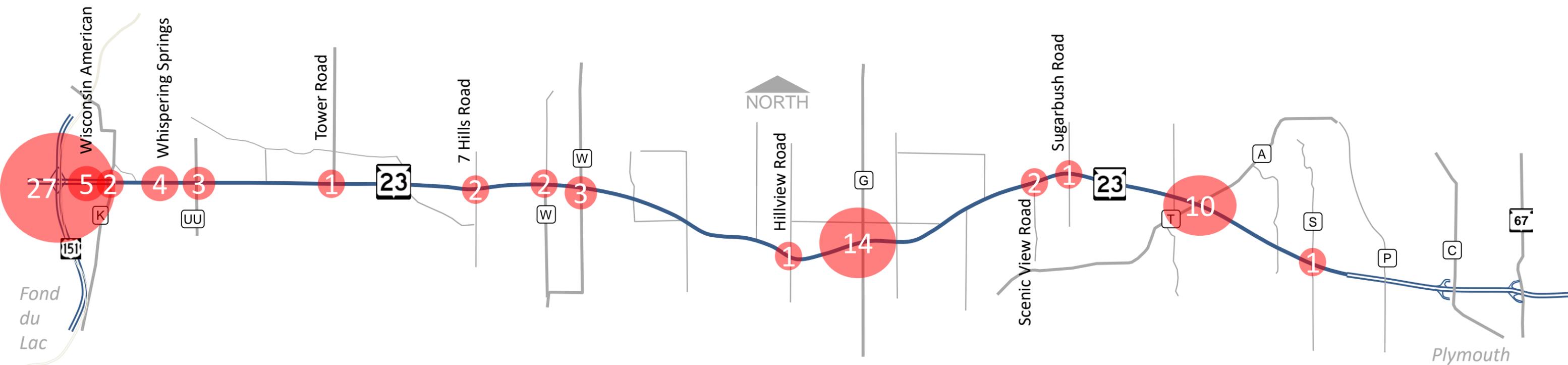
- 5 years of crash data (2012-2016) was analyzed by the study team.



Need - Safety

Intersection Crash Numbers

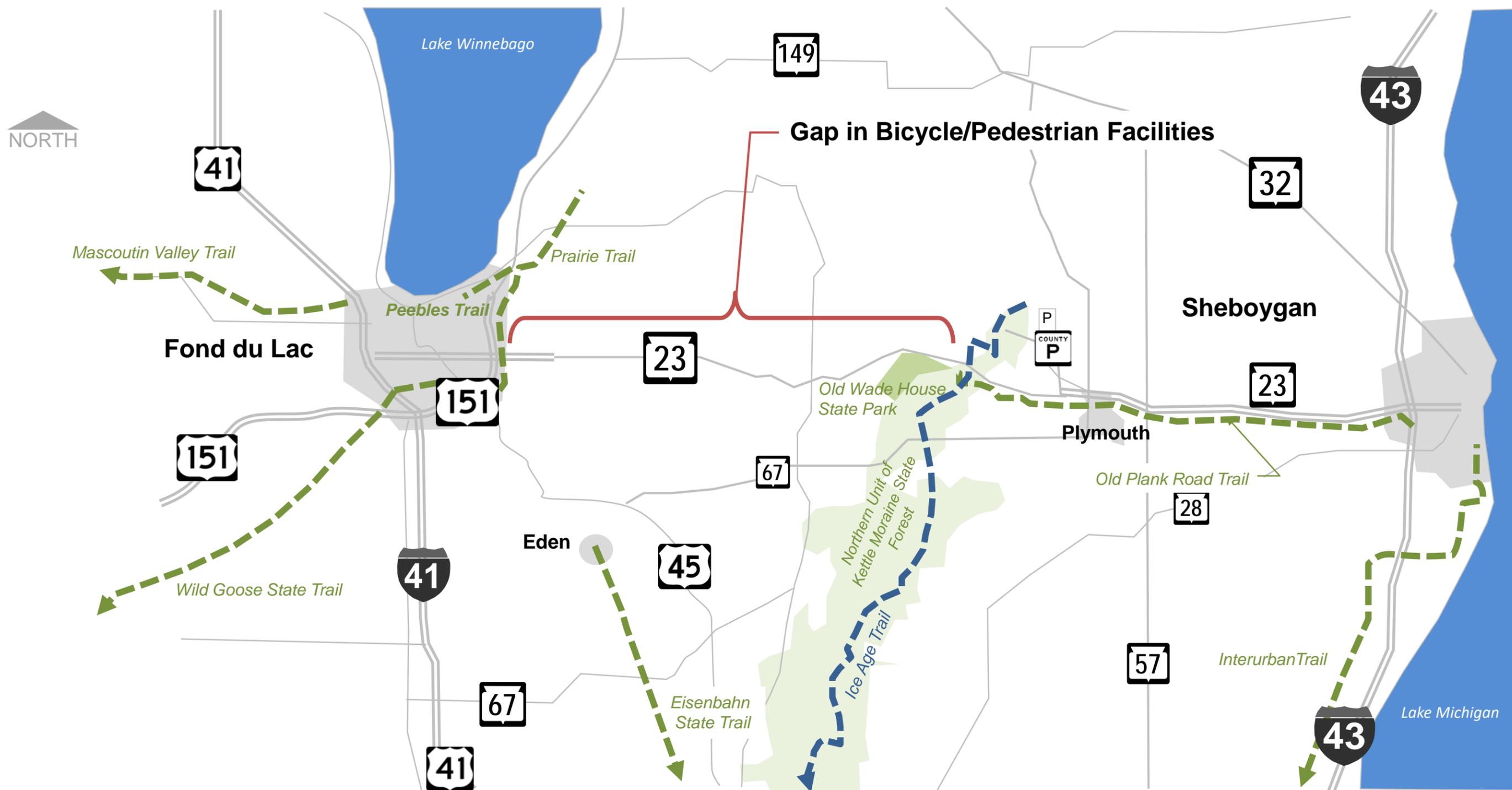
- 5 years of crash data (2012-2016) was analyzed by the study team.



Total Crashes Legend

Number of Crashes

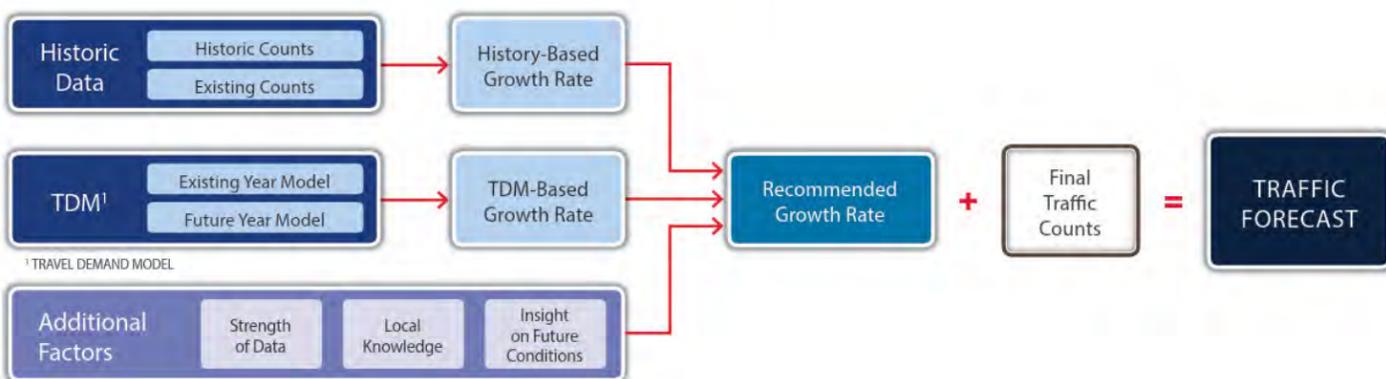
Need –Accommodate Non-motorized Travel



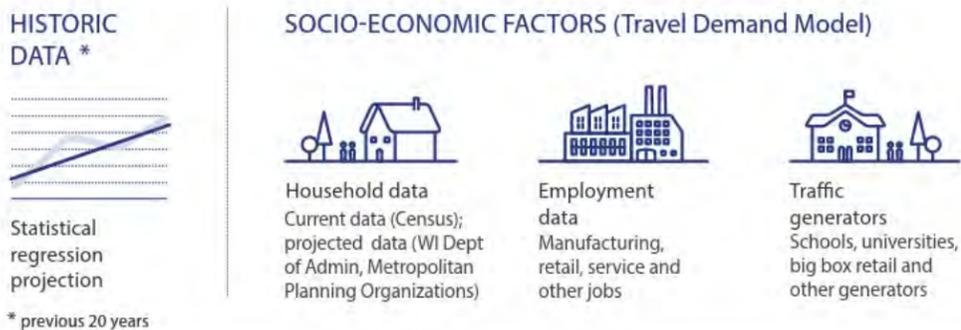
How WisDOT develops and uses traffic forecasts

Traffic forecasts are fundamentally important for planning and engineering any transportation project. Forecasts explain what the traffic needs of the future will more likely be and provide benchmarks for proper design and efficient transportation system operation. While each traffic forecast is unique to a specific project, all forecasts are built around WisDOT's standard forecasting process.

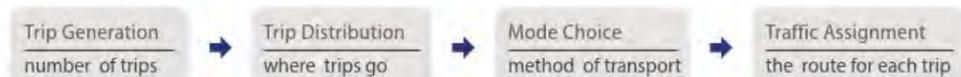
THE TRAFFIC FORECASTING PROCESS



WHAT GOES INTO THE FORECAST



FOUR-STEP MODEL PROCESS (Travel Demand Model)



ADDITIONAL FACTORS



EXPERTS AT EVERY STEP

FORECASTING DECISIONS
Forecasting experts incorporate the calculated results from the various available sources, including historical data and the Travel Demand Model (TDM). They then follow WisDOT's forecasting process to develop the final traffic forecast.

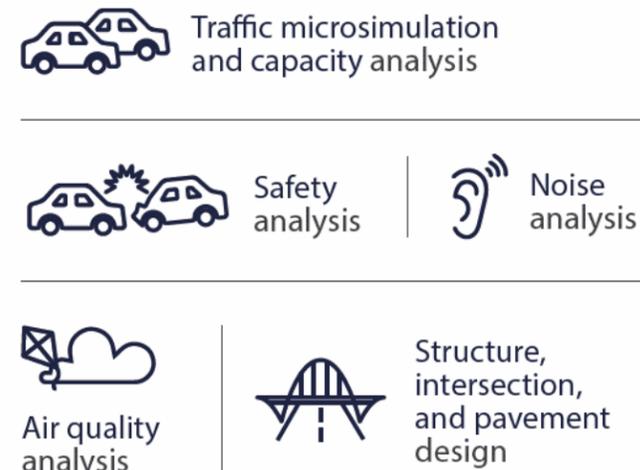
REFINING THE FORECAST
Transportation projects evolve during the planning and design phases, and traffic forecasts are subsequently refined periodically with updated data and detailed design aspects.

WHAT COMES OUT OF THE FORECAST



USING THE FORECAST

WisDOT uses the traffic forecast volumes for several study analyses:



For more information
WisDOT Transportation Planning Manual
wisconsindot.gov/Documents/projects/data-plan/plan-res/tpm/9.pdf
Jen Murray, WisDOT Program and Policy Chief 608-264-8722 Jennifer.murray@dot.wi.gov

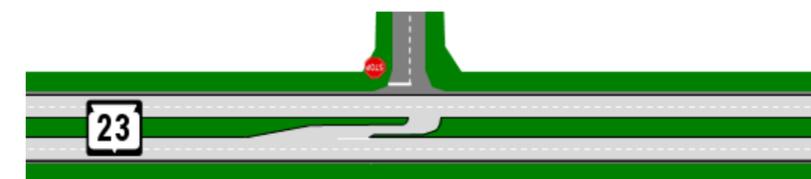
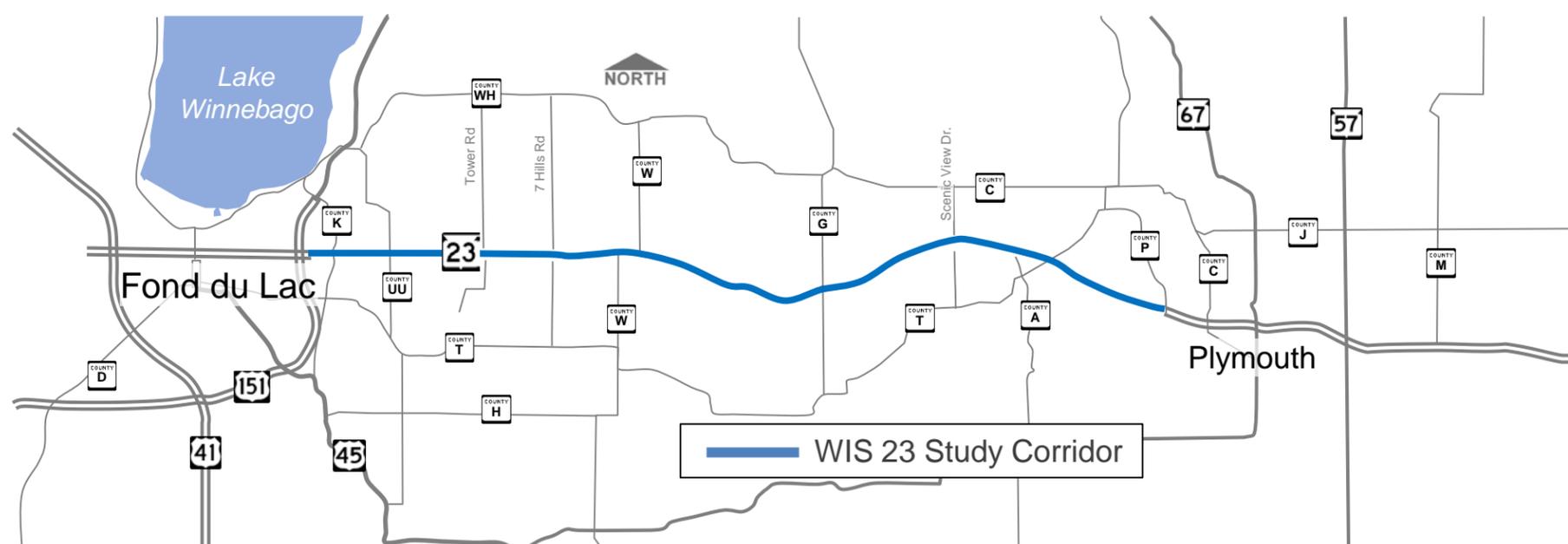
Alternatives reviewed in the 2014 LS SEIS

No Build	All build alternatives include the Old Plank Road Trail extension				Corridor Preservation associated with Build alternatives	
	Transportation System Management (TSM)	2-Lane Alternatives	4-Lane Alternatives	Hybrid Alternative	US 151/WIS 23 System Interchange	Corridor Preservation
<ul style="list-style-type: none"> The No-Build Alternative would not expand WIS 23 to provide additional roadway capacity. The No-Build Alternative does not make any improvements to the corridor except for routine roadway maintenance. 	<p>TSM consists of low-cost improvements to increase the traffic flow on the existing highway.</p> <p>Improved or innovative roadway designs</p> <ul style="list-style-type: none"> Transit assessments Improved signage or signal arrangement Targeted traffic enforcement Access management Incident response plans Intelligent transportation systems (ITS) 	<p>2-Lane Reconstruction</p> <p>This alternative would reconstruct the existing roadway and construct auxiliary turn lanes at intersections.</p>	<p>Alternative 1</p> <p>4-Lane Expansion On-Alignment</p> <p>This alternative uses as much of the existing roadway as possible by using it for one set of lanes.</p>	<ul style="list-style-type: none"> 4-lane divided highway from US 151 to County G. 2-lane roadway with passing lanes from County G to County P. 	<p>No Corridor Preservation</p> <p>Alternative does not preserve any right of way for anticipated future transportation improvements.</p>	<p>No Corridor Preservation</p> <p>Alternative does not preserve any right of way for anticipated future transportation improvements.</p>
		<p>Passing Lanes without Left Turn Lanes</p> <p>Adds 2 passing lanes for eastbound travel and 2 passing lanes for westbound travel in addition to the existing 2 climbing lanes west of County P in Sheboygan County.</p>	<p>Northern 4-Lane Roadway Alternatives</p> <p>Routes that would shift WIS 23 north to avoid the Kettle Moraine State Forest.</p>		<p>Option 23-1</p> <p>System Ramps in the Southeast Quadrant</p>	<p>Corridor Preservation</p> <p>Will preserve right of way needed to remove access from WIS 23 or improve the access type.</p>
		<p>Passing Lane with Left Turn Lanes</p> <p>Left-turn lanes at 9 intersections.</p> <p>Adding the left-turn refuge requires a median, which decreases the amount of roadway that is available for passing.</p>	<p>Alternatives 2 – 6</p> <p>4-Lane expansion south and north of WIS 23 (various alignments)</p>		<p>Option 23-2</p> <p>System ramps over existing US 51/ WIS 23 Interchange</p>	

Are there other alternatives that should be considered?

Alternatives reviewed in 2014 LS SEIS – No Build and TSM

- The No-Build Alternative does not make any improvements to the corridor except for routine roadway maintenance.
- Transportation System Management (TSM) consists of low-costs improvements to increase the efficiency of a roadway. Examples of TSM actions include innovative roadway designs, transit assessments, improved signals, access management, incident response plans, and intelligent transportation systems (ITS).



Examples of TSM include access management, like this intersection which restricts left turns out of a side road.

Alternatives reviewed in 2014 LS SEIS – 2-Lane

2-Lane Reconstruction

This alternative would reconstruct the existing roadway and construct auxiliary turn lanes at intersections.

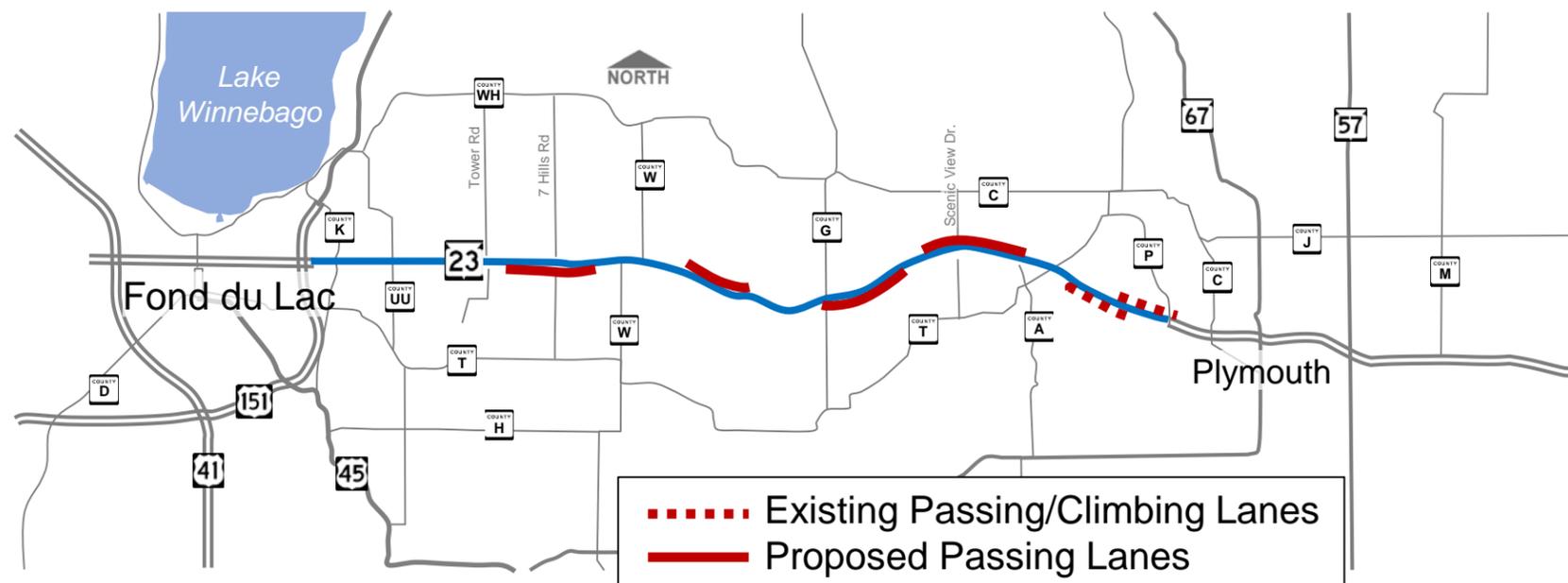
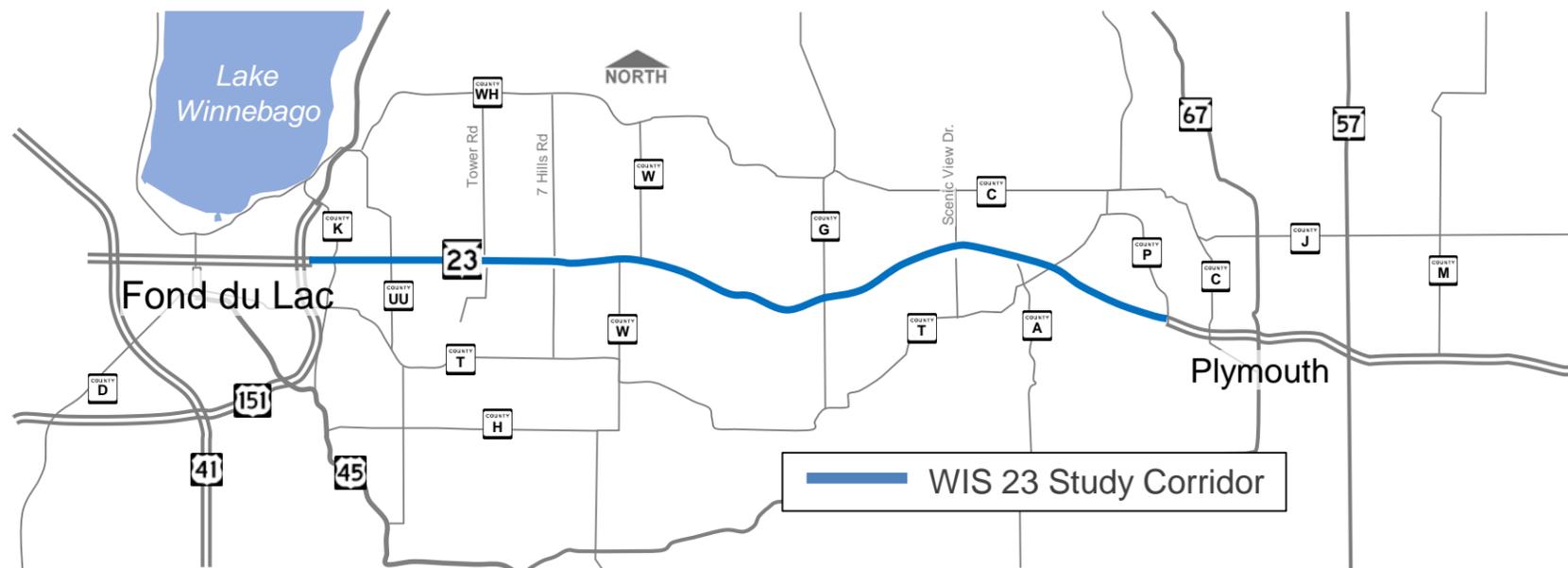
Passing Lanes without Left Turn Lanes

Adds 2 passing lanes for eastbound travel and 2 passing lanes for westbound travel in addition to the existing 2 climbing lanes west of County P in Sheboygan County.

Passing Lane with Left Turn Lanes

Installs left-turn lanes at Tower Road, 7 Hills Road, County W south, County W north, County G, County U, County T, County A, and County S.

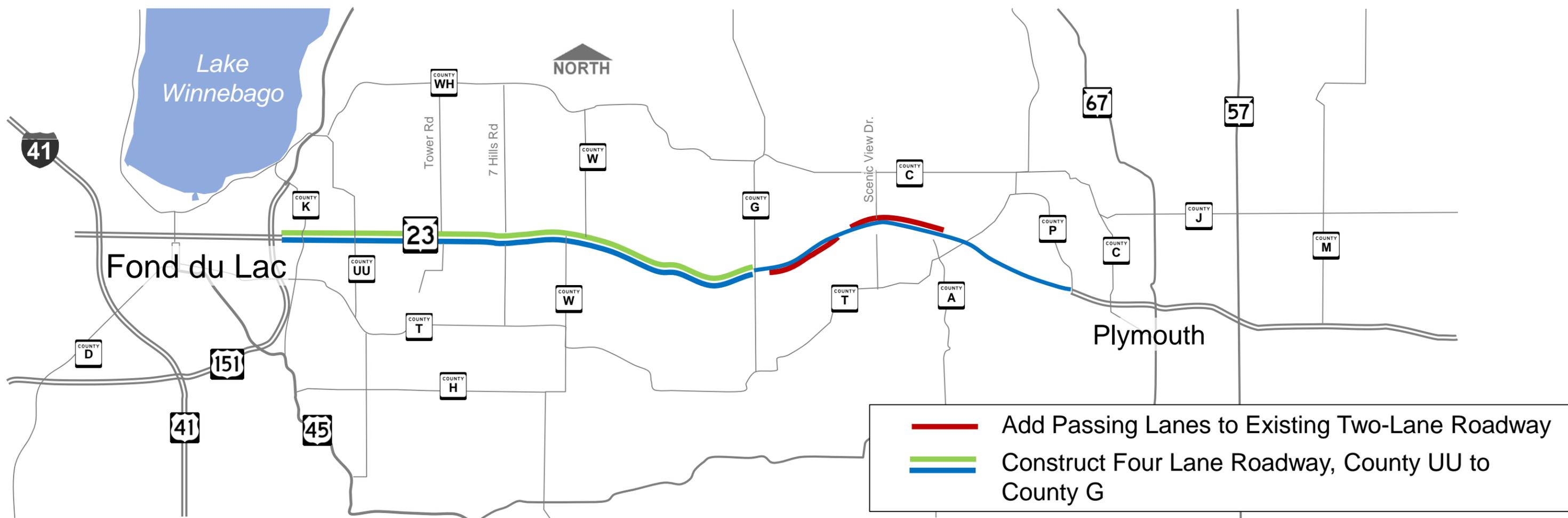
Adding the left-turn refuge requires the development of a median, which decreases the amount of roadway that is available for passing.



Alternatives include Old Plank Road Trail extension from Fond du Lac to Sheboygan



Alternatives reviewed in 2014 LS SEIS – Hybrid



Alternative includes Old Plank Road Trail extension from Fond du Lac to Sheboygan

Alternatives reviewed in 2014 LS SEIS – 4-Lane

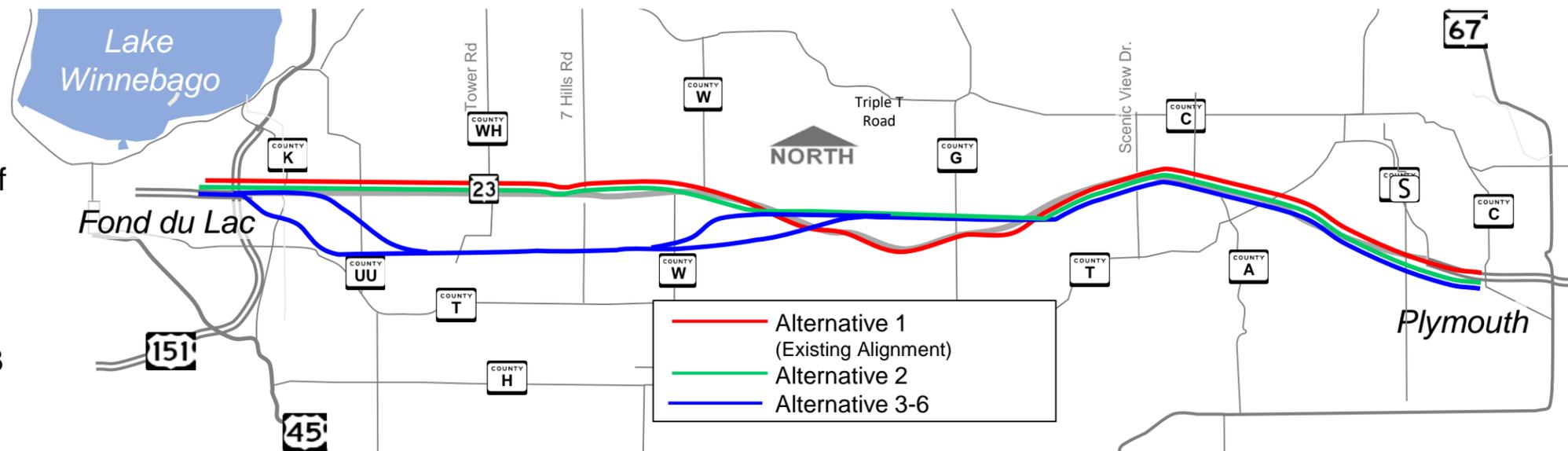
Alternative 1

4-Lane Expansion On-Alignment

This alternative uses as much of the existing roadway as possible by using it for one set of lanes.

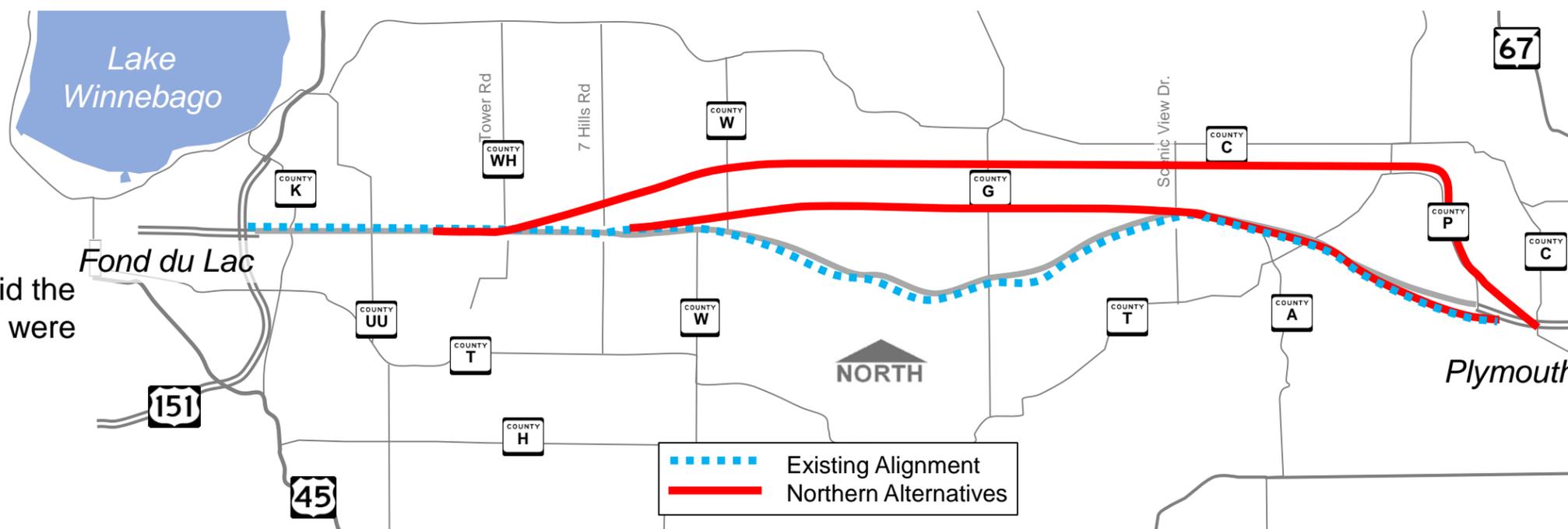
Alternatives 2 – 6

4-Lane expansion south and north of WIS 23 (various alignments)



Northern 4-Lane Roadway Alternatives

Routes that would shift WIS 23 north to avoid the Kettle Moraine State Forest. These options were dismissed early in the process



Alternatives include Old Plank Road Trail extension from Fond du Lac to Sheboygan



Alternatives reviewed in 2014 LS SEIS

US 151/WIS 23 System Interchange Corridor Preservation

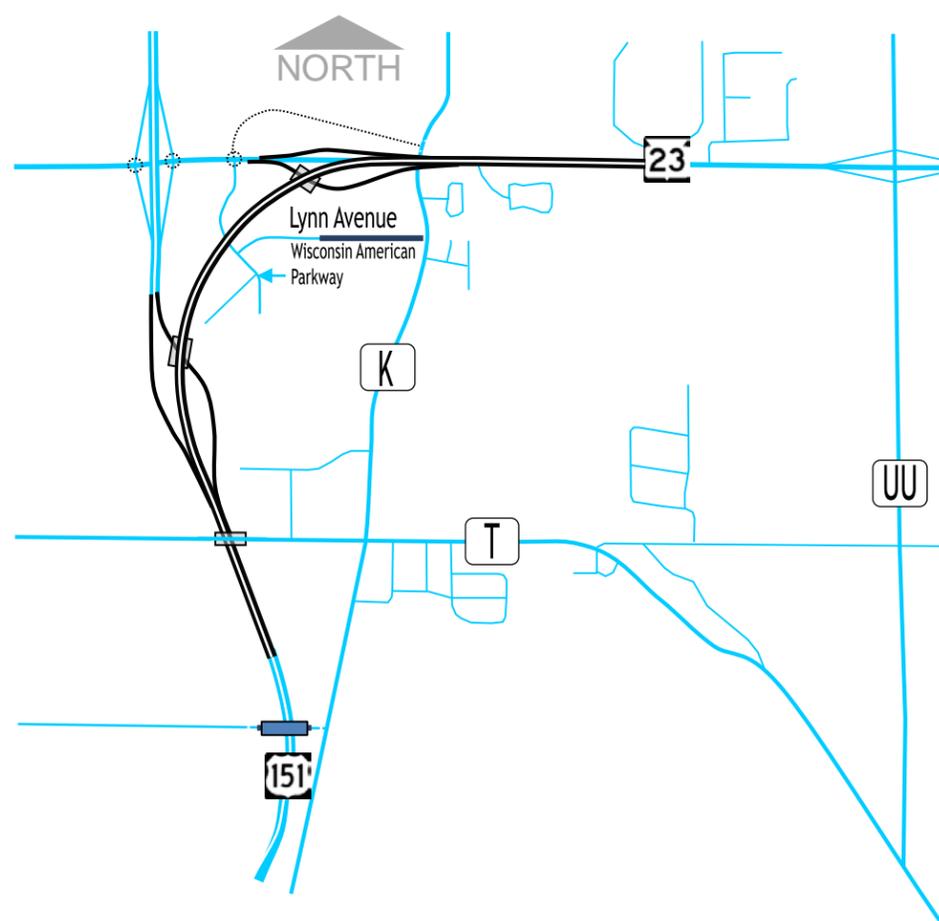
A system interchange provides freeflowing movements, where the system travel movement does not stop at a ramp terminal with a signal or stop sign. The 2014 LS SEIS evaluated system interchanges for the US 151/WIS 23 interchange in order to preserve right of way for future construction.

No Corridor Preservation

Alternative does not preserve any right of way for anticipated future transportation improvements.

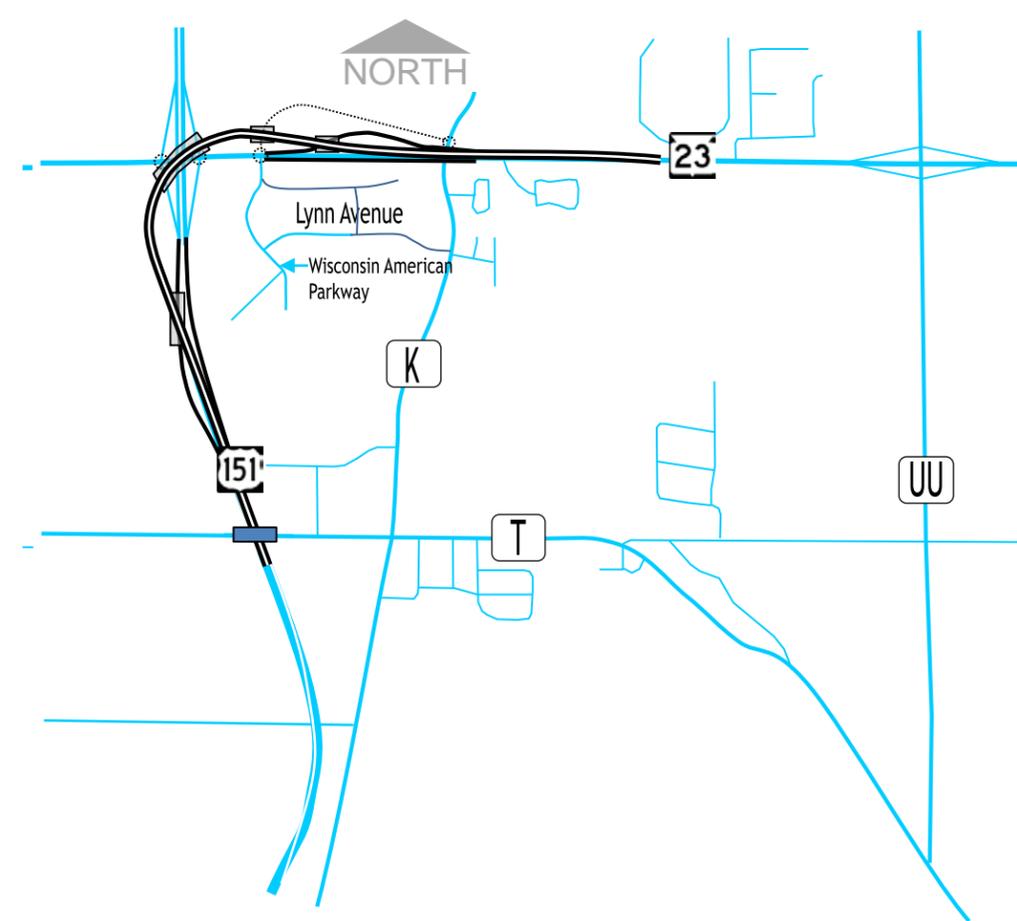
Option 23-1

System Ramps in the Southeast Quadrant



Option 23-2

System Ramps over Existing US 151/WIS 23 Interchange



Alternatives reviewed in 2014 LS SEIS

Freeway conversion corridor preservation

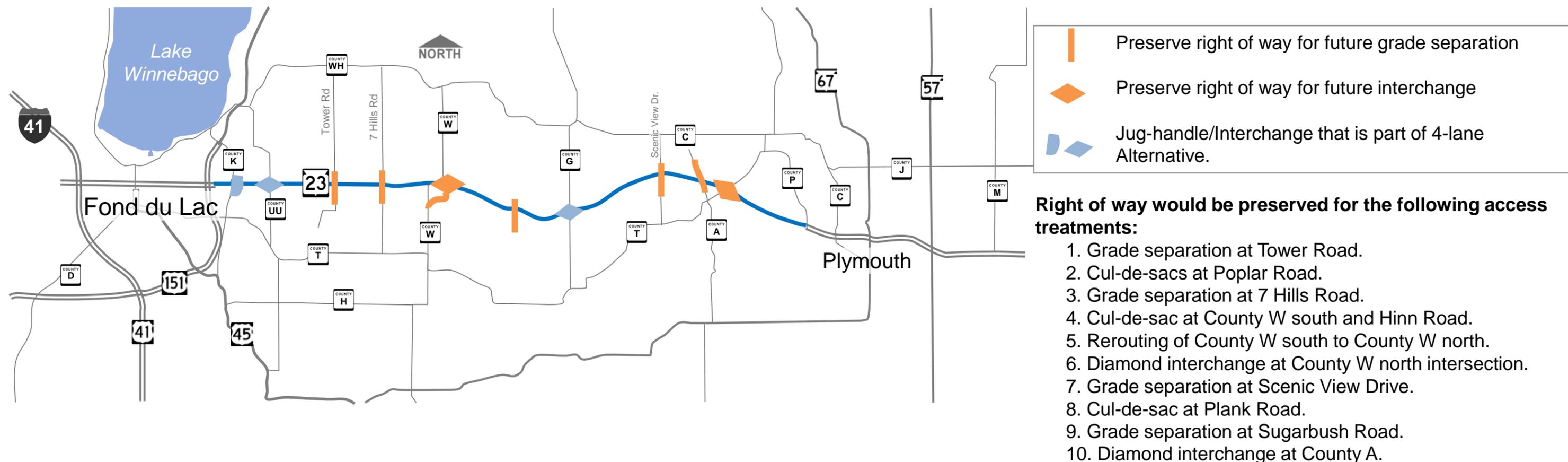
Corridor preservation uses official mapping to preserve right of way that would be needed for future improvements. The 2014 LS SEIS evaluated the corridor preservation needed to convert WIS 23 to a freeway at some point in the future.

No Corridor Preservation

Alternative does not preserve any right of way for anticipated future transportation improvements.

Corridor Preservation

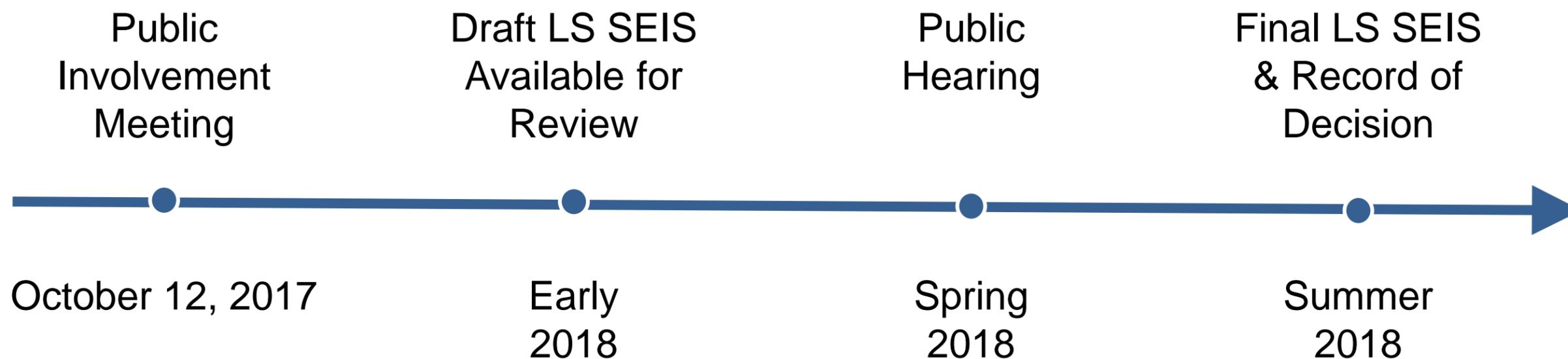
Will preserve right of way needed to construct a 4-lane roadway (if not already constructed) and improve or remove access from WIS 23.



Alternatives reviewed in 2014 LS SEIS Old Plank Road Trail Extension



Proposed Schedule



How Can I Provide Comments?

WisDOT welcomes your comments with three ways to provide them:

1. Use the Comment Sheet provided for written comments and place it in the comment box before you leave the meeting tonight.
2. Mail your written comments with prepaid mailer after tonight's meeting to:

Bryan Lipke - Project Manager
WisDOT Northeast Region Office
944 Vanderperren Way
Green Bay, WI 54304
3. Email your comments after tonight's meeting to: Bryan.Lipke@dot.wi.gov