

I-90/94 Corridor Study

Wisconsin Dells – Portage

US 12/WIS 16 (North of Wisconsin Dells) to I-39
Juneau, Sauk and Columbia Counties
WisDOT ID 1014-10-00

Public Involvement Meeting #1
September 29, 2014
Wisconsin Dells High School



MEETING OUTLINE

- Introductions
- Project Description & Status
- Study Purpose and Need - Draft Findings
- Public Involvement Plan Summary
- Q & A



STUDY TEAM INTRODUCTIONS

■ WisDOT Staff

- Mike Hoelker – Major Studies Chief
- Brandon Lamers – Major Studies Supervisor
- Mark Westerveld – Project Manager
- Franklin Marcos – Project Planner

■ Consultant Staff

- Rusty Chesmore – Project Manager/Mead & Hunt



PROJECT LIMITS



- US 12/WIS 16 (North of Wisconsin Dells) to I-39, Juneau, Sauk and Columbia Counties
- Approximately 25 miles with 6 Interchanges and 13 grade separations



PROJECT SCOPE

- **Study Only**
 - No immediate construction planned
 - No funding allocations beyond the study phases
 - Transportation Project Commission determines future project funding eligibility
- **Purpose**

Analyze existing conditions, project future conditions and recommend possible improvements in order to provide for safe and efficient travel, serve existing and future traffic demand and support the local and regional economy, while avoiding and minimizing impacts to the natural, cultural, and built environment
- **Includes completion of an Environmental Impact Statement (EIS) as part of the Record of Decision (ROD)**



I-90/94 ROUTE IMPORTANCE

- Infrastructure
 - Part of the Wisconsin Backbone System and National Highway System
- Tourism
 - Serves one of the top tourist destinations in the State
 - Sauk County ranked 3rd highest among 72 counties in 2013 visitor spending
- Commerce
 - Primary long-haul truck route and regional vehicle corridor through Wisconsin
 - Traffic volumes during a summer weekday in 2013 were approx. 34% trucks
- Military
 - Route to Volk Field Air National Guard base at Camp Douglas and Fort McCoy Army Base
- Emergency Management
- Community Development



GENERAL STUDY PROCESS

- **Existing Conditions Analysis** (Summer 2013 – Winter 2014)
 - Public Involvement Meeting #1 (September 29, 2014)

- **Development of Alternatives** (Spring - Fall 2015)
 - Public Involvement Meeting #2 (Summer 2015)

- **Draft Environmental Impact Statement Preparation** (Summer 2015 – Fall 2016)
 - Public Hearing (Fall 2016)

Note this schedule may adjust as the project continues



GENERAL STUDY PROCESS, *Cont.*

- **Select Preferred Alternative** (Fall 2016 – Spring 2017)
 - Public Involvement Meeting #3 (Spring 2017)
- **Analysis of Preferred Alternative** (Spring - Fall 2017)
- **Final Environmental Impact Statement Preparation** (Winter 2017-2018)
- **Record of Decision** (Fall 2018)

Note this schedule may adjust as the project continues



EXISTING CONDITIONS ANALYSIS



STUDY PURPOSE AND NEED – DRAFT FINDINGS

- Corridor Conditions
 - Construction & Pavement Maintenance Summary
 - Roadway Geometric Deficiencies
 - Median width, shoulder width, superelevations, clear zones, vertical alignment, horizontal alignment, ramp configurations
 - Interchange Deficiencies
 - Bridge Deficiencies
 - Crashes
 - Traffic Operations
 - Population Projections
 - Level of Service



CONSTRUCTION & PAVEMENT MAINTENANCE SUMMARY

- Initial Construction
 - 1960-1975, 4 lane construction from Wisconsin River Bridge to US 12 / WIS 16

- Reconstruction
 - 1983-84, 6 lane construction from Wisconsin River Bridge to WIS 33
 - 1990-1992, WIS 33 to US 12 / WIS 16
 - 1993-1995, WIS 78 and I-39 Interchange
 - 2003-2004, Baraboo River Bridge

- Pavement Maintenance
 - Numerous concrete pavement repair projects in recent years to address transverse joint break-up and concrete pavement distress



CORRIDOR DEFICIENCIES – North Segment

SOO LINE RAILROAD

- Substandard bridge width

Town of Dell Prairie

WIS 12/16 INTERCHANGE

- Substandard ramp design
- Substandard bridge width

Town of Lyndon

JUNEAU COUNTY
SAUK COUNTY

WIS 13 INTERCHANGE

- Substandard ramp design
 - EB off meets standards
- Substandard bridge width
- Substandard bridge clearance

City of Wisconsin Dells

WIS 23 INTERCHANGE

- Substandard ramp design
- Substandard bridge width

Village of Lake Delton

ISHNALA ROAD

- Substandard bridge width

Town of Delton

190/94 MAINLINE

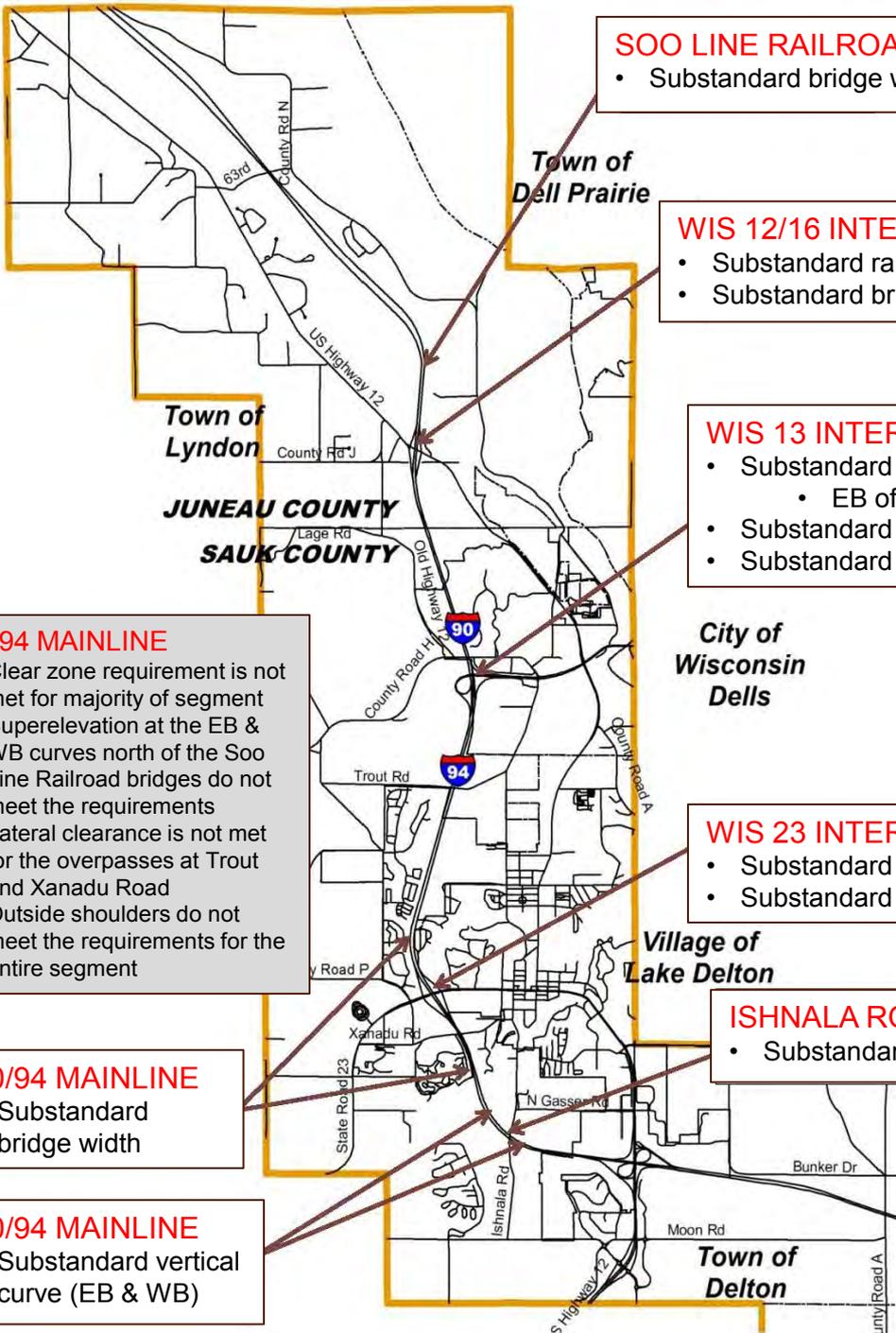
- Clear zone requirement is not met for majority of segment
- Superelevation at the EB & WB curves north of the Soo Line Railroad bridges do not meet the requirements
- Lateral clearance is not met for the overpasses at Trout and Xanadu Road
- Outside shoulders do not meet the requirements for the entire segment

190/94 MAINLINE

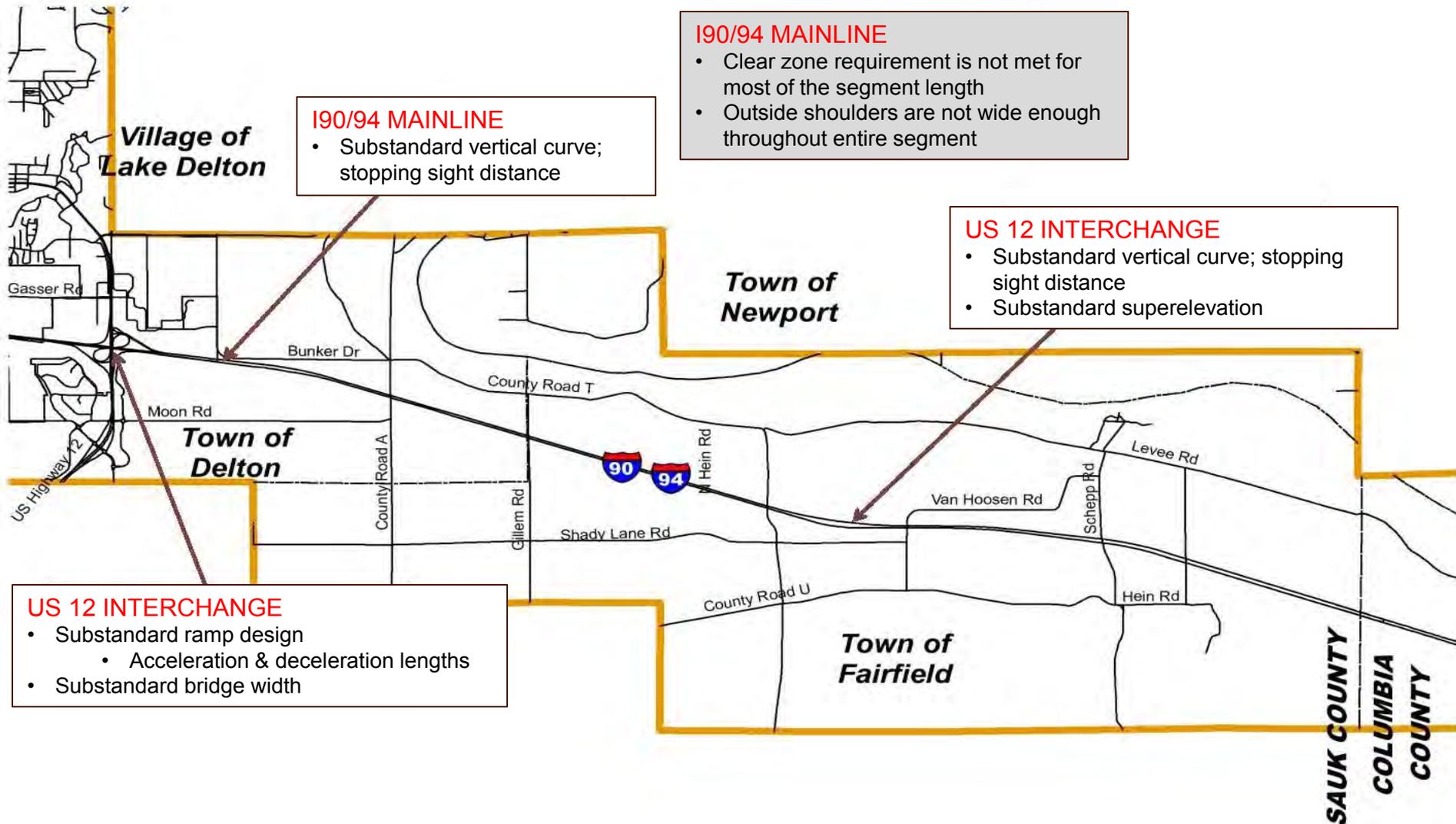
- Substandard bridge width

190/94 MAINLINE

- Substandard vertical curve (EB & WB)



CORRIDOR DEFICIENCIES – Central Segment



CORRIDOR DEFICIENCIES – South Segment

I90/94 MAINLINE

- Substandard vertical curve; stopping sight distance

Town of Lewiston

WIS 33 INTERCHANGE

- Substandard ramp design
 - Acceleration & deceleration lengths

I90/94 MAINLINE

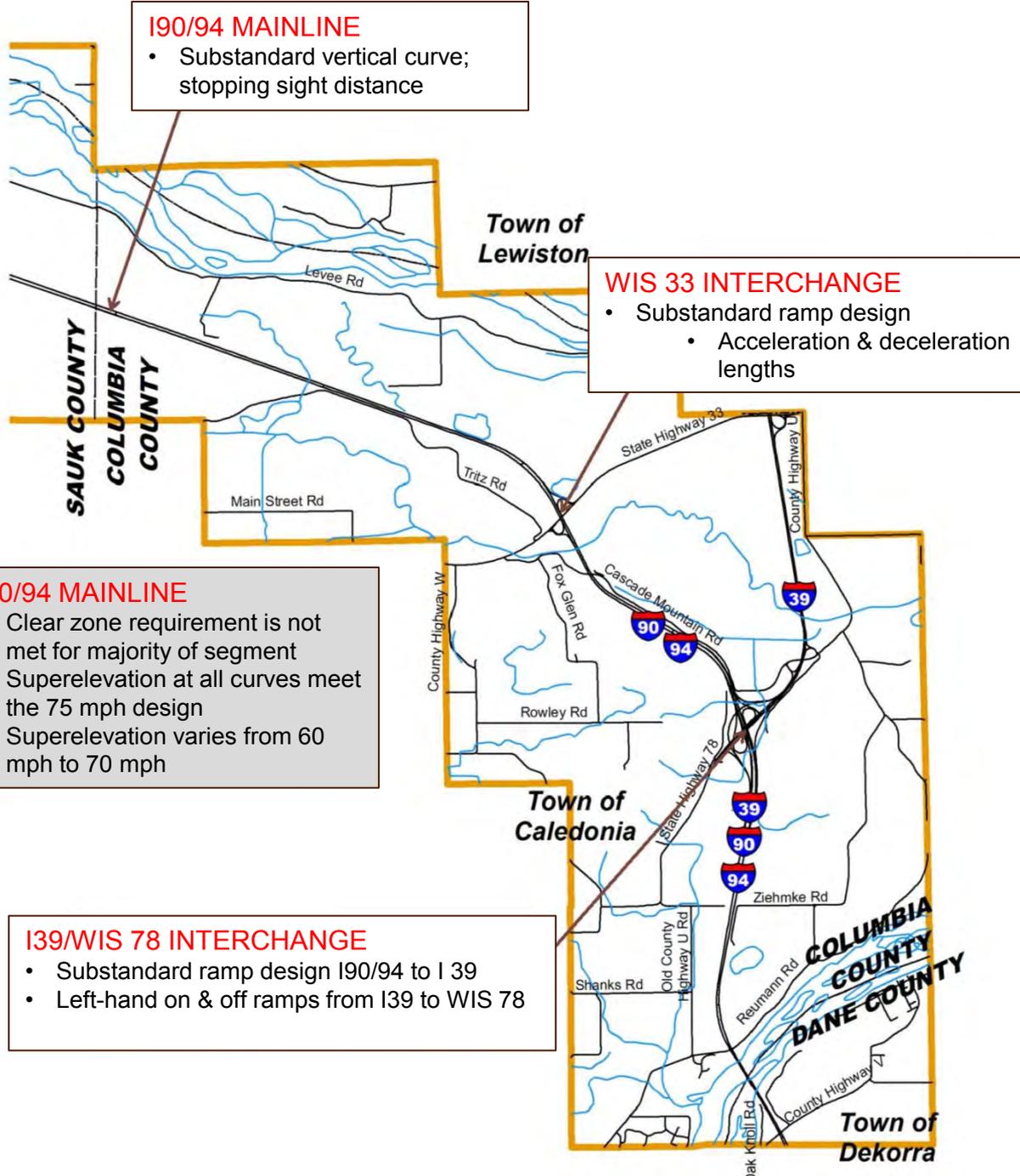
- Clear zone requirement is not met for majority of segment
- Superelevation at all curves meet the 75 mph design
- Superelevation varies from 60 mph to 70 mph

Town of Caledonia

I39/WIS 78 INTERCHANGE

- Substandard ramp design I90/94 to I 39
- Left-hand on & off ramps from I39 to WIS 78

Town of Dekorra



CORRIDOR CRASHES BY MANNER OF COLLISION, 2008-2012

USH 12 / STH 16 to STH 13

	Eastbound	Westbound
NO C	24	31
SSS	11	6
REAR	4	6
HEAD	0	1
ANGLE	1	0
SSOP	0	0
TOTAL	40	44

STH 13 to STH 23

	Eastbound	Westbound
NO C	39	23
SSS	11	6
REAR	17	11
HEAD	1	0
ANGLE	4	0
SSOP	1	0
TOTAL	73	40

STH 23 to USH 12

	Eastbound	Westbound
NO C	38	27
SSS	9	12
REAR	30	10
HEAD	2	1
ANGLE	2	3
SSOP	0	0
TOTAL	81	53

USH 12 to STH 33

	Eastbound	Westbound
NO C	79	105
SSS	26	29
REAR	48	38
HEAD	1	4
ANGLE	2	16
SSOP	2	2
TOTAL	158	194

USH 33 to I-39 / STH 78

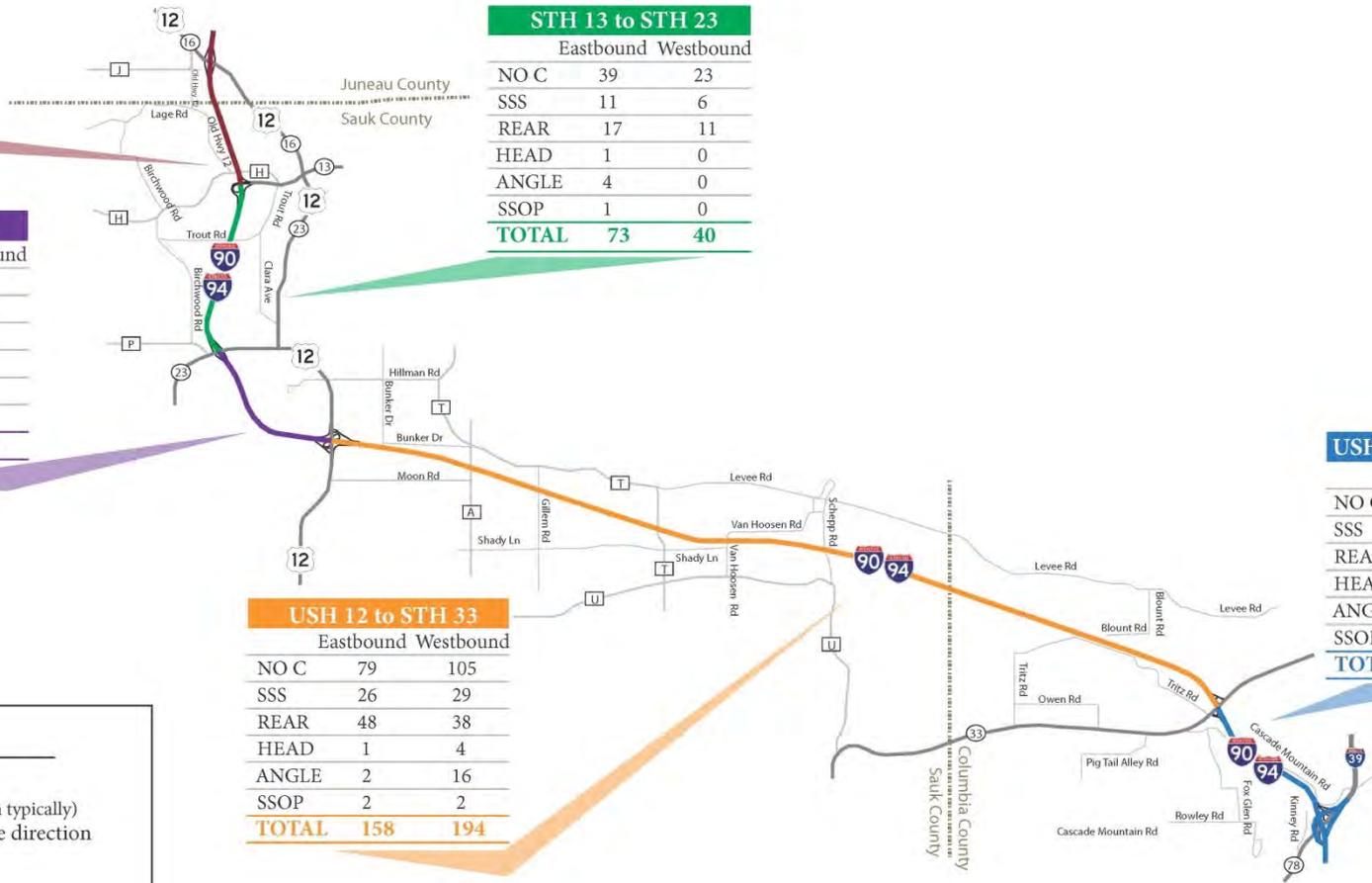
	Eastbound	Westbound
NO C	44	46
SSS	13	14
REAR	8	12
HEAD	1	0
ANGLE	6	2
SSOP	1	0
TOTAL	73	74

LEGEND

- NO C No Collision
(single vehicle crash typically)
- SSS Side swipe - same direction
- REAR Rear-end
- HEAD Head-on
- ANGLE Angle
- SSOP Side swipe - opposite direction



map not to scale



CORRIDOR CRASH RATES PER 100 MILLION VEHICLE MILES, 2008-2012



LEGEND

Statewide Rural Freeway Average Crash Rate - 37

Crash Rate (Crashes per 100 million vehicle miles traveled)

Percent of Statewide Rural Freeway Average Crash Rate

0 - 25	0 - 70%
26 - 37	71 - 100%
38 - 55	101 - 150%
56 +	150% +



map not to scale

EXISTING AND FUTURE DAILY TRAFFIC

Freeway Segment	2012 Traffic (vpd)	2050 Traffic (vpd)	2012-2050 Traffic Growth (percent)	2012-2050 Annual Growth Rate (percent)
I-39/90/94 at the Wisconsin River	50,600	75,700	50	1.31
I-90/94				
South of WIS 33	34,500	53,100	54	1.42
WIS 33 – US 12	35,800	51,700	44	1.17
US 12 – WIS 23	31,200	47,200	51	1.35
WIS 23 – WIS 13	35,600	52,000	46	1.21
WIS 13 – US 12/ WIS 16	34,000	51,300	51	1.34
North of US 12/ WIS 16	32,000	50,600	58	1.53



EXISTING AND FUTURE POPULATIONS

Community	2010 Population	2040 Population Projection	Growth Percentage	Annual Growth
Juneau	26,664	29,465	10.5%	0.4%
Sauk	61,976	77,815	25.6%	0.9%
Columbia	56,833	68,450	20.4%	0.7%
City of Mauston				
City of Mauston	4,423	5,310	20.1%	0.7%
Village of Lyndon Station				
Village of Lyndon Station	500	525	5.0%	0.2%
City of Wisconsin Dells				
City of Wisconsin Dells	2,678	3,055	14.1%	0.5%
Village of Lake Delton				
Village of Lake Delton	2,914	4,320	48.3%	1.6%
City of Baraboo/Village of West Baraboo				
City of Baraboo/Village of West Baraboo	12,462	16,215	30.1%	1.0%
City of Portage				
City of Portage	10,324	11,680	13.1%	0.4%

Source: US Census & WI DOA



LEVEL OF SERVICE

- What is it and why is it important?
 - A through F



Level of Service A (free flow operations)



Level of Service B



Level of Service C



Level of Service D



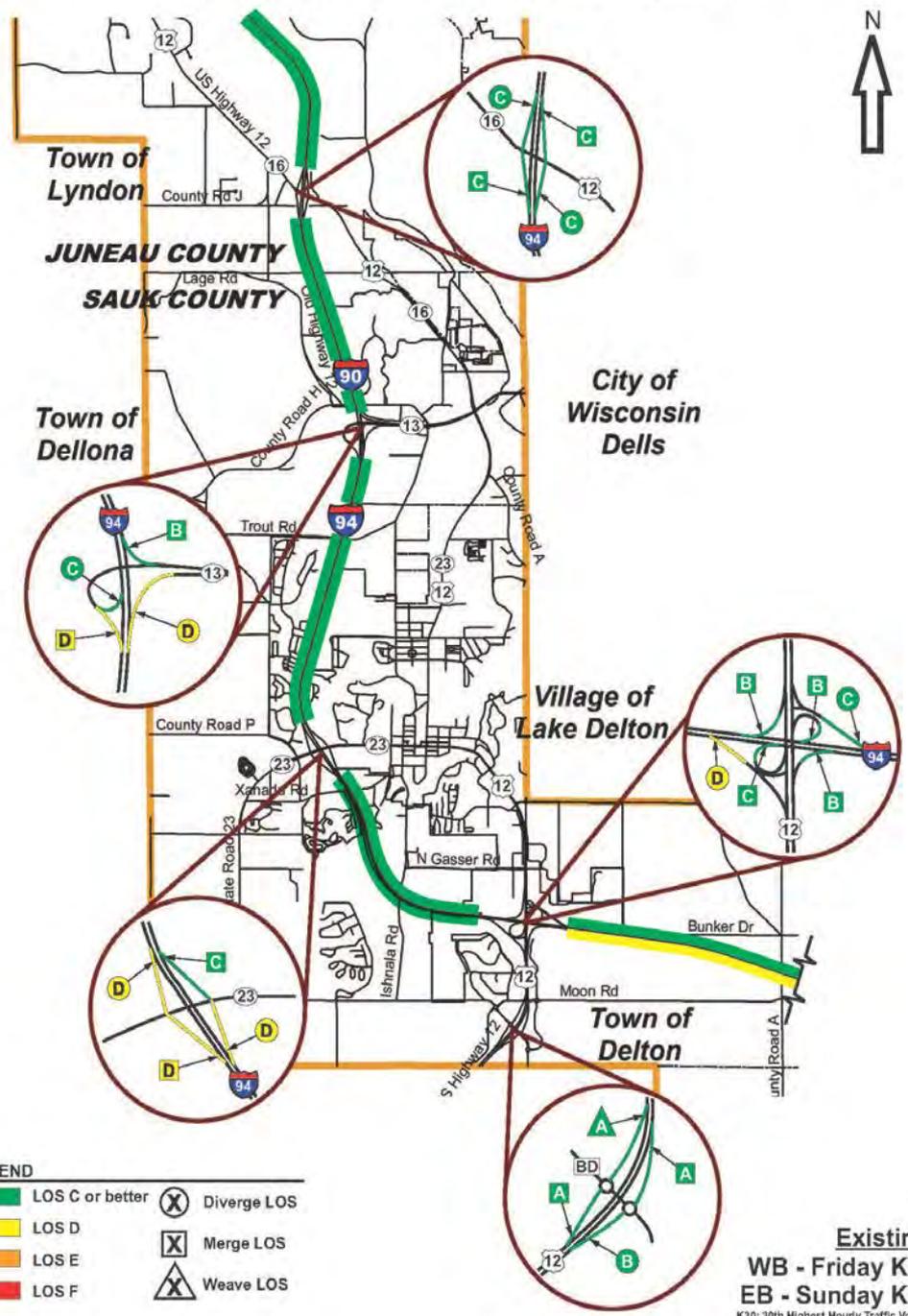
Level of Service E



Level of Service F (breakdown or unstable flow)



Figure X: I-90/94 Level of Service - Existing K30 - (North Segment)



EXISTING LOS— Juneau and Sauk County

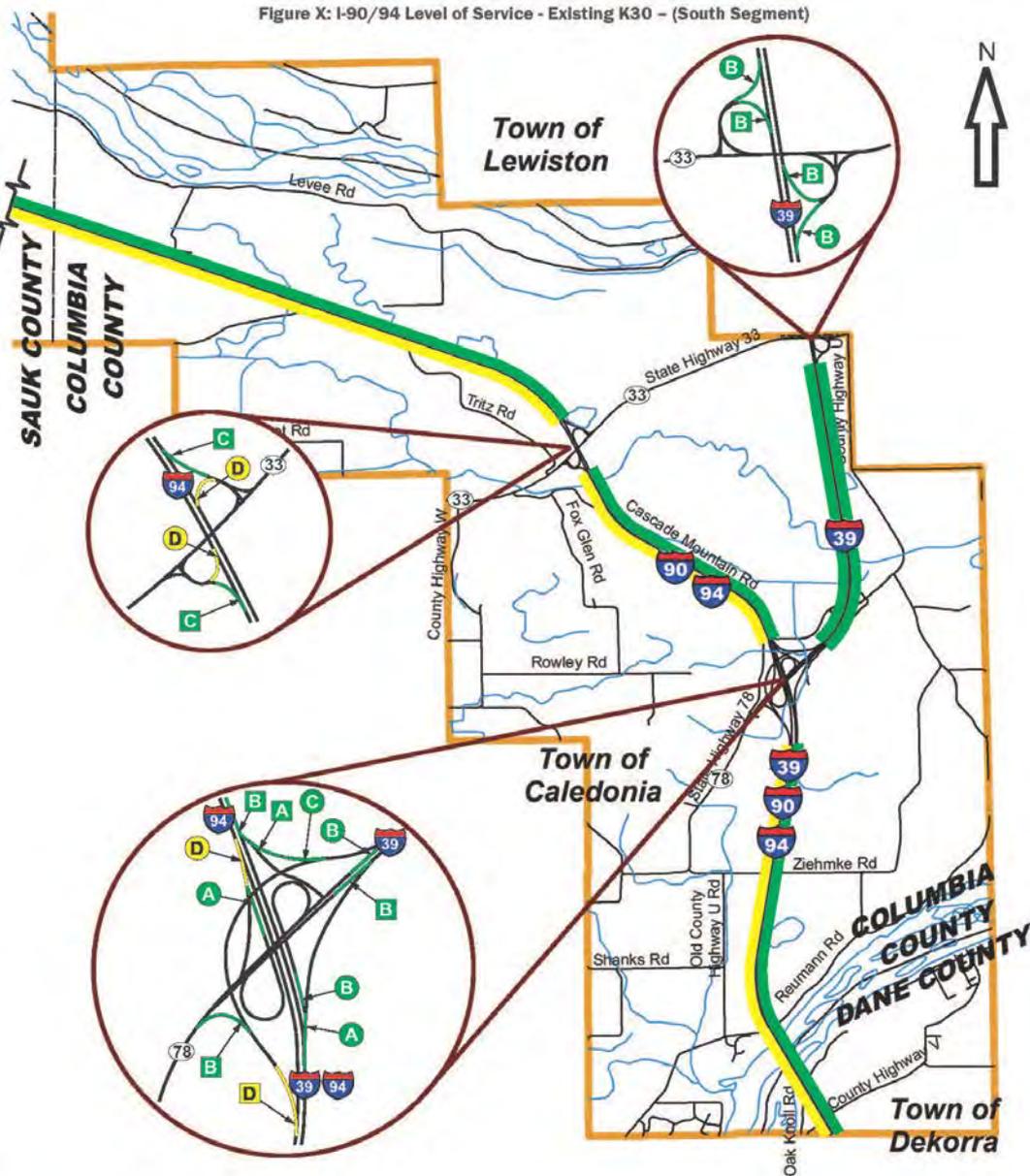
- K30 =
 - Design Hour Volume (DHV)
 - 30th highest hour of the year

- Future improvements are based on the traffic analysis of the DHV
 - DHV for I-90/94 WB Summer Fridays at 3-4pm
 - DHV for I-90/94 EB Summer Sundays at 2-3pm

Existing
WB - Friday K30
EB - Sunday K30
K30: 30th Highest Hourly Traffic Volume
Map not to scale

Figure X: I-90/94 Level of Service - Existing K30 - (South Segment)

EXISTING LOS- Columbia County



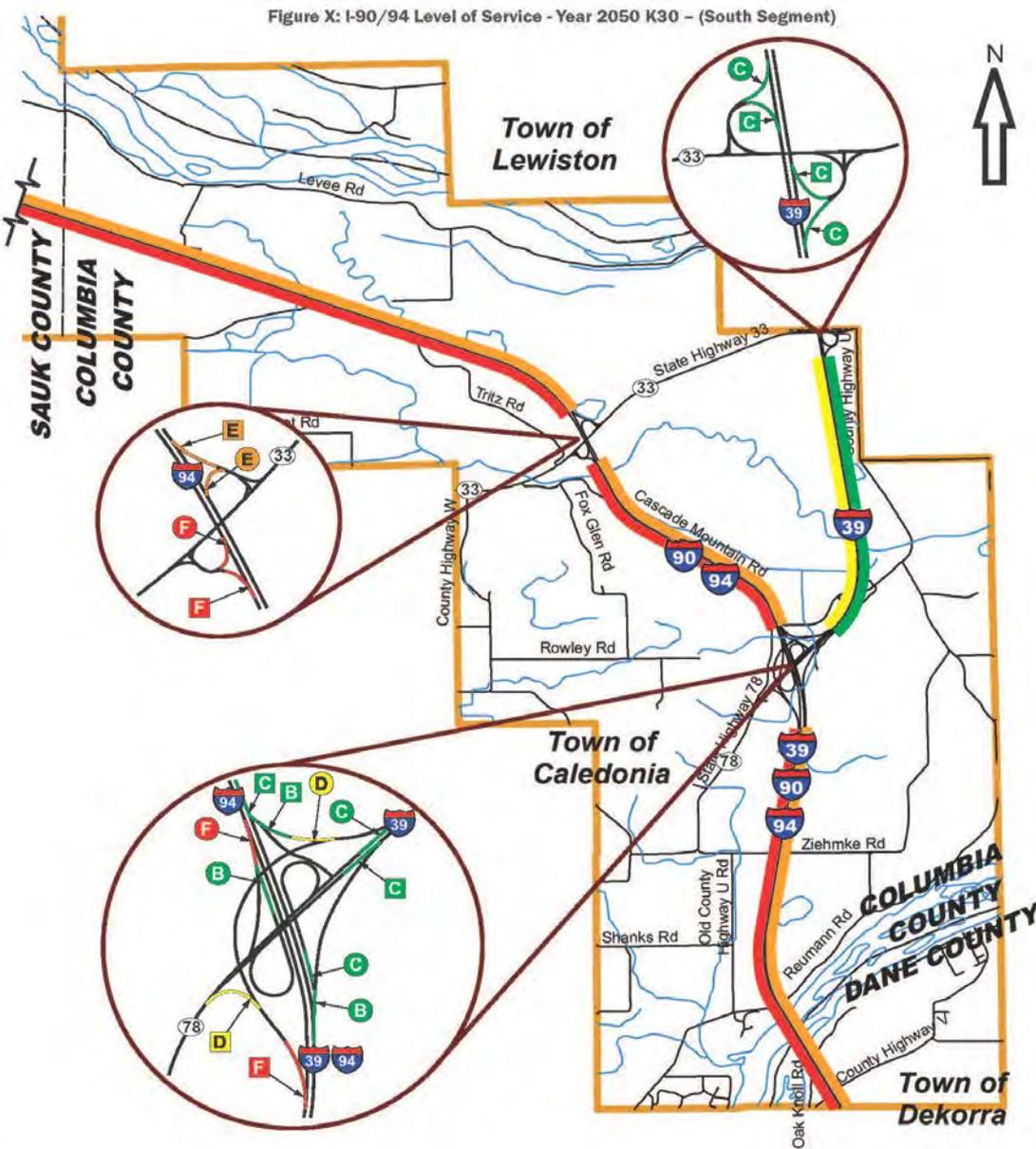
LEGEND

 LOS C or better	 Diverge LOS
 LOS D	 Merge LOS
 LOS E	 Weave LOS
 LOS F	

Existing
 WB - Friday K30
 EB - Sunday K30
K30: 30th Highest Hourly Traffic Volume
 Map not to scale

Figure X: I-90/94 Level of Service - Year 2050 K30 - (South Segment)

YEAR 2050 LOS— Columbia County

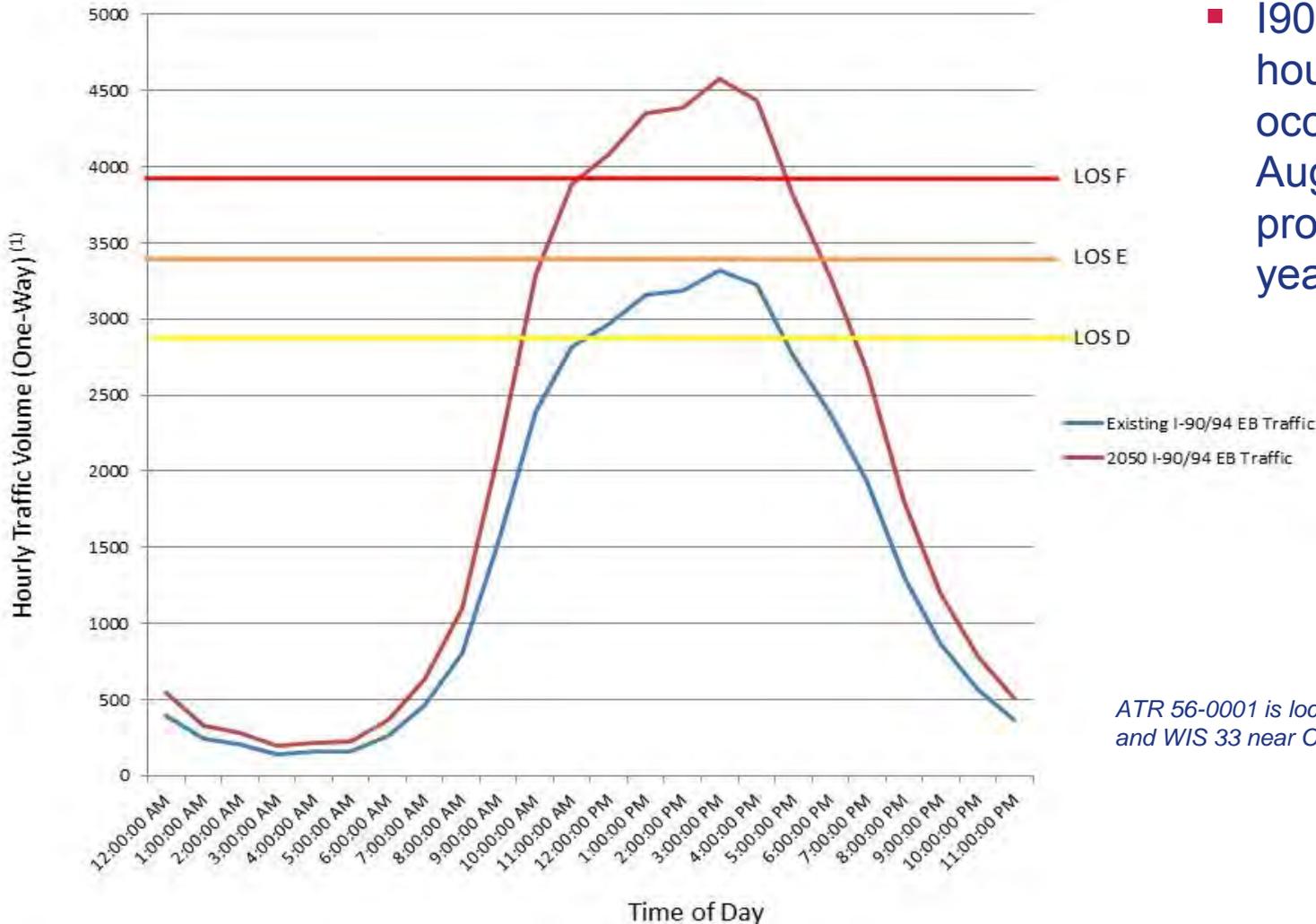


LEGEND

 LOS C or better		Diverge LOS
 LOS D		Merge LOS
 LOS E		Weave LOS
 LOS F		

Year 2050
 WB - Friday K30
 EB - Sunday K30
K30: 30th Highest Hourly Traffic Volume
 Map not to scale

DURATION OF CONGESTED CONDITIONS



- I-90-94 eastbound hourly traffic volumes occurring on Sunday, August 12, 2012, projected out to the year 2050.

ATR 56-0001 is located on I-90/94 between US 12 and WIS 33 near CTH A

PUBLIC INVOLVEMENT OVERVIEW

- ✓ Project Website:
 - <http://www1.wisconsin.gov/Pages/projects/by-region/sw/9094/default.aspx>
- ✓ Frequently Asked Questions Handout & Corridor Map
- ✓ Project Initiation Letters Mailed to Adjacent Property Owners – August 2013 & prior to each PIM
- ✓ Technical Advisory Committee (TAC) and Policy Advisory Committee (PAC) formed



TAC & PAC OVERVIEW

- Membership

- Local governments, stakeholder agencies, business representatives

- Advisory Role

- Liaison with applicable constituents
- Advise the design team regarding existing corridor conditions and design alternatives
- Attend meetings and provide advisory feedback over the course of the project
- No vested approving authority or implied organization support of the project findings



PUBLIC INVOLVEMENT PLANNED MEETINGS

- Public Involvement Meetings & Hearing
 - Project includes four total PIMs and one Public Hearing
- Technical and Policy Advisory Meetings
- Additional Special Interest Group Meetings as needed



DISCUSSION

- Questions or concerns?
- Contact Info:
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