

# US Highway 12 Corridor Study



ID 1670-10-09

Ski Hi Road to STH 19 West












Sauk and Dane Counties

# PURPOSE OF THIS MEETING

- ▶ Introduce project concepts and team
- ▶ Describe information gathered to date
- ▶ Gather information from **YOU** on the corridor
  - Talk with representatives
  - Comment form
  - Agricultural Operations Survey

# EXHIBITS AVAILABLE

## ▶ Long Roll Plots

LEGEND	
	VERTICAL CURVE--SAG (mph)
	VERTICAL CURVE--CREST (mph)
	GRADIENT >4.0%
	SUPER ELEVATION (mph)
	TYPICAL SECTION
	VERTICAL CURVE LENGTH (mph)
	WDNR MANAGED LANDS
	US FISH & WILDLIFE WETLANDS
	HAZMAT LOCATION
	ARCHITECTURAL/HISTORIC RESOURCE (AHI) SITE--PREVIOUSLY IDENTIFIED
	AGRICULTURAL PARCEL--CONTACTED FOR STUDY SURVEY

LOS LEVEL OF SERVICE

## ▶ Typical Sections

## ▶ Crashes

## ▶ Levels of Service

# PROJECT PHASES

## PHASE I Data Gathering

Compile Data

Identify Deficiencies

Public Involvement

# PROJECT PHASES

## PHASE II Reporting

*North Segment*

Alternatives to Extend Useful Life

*South Segment*

Alternatives to Extend Useful Life

Concepts to Convert to Freeway

Public Involvement

# FREQUENTLY ASKED QUESTIONS

- ▶ This is a planning study. No construction \$ have been allocated
- ▶ Not looking at bypasses or adding capacity
- ▶ Goal: recommendations in place to react to future development pressures

# FREQUENTLY ASKED QUESTIONS

## con't

- ▶ Goal: identify potential unsafe/poor operating intersections or sections of roadway
- ▶ Goal: identify environmental, social, or demographic populations in the corridor that require preservation

# NORTH SEGMENT

Ski Hi Rd to Wis 78 S  
Sauk & Dane Counties





# NORTH SECTION PURPOSE

~12 mile Expressway 2 & 4-lane rural and urban

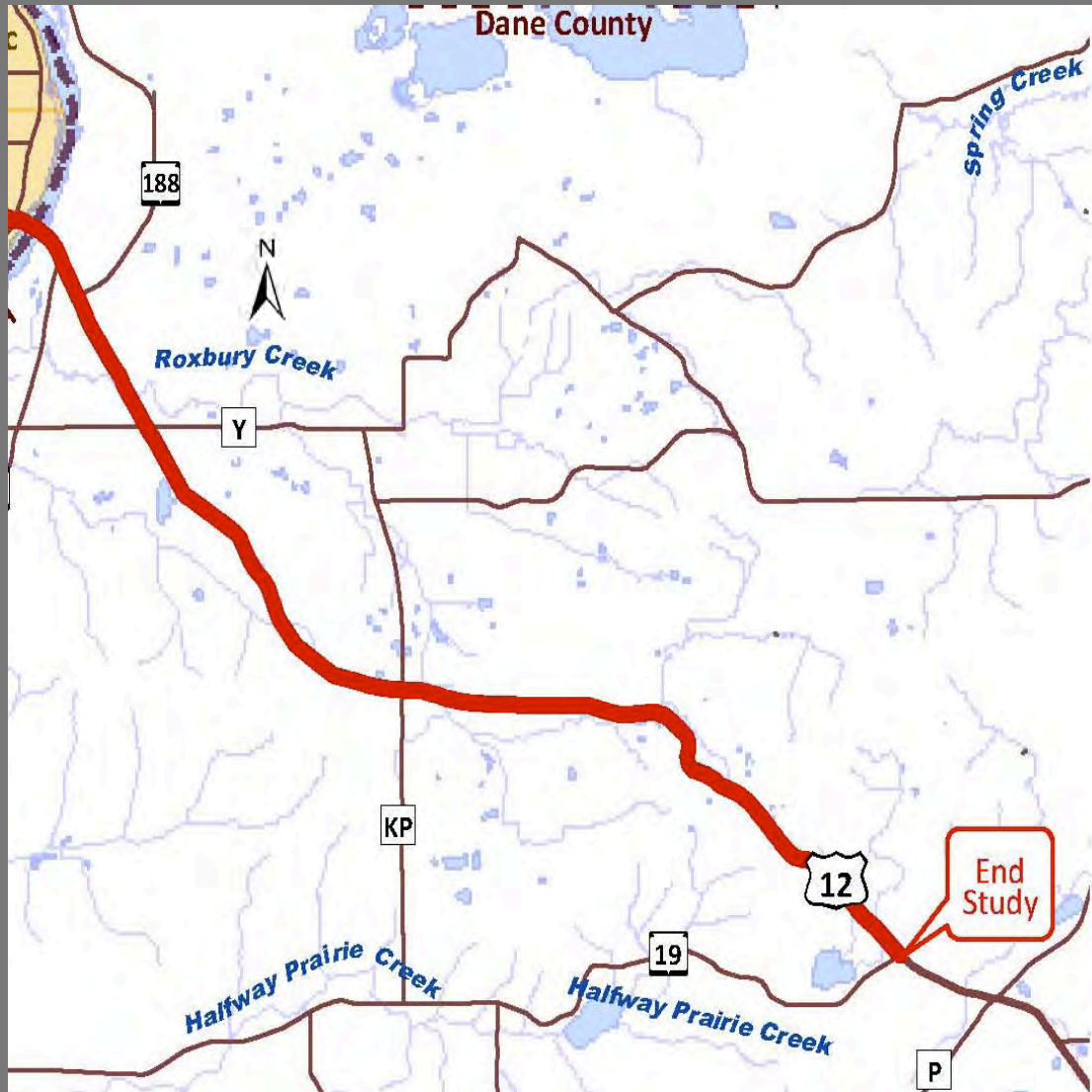
- ▶ Preserve functionality and safety of US 12
- ▶ Looking at alternatives to consolidate/control access points
  - Sauk City ~ consolidation
  - Rural ~ control

# NORTH SECTION PURPOSE

## con't

- ▶ Identify poorly operating intersections/sections of roadway
- ▶ Identify intersections/sections of roadway with high crash rates
- ▶ Develop short & mid-term operational/safety alternatives
- ▶ Develop alternatives for curves south of Badger Ammo

# SOUTH SEGMENT



Wis 78 S to Wis 19 W  
Dane County

# SOUTH SECTION PURPOSE

~9 mile Expressway Section 4-lane rural

- ▶ Preserve functionality and safety of US 12
- ▶ Looking at possible concepts/feasibility to convert to Freeway
  - Possible Interchange Locations
  - Possible Frontage Road connections

# SOUTH SECTION PURPOSE

## con't

- Possible Geometric Deficiencies to Freeway Standards
- ▶ Identify poorly operating intersections.
- ▶ Identify intersections with high crash rates.
- ▶ Develop short & mid-term safety/operational alternatives.

# TERMINOLOGY

▶ LOS = Level of Service



- Threshold for Investigation is D

# TERMINOLOGY

- ▶ Crash Rate  
(Thresholds for Investigation)
  - Intersections → 1.50 million vehicles entering
  - Non-Intersections → varies ~ depends on roadway classification

# TERMINOLOGY

- ▶ Expressway
  - At-Grade Intersections
  - Driveways OK
  
- ▶ Freeway
  - Interchanges and over/under-passes
  - No Driveways allowed



# ACCESS CONTROL

## Composite Crash Rate Indices



Crash rate indices increase as # of access points per mile increases



# PHASE I RESULTS NORTH SEGMENT

## ▶ Traffic Operations

- STH 60 2010—LOS D  
2041—LOS F
- Sauk Prairie Rd 2010—LOS C  
2041—LOS F
- CTH Z 2010—LOS D  
2041—LOS F

# PHASE I RESULTS NORTH SEGMENT

## ▶ Traffic Crashes

- CTH Z→ 0.28 crash rate
- CTH PF→1.33 crash rate
- STH 60→0.32 crash rate

# PHASE I RESULTS

## NORTH SEGMENT con't

### ▶ Traffic Crashes

- Madison St → 0.70 crash rate
- Water St → 0.81 crash rate

### ▶ Roadway Geometrics

- Paved shoulder width & outside width tend to be sub-standard

# PHASE I RESULTS

## NORTH SEGMENT con't

- Median width and clear zones tend to be sub-standard

# PHASE I RESULTS

## NORTH SEGMENT con't

- ▶ Traffic Operations—Non Intersection
  - LOS for segment:
    - ▶ 4-lane→A
    - ▶ 2-lane→D
    - ▶ Urban: Drop one level in 20 years
  - Problem areas: Urban section

# PHASE I RESULTS

## NORTH SEGMENT con't

- ▶ Traffic Crashes—Non Intersection
  - Crash Rate for segment:??
  - Problem areas:
    - ▶ 2 to 4 –lane transitions
    - ▶ Badger Ammo Curves
    - ▶ Down Devil's Lake hill

# PHASE I RESULTS

## NORTH SEGMENT con't

### ▶ Roadway Geometrics

- 3 horizontal curves have sub-standard radii
- Several areas of sub-standard sight distances

### ▶ Access Control

- Access Plats in place



# PHASE I RESULTS

## NORTH SEGMENT con't

### ► Environmental

- Numerous Ag. Parcels
- 18 Architectural/Historical sites & 35 Archaeological sites
- 11 Hazardous Materials sites
- Wetlands—several locations identified

# PHASE I RESULTS

## NORTH SEGMENT con't

- Protected Species—none identified at this time

### ▶ Utilites

- Numerous facilities in corridor.

# PHASE I RESULTS

## SOUTH SEGMENT

### ▶ Traffic Operations

- CTH KP & CTH Y 2010—LOS C  
2041—LOS E

### ▶ Traffic Crashes

- STH 188 → 0.45 crash rate
- CTH Y → 0.30 crash rate
- STH 19 W → 0.32 crash rate

# PHASE I RESULTS

## SOUTH SEGMENT con't

- ▶ Roadway Geometrics
  - Built to Expressway Standards
  - Some deficiencies to Freeway Standards
  
- ▶ Access Control
  - Access Plats in place

# PHASE I RESULTS

## SOUTH SEGMENT con't

### ► Environmental

- Numerous Ag. Parcels
- 38 Architectural/Historic sites & 45 Archaeological sites
- 1 Hazardous Materials site
- Wetlands—several locations identified

# PHASE I RESULTS

## SOUTH SEGMENT con't

- Protected Species—none identified at this time

### ▶ Utilites

- Numerous facilities in corridor.

# PHASE I RESULTS

## SOUTH SEGMENT con't

- ▶ Traffic Operations—Non Intersection
  - LOS for segment: A→B in 20 years
  - Problem areas: None
- ▶ Traffic Crashes—Non Intersection
  - Crash Rate for segment--??
  - Problem areas—Ballweg Road

# PROJECT SCHEDULE

## ▶ Phase 1

- Public Info. Meeting No. 1  
April 2012

We Are Here

## ▶ Phase 2

- Draft Report Completed  
June 2012
- Local Officials Meeting No. 2  
August 2012



# PROJECT SCHEDULE

- **Public Info. Meeting No. 2  
Sept. 2012**
- **Final Report Completed  
May 2013**

# QUESTIONS??

