



# TRI-COUNTY EXPANSION



U.S. Department of Transportation  
**Federal Highway  
Administration**

# **WIS 441 Tri-County Project**

## **Noise Barrier Public Involvement Meeting**

**May 19, 2015**

# Welcome and Meeting Purpose

- Provide adjacent landowners and residents:
  - An opportunity to learn about the noise barrier selection process
  - Ask questions
  - Submit their voting ballot and/or comments

# Presentation Outline

- Introductions
- Understanding noise
- Noise barrier process and analysis
- Noise barrier treatments
- Voting
- Additional information

# Introductions

- WIS 441 Tri-County Project team
  - Will Dorsey, Northeast Region Director
  - Tom Buchholz, Project Development Manager
  - Chad DeGrave, Design Supervisor
  - Scott Ebel, Design Project Manager
  - Kathleen Slattery, Design Project Manager
  - Ashley Nelson, Design Lead
  - Tammy Rabe, Construction Supervisor

# Introductions

- WIS 441 Tri-County Project team
  - Jay Waldschmidt, Noise
  - Ryan Clussman, Noise
  - Jennifer Gibson, Environmental
  - Dawn Vanoudenhoven, Real Estate
  - Mark Kantola, Communication Manager



# Understanding Noise

- The Noise Level Criteria (NLC) and noise barrier design process are set by *WisDOT's Facilities Development Manual, Chapter 23, Noise*
- Why does WisDOT build noise barriers?
  - It is part of a federal requirement to assess highway noise impacts



The **decibel** (abbreviated dB) is the unit used to measure the intensity of a sound

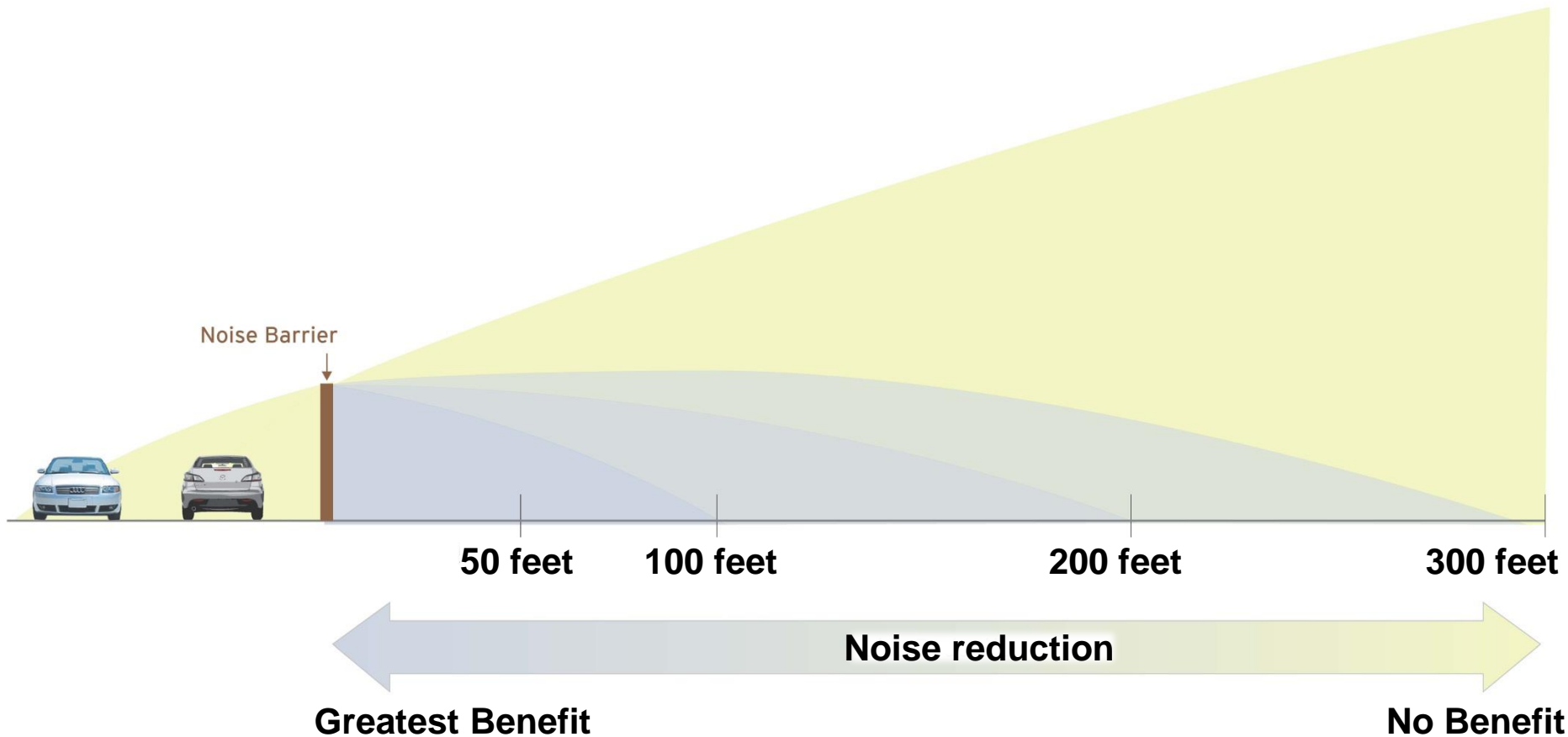
# Common Noise Levels

Common Outdoor Noise Levels	Noise Level (dBA)	Common Indoor Noise Levels
	110	Rock band
Jet flyover at 1000 feet Gas lawn mower at 3 feet	100	Inside a subway train
Diesel truck at 50 feet	90	Blender at 3 feet
Noisy urban daytime	80	Garbage disposal at 3 feet Shouting at 3 feet
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area	60	Normal speech at 3 feet Large business office
Quiet urban, suburban daytime	50	Dishwasher next room
Quiet rural nighttime	40	Small theater (background)
	30	Library, bedroom at night
	20	Concert hall (background)
	10	Broadcast and recording studio
		Threshold of hearing



# Understanding Noise

Distance affects the intensity of sound - if you are far away, the power is greatly diminished

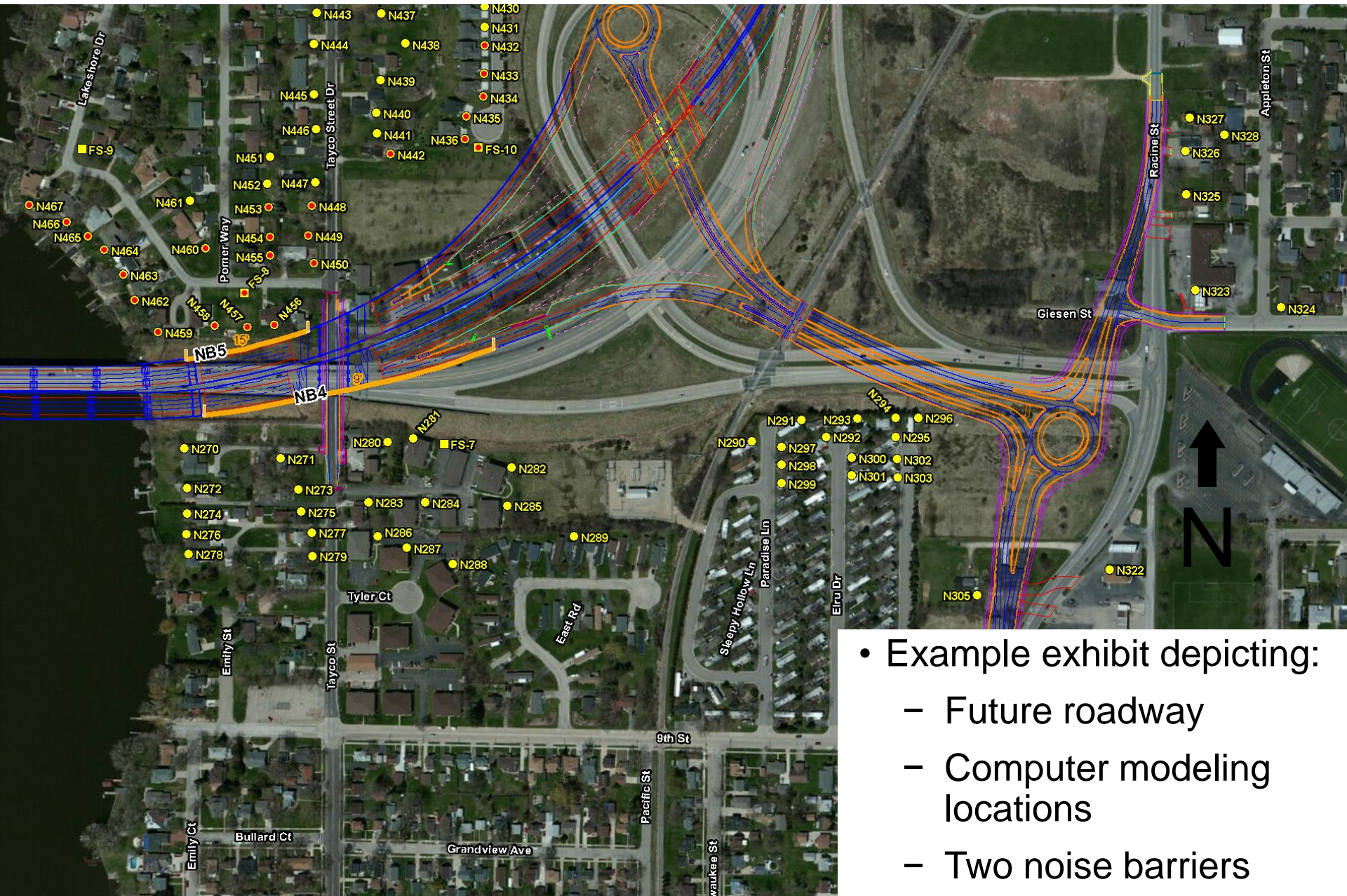


# Process and Analysis

- Existing noise levels were measured in June 2013
- Design year noise levels were computer modeled with FHWA's TNM<sup>®</sup>2.5
- The modeling was based on:
  - New roadway design
  - Design year (2038) traffic projections
  - Proximity of redesigned roadway to homes
- Identify properties that approach or exceed NLC of 67 dBA Leq



# Process and Analysis



- Example exhibit depicting:
  - Future roadway
  - Computer modeling locations
  - Two noise barriers

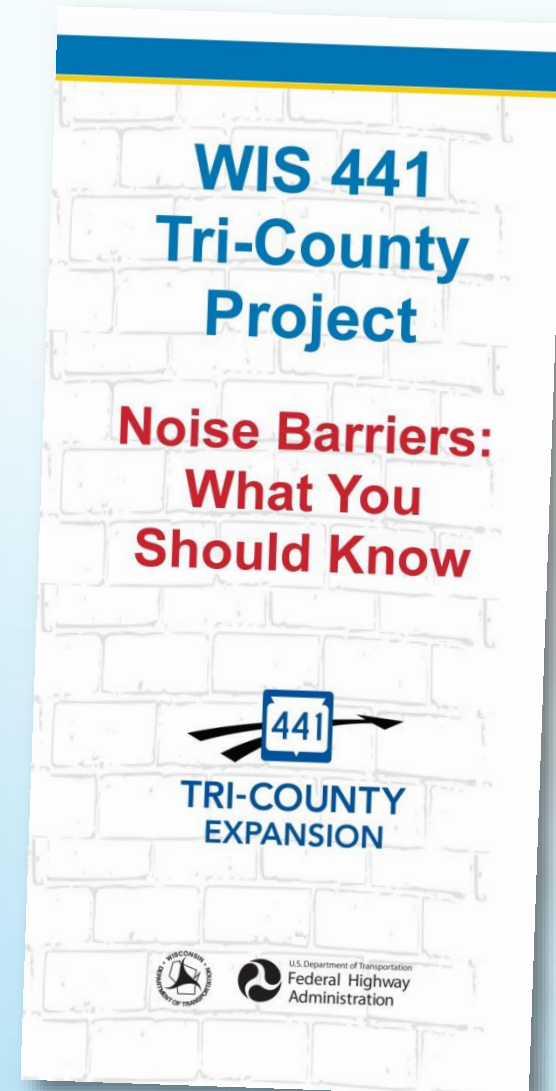
# Process and Analysis

- Design noise barriers that can economically maximize attenuation
- Barrier needs to be feasible
  - A minimum of one impacted receptor or common use area must achieve a five (5) dB noise reduction
- Barrier needs to be reasonable
  - The total cost may not exceed \$30,000 per benefited receptor
  - One impacted receptor must achieve a nine (9) dB reduction
  - Each receptor that receives an eight (8) dB reduction is considered as benefited

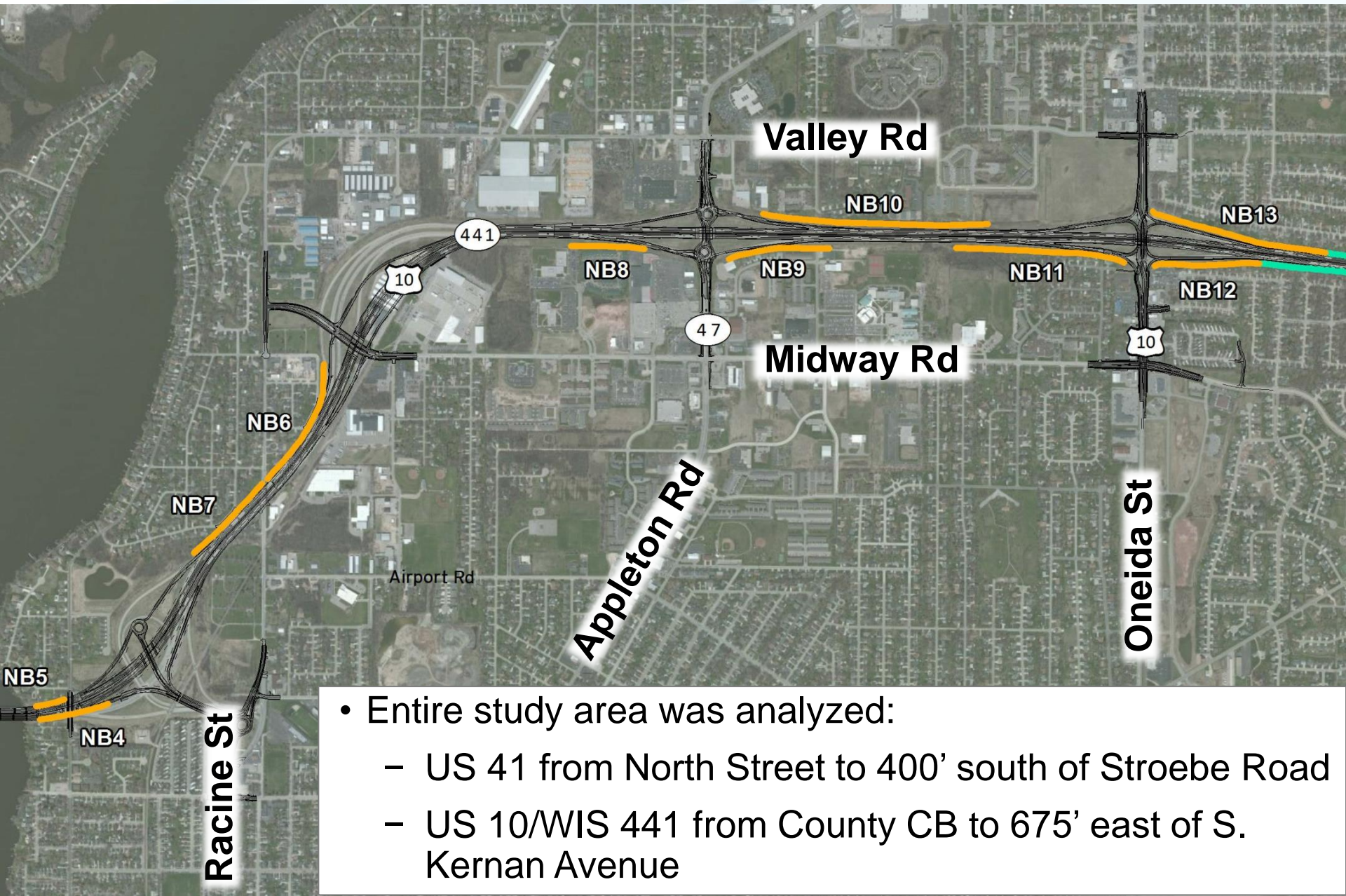


# Process and Analysis

- Vote is required from benefited receptors
  - Must receive a minimum of eight (8) dB noise reduction
  - Property owners and renters (one vote per unit)
  - Simple majority of votes will determine if barrier is built
- Funded as part of construction



# WIS 441 Noise Barriers

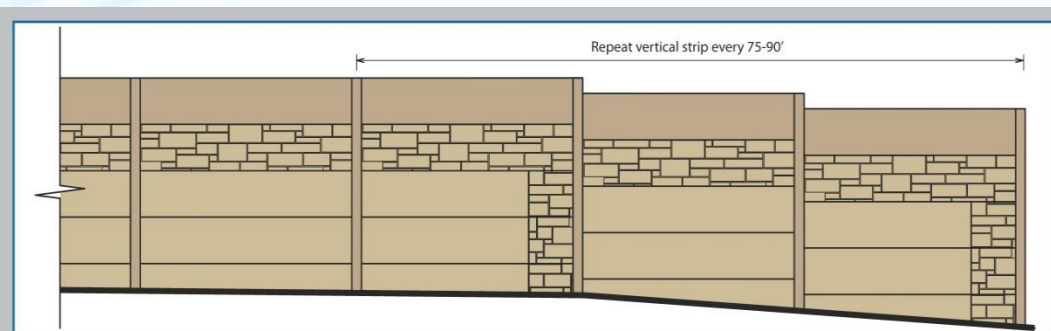


- Entire study area was analyzed:
  - US 41 from North Street to 400' south of Stroebe Road
  - US 10/WIS 441 from County CB to 675' east of S. Kernan Avenue

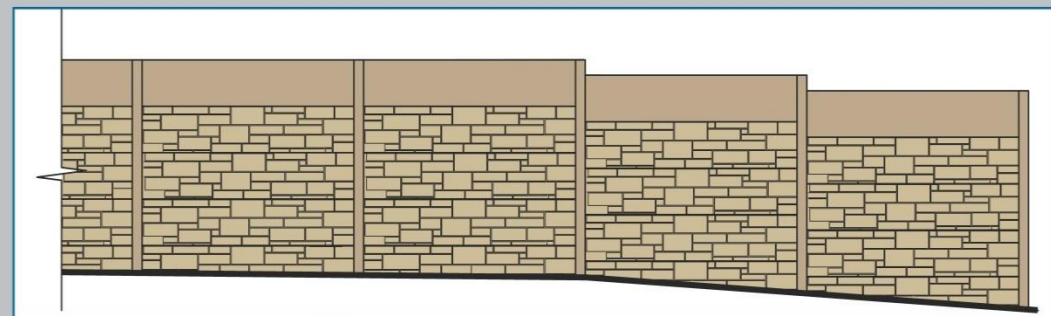


# Noise Barrier Treatments

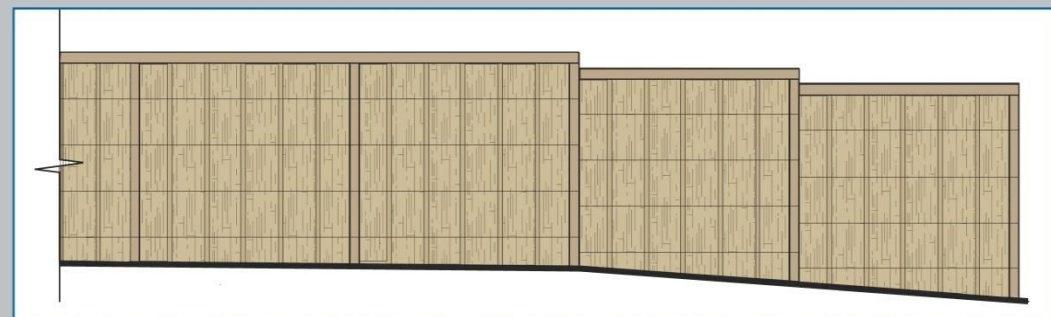
- WisDOT welcomes comments on noise barrier treatment options
- Residential side treatments can vary along the corridor
- Due **June 22, 2015**



Ashlar Stone Concept A



Ashlar Stone Concept B



Wood Concept C



# Voting

- Please submit your vote:
  - Via the ballot mailed to your house
  - Via email to [Scott.Ebel@dot.wi.gov](mailto:Scott.Ebel@dot.wi.gov)
  - Submit ballot at tonight's meeting
- Your vote is due by **June 22, 2015**



## NOISE BARRIER VOTING BALLOT

Noise barriers that are determined to be feasible and reasonable must receive a vote of support from a simple majority of all votes cast by the adjacent landowners and residents of the benefited areas in order to be considered for construction.

Benefited residences, also called benefited receptors, are those residences or common use areas receiving a minimum of eight (8) decibels reduction in sound level as a result of the proposed abatement measure. Votes eligible to be counted towards this decision are as follows:

- For each benefited receptor that is owner-occupied, the owner will have one vote.
- For each benefited receptor that is not owner-occupied, the owner will have one vote and one resident of each non-owner occupied unit will have one vote.

Please use the check boxes to the right to submit your vote.

**This ballot is due to the  
Wisconsin Department of Transportation by  
June 22, 2015.**

Please submit your vote using the postage-paid return envelope included for your convenience.

If you have any questions regarding the voting process, please contact WIS 441 Project Manager Scott Ebel at (920) 492-2240 or by email at [Scott.Ebel@dot.wi.gov](mailto:Scott.Ebel@dot.wi.gov).



**Noise barrier No:**

**Your name:**

**Address adjacent to project:**

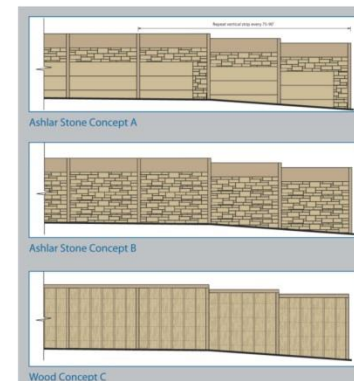
*Please check one:*

- ☐ **OWNER** (I am the owner of the property listed above.)
- ☐ **RENTER** (I am a renter of the property listed above.)

*Please check one:*

- ☐ **I SUPPORT** construction of the eligible noise barrier listed above.
- ☐ **I DO NOT SUPPORT** construction of the eligible noise barrier listed above.

## NOISE BARRIER COMMENT FORM



Please share your thoughts or preferences on the noise barrier treatments shown to the left. If more space is needed, please use the reverse of this form and/or attach additional sheets.

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To join the project email list, please provide your email below:

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# Room Layout

Stage

West of  
Appleton Rd  
**Barrier 8**

Racine Rd,  
Midway Rd  
**Barriers 6, 7**

Appleton Rd,  
Oneida St  
**Barriers 9, 10, 11**

Tayco Rd  
**Barriers 4, 5**

Seating

East of  
Oneida St  
**Barriers 12, 13**

Real Estate

Submit  
ballots/comments

Extra ballots

Entrance

# Additional Information



DEPARTMENT OF TRANSPORTATION  
Wisconsin 511 Construction Projects

[www.projects.511wi.gov/wis441/](http://www.projects.511wi.gov/wis441/)

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## WIS 441 Tri-County Project

Tri-County Expansion



OVERVIEW

SCHEDULE

MAP

CLOSURES

NEWS RELEASES

RESOURCES ▶

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### Overview

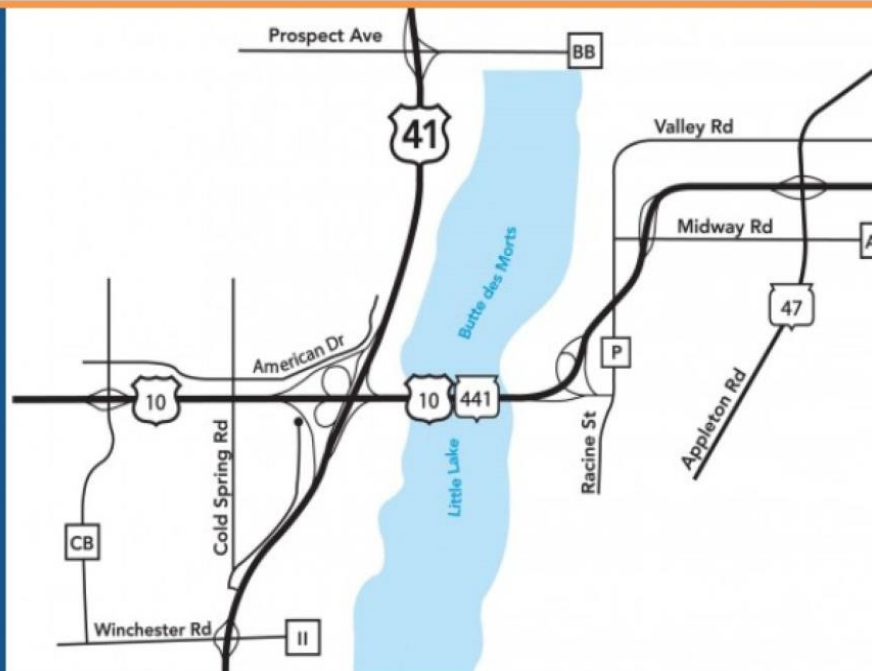
The Wisconsin Department of Transportation (WisDOT) is developing plans to reconstruct the US 10/WIS 441 freeway. The WIS 441 Tri-County Project will reconstruct and expand US 10/WIS 441 from four to six lanes from Cold Spring Road to about 1/2 mile east of Oneida Street (approximately 6 miles).

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FULL OVERVIEW



- Keeping public informed
  - Project web presence
  - Media outreach
  - Newsletters
  - Public meetings
- Feedback



A landscape photograph showing a multi-span concrete bridge crossing a wide river. The sky is filled with dramatic, dark clouds, with a bright sunset or sunrise glow on the right side. The foreground is a grassy field.

**General questions?**

**Please see project staff for  
specific noise/property questions**