

IL 60/83 Noise Wall Forum

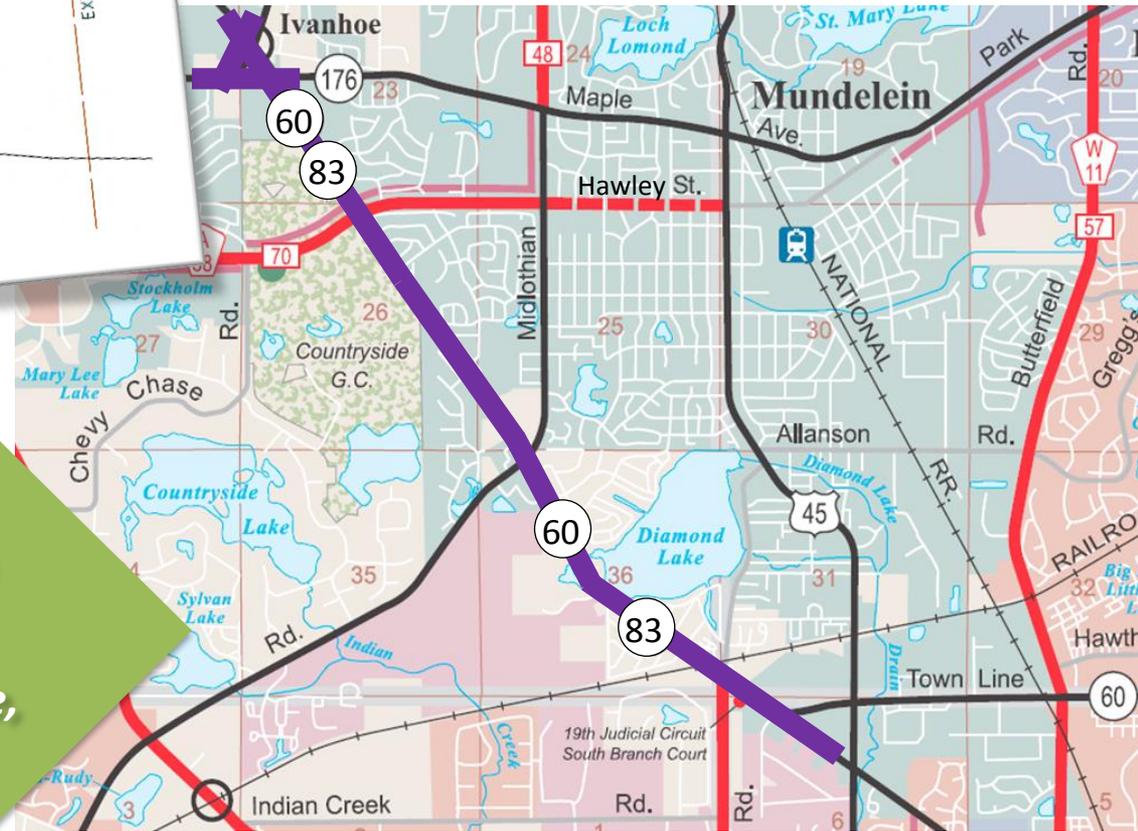
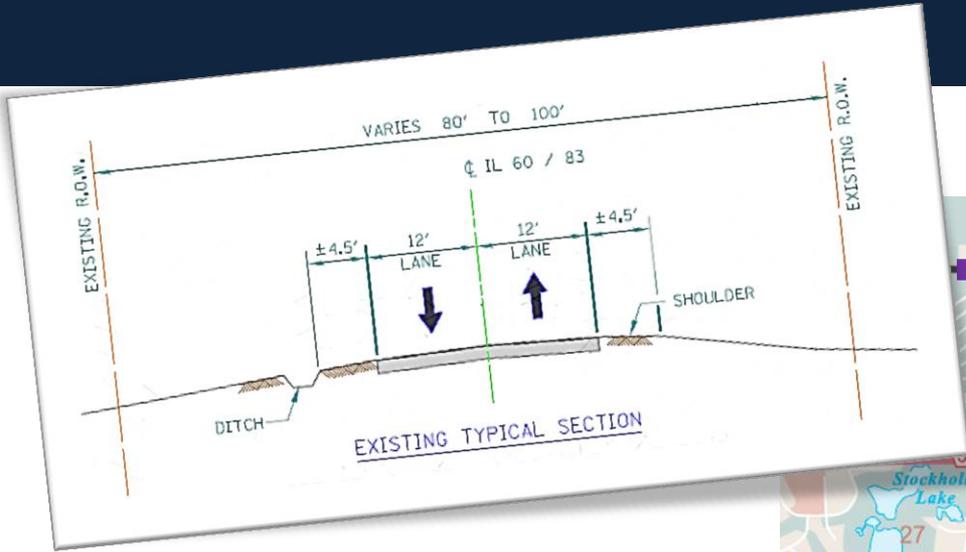
January 31, 2017

Agenda

- ✓ **Project Overview**
- ✓ **Noise Analysis Overview**
- ✓ **Noise Wall Voting Process**
- ✓ **Next Steps**



Project Overview



- ✓ Study Limits
 - ✓ IL 176 to intersection of IL 60 and IL 83
- ✓ Village of Mundelein
- ✓ Townships of Fremont, Libertyville, Vernon & Ela

IDOT Process



Phase I

Summer 2017
(Target)

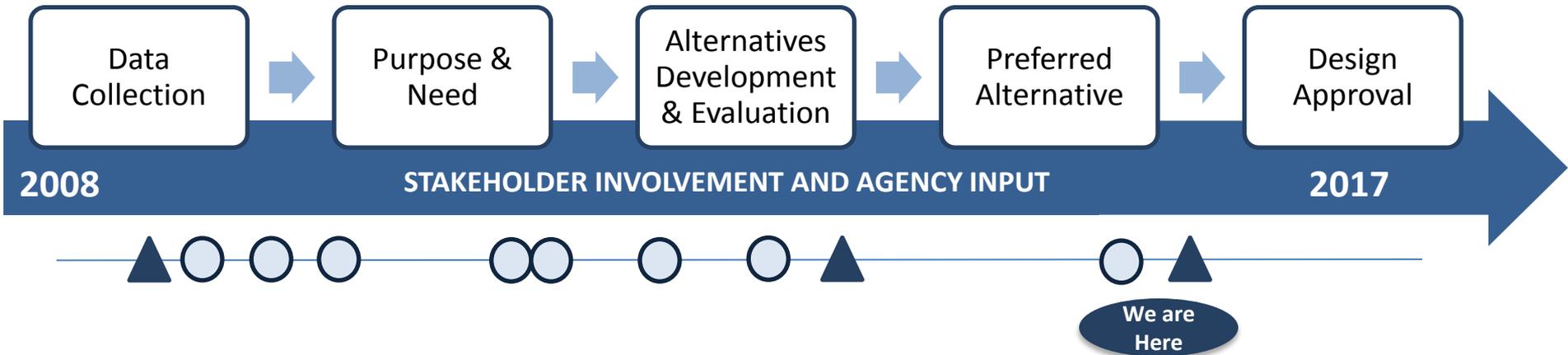
Phase II

18 to 24 months

Phase III

24 to 36 months

Public Involvement



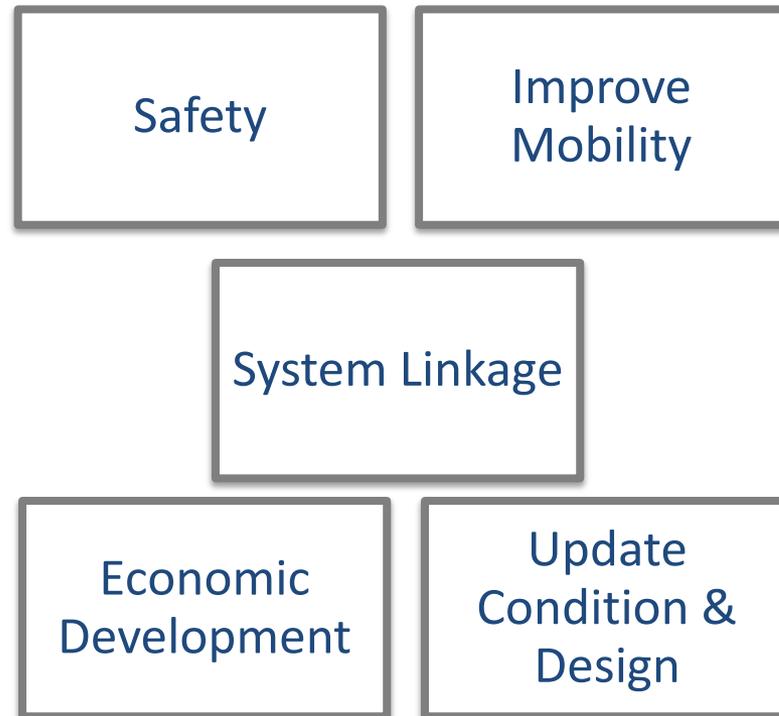
Purpose & Need



- ✓ Purpose:

- ✓ To provide a safe and efficient transportation facility

- ✓ Needs:



Alternatives Development



Takes Into Account:

Stakeholder Input

Purpose & Need

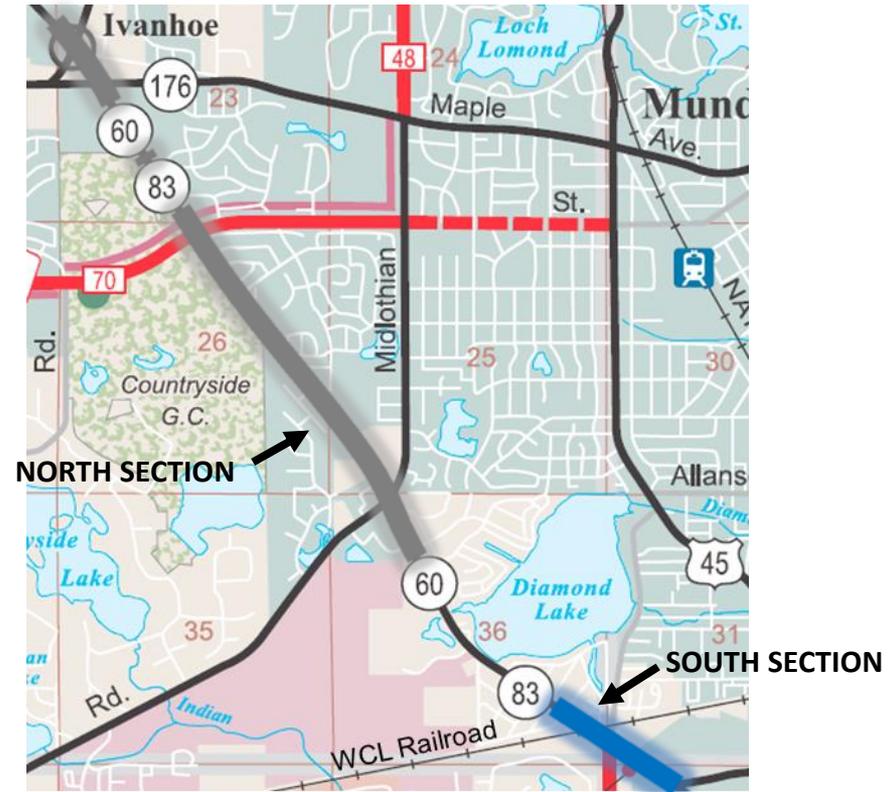
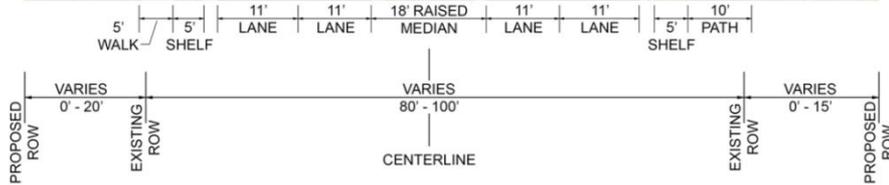
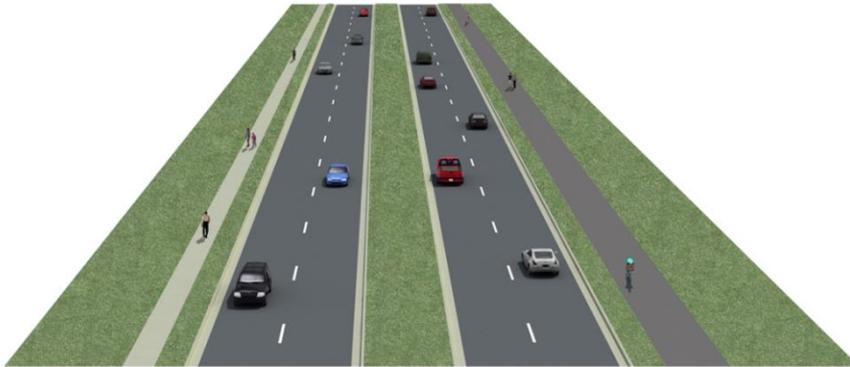
Environmental Analysis

Engineering Analysis

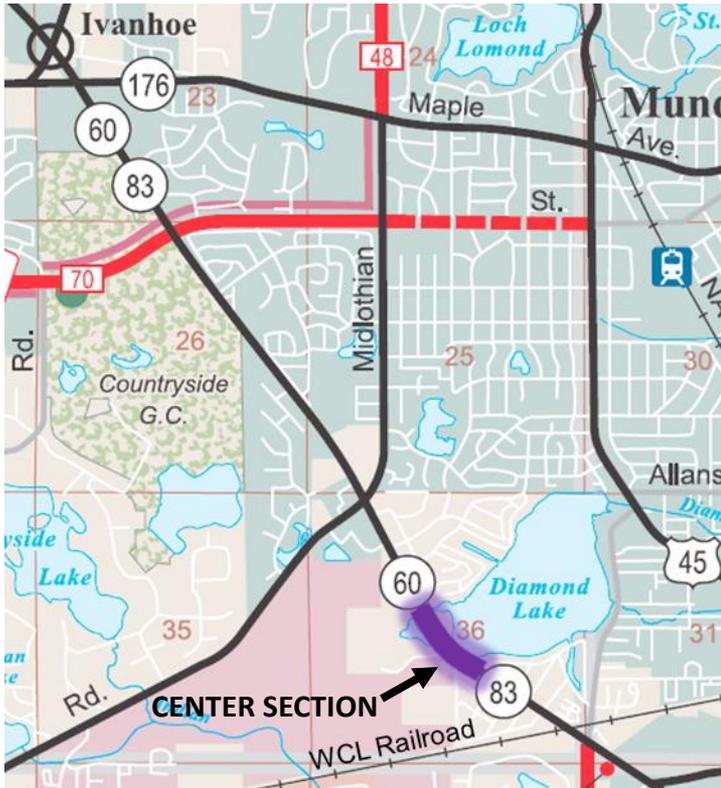


Preferred Roadway Alternative – North & South Section

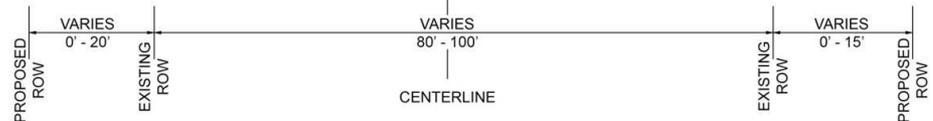
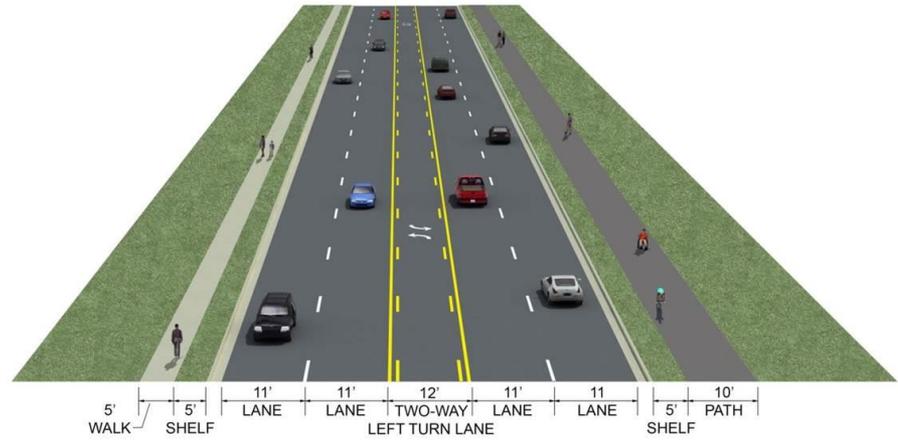
- ✓ NORTH SECTION - IL 176 to Circle Drive
- ✓ SOUTH SECTION - Maple Ave to IL 60
 - ✓ 18' Curbed Median
 - ✓ 2-11' Lanes
 - ✓ Sidewalk
 - ✓ Shared-Use Path



Preferred Roadway Alternative – Center Section



- ✓ **CENTER SECTION** - Circle Drive to Maple Ave
 - ✓ 12' Two-Way Left Turn Lane
 - ✓ 2-11' Lanes
 - ✓ Sidewalk
 - ✓ Shared-Use Path



Railroad Crossing Alternatives

– IL 60/83 at WCL (EJ&E)



- ✓ At-Grade Crossing
- ✓ IL 60/83 Roadway Underpass
- ✓ IL 60/83 Roadway Overpass

PREFERRED ALTERNATIVE

- ✓ Removes risk of car-train collision
- ✓ Eliminates delay due to train traffic
- ✓ Improves emergency response times
- ✓ Does not require complex construction methods
- ✓ Avoids blockage at Diamond Lake Road intersection

Railroad Crossing – Preferred Alternative

IL 60/83 Overpass Rendering

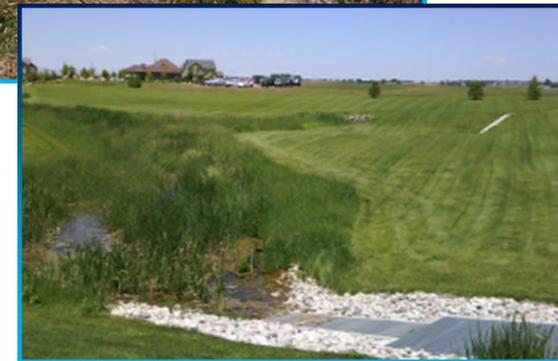


Best Management Practices (BMPs)



ADVANTAGES →

- ✓ Improve Overall Water Quality
- ✓ Minimizes Soil Erosion
- ✓ Controls Stormwater Runoff
 - ✓ Captures Soil Sediment and Roadway Pollutants



BMPs are proposed at 9 locations within study limits.

Land Acquisition Types



✓ Fee Simple

- Acquisition of all rights and interest

✓ Permanent Easement

- Ownership is retained by property owner
- IDOT is allowed use of property to construct and maintain facilities

✓ Temporary Easement

- Ownership is retained by property owner
- IDOT is allowed to construct minor improvements
 - Required only during construction for grading work, sidewalk or driveway construction, and other improvements

Land Acquisition Procedures



What is the Land Acquisition Process?

- ✓ IDOT priority is to work with the property owners to minimize the impacts of all projects
- ✓ Negotiation process begins after Phase I is complete and funding is identified

- 1) Survey and Appraisal
- 2) Offer and Negotiations
 - ✓ Must offer fair market compensation for needed property based on independent appraisal
- 3) Condemnation/Court Proceedings
 - ✓ Considered to be last resort
- 4) Relocation assistance is provided when building is acquired
 - ✓ Advisory/Referral Services
 - ✓ Replacement Housing Payments
 - ✓ Reimburse Moving Expenses



NOISE ANALYSIS OVERVIEW

When are Noise Walls Considered?



TYPE I PROJECT

- New Roadway
- New travel lanes
- Substantial alteration



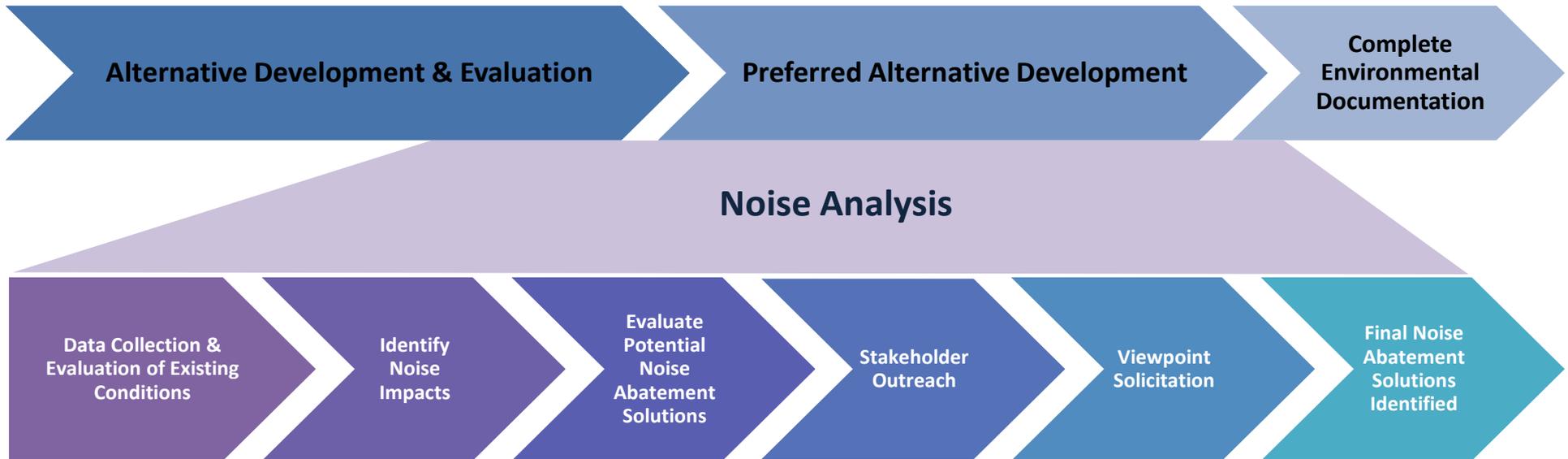
TYPE II PROGRAM

*Illinois has **NO** Type II (retrofit) Program*

When should the noise analysis be completed?



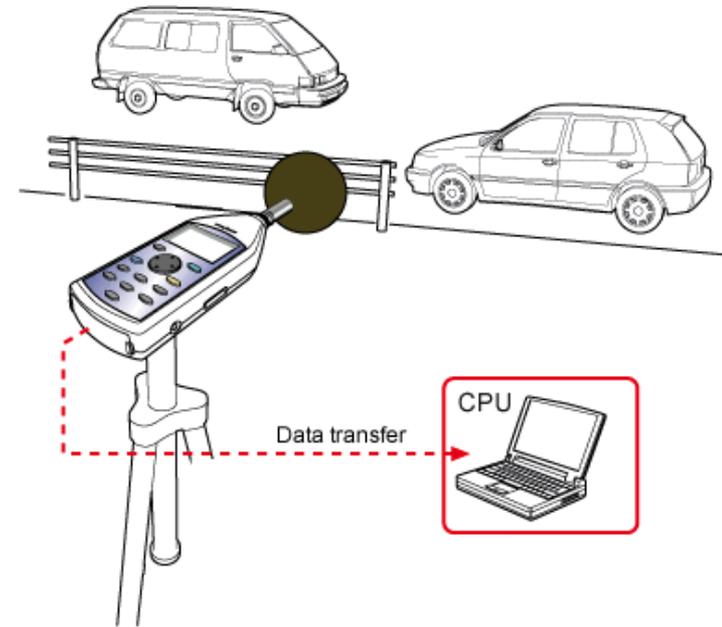
Phase I Process



Traffic Noise Analysis Process



- ✓ Identify Noise Receptors
- ✓ Traffic Noise Level Determination
 - ✓ Modeling
 - ✓ Validated by field monitoring
- ✓ Traffic Noise Impact Identification
- ✓ Traffic Noise Abatement Analysis



Identify Noise Receptors



A receptor is an **outdoor** area of **frequent** human use along a highway that is analyzed for noise impacts due to the project.



FHWA Noise Abatement Criteria (NAC)



CATEGORY A (Exterior)

Serene lands - rarely applies. (e.g.: Tomb of the Unknown Soldier)

CATEGORY B (Exterior)

Residential

CATEGORY C (Exterior)

Hospitals, schools, places of worship, parks

CATEGORY D (Interior)

Hospitals, libraries, places of worship, institutions, schools

CATEGORY E (Exterior)

Hotels, offices, restaurants

No Established
NAC

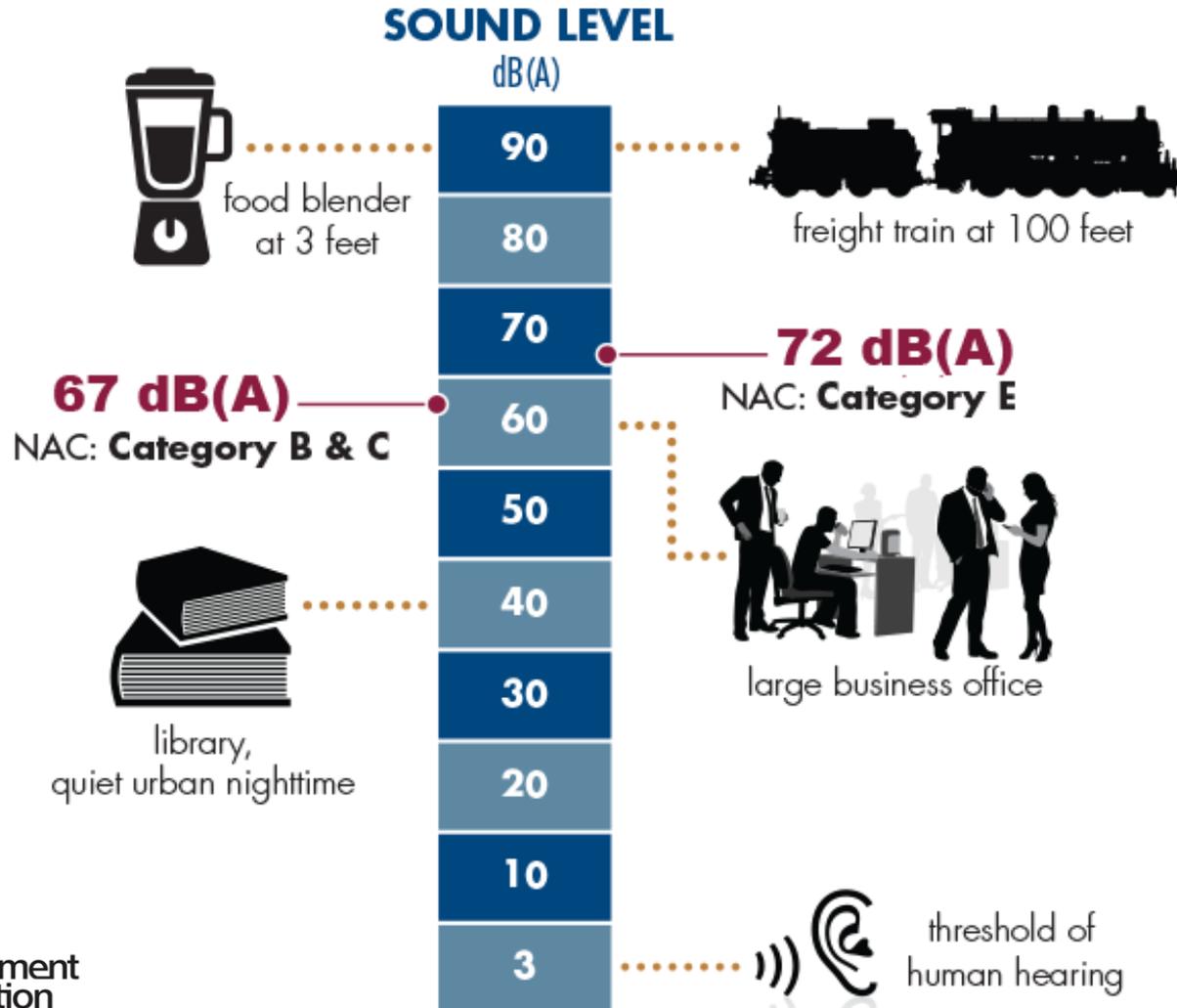
CATEGORY F

*Agricultural,
industrial, retail,
utilities*

CATEGORY G

Undeveloped lands

Common Noise Levels



Interior vs. Exterior Noise



- ✓ **IDOT** and **FHWA** stipulate that outdoor areas of frequent human use be given primary consideration.
- ✓ Interior noise for private residences not studied, as that analysis focuses on noise levels interfering with outdoor conversations.



“Interior noise levels shall be used for the evaluation of potential traffic noise impacts only if no exterior use areas are identified for those land uses within Activity Category D.”

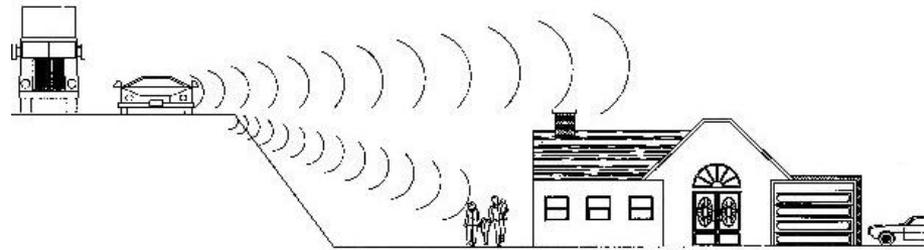
- *IDOT's Highway Traffic Noise Assessment Manual*

Traffic Noise Level Determination



- ✓ Predicted traffic noise levels using the FHWA Traffic Noise Model (TNM)
 - ✓ **Existing** (validated with field monitoring)
 - ✓ Future **No-Build**
 - ✓ Future **Build**

*Noise
calculated at
worst-case receptor
locations*



Traffic Noise Impact Identification



Impacts Identified for worst-case receptors

2 methods for impact identification:

- ✓ Future Build noise levels approach, meet, or exceed the FHWA Noise Abatement Criteria (NAC)
- ✓ Substantial increase in noise

Feasibility & Reasonableness Policy



Feasibility:

- ✓ Must achieve at least a 5 decibel traffic noise reduction
- ✓ Must be feasible to construct

Reasonableness:

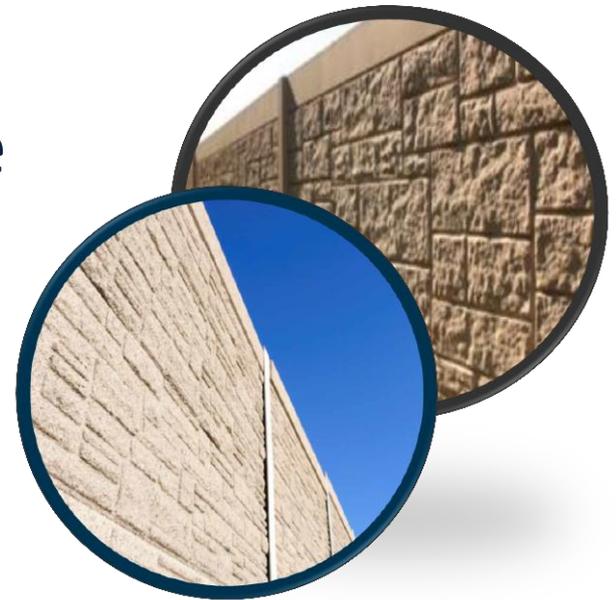
- ✓ In general, noise abatement must be less than \$24,000* per benefitted receptor
- ✓ Must achieve at least an 8 decibel reduction at a benefitted receptor
- ✓ Majority of benefitted receptors in favor of noise abatement

** Adjustment factors can increase the allowable cost per benefitted receptor.*

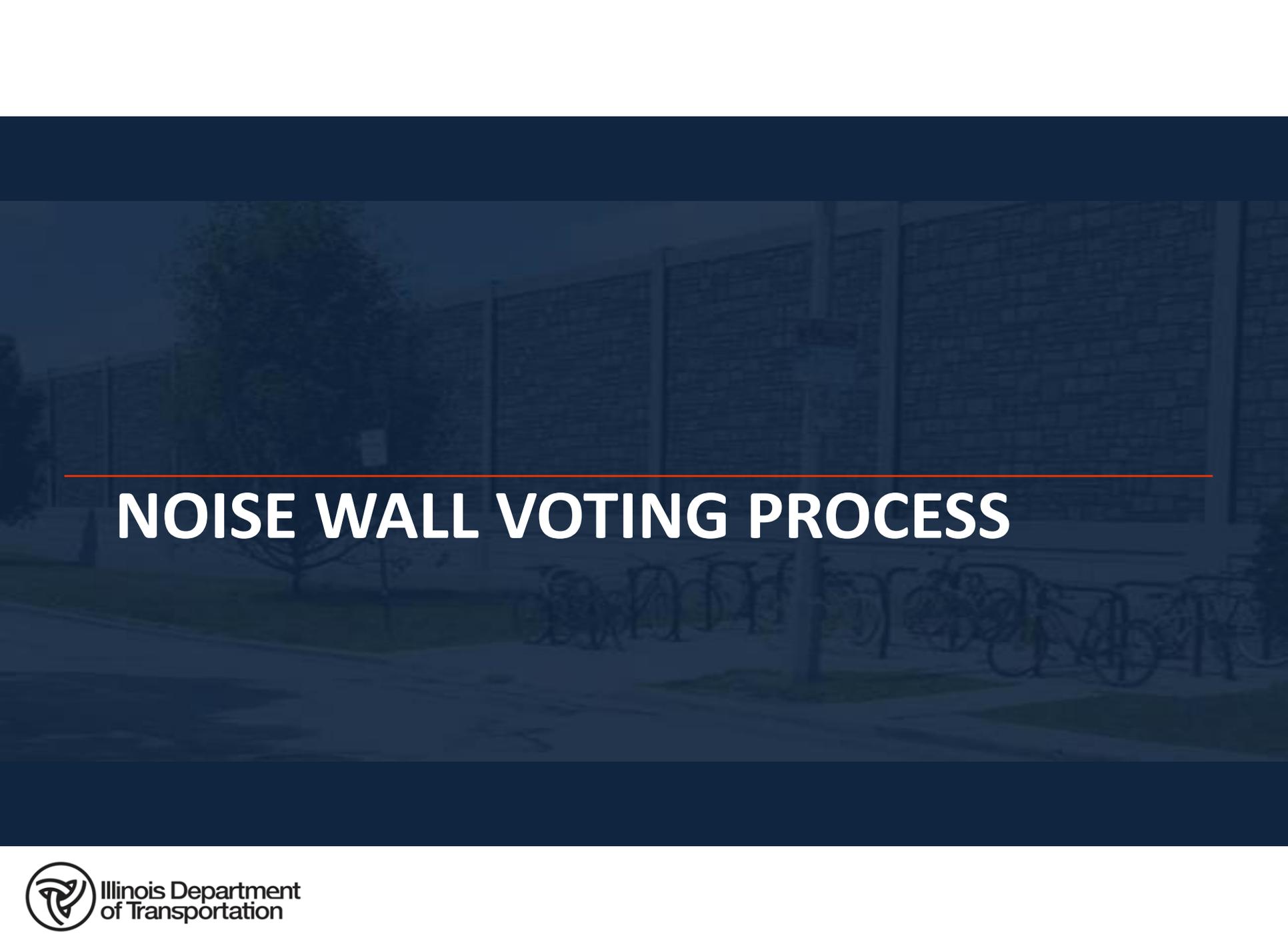
Proposed Noise Walls



- ✓ **18** noise walls studied
- ✓ **5** walls were feasible/reasonable
 - ✓ Walls **1, 4, 6, 9, & 11**
- ✓ Range from **10.5** to **12.5** foot tall walls
- ✓ **105** benefited receptors



Recommended Walls
Determined after the viewpoint solicitation



NOISE WALL VOTING PROCESS

Viewpoint Solicitation



- ✓ Each identified benefited receptor receives a vote, however
 - ✓ Receptors that **share property line** with IL 60/83 count as **TWO (2) VOTES**
 - ✓ **Benefited Receptors Rental Properties that Share a Property Line**
 - ✓ Two votes for tenant, two votes for owner (per unit)
 - ✓ **Benefited Receptor Rental Properties that do not Share a Property Line**
 - ✓ One vote for tenant, one vote for owner (per unit)



RESPONSE GOAL OF 33%
of benefited receptors per proposed barrier

If more than half of the votes are in favor of a barrier, the proposed abatement measure will be likely to be implemented

If **RESPONSE GOAL** is not met for a barrier,
a second mailing will be sent to maximize response rate

Viewpoints Example Letter and Form



FILE COPY

 **Illinois Department of Transportation**
Division of Highways/Region One / District One
201 West Center Court/Schaumburg, Illinois 60196-1096

Project and Environmental Studies
I-55 at Weber Road
Weber Road from 135th Street/Romeo Road to 119th Street/Rodeo Drive
Will County

November 8, 2013

Re: Viewpoint Solicitation – First Notice
Noise Barrier Implementation

-fullname-
-Address1-
-Address2- -zip-

Dear Property Owner or Resident:

The Illinois Department of Transportation (Department) in cooperation with Will County Department of Highways (County) are currently engaged in preliminary engineering and environmental studies (Phase I) for Weber Road from 135th Street/Romeo Road to 119th Street/Rodeo Drive including the Weber Road interchange at I-55. The proposed improvements include reconstruction of the existing diamond interchange of I-55 at Weber Road to a diverging diamond interchange and widening of Weber Road from four lanes to six lanes. The I-55 at Weber Road improvements are included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program contingent upon the sale of approximately 200 acres of unused property currently owned by the Illinois Department of Corrections as stipulated in Public Act 95-0019, and contingent upon local financial participation for improvements to adjacent highway facilities under local jurisdiction.

As part of the Phase I Study, traffic noise was evaluated for the proposed roadway improvements. The traffic noise analysis indicated that noise levels in your area warrant the consideration of noise abatement. Based on the noise abatement analysis, a noise wall approximately 10 feet high is warranted along the west side of Weber Road from approximately 300 feet north of Rodeo Drive to just north of Countryside Drive. See the enclosed figure for the location of the proposed noise wall. The proposed wall in your area is labeled as "B1B".

The Department is requesting your viewpoint regarding your desire for the noise wall proposed near your location. This letter has been provided to all property owners and tenants who would "benefit" from a noise barrier.

Viewpoint Form

I-55 at Weber Road
Weber Road from 135th Street/Romeo Road to 119th Street/Rodeo Drive
Will County
Wall – B1B

Please provide your response by December 9, 2013.

am in favor of a noise barrier:

Yes
 No

Name: _____
Signature: _____
Owner: _____ OR Tenant: _____
Address: _____
Date: _____

Comments:

What Will the Noise Walls Look Like?



IDOT CURRENT TYPICAL WALL



Noise Wall Renderings



Looking towards IL 60/83
from Manor Lane



Looking south on IL 60/83
from west leg of Wingate
Drive



Next Steps



NEXT STEPS:

- *Mail Viewpoint Solicitation Letters*
- *Public Hearing (Spring 2017)*
- *Compile Viewpoint Results*
- *Determine Recommended Walls*



Thank You!

