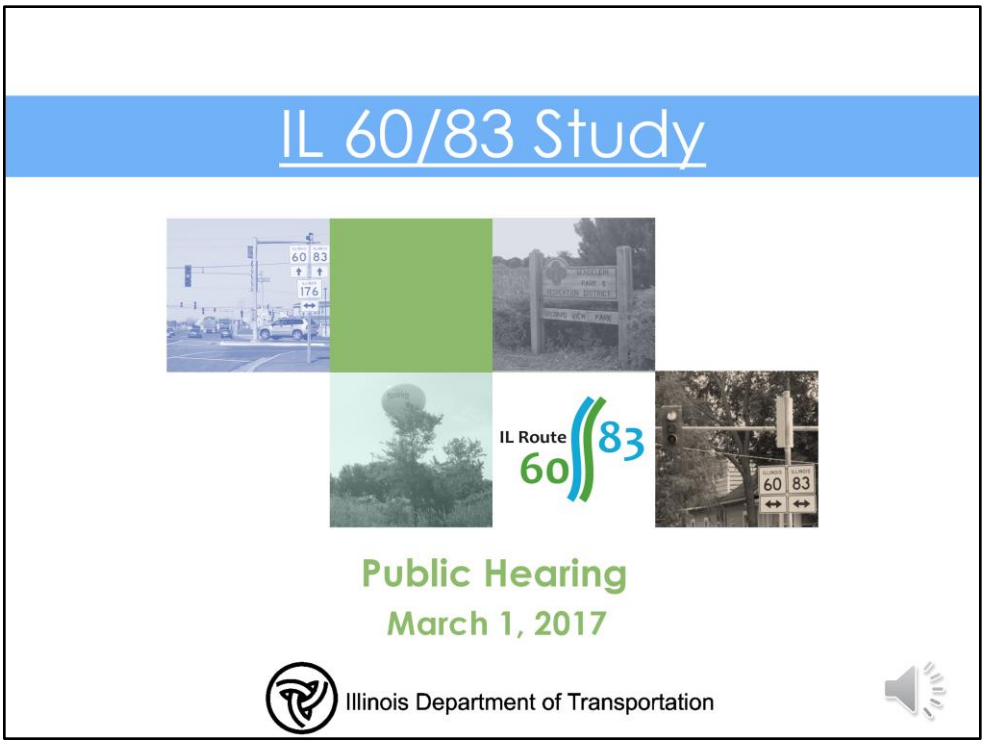
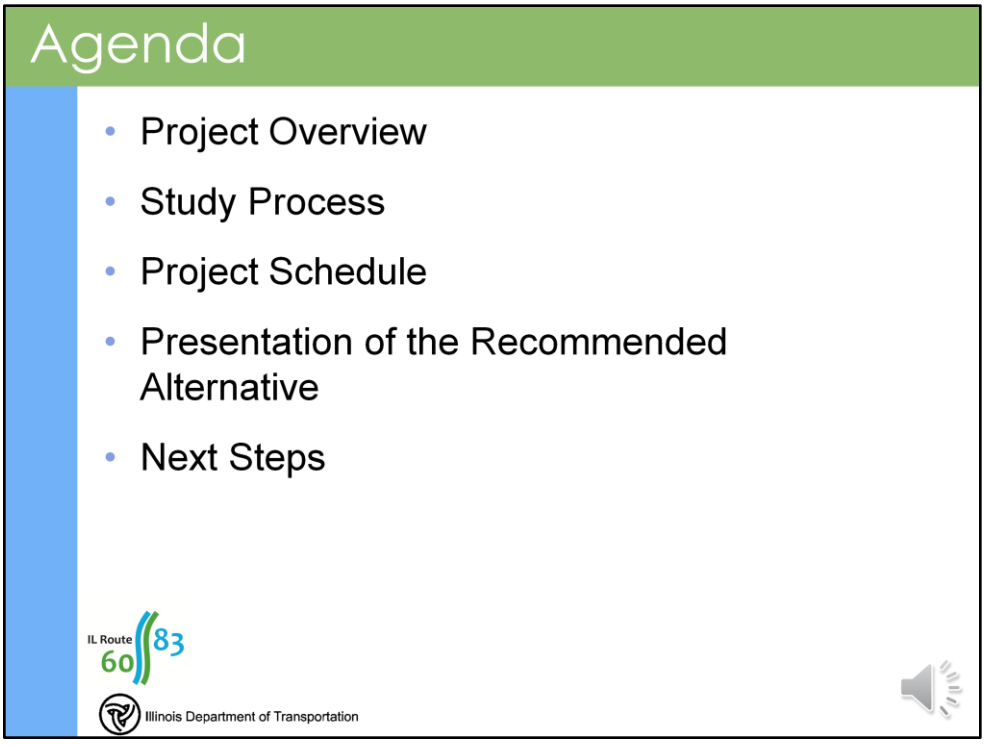
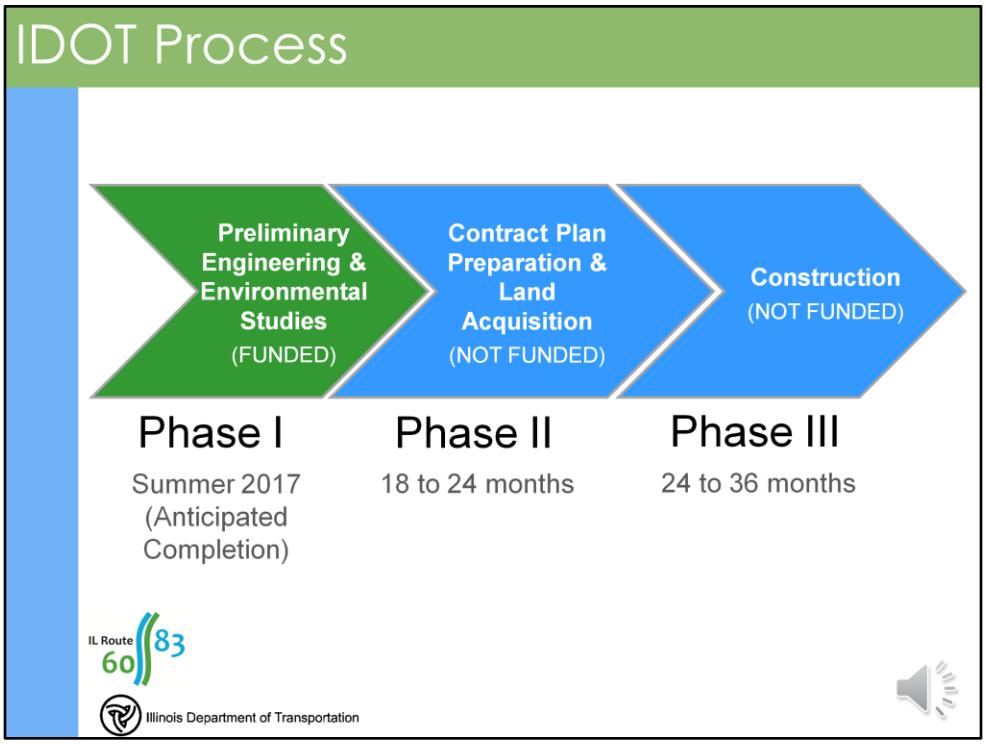


The Illinois Department of Transportation welcomes you and thanks you for taking the time to join us for our public hearing to discuss the recommended improvements to Illinois 60/83. Your continued input is an important part of our study process.



This presentation will include:

- A general overview of the project
- An explanation of the study process
- The overall project schedule
- A presentation of the recommended alternative
- The next steps in the study process



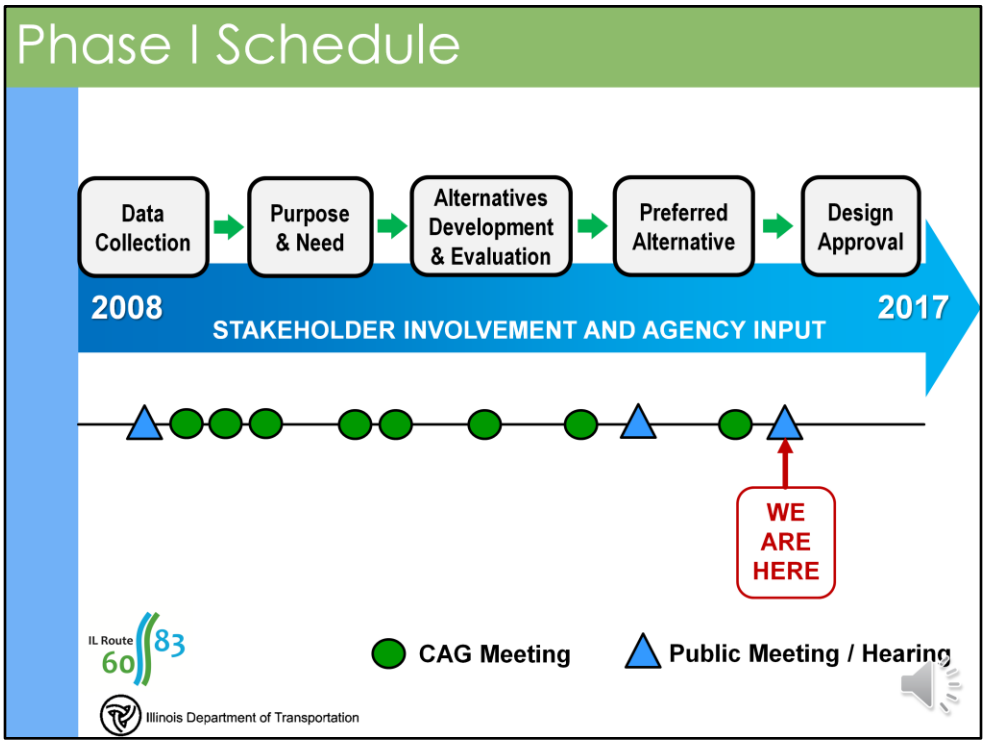
The process from planning to construction of a roadway project involves three distinct phases.

Phase I is engineering and environmental study, which includes the development of the project's purpose and need, development of alternatives, identification of environmental resources and the analysis of minimizing impacts. We are currently nearing the completion of this Phase I process.

Phase II includes a continued and more detailed development of the improvement and is the preparation of contract plans and documents. Phase II is also when Land Acquisition of required parcels is performed.

Phase III includes the bidding and actual construction of the project.

Each Phase has a separate funding authorization. Phase I is currently funded. Funding for Phase II and Phase III has not been identified.



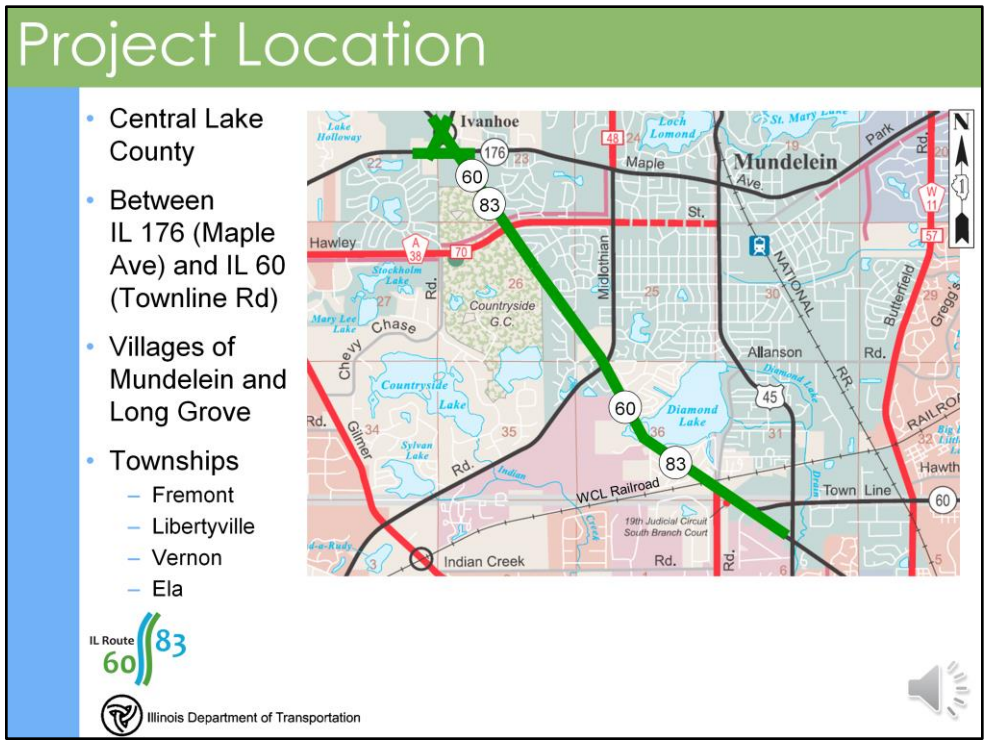
The project schedule includes key milestone progress dates and activities associated with the study process.

A detailed schedule is also included in today's meeting handout.

Two Public Information Meetings and eight Community Advisory Group meetings were held for this project.

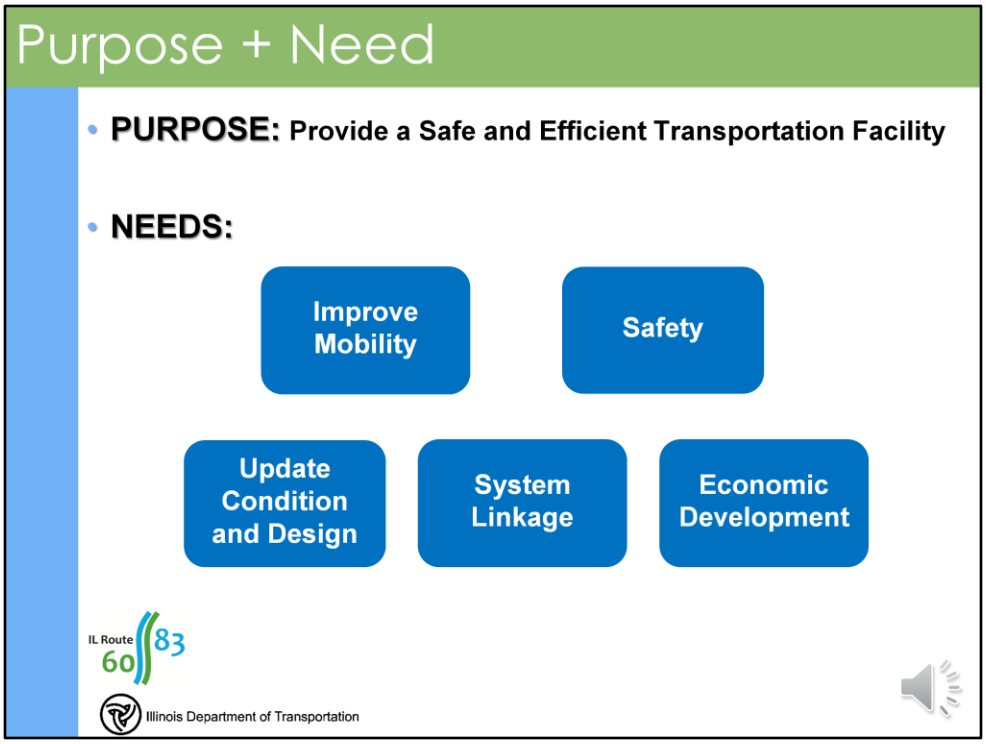
Tonight's Public Hearing includes a presentation of the recommended roadway improvements for your review and input.

This study is targeted to conclude and receive approval in the Summer of 2017.



The project is located in central Lake County. The limits of the proposed improvement are from the Illinois 176/Schank Avenue triangle to south of Illinois 60 (Townline Road) – a distance of approximately 3.5 miles

The project is located primarily in the Village of Mundelein with parts traversing the Village of Long Grove and the Townships of Fremont, Libertyville, Vernon and Ela.



The purpose of the project is to provide a safe and efficient transportation facility for Illinois 60/83.

The identified project needs include the following:

- Improve mobility
- Address safety for all roadway users.
- Update condition and design of the facility
- Improve system linkage between routes
- Accommodate future economic development

The existing roadway primarily consists of one through-lane in each direction with an open drainage system for the majority of the route. Existing posted speed limits vary from 35 miles per hour to 50 miles per hour.

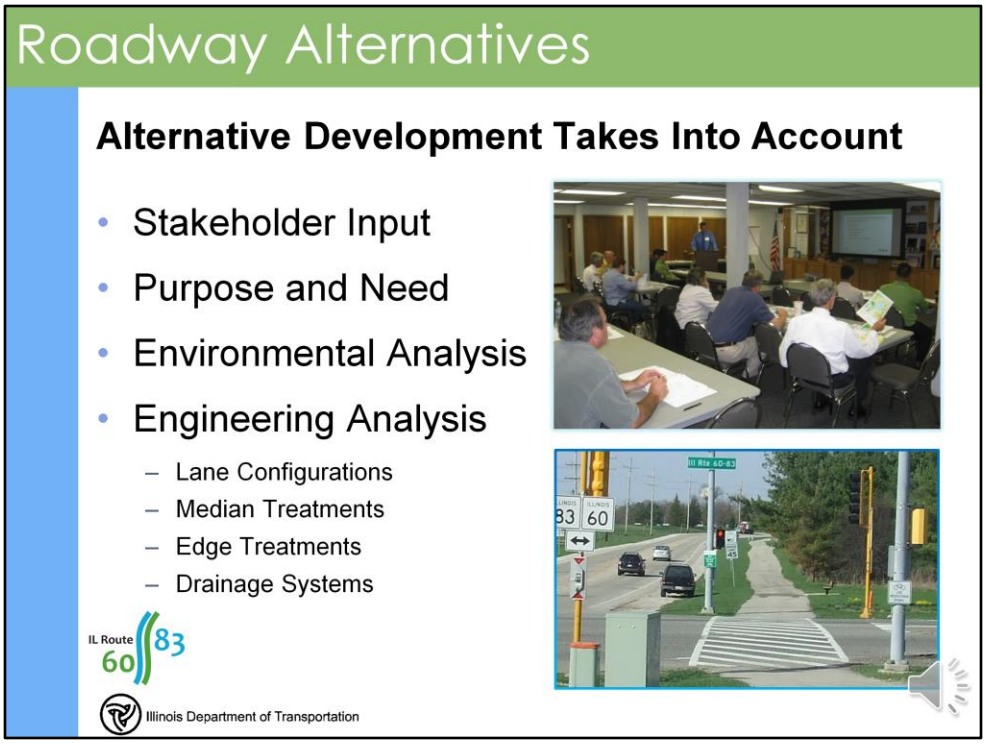
The existing roadway requires modernization for the following reasons:

- The existing pavement is in poor condition and nearing the end of it's design life.
- Traffic Demand exceeds the existing roadway capacity. Today's traffic volumes exceed 18,000 vehicles per day, while daily volumes of up to 27,000 vehicles are projected by year 2040.
- Excessive delays during peak periods are common resulting in average travel speeds of 10 mph or less through the corridor.
- The existing roadway does not accommodate pedestrians and bicyclists.
- Traffic signals are outdated and do not meet current design standards.

Crash analysis includes the collection and evaluation of traffic crash reports along the corridor. The analysis utilizes the most recent three years of crash reporting history available; in this case 2012 through 2014.

A total of 436 crashes occurred with the majority being rear end collisions and turning movement collisions. 96 of the crashes reported involved minor to severe injuries. There was one fatality crash that involved a bicyclist during this three year period.

The lack of sidewalks, off-street paths and adequate shoulder widths will be addressed to improve safety for pedestrians and bicyclists.

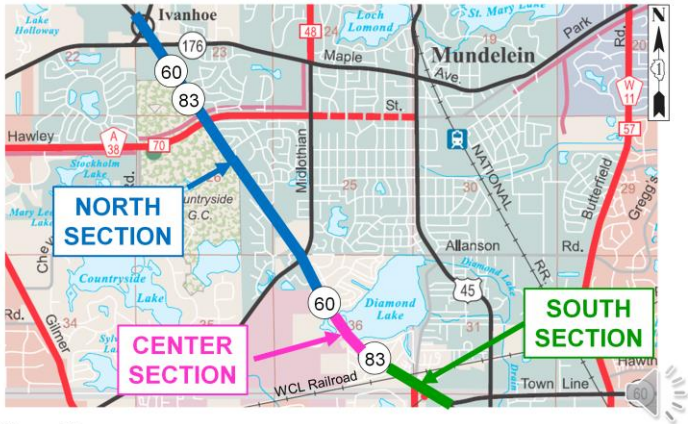


Alternatives were developed with the following in mind:

- Input from Stakeholders
- Satisfying the Project's Purpose and Need
- Environmental and Engineering analysis to avoid or minimize impacts to surroundings. Design features considered included lane configurations, median treatments, edge treatments, and drainage systems.

Preferred Alternative

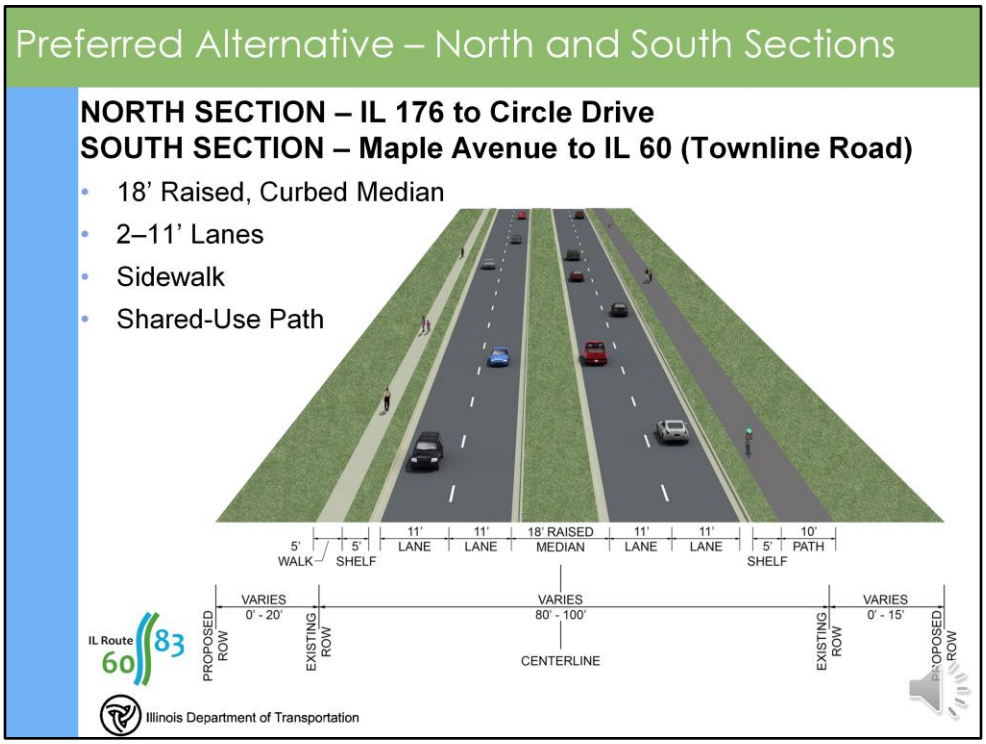
- North, Center and South Sections
  - Minimizes Environmental Impacts
  - Supports the Purpose and Need
  - Contains Design Elements for All Users
  - Minimizes Property Impacts and Right-of-Way Acquisition



IL Route 60/83

Illinois Department of Transportation

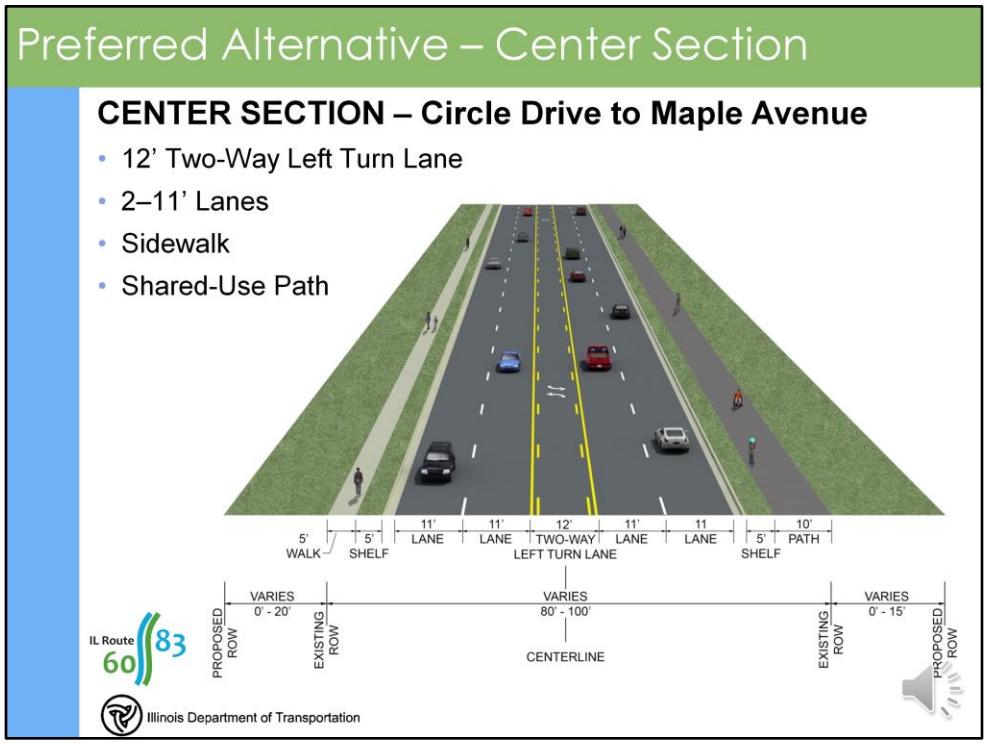
IL 60/83 has been divided into a north section, center section and south section for analysis. A preferred alternative has been developed for each section.



At the north and south ends of the improvement, from Illinois 176 to Circle Drive, and from Maple Avenue to IL 60 (Townline Road), a raised, curbed median is proposed with two lanes in each direction.

This median type provides an opportunity to install an aesthetically and environmentally friendly landscape, create well defined access management and reduce crash potential associated with left turn movements. U-Turn movements are accommodated at all major intersections along the corridor to maintain full access at driveways.

The proposed improvements also include a potential sidewalk and shared-use path.



Within the center section of the improvement, between Circle Drive and Maple Avenue, a two-way left-turn lane is proposed in this area.

A narrower cross-section was implemented in this section to minimize impacts to Diamond Lake on the east and the Diamond Lake Sports Complex on the west.

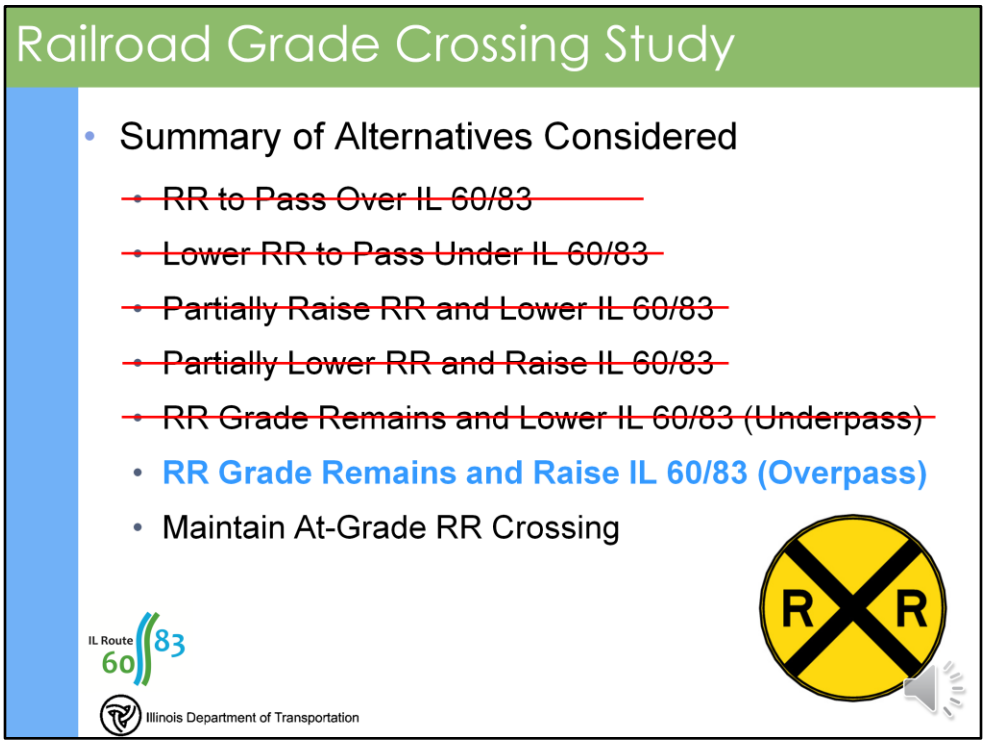
This median type was also chosen due to the high-density of residential driveways and minor side streets and the absence of high traffic commercial driveways.

In partnership with the Village of Mundelein, the study included the evaluation of a potential grade separation or bridge to separate IL 60/83 and the Wisconsin Central Limited Railroad. Utilizing rail crossing gate monitoring data, the study concluded that the Federal Warrant for Daily Vehicle Delays was well exceeded.

A bridge at the IL 60/83 crossing would eliminate all conflicts between trains and roadway users and would address these three primary concerns noted and documented from the initial public meeting.

Benefits of a grade separation would include elimination of all traffic delays due to train activity because trains would no longer block the IL 60/83 crossing.

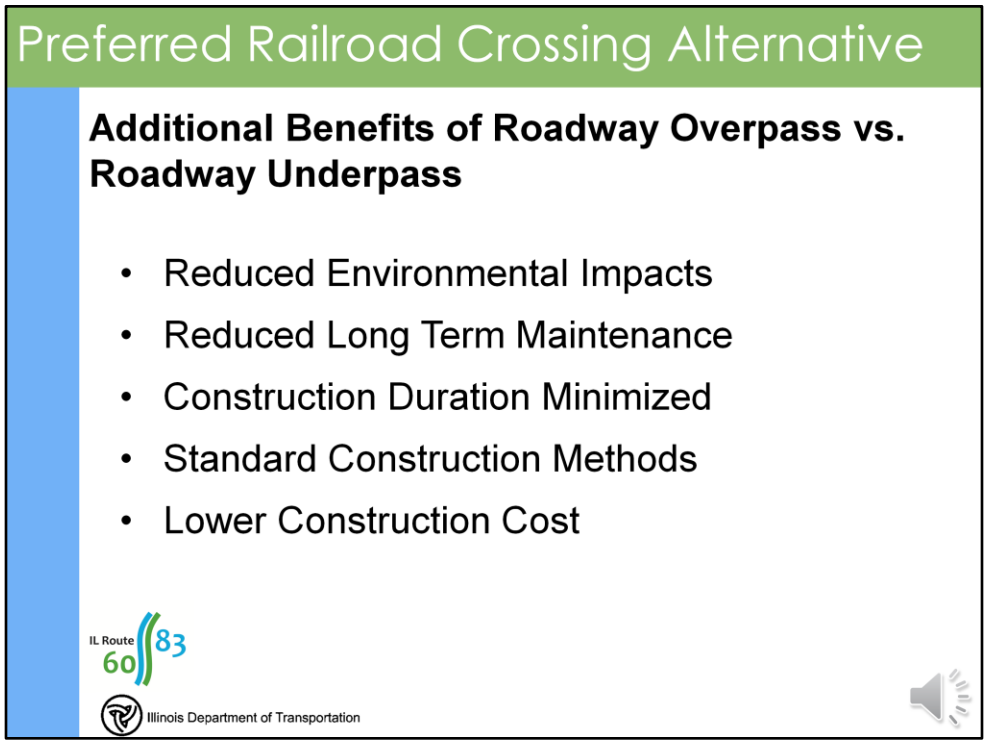
The safety for all roadway users, including bicyclists and pedestrians, would similarly be improved as the crash potential with trains is eliminated. Finally, the grade separation would benefit public safety as emergency response times from paramedics, firefighters and police would be improved in the area.



Seven alternatives for a grade separation were given consideration. Due to the nature of railroad design criteria, physical room needed to implement railroad profile grade and elevation changes and associated cost, four alternatives were removed from further study.

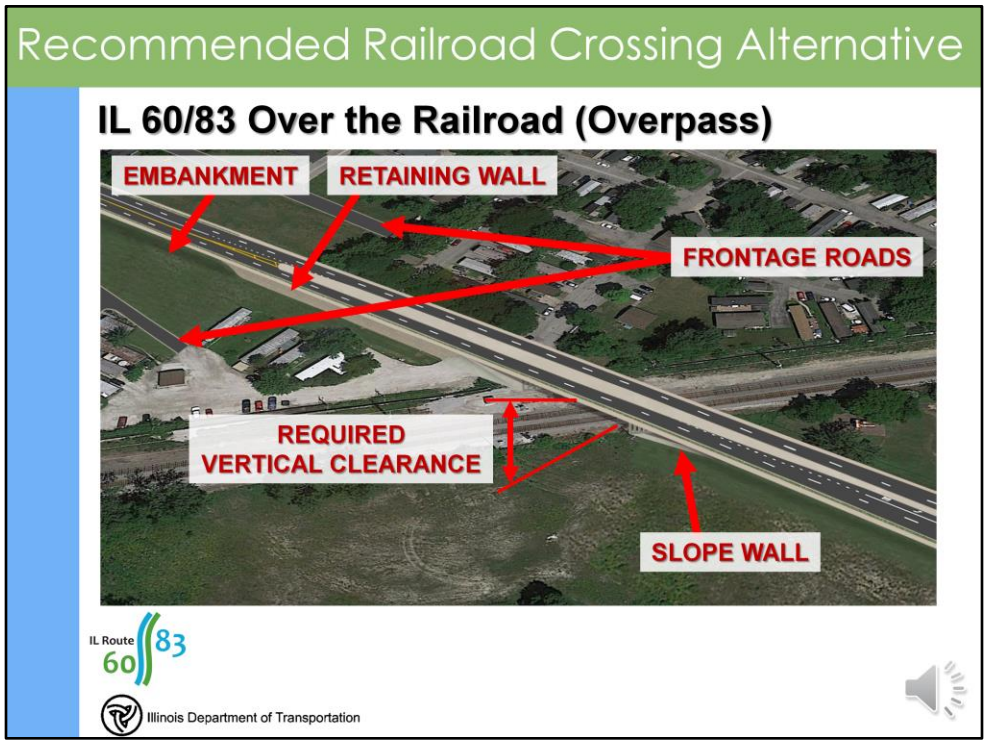
In addition, a roadway underpass was eliminated from additional consideration due to cost, associated drainage improvements required, construction staging complexity and maintaining railroad operations.

The recommended alternative consists of an IL 60/83 overpass over the railroad.



There are additional benefits realized with the roadway overpass alternative when compared with the roadway underpass alternative. These additional benefits include:

- Reduced environmental impacts - an overpass would avoid extensive excavation and existing water table concerns.
- Reduced long term maintenance - the overpass does not require installation and maintenance of a pump station and lighting system.
- Shorter overall construction duration with fewer and less complex construction staging
- Standard construction methods
- And an overall lower construction cost.

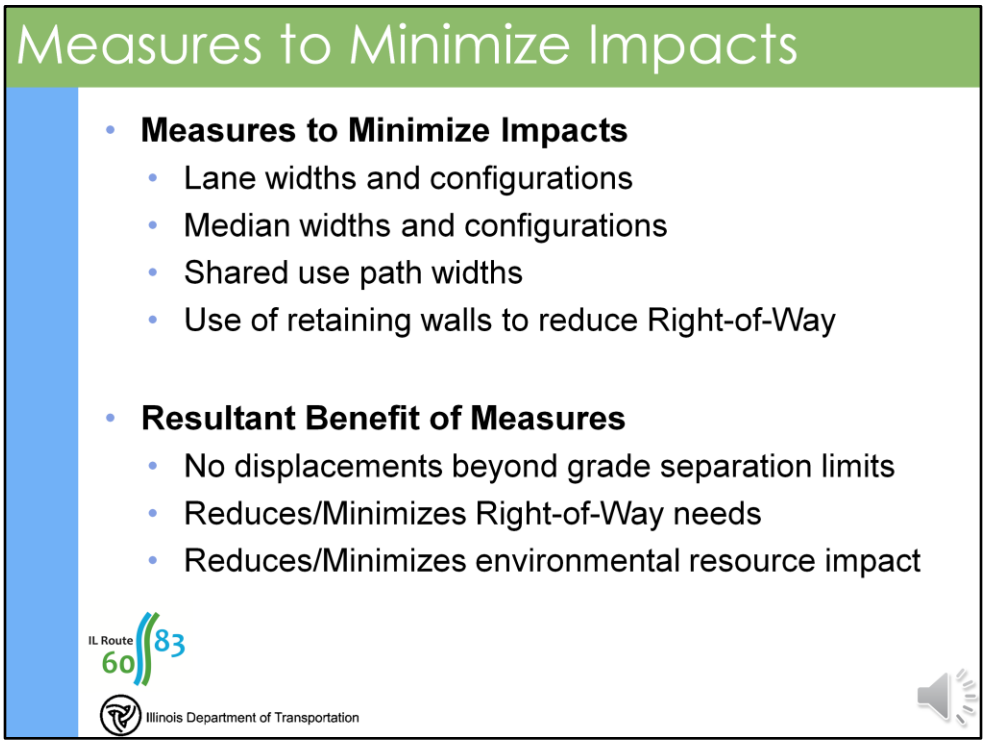


The graphic visually depicts the proposed IL 60/83 railroad grade separation alternative.

To accommodate the grade separation and vertical clearance required above the railroad, a change in roadway elevation is required to begin near the intersection of Hickory Avenue and continue south of Diamond Lake Road. This would prohibit the potential reestablishment of access to several of the adjacent properties, requiring the acquisition of eight residences and five commercial businesses.

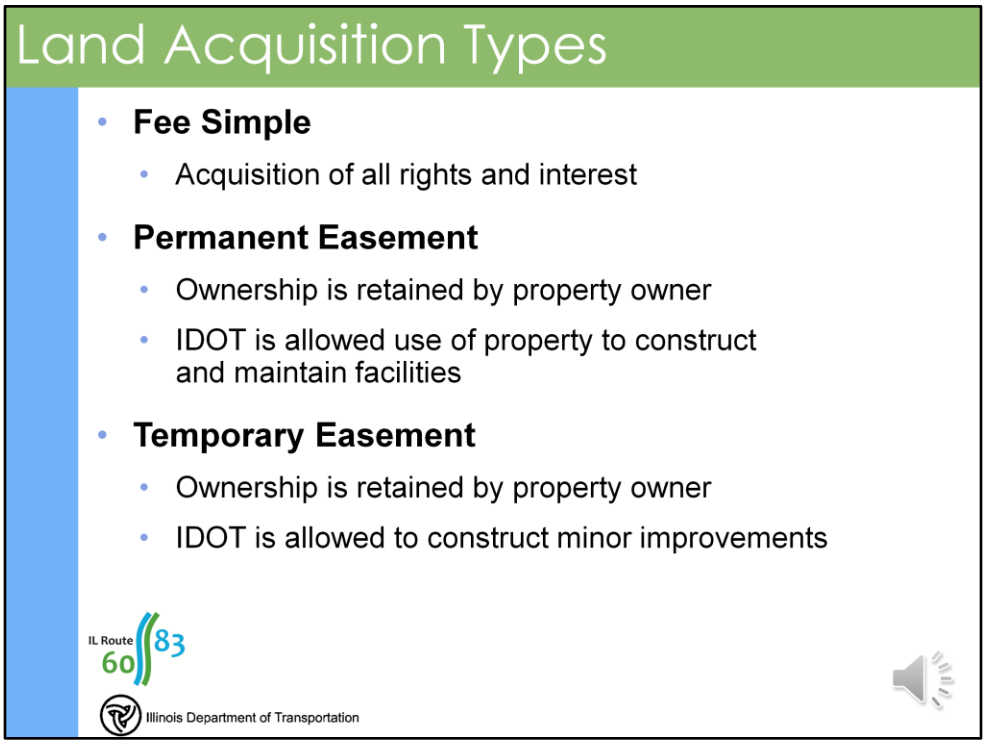
To minimize further impacts to access, north and south frontage roads are proposed to reinstate travel to Maple Avenue, West Oak Middle School and the adjacent residential communities.

Retaining walls and sloped embankments are utilized along overpass approaches, accommodating drainage and detention measures while minimizing the necessary improvement footprint and with sensitivity for the visual appearance of this area.



Similar to the previous slide, other areas along the route utilize opportunities where practical to introduce measures which minimize the improvement width and footprint. A few of these measures include use of reduced width pavement, median and shared use path, and the use of retaining walls

Resultant benefits such as no additional property displacements anticipated beyond those previous noted within the limits of the grade separation overpass area, reduced right of way, and minimized impacts to environmental resources.



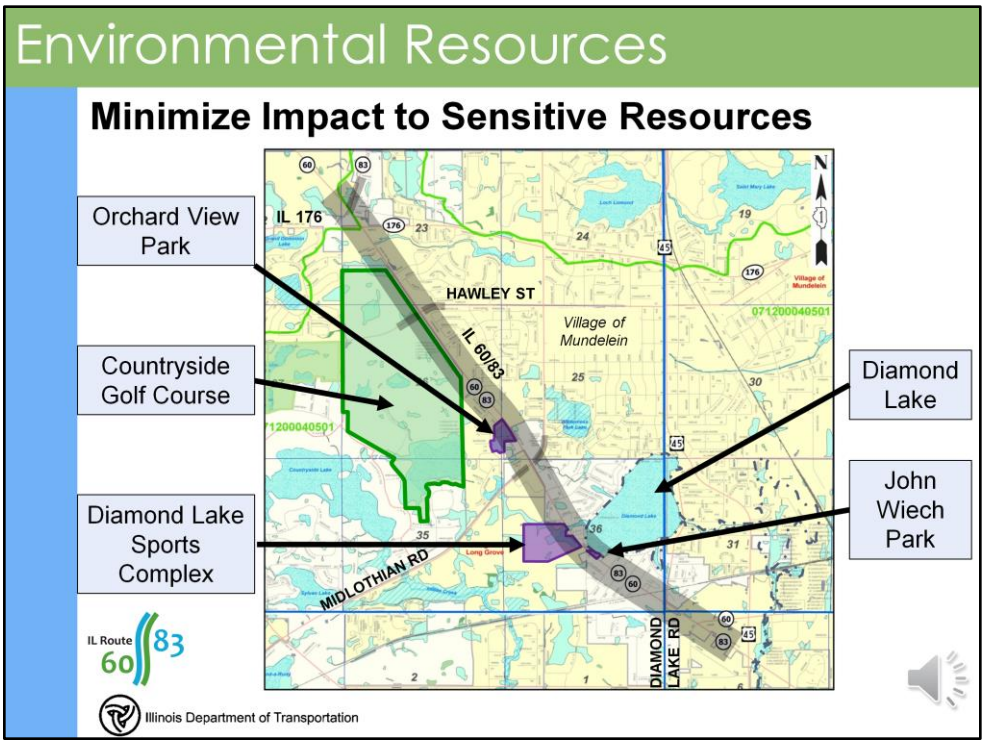
When projects require work to be performed beyond the existing right of way, land is required. The three types of land acquisition include the following:

Fee simple - which is acquisition of all rights and interests.

Permanent Easement - where ownership of the land utilized for the project is retained by the property owner, but that allows IDOT continued use of the property for construction and future maintenance.

Temporary Easement - where ownership of the land utilized for the project is retained by the property owner, however, IDOT is allowed to construct minor improvements.

IDOT will strive to minimize the need to acquire property. Staff will be available in the adjacent room to answer questions you may have concerning the Land Acquisition Process.



During the planning process, existing environmental resources were identified and evaluated for avoiding and minimizing impacts relative to roadway improvements within the project limits.

Environmental resources may typically include parks and recreation areas, forest preserves, wetlands, and areas supportive of native species and habitats. Some of the resources along this project consist of:

- Orchard View Park
- The Countryside Golf Course
- The Diamond Lake Sports Complex
- John Wiech Park
- Diamond Lake

and

- Various wetlands

A total of five wetlands would be impacted as a result of the proposed improvements.

This total impacted area is eight tenths of an acre, which will be mitigated.

Exhibits depicting these impacts are on display in the adjacent room.

Public Lands – Section 4(f) Impacts

Public Land	Fee Simple Acquisition (acres)	Temporary Easement (acres)	Permanent Easement (acres)
MUNDELEIN PARK AND RECREATION DISTRICT			
John Wiech Park	0.02	None	0.15
Diamond Lake Sports Complex	0.32	0.01	None
Orchard View Park	0.12	0.08	0.02
LAKE COUNTY FOREST PRESERVE DISTRICT			
Country Side Golf Course	0.71	0.15	0.75

IL Route 60/83

Illinois Department of Transportation

Public lands or Section 4(f) properties are defined as publicly owned parks and recreation areas. There are a total of four such properties within the project limits.

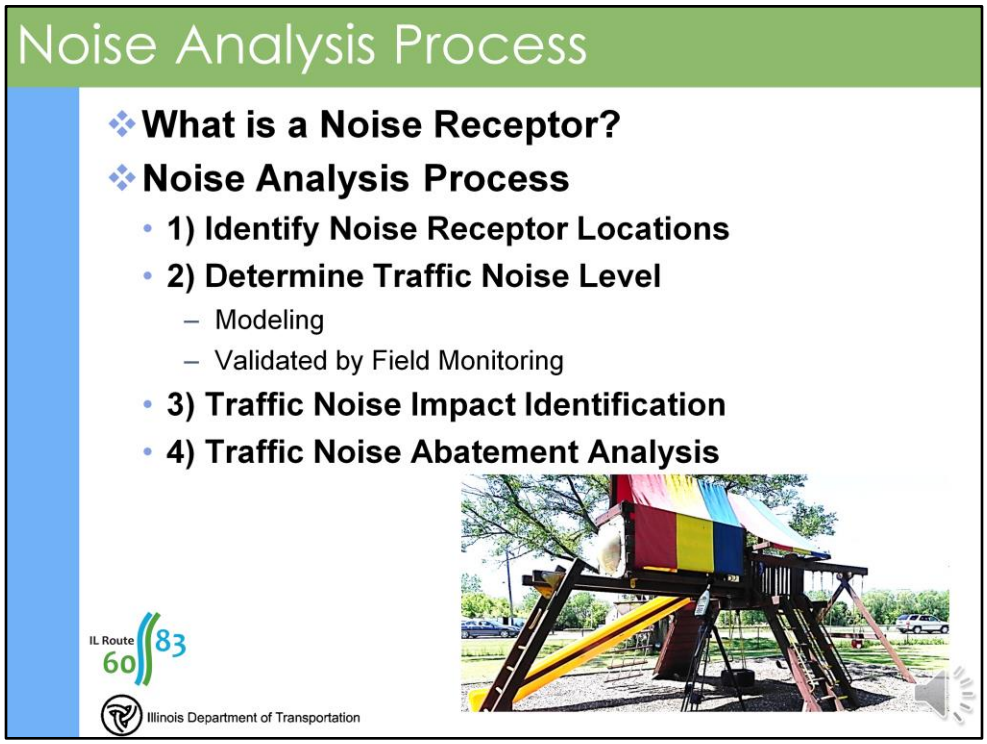
A minimal amount of land, that is immediately adjacent to the IL 60/83 right of way, will need to be acquired from each of these four properties. However, this will not adversely affect the use of these parks and recreation areas.

The areas for each property are summarized on this slide; fee simple acquisition areas range between two hundredths and seven tenths of an acre.

Storm water management BMPs are control measures taken to mitigate changes to the quality of urban runoff caused through changes to land use.

BMPs focus on improving water quality problems caused by increased impervious surfaces from land development; such as the additional roadway pavement and sidewalks associated with this improvement project.

BMPs are designed to improve water quality through infiltration and retention/detention.



The study included an analysis of current noise levels as well as those modeled based on roadway improvements and future traffic volumes

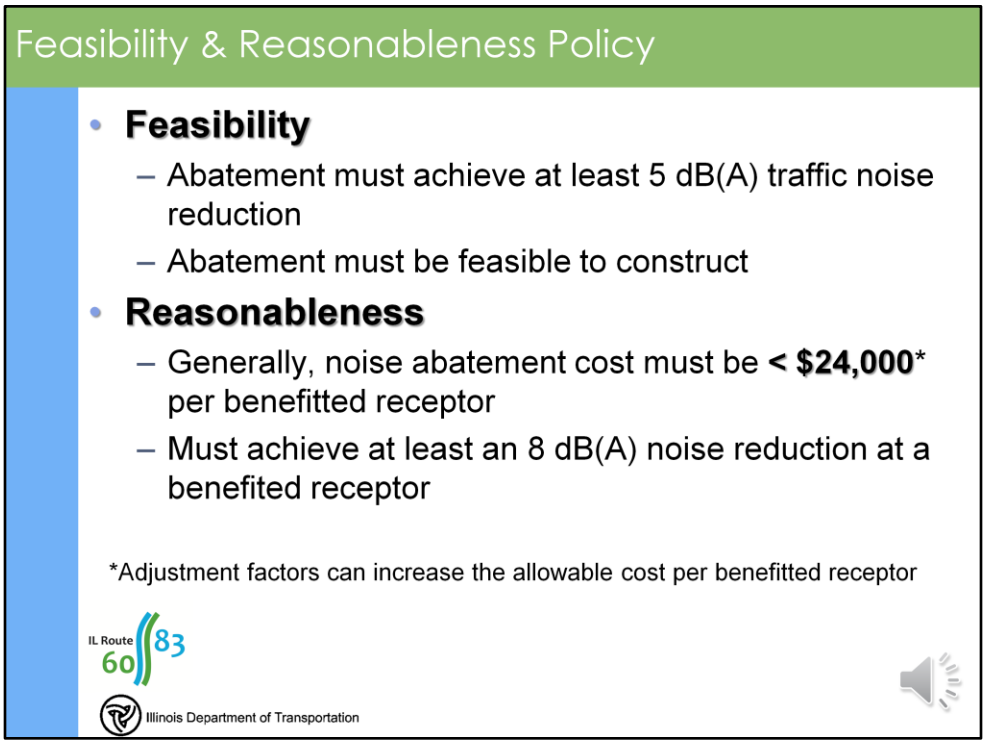
The next few slides reference the term noise receptor. A noise receptor is defined as “an outdoor area of frequent human use” along a highway that is analyzed for noise impacts due to the project. Noise receptors are key components of the noise analysis process which consists of four primary steps:

First, is to identify noise receptor locations

Second, determine existing traffic noise levels by taking field measurements and validating the noise model with field data.

Third, identify receptors that have been impacted, and

Fourth, complete the noise abatement analysis. A noise barrier must be found to be both feasible and reasonable to be considered for implementation.



Noise abatement walls are only considered for implementation if they are found to be both feasible and reasonable.

Feasible criteria includes: that abatement must achieve at least a 5 decibel traffic noise reduction AND the abatement wall must be feasible to construct.

Reasonable criteria includes: that, in general, the cost per benefited location must be less than $24,000. The barrier also must achieve at least an 8 decibel reduction at a benefited receptor.

If these criterion are not satisfied, the barrier cannot be considered for implementation.

For this project, the noise analysis identified and studied:

239 receptors

17 individual noise walls

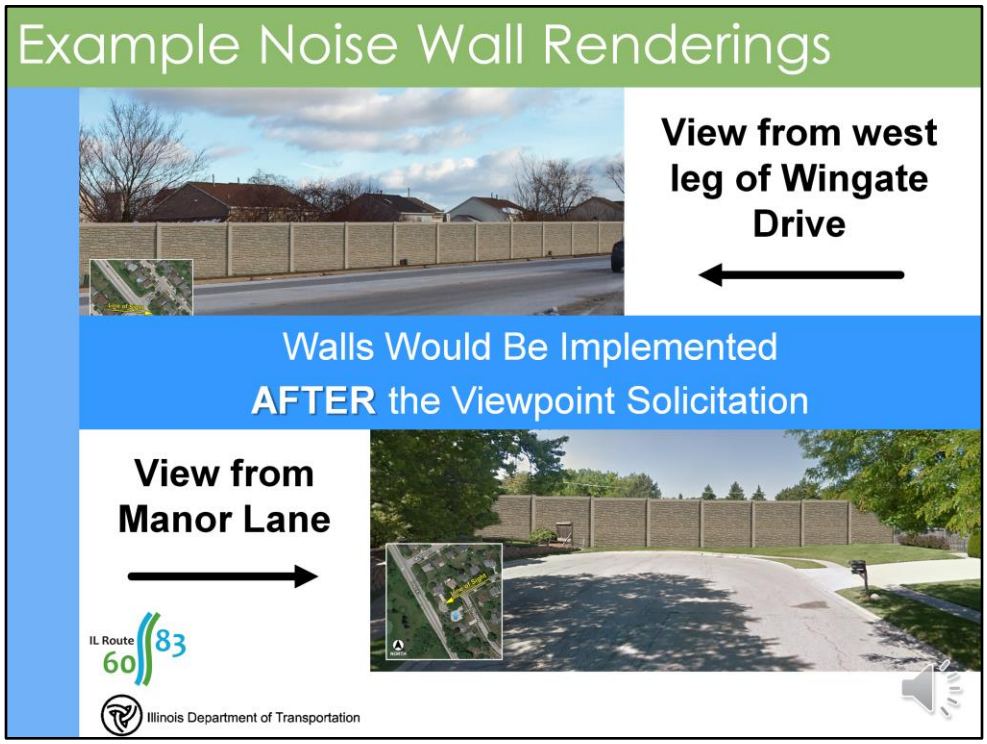
The results indicated that:

5 noise walls were found to be feasible and reasonable

the walls would benefit 105 receptors

the walls would vary in height from 10’ to 12.5’

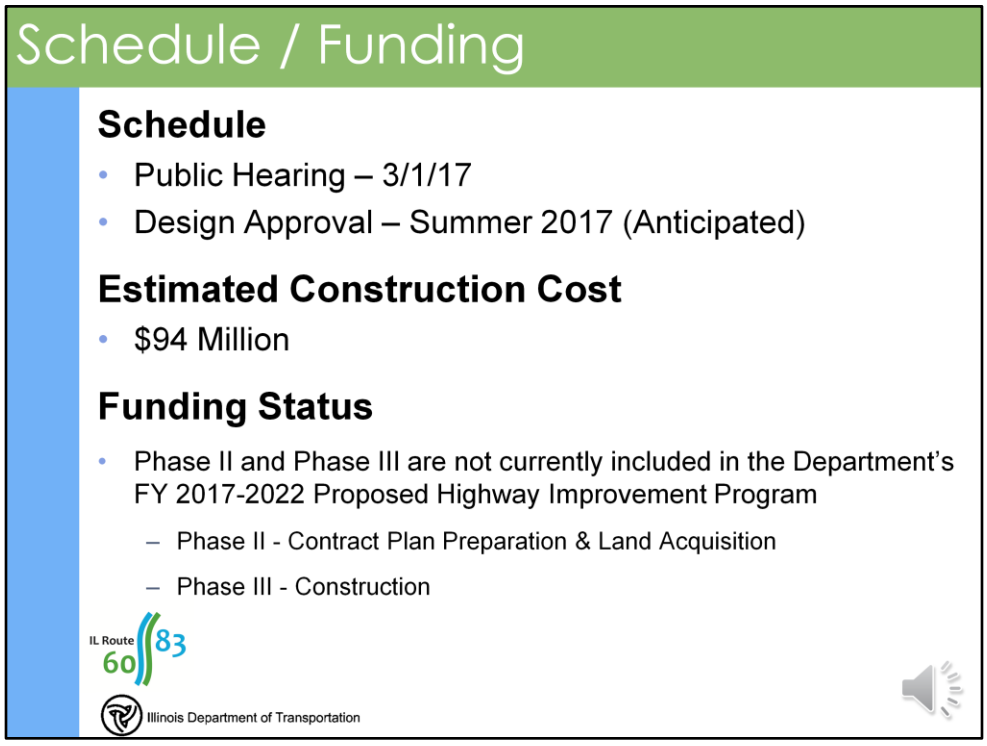
the combined length of the five walls would be 1.25 miles in length



This slide is a rendering of what noise walls would typically look like at two locations along the project corridor.

Special treatments or aesthetics can be accommodated; however, cost participation by the local municipality would be required.

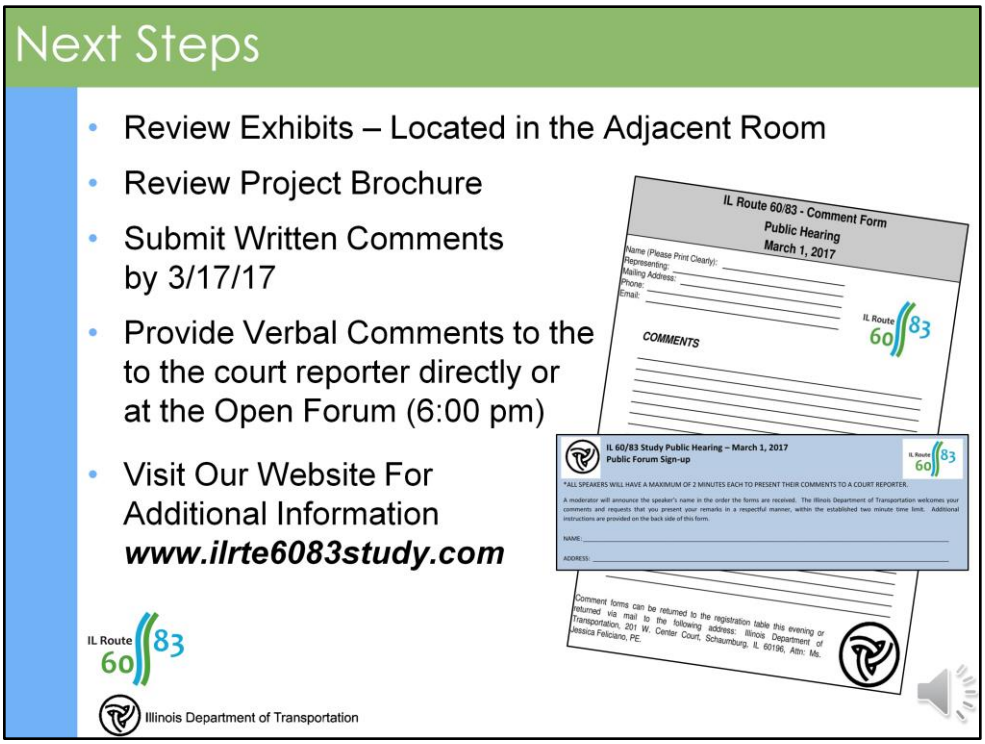
The walls would be implemented based on property owner input from benefitted receptors.



This study is anticipated to be completed and receive Design Approval by the Summer of 2017.

The estimated construction cost for this roadway improvement project is 94 million dollars.

This project is not currently included in the Department's FY 2017-2022 Proposed Highway Improvement Program; however, it will be included in the Department's priorities for future funding consideration among similar improvement needs throughout the region.



We welcome your participation in the study process. If you haven't already, we encourage you to review the display exhibits and discuss them with the Project Study Team in the adjacent room.

We have provided a brochure that includes an overview of the project. We also encourage you to submit written comments on the comment forms provided in the adjacent room. You may also mail your pre-addressed comment form directly to the Department.

You may also provide verbal statements individually to the court reporter, or during the open forum which begins at 6:00 PM. We ask that you fill out a blue participation form and give it to a project team member.

The majority of the information on display at this meeting, as well as previous meetings, can be found on our project website.

The Illinois Department of Transportation thanks you for attending the public hearing today on the Illinois 60/83 improvement project.

We value your participation and appreciate your input as part of our combined effort to improve transportation in Illinois.