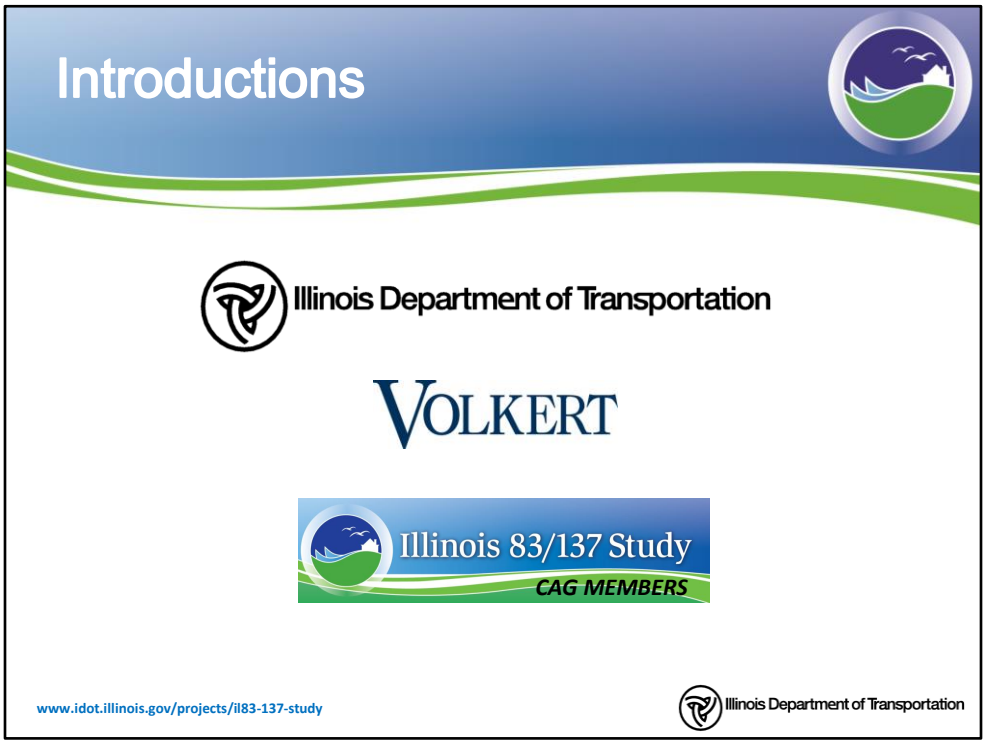
Welcome to the 5th Community Advisory Group meeting for the IL 83/IL 137 Study project. We appreciate you all being here today.

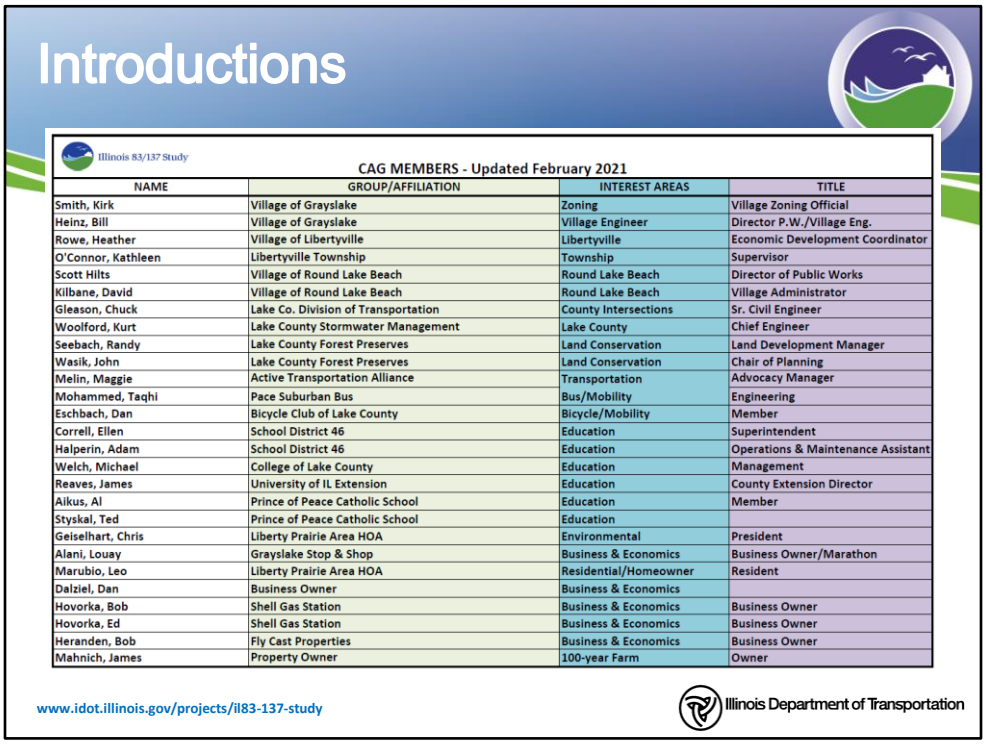
As you enter today's meeting, each CAG Member will be muted during the PowerPoint Presentation, however, attendees are encouraged to utilize the chat window for any specific questions that we can discuss at the end. Once the presentation is completed there will be a walk-through of the Preferred Alternative Strip Maps in which CAG Members will be able to discuss the proposed improvements along the corridor.



IDOT Introductions

Volkert Introductions

And CAG Members, as shown on the following slide:



Attached is a list of the current CAG Members and the groups/affiliations that they represent which include municipalities, agencies, forest preserves, schools, businesses, and residents.

Meeting Agenda

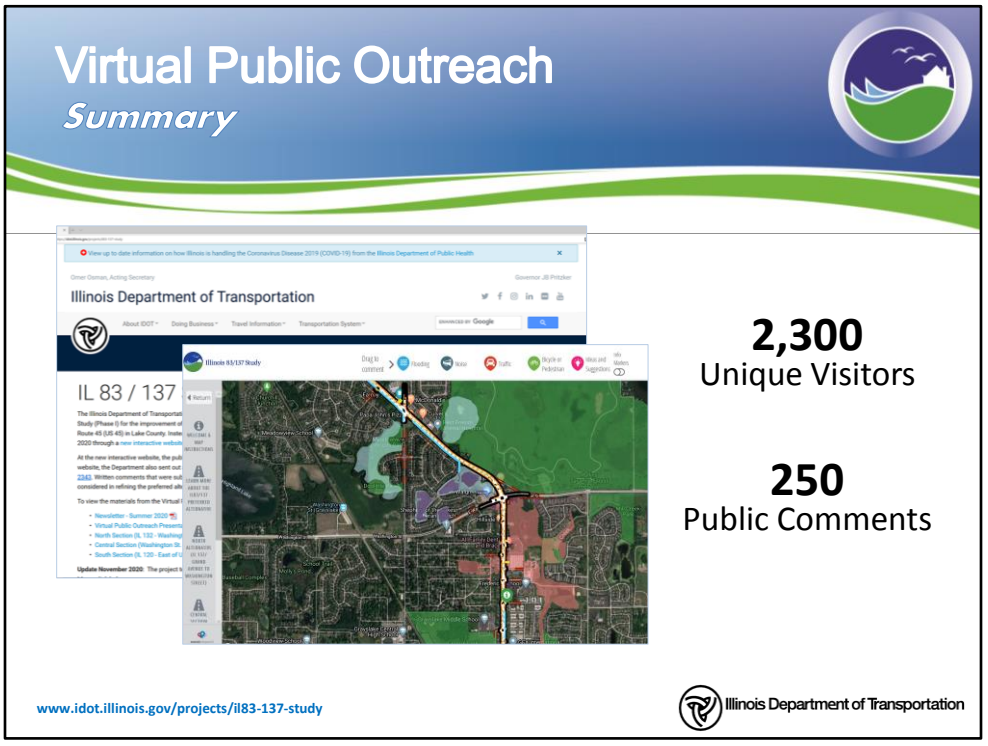
- Virtual Public Outreach Summary
- CAG Meeting #4 Summary
- Project Overview
- Review of Alternatives Carried Forward
- Presentation of Recommended Preferred Alternative
- Next Steps
- Walkthrough – Recommended Preferred Alternative

www.idot.illinois.gov/projects/il83-137-study

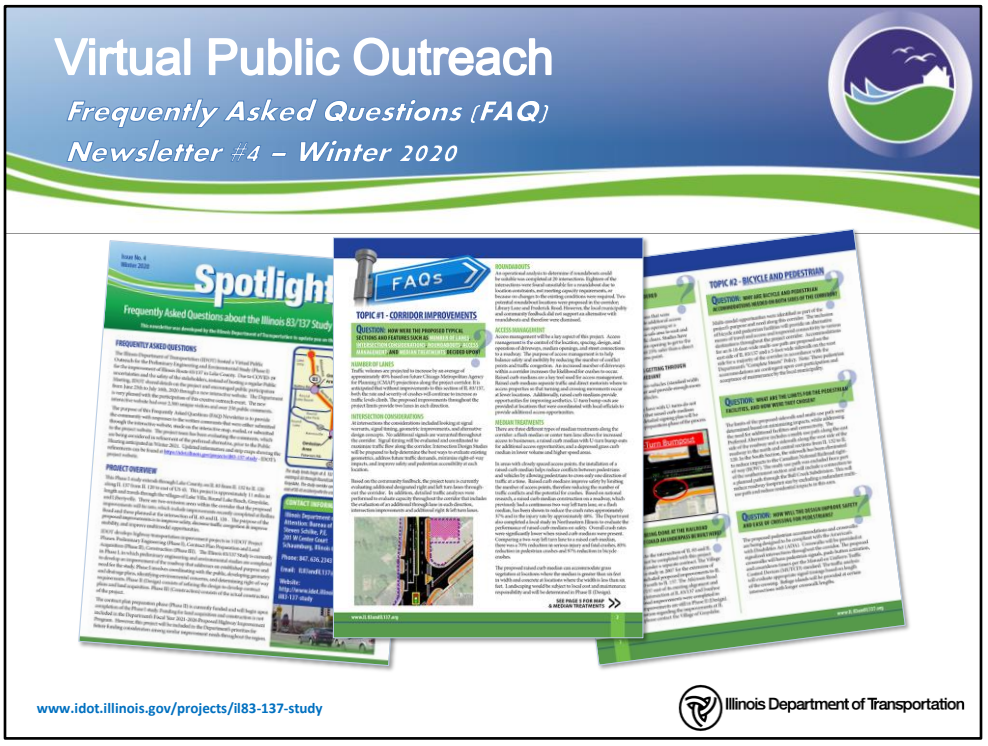
Illinois Department of Transportation

In today's meeting we will plan on discussing the following topics:

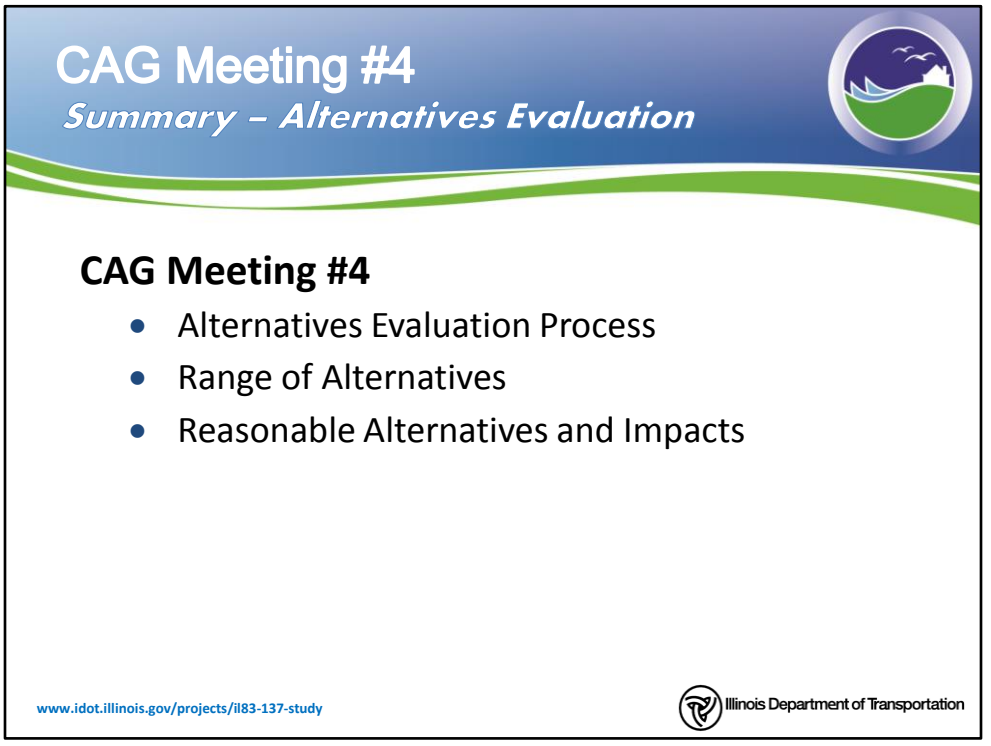
- Virtual Public Outreach Summary
- CAG Meeting #4 Summary
- Project Overview
- Review of Alternatives Carried Forward
- Presentation of Recommended Preferred Alternative
- Next Steps
- Walkthrough – Recommended Preferred Alternative



The Illinois Department of Transportation (IDOT) hosted a Virtual Public Outreach for the Preliminary Engineering and Environmental Study (Phase I) for the improvement of Illinois Route 83/137 in Lake County. Due to COVID-19 uncertainties and the safety of the stakeholders, instead of hosting a regular Public Meeting, IDOT shared details on the project and encouraged public participation from June 25th to July 16th, 2020 through a new interactive website. The Department was very pleased with the participation of this creative outreach event. The new interactive website had over 2,300 unique visitors and over 250 public comments.



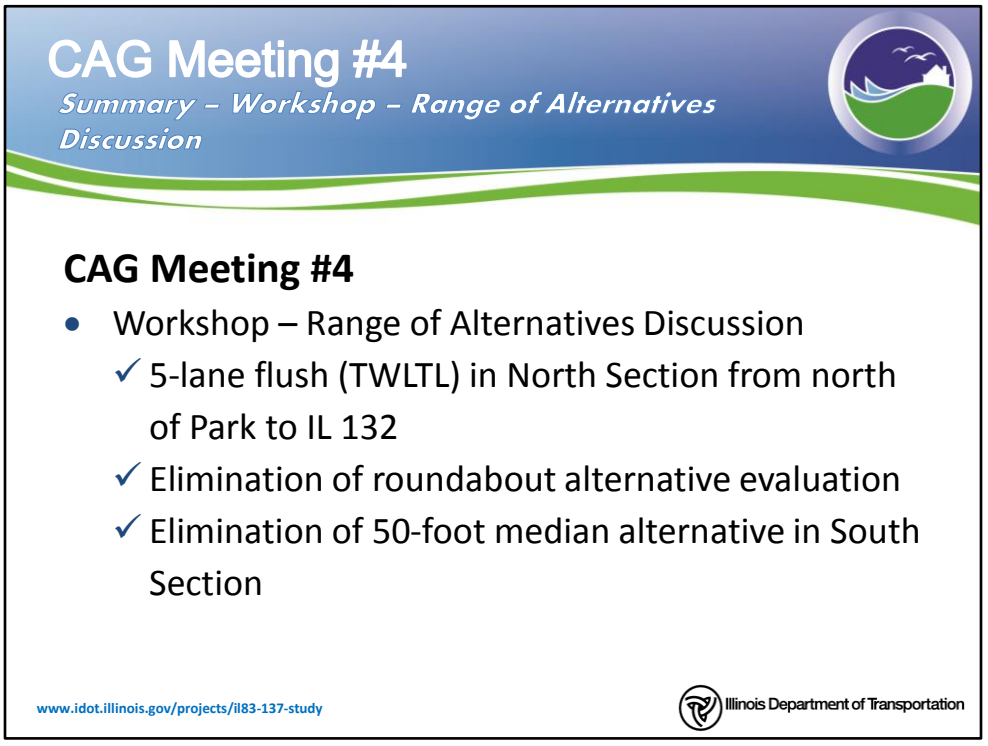
In response to the Virtual Public Outreach feedback, the project team recently sent out a Frequently Asked Questions (FAQ) Newsletter to provide the community with responses to the written comments that were either submitted through the interactive website, made on the interactive map, mailed, or submitted to the project website. The project team has been evaluating the comments, which are being considered in refinement of the preferred alternative, prior to the Public Hearing anticipated for later in 2021. Updated information and strip maps showing the refinements can be found on IDOT's project website and will be discussed during the walkthrough of the Preferred Alternative, following this presentation.



It has been a while since we have met, and we also have some new members, so we will first review with you what we did during our last CAG meeting.

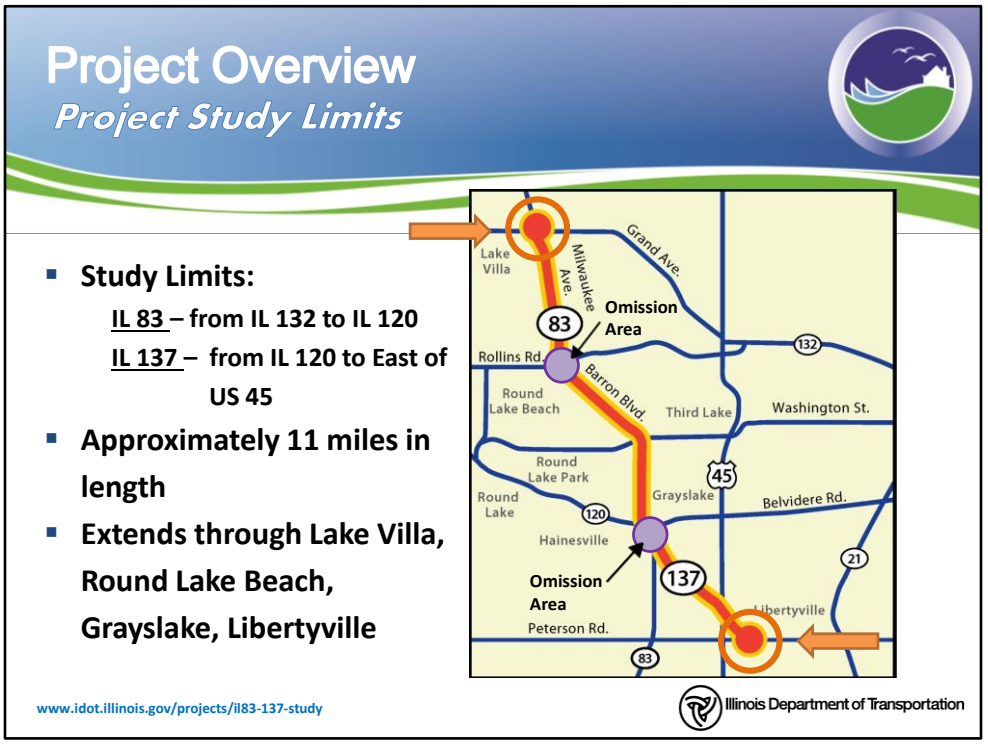
The Alternatives Evaluation Process included discussing the engineering and environmental data collected, the detailed studies completed, and the screening of alternatives for fatal flaws and against the project's Purpose and Need.

The Range of Alternatives and Impacts discussion provided details associated with splitting the corridor into sections, the review of the initial alternatives developed, reasoning for alternatives dismissed in certain sections of the corridor, and the creation of more viable alternatives in other sections. A break-down of the proposed Range of Alternatives that was developed in each section of the project was provided to the group for input and discussion. A copy of the CAG Meeting #4 Summary was provided with the invite for this meeting and contains additional information and details of the meeting.



During the Workshop – Range of Alternatives Discussion exercise, the group reviewed the exhibits for the Range of Alternatives developed in each section of the project and used comment sheets to provide comments and suggestions regarding each of the alternatives. The summary of comments from CAG #4 led to the following alternative refinements:

- 5-lane flush w/Two-Way Left Turn Lane (TWLTL) in North Section from north of Park to IL 132
- Elimination of roundabout alternative evaluation
- Elimination of 50-foot median alternative in the South Section



The project extends through Lake County, on IL 83 from IL 132 to IL 120 along IL 137 from IL 120 to east of US 45. This project is approximately 11 miles in length and travels through the villages of Lake Villa, Round Lake Beach, Grayslake, and Libertyville.

There are two omission areas within the corridor that the proposed improvements will tie into. They include improvements recently completed at Rollins Road and those planned at the intersection of Illinois 83 and Illinois 120.

Project Overview

Goals

- Identify transportation needs along the corridor
- Collect information about a variety of resources
- Develop a broad range of transportation solutions
- Study and document potential effects
- Recommend transportation improvements that benefit residents, businesses and the traveling public

www.idot.illinois.gov/projects/il83-137-study

Illinois Department of Transportation

This Study will:

- Identify transportation needs along the corridor
- Collect information about a variety of resources
- Develop a broad range of transportation solutions
- Study and document potential effects
- Recommend transportation improvements that benefit residents, businesses and the traveling public

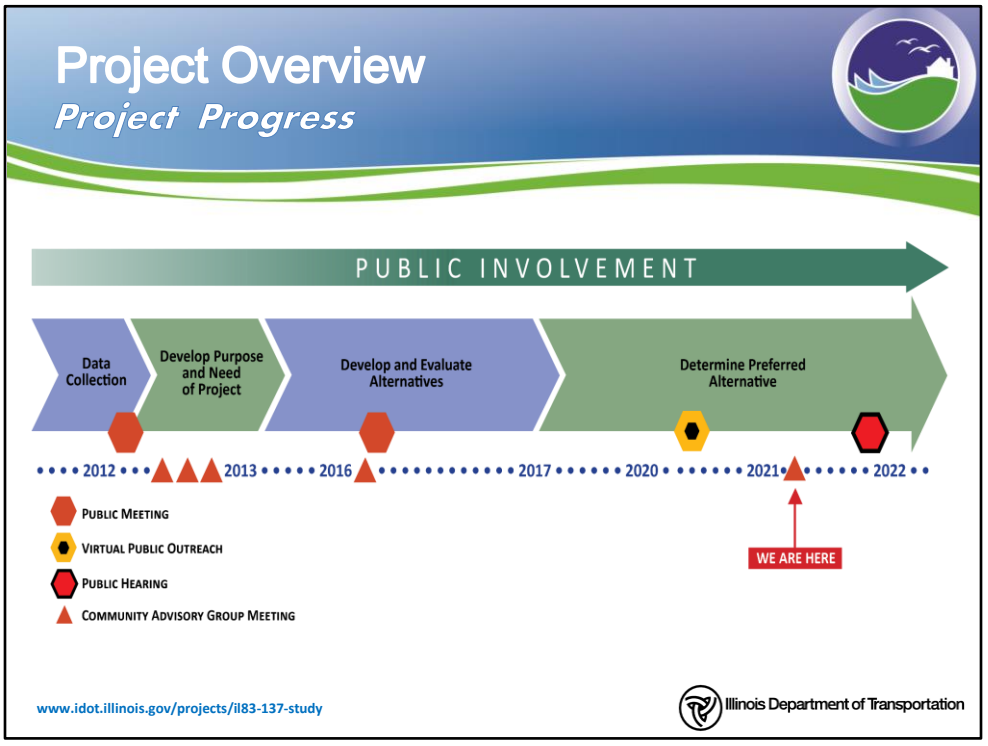
The Project Purpose and Need was developed from a problem statement as well as from a technical analysis of the roadway and additional stakeholder input.

The purpose of the proposed action is to improve safety, improve mobility, and improve multimodal opportunities along the corridor.

With safety identified as a key concern for the corridor, crash history along the corridor was utilized to identify high crash locations and to determine patterns related to safety concerns. There were 1,176 crashes identified through the corridor in the 5-year period studied. The majority of crashes were, rear-end collisions, accounting for 54% of the total crashes. Given the anticipated growth, the corridor will likely experience more crashes as a result of increasing traffic. Therefore, in order to reduce the potential for crashes, the traffic capacity of the roadway must be improved.

To determine the mobility within the corridor, the existing traffic volumes are measured, and future volumes projected. The existing needs can then be determined, and alternatives developed to provide the capacity as to meet the required design criteria. The existing traffic volumes along the corridor range from 13,000 to approximately 22,000 vehicles per day and without an improvement the traffic congestion will be below acceptable levels. The traffic volume is projected to increase to 14,000 and 31,000 vehicles per day by year 2040. If no improvements are completed, the projected capacity will remain below the acceptable level in most areas along the corridor. The only areas where acceptable levels were found is where 4 or 5 lane improvements have been completed or are planned to be completed. Detailed traffic studies have been completed with this study, that includes a Highway Capacity Study (HCS) and traffic signal coordination, along the corridor. Roadway geometry will be upgraded to current design criteria to improve mobility along the corridor.

Intermittent sidewalk, as well as the lack of bicycle and multi-modal opportunities were identified as another need along this corridor. Because of the residential and commercial land use found along the corridor, as well as the frequency of parks, schools, bicycle paths, Metra stations, and intermittent sidewalks within the area, the inclusion of bicycle and pedestrian facilities along the corridor would provide an alternative means of travel and access. The study will follow current ADA design standards and will propose a 5’ sidewalk is along the west side and an 8-10’ multi-use path along the east side of IL 83/137.



The Phase I study process involves 4 primary components. These include: data collection, developing the Purpose and Need of a project, developing and evaluating alternatives, and determining a Preferred Alternative.

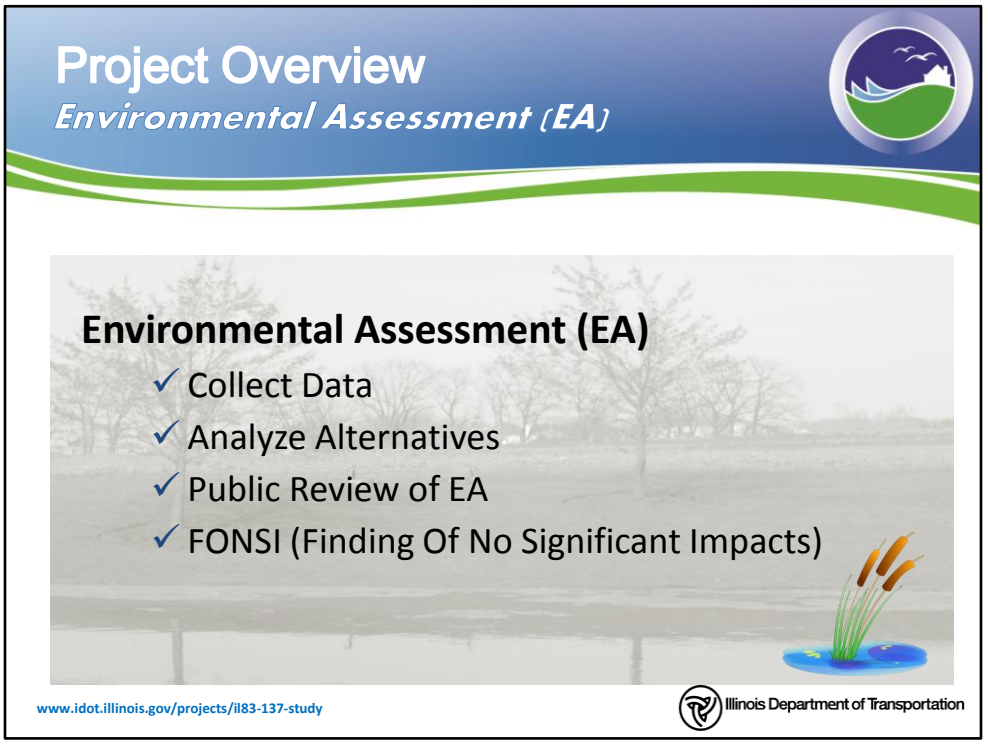
Throughout the Phase I Study Process, principles of CSS are used to engage stakeholders through a number of tools such as: Public Meetings, Community Advisory Group Meetings, Media & Virtual Public Outreach, the Project Website, Local Municipality & Agency Meetings, Project Newsletters, and other small group presentations.

There have also been two Public Meetings to present the study to the public and gather input and comments on the project. Public Meeting #1 was held on March 6th, 2012, while Public Meeting #2 was on May 24th, 2016. The Virtual Public Outreach took the place of Public Meeting #3 and was held in June/July of 2020. The Public Hearing is tentatively scheduled for later in 2021.

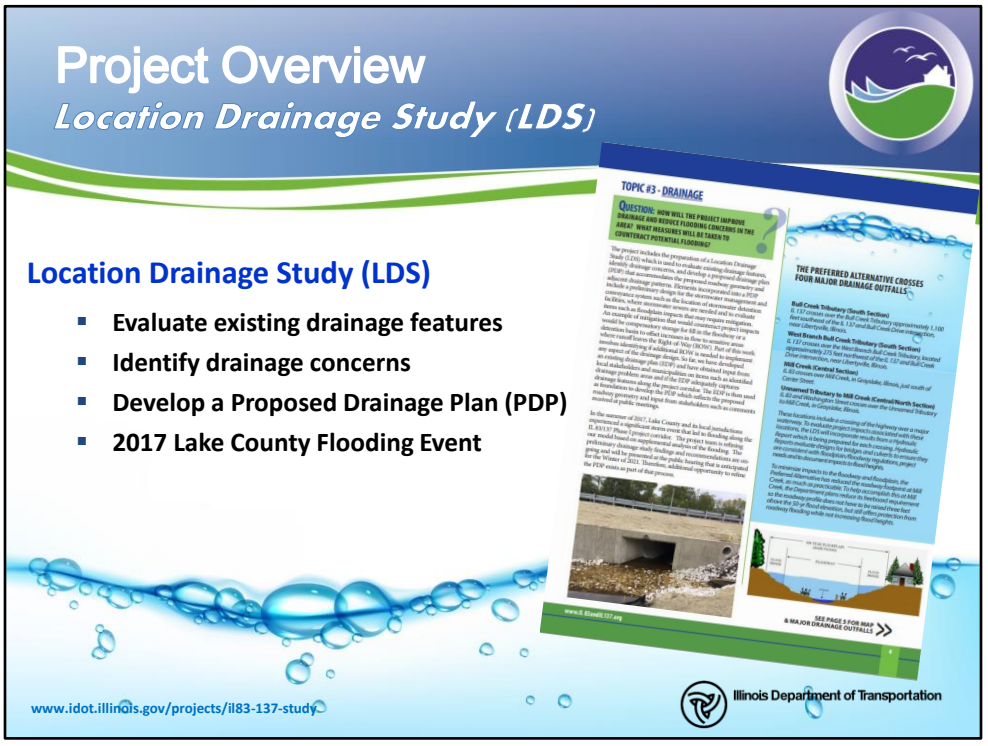
The Project Team also collected Engineering and Environmental Data, completed roadway and drainage surveys, provided a detailed hydraulic and drainage analysis along the corridor, and completed extensive Traffic Signal/Highway Capacity Studies.

This project is being developed in accordance with the National Environmental Policy Act (or NEPA). The environmental impacts of potential alternatives are a critical component to the overall alternative development process. The purpose of NEPA is to ensure that environmental factors are weighted equally when compared to other factors in the decision-making process.

Environmental surveys were collected throughout the project area so that we could identify impacts as we develop alternatives. By identifying these environmental features, we can better determine alternatives that best serve the purpose and need of the project while minimizing environmental impacts. Environmental features include the following: Wetlands; Protected species and habitats; Floodplains; Historic Sites & Cemeteries; 4(f) Resources (Parks, recreation areas & refuges, Forest Preserves); Community & Social Resources; Environmental Justice Communities; and Relocation Impacts.

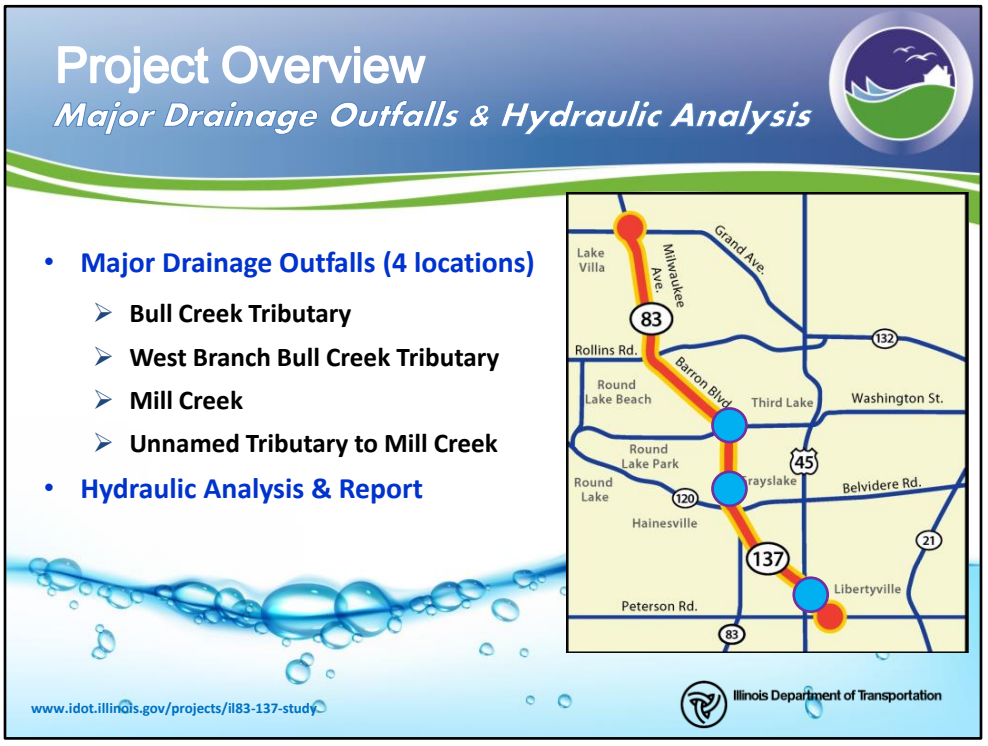


This study is being processed as an Environmental Assessment (or EA) which assists decision makers in determining if a Federal project's impacts are significant. The alternatives will be identified and analyzed to identify the alternative that best meets the needs of the project study area, while avoiding or minimizing environmental impacts. Upon completion of the EA, A Finding of No Significant Impact (or FONSI) is anticipated, which will complete the environmental studies for the project.



The project includes the preparation of a Location Drainage Study (LDS) which is used to evaluate existing drainage features, identify drainage concerns, and develop a proposed drainage plan (PDP) that accommodates the proposed roadway geometry and adjacent drainage patterns.

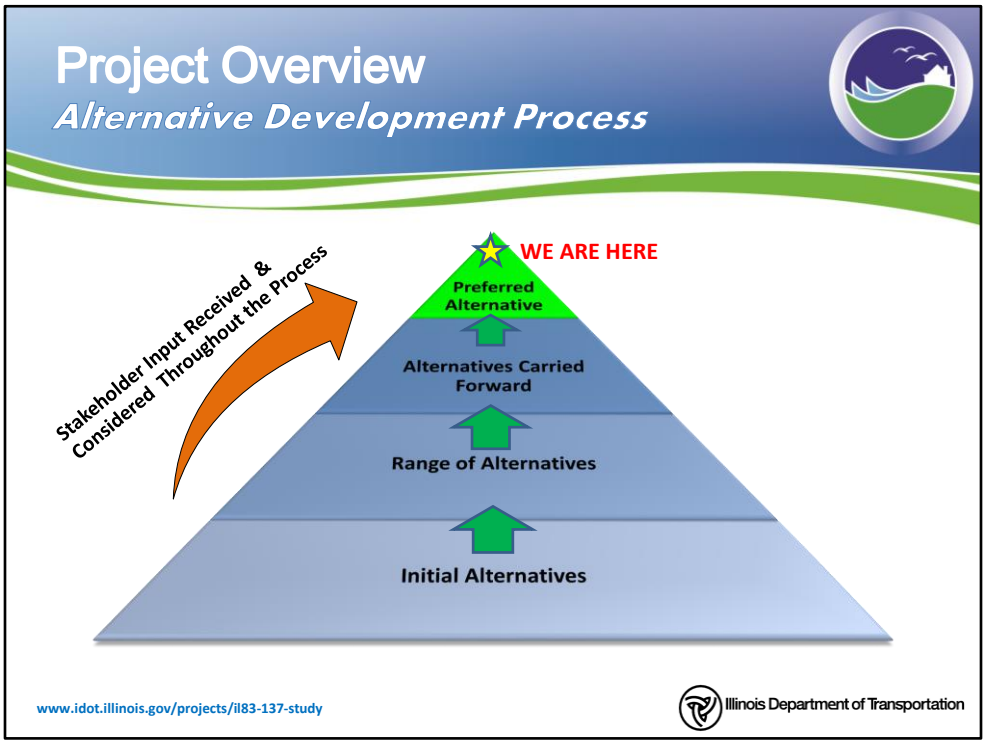
So far, we have developed an existing drainage plan (EDP) and have obtained input from local stakeholders and municipalities on items such as identified drainage problem areas and if the EDP adequately captures drainage features along the project corridor. The EDP is then used as foundation to develop the PDP which reflects the proposed roadway geometry and input from stakeholders such as comments received at public meetings. In the summer of 2017, Lake County and its local jurisdictions experienced a significant storm event that led to flooding along the IL 83/137 Phase I project corridor. The project team has refined our models based on supplemental analysis of the flooding. We are currently refining the PDP to incorporate comments from the Virtual Public Outreach as part of the LDS process and will be presented at the public hearing that is anticipated for later in 2021.



There are four major drainage outfalls within the project corridor:

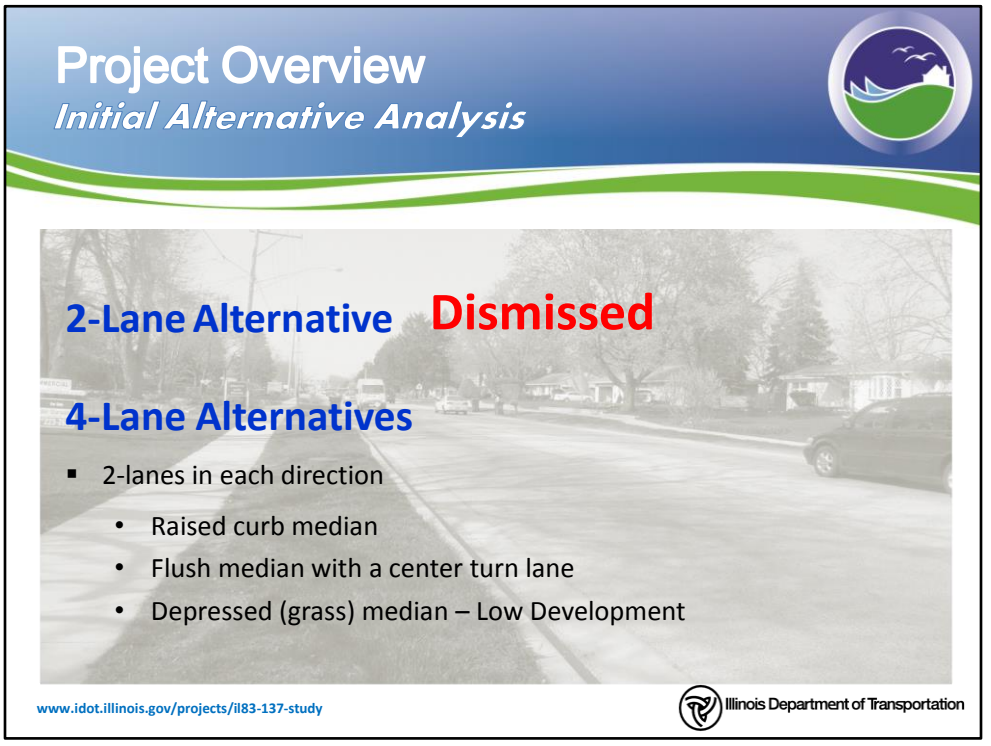
- Bull Creek Tributary
- West Branch Bull Creek Tributary
- Mill Creek
- Unnamed Tributary to Mill Creek

To evaluate project impacts associated with these locations, Hydraulic Reports are being prepared for each crossing. Hydraulic Reports evaluate designs for bridges and culverts to ensure they are consistent with floodplain/floodway regulations, project needs and to document impacts to flood heights. To minimize impacts to the floodway and floodplain, the Preferred Alternative has reduced the roadway footprint at Mill Creek, as much as practicable. To help accomplish this at Mill Creek, the Department plans to reduce its requirements, so the roadway profile does not have to be raised three feet above the 50-yr flood elevation, but still offers protection from roadway flooding, while not increasing flood heights.



The Alternative Development Process is a multi-step process of developing, improving, screening, and eliminating alternatives until a preferred alternative is selected. Throughout this process IDOT keeps the community engaged in the project, which helps to ensure the preferred alternative fits the needs of the community.

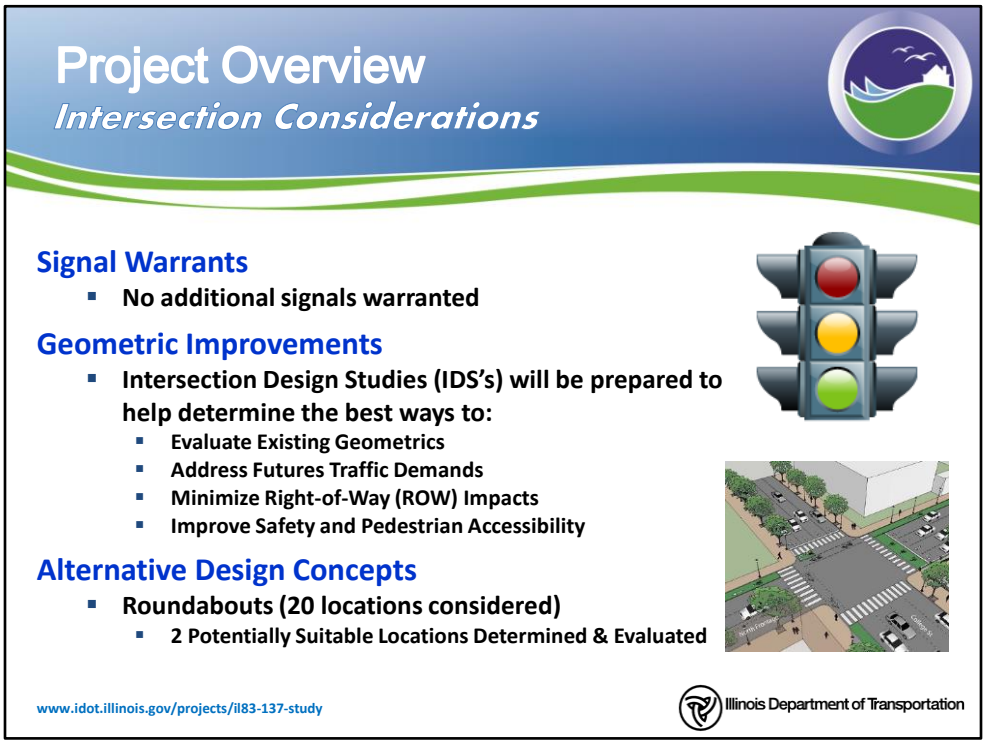
The process begins by screening initial alternatives to make sure they meet the Purpose and Need of the project and they do not have fatal flaws. Following this screening, the Alternatives Carried Forward are evaluated in greater detail. Then, the alternatives and their associated impacts are further refined, and subsequently screened until a preferred alternative is selected.



The lane configuration was also studied throughout the corridor by developing initial build alternatives, which included:

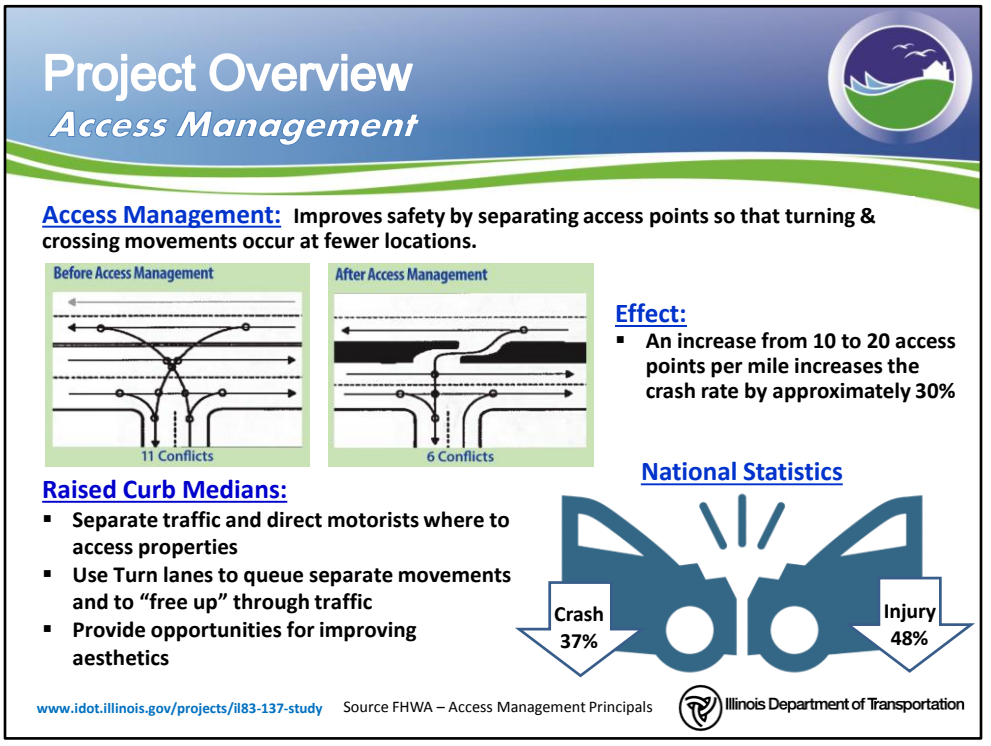
A 2-lane alternative with one through lane in each direction and a center turn lane, which was dismissed because current traffic exceeds the acceptable capacity levels of the corridor.

3 basic types of 4-lane alternatives (all of which have 2 through lanes in each direction) were also developed. These alternatives include various median types such as raised curb median, a flush median (center turn lane) and a depressed (grass) median, which is used in low density development areas with increased speeds. The median treatments will be discussed in more detail on the following slides.



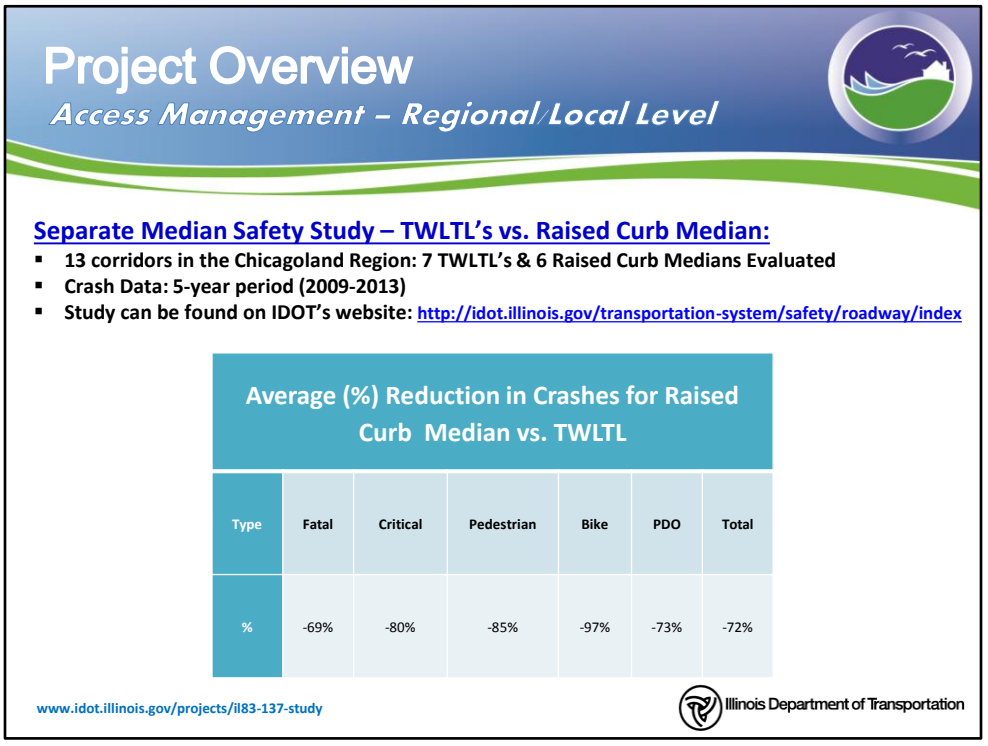
At intersections, the considerations included looking at signal warrants, geometric improvements, and alternative design concepts. No additional signals are warranted throughout the corridor. Intersection Design Studies will be prepared to help determine the best ways to evaluate existing geometrics, address future traffic demands, minimize right-of-way impacts, and improve safety and pedestrian accessibility at each location.

Twenty (20) locations within the corridor were considered to determine if a multilane roundabout was feasible. The analysis identified concerns related to traffic volumes and patterns at multiple locations, which were eliminated from further evaluation, however, two potentially suitable locations were identified and carried forward.



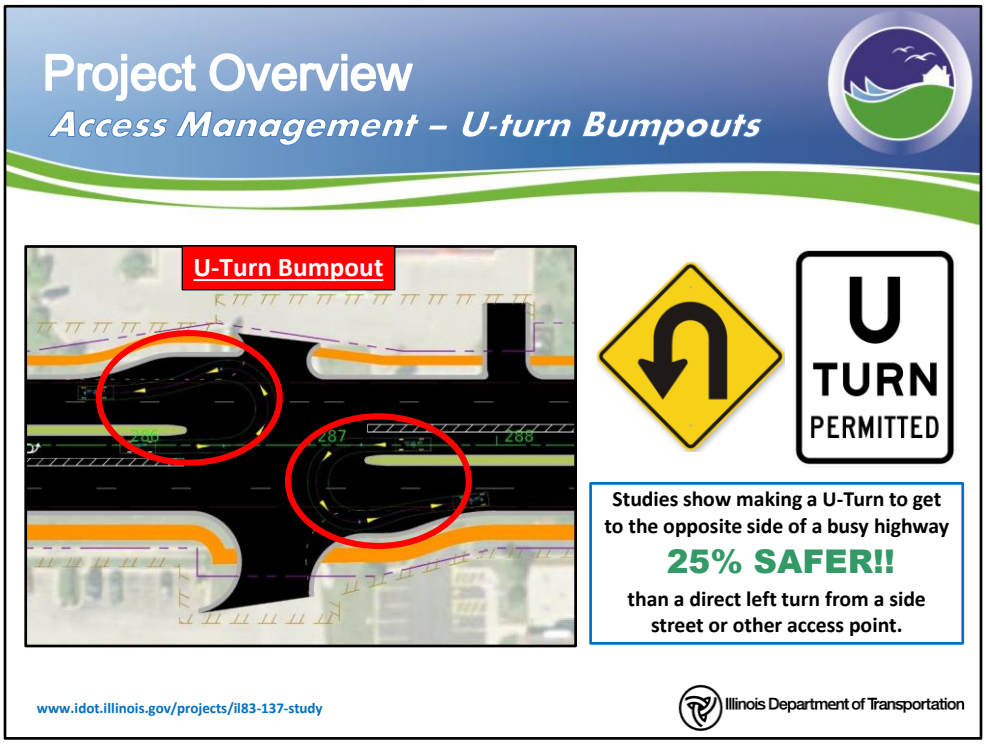
Access management is the control of the location, spacing, design, and operation of driveways, median openings, and street connections to a roadway. Access Management improves safety by separating access points so that turning and crossing movements occur at fewer locations. An increase from 10 to 20 access points per mile increases the crash rate by approximately 30%.

Raised medians are a key tool used for access management. Raised medians separate traffic and direct motorists where to access properties so that turning and crossing movements occur at fewer locations. Additionally, raised medians provide opportunities for improving aesthetics. National studies show adding a median where a Two-Way Left Turn Lane (TWLTL) previously existed can reduce the crash rate by approximately 37% and the injury rate by approximately 48%.

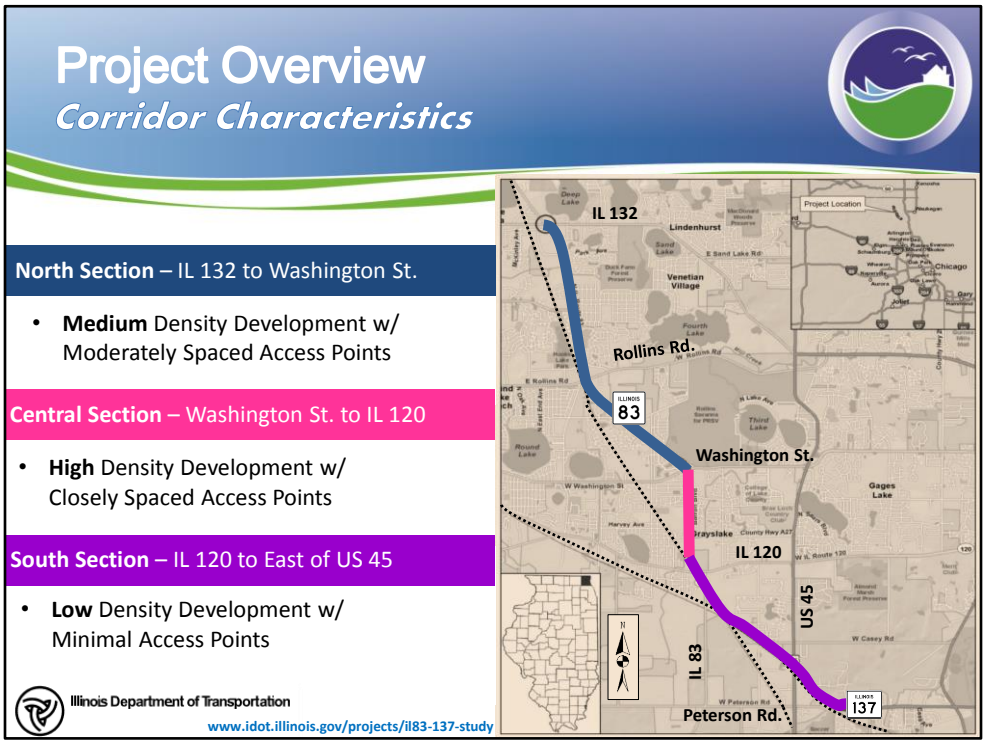


The Department also conducted a separate median safety study in Northeastern Illinois to evaluate the performance of Two-Way Left Turn Lanes (TWLTL) vs. Raised Curb Medians on safety. Thirteen corridors of similar land use where seven TWLTL's and six raised curb medians were evaluated. The crash date utilized a 5-year period from 2009-2013 for the study.

Overall crash rates were significantly lower when raised curb medians were present. Comparing a two-way left turn lane to a raised curb median, there was a 70% reduction in serious injury and fatal crashes, 85% reduction in pedestrian crashes and 97% reduction in bicycle crashes.



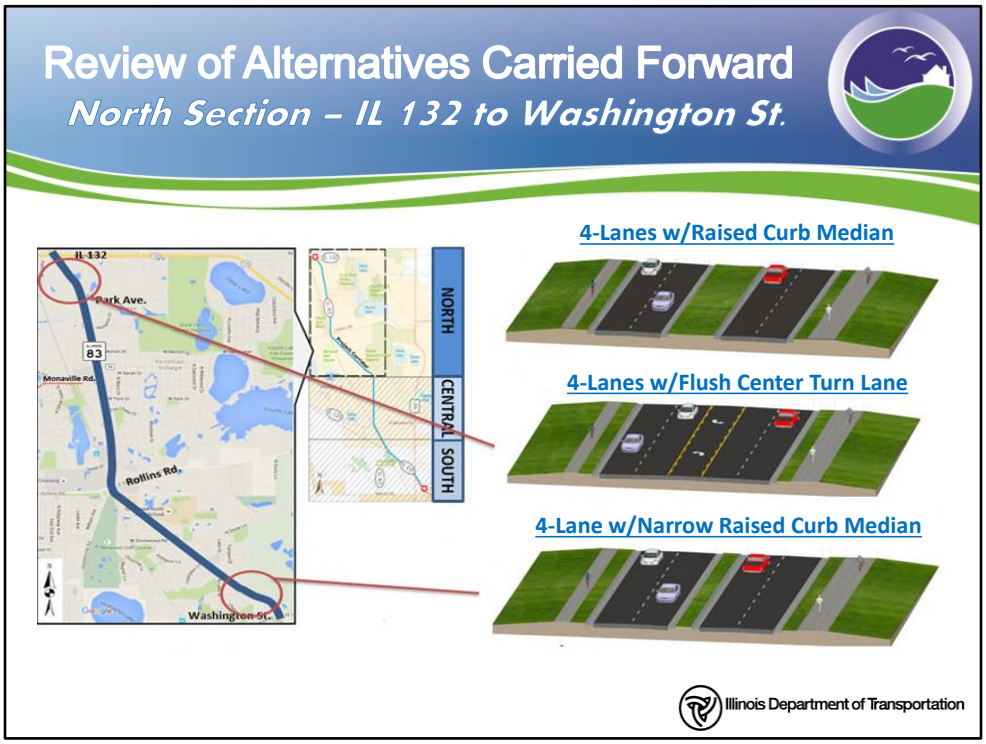
U-turn bump outs are provided at locations that were coordinated with local officials to provide additional access opportunities. A left turn lane at a median opening or a signalized intersection provides drivers a safe area to wait and complete a U-turn when opposing traffic clears. Studies have shown that making a U-turn at a median opening to get to the opposite side of a busy highway is about 25% safer than a direct left turn from a side street or other access point. As part of this project, a detailed signing plan will be developed during the contract plan preparations phase of the process.



The characteristics of the corridor area is another important element in identifying the elements used in the alternatives. The land use varies significantly along the Illinois 83-137 corridor area. To develop alternatives that more closely align with the land use in the various areas, the corridor was first divided into 3 sections. These are referred to as the project's north, central, and south sections.

The North section extends from IL 132 to Washington St and is made up of medium density development & property access with speeds of 35-45 mph. The Central section extends from Washington St. to IL 120 is highly developed, and the most densely populated section of the corridor having substantial property access, with reduced speeds of 35-40 mph. The South section extends from IL 120 to east of US 45 is made up of low-density development & property access with increased speeds of 45-55 mph.

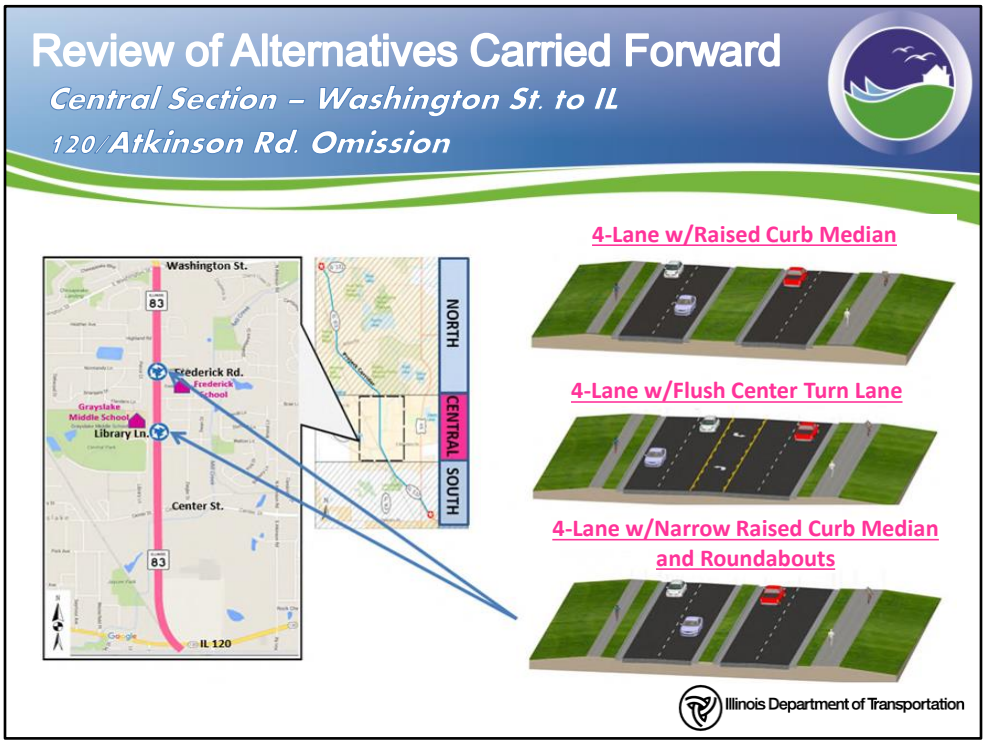
By dividing the corridor up in this way, we could better focus on the alternatives in those areas that will better serve the community.



In the North Section, there were three Alternatives Carried Forward:

The first alternative is a 4-lane cross-section with a raised curb median, which can be considered the typical section throughout the majority of the north section. Based on feedback from CAG Meeting #4, an additional alternative was created that provides a flush median, center turn lane, in the northern most section of the corridor, just south of IL 132. This alternative narrows the footprint and would provide more access. Due to environmental concerns, alternatives were created that provided a narrower raised curb median, w/reduced lane widths.

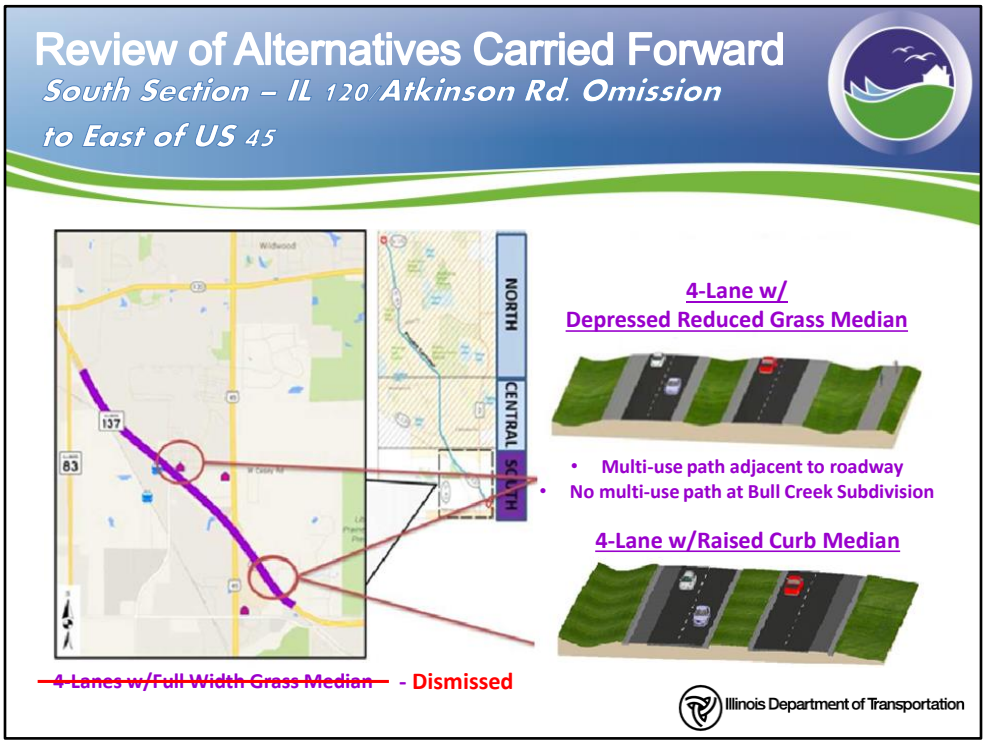
All three alternatives primarily follow the existing centerline alignment, have outside curb and gutter and include a multi-use path along the east side of the roadway and a sidewalk along the west side of the roadway throughout the length of the section.



In the Central Section three alternatives were carried forward.

The first alternative replicates the 4-lane cross-section in the north section, with a raised curb median. The second alternative is a 4-lane roadway with a flush median, center turn lane. The third alternative is a 4-lane roadway with a narrower raised curb median and roundabouts at the intersection of Frederick Road and Library Lane.

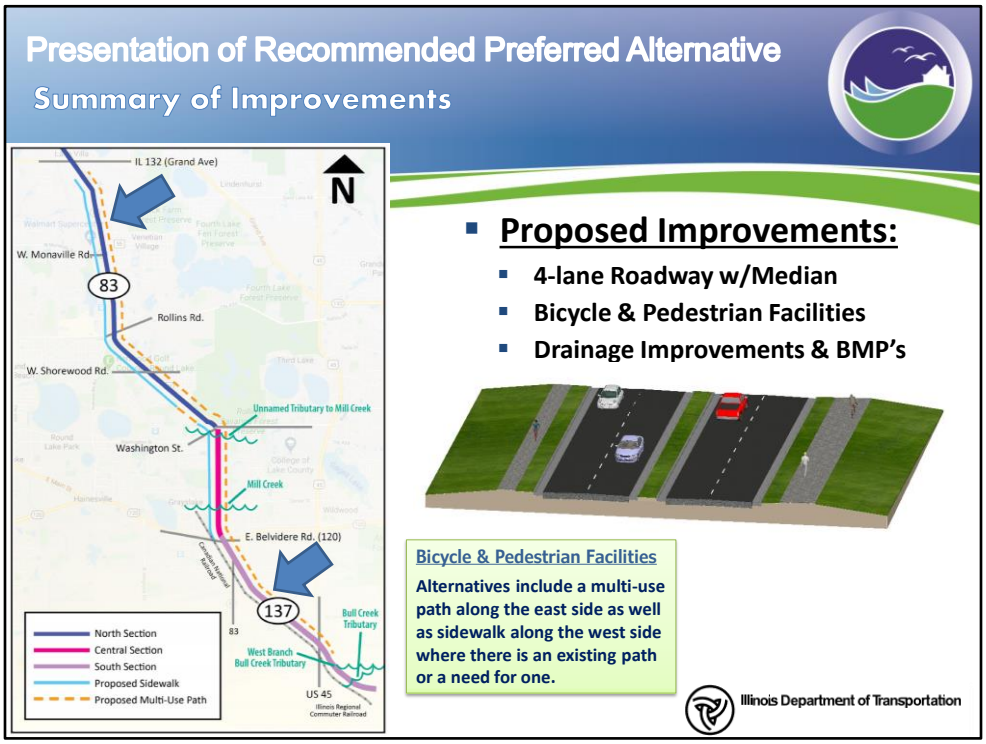
All three alternatives primarily follow the existing centerline alignment, have outside curb and gutter and include a multi-use path along the east side of the roadway and a sidewalk on the west side of the roadway throughout the length of the section.



In the South Section, an alternative was first developed that provides a 4-lane roadway with a standard width depressed grass median, outside paved shoulders and ditches and a multi-use path along the east side of the roadway. The entire South Section is parallel and adjacent to a railroad that puts constraints on right-of way. Therefore, to reduce the right-of-way impacts, a second alternative was developed with a narrower depressed median. This alternative reduced impacts significantly, allowing the standard width alternative to be eliminated from further consideration.

In the areas of residential development, the 30' median alternative was refined to provide alternatives that further reduced impacts. This included an alternative that places the multi-use path along the edge of the shoulder, as well as an alternative with no path along the roadway in the further southernmost section.

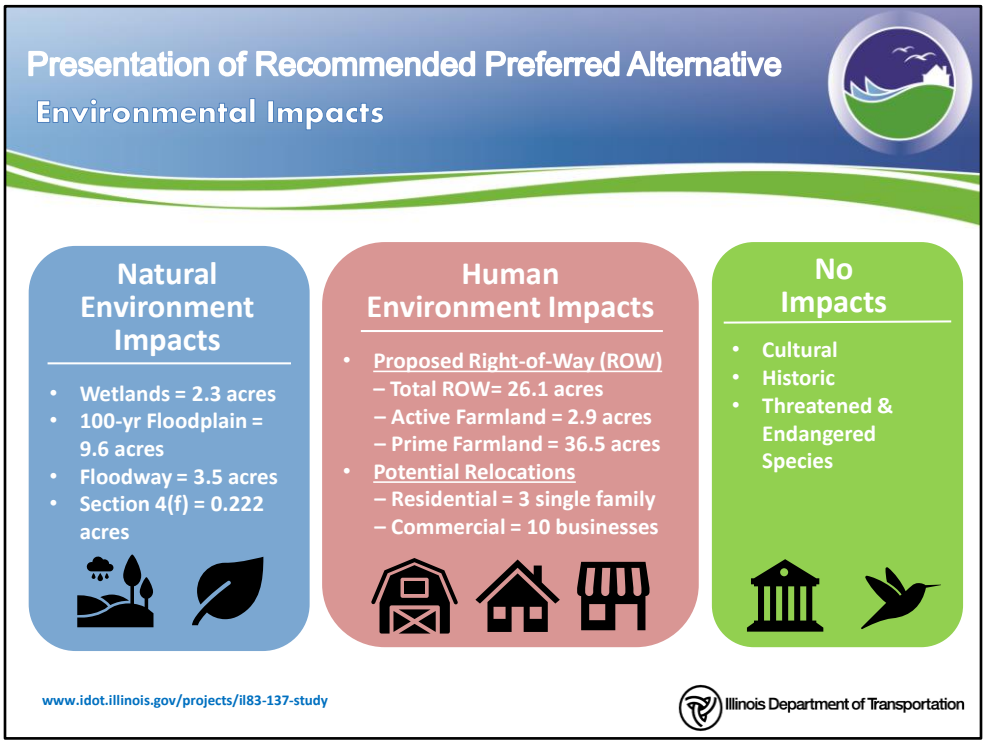
As a result of community feedback from previous Public Involvement & CAG Meetings, an urban (curb & gutter) alternative was created that included a raised median in the southernmost section from US 45 to the southern project limit to reduce the roadway footprint and further reduce environmental & property impacts.



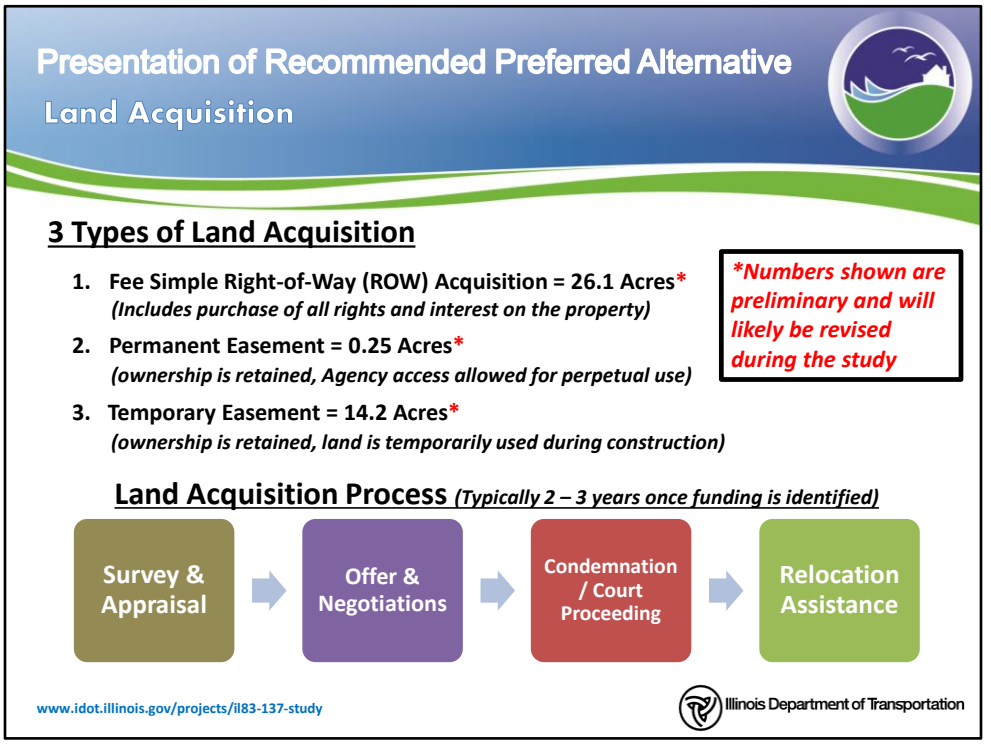
The recommended Preferred Alternative is the alternative that best meets the project's Purpose and Need while balancing and minimizing impacts to environmental resources.

Generally, the recommended preferred alternative consists of constructing a 4-lane roadway section, with varying median types, throughout the corridor. However, the corridor between IL 132 (Grand Avenue) and Park Avenue is a 5-lane flush section with two-way left turn lane (TWLTL). There is also one section south of IL 120 (Belvidere Road) to US 45 that includes a 30-foot depressed grass median in lieu of the raised curb median.

As shown on the map, a multi-use path will be located on the east side of the roadway and a sidewalk will be located on the west side of the roadway in the north and central sections from IL 132 to IL 120. There is only a multi-use path through the majority of the south section, Drainage improvements and best management practices (BMP's) are also being included in the improvements. We will plan to walkthrough the Preferred Alternative Strip Maps as part of this meeting today.



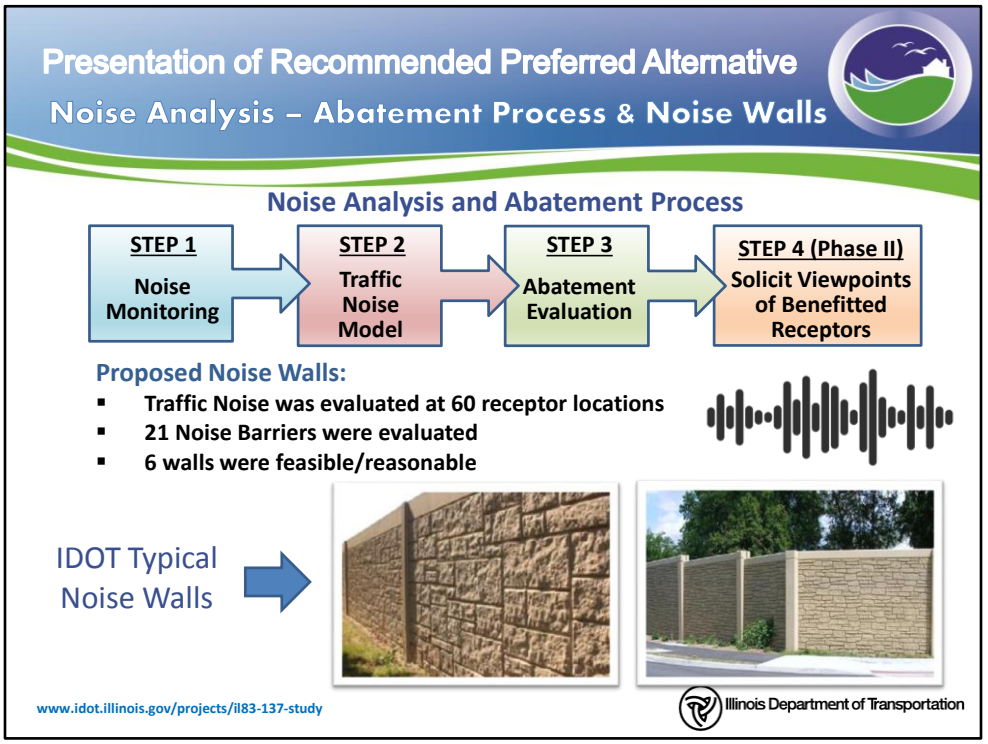
The slide summarizes the environmental resources impacted by the recommended Preferred Alternative. These impacts include natural environment resources such as wetlands and water resources and human environment such as land acquisition and residential and business relocations. No impacts to cultural, historic, or threatened and endangered species are anticipated. Section 4(f) impacts have been preliminarily coordinated with Grayslake Community Park District (GCPD) and will be finalized with the Public Hearing later in 2021. ROW numbers shown are preliminary and will likely be revised during the study.



There will be land acquisition required to construct the preferred alternative. The three types of land acquisition are fee simple acquisition, permanent easements, and temporary easements. A Fee Simple ROW Acquisition includes the purchase of all rights and interest on the property. With a permanent easement, the ownership is retained by the property owner, but the agency is allowed access for perpetual use. With a temporary easement, ownership is retained by the property owner and the land is only temporarily used during construction for items such as grading work, driveway construction, and landscaping restoration. Please note that numbers shown are preliminary and will likely be revised during the study.

The land acquisition process involves the following sequence of steps:

1. The ownership of the property is confirmed, a plat of survey drawing is prepared to show the dimensions and amount of property that is being acquired, and an independent appraisal is made to determine the fair market value of the property to be acquired.
2. Negotiations begin with an offer to acquire the necessary property at the appraised value.
3. If a settlement cannot be reached, the matter is referred to the Courts for acquisition under the law of Eminent Domain.
4. Relocation assistance is provided when a building/structure is being acquired.



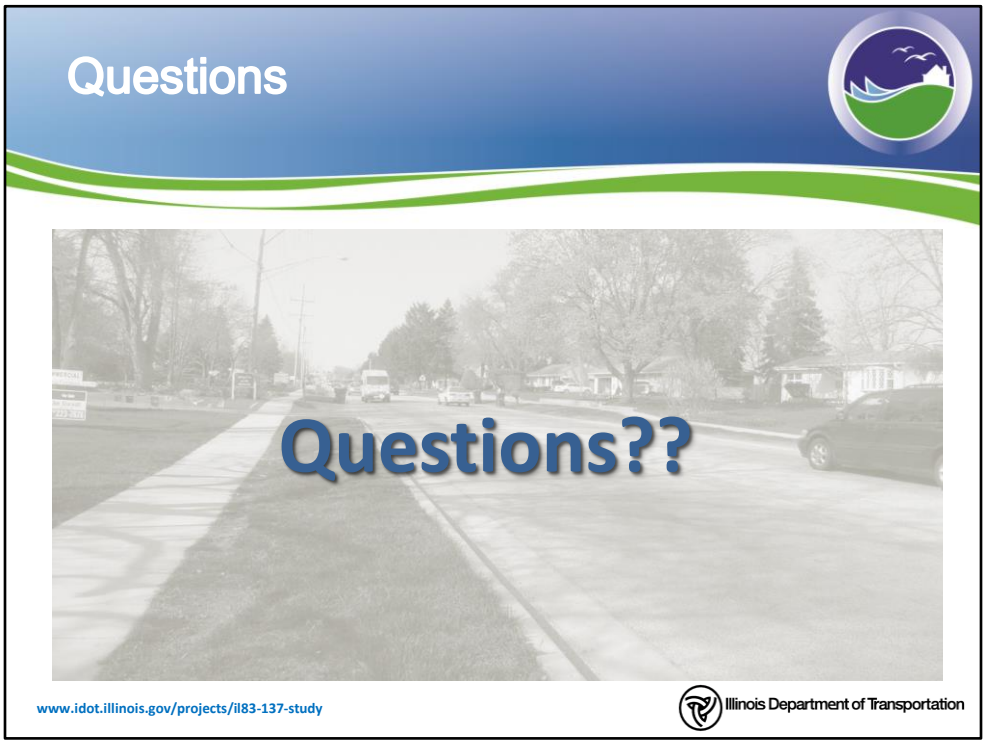
A Traffic Noise Study is being conducted to evaluate traffic noise for the proposed improvements. The noise study includes field noise monitoring, analysis of the Traffic Noise Model which evaluates existing and future noise levels, as well as noise abatement and potential reduction measures.

The evaluation of noise mitigation measures must be feasible and reasonable. To meet these requirements, the mitigation must achieve required sound reduction, be feasible to construct, cost effective and finally be majority in favor of those benefited. For the noise barriers determined to be feasible, the viewpoints of benefitted receptors shall be solicited to determine the desire for implementation of the noise abatement measure, which would be completed during final design (Phase II). Benefited receptors include property owners and renters/leasers residing on the benefitted property.

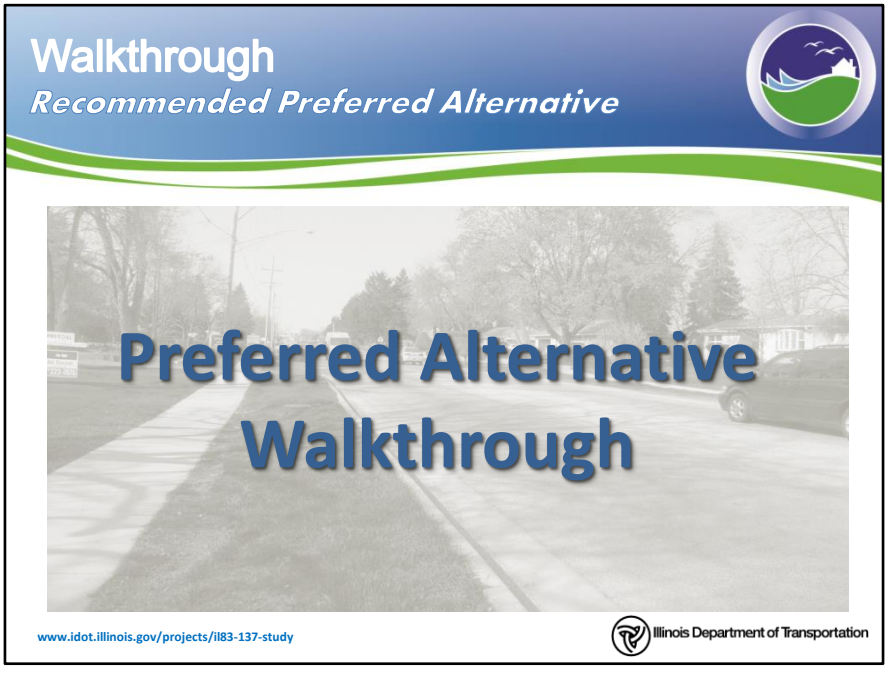
Traffic noise was assessed at 60 receptor locations, while 21 noise barriers were evaluated, with 6 noise walls deemed feasible/reasonable. The feasible and reasonable noise wall locations will be presented in more detail at the Public Hearing later in 2021.

Next Steps Going Forward:

- Refine the Preferred Alternative based on public feedback
- Approval of the Environmental Assessment
- Public Hearing anticipated later in 2021
- Obtain approval of environmental studies



We would like to take this opportunity to go through the chat room questions before we proceed with the Walkthrough of the Preferred Alternative.



We will now walkthrough the Preferred Alternative Strip Maps to discuss the refinements that have been made since the Virtual Public Outreach These improvements include refinements based on individual stakeholder comments, as well as geometric & drainage improvements based on community feedback. The project team will provide a general overview of the North, Central, and South sections and will moderate an open discussion at the conclusion of each section's overview. We encourage the CAG Members to continue to utilize the chat room to voice your questions and the project team will unmute your speaker so CAG Members can voice their questions & concerns in a timely manner.