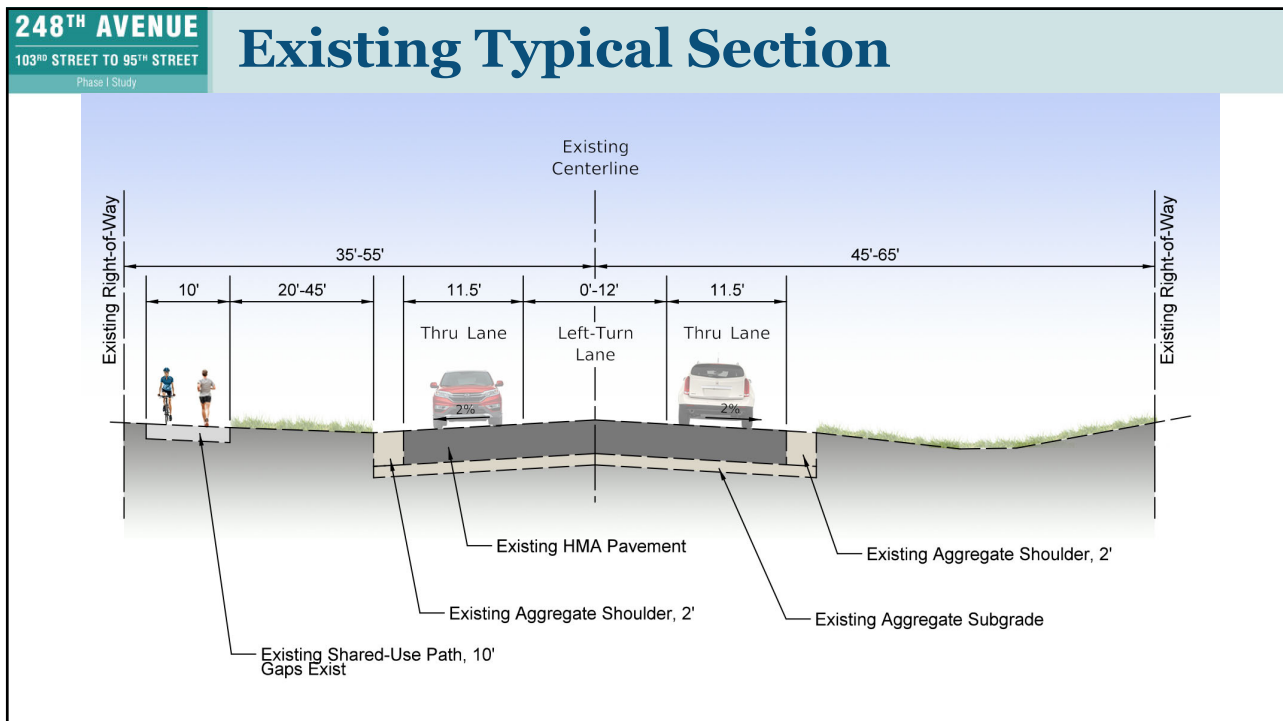
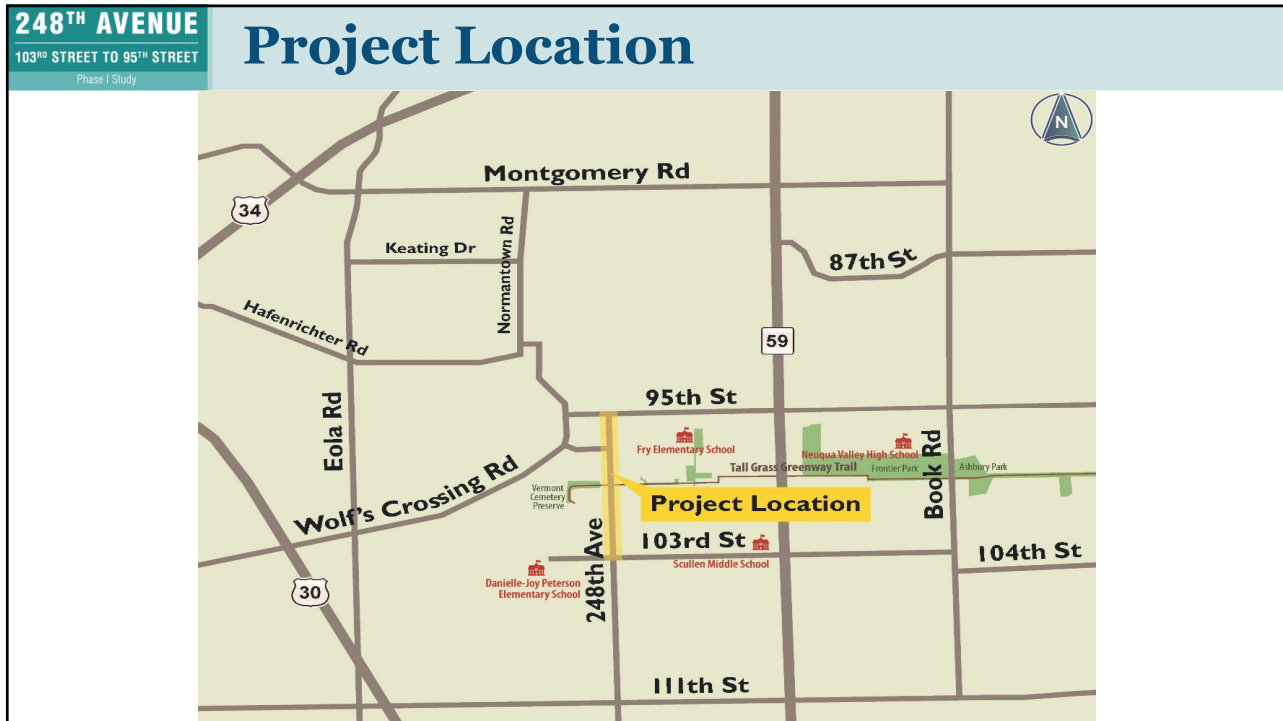


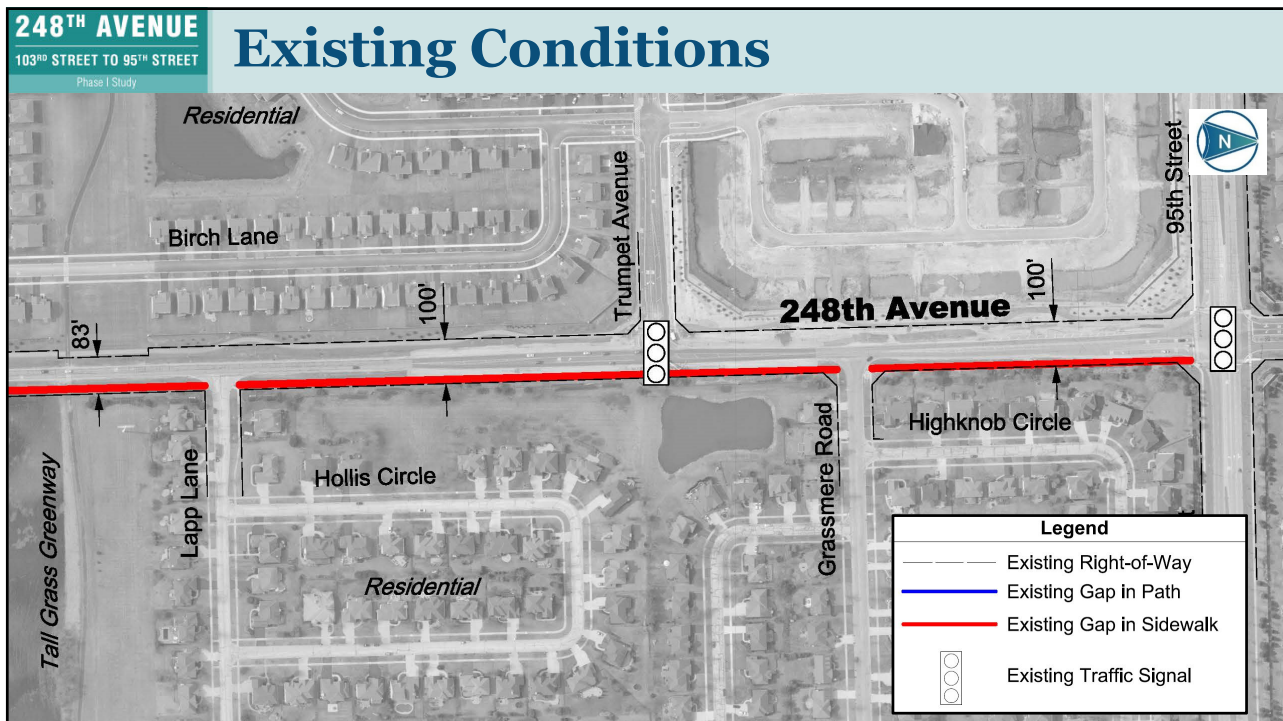
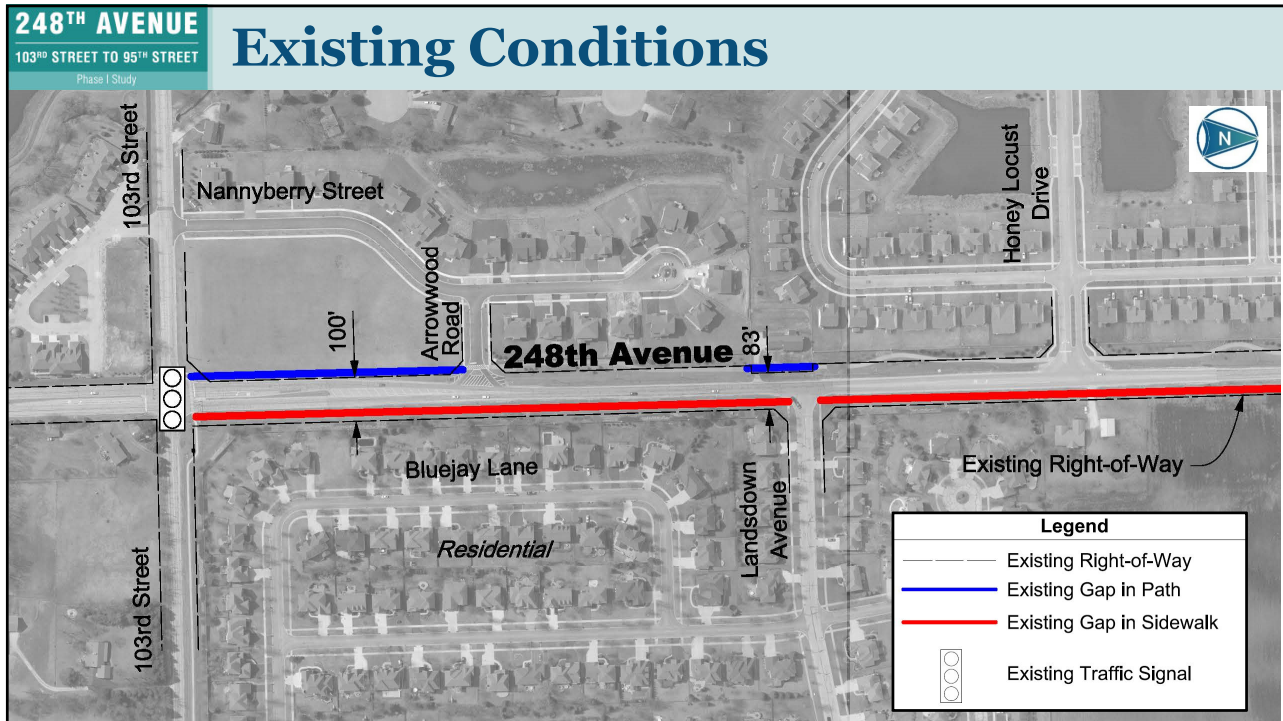


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Agenda

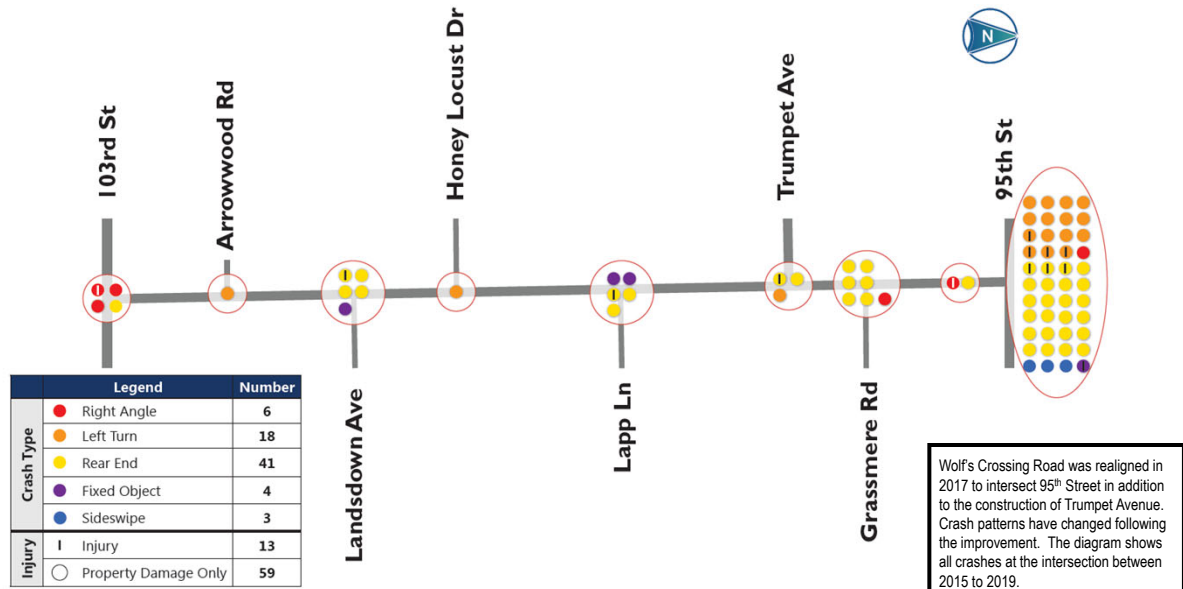
1. Project Location and Existing Conditions
2. Crash Data, Existing and 2050 Projected Traffic Volumes
3. Project Purpose and Need
4. Public Involvement to Date
5. Recent Updates
6. Proposed Alternatives
7. Updated Noise Analysis
8. Next Steps and Action Items



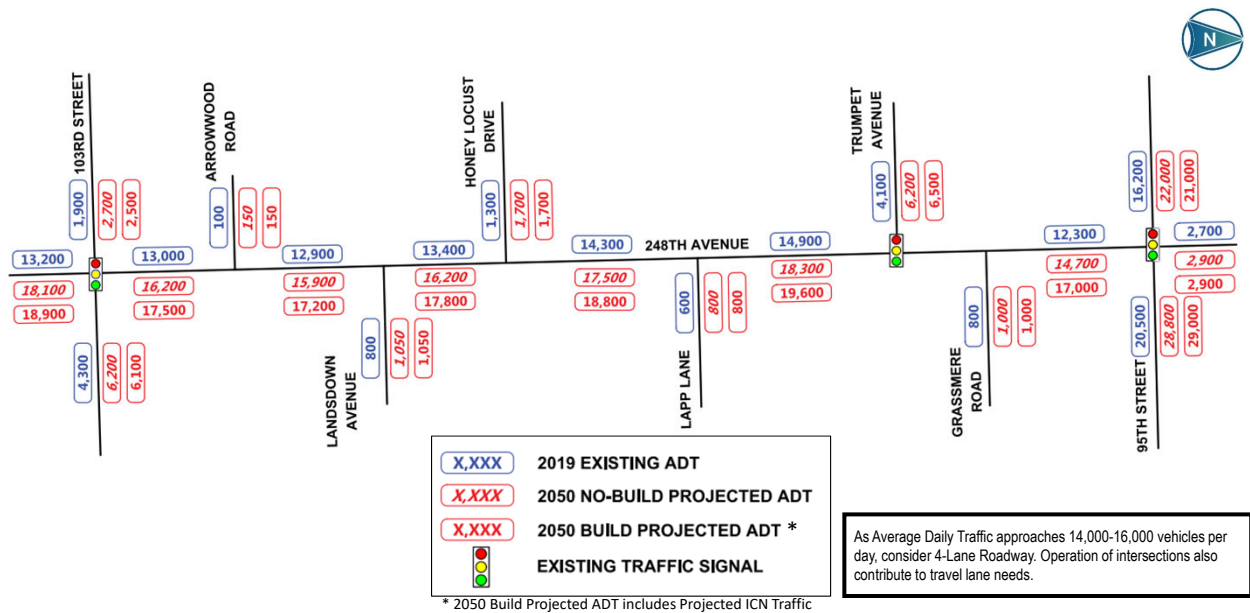


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Phase I Study

Crash Analysis (2015-2019)**248TH AVENUE**103RD STREET TO 95TH STREET

Phase I Study

Existing and 2050 Traffic Volumes

Project Purpose and Need



Reduce Congestion and Improve Mobility, Access, and Safety



Encourage and Increase Use of Alternative Modes of Transportation



Increase Safety for Bicyclists and Pedestrians

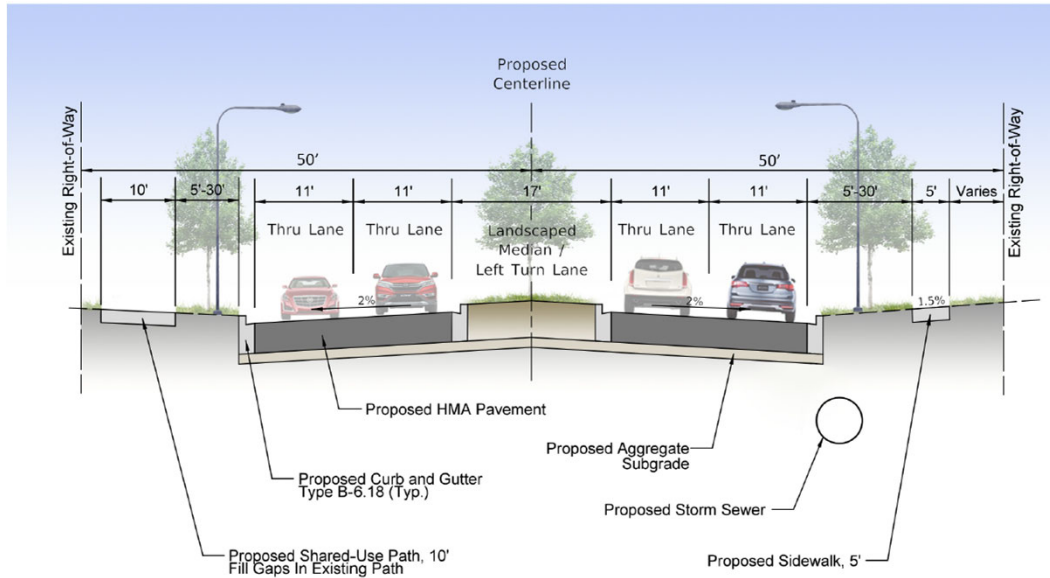
Public Information Meetings

Public Involvement

- Public Information Meeting #1 – 11/7/2019
 - Public Input on Existing Conditions
- Public Information Meeting #2 – 8/31/2020 (Virtual) & 9/10/2020
 - Public Input on Alternatives
 - Alternative 1 – 11' Lanes, 17' Median, 10' Path/5' Sidewalk, Symmetrical Widening
 - Alternative 2 – 11' Lanes, 17' Median, 8'-10' Path/5' Sidewalk, Asymmetrical Widening
 - Alternative 3 – 12' Lanes, 12' Median, 10' Path/8' Path, Symmetrical Widening
- Public Information Meeting #3 – 12/8/2021
 - Public Comment on Preferred Alternative (Alternative 2)

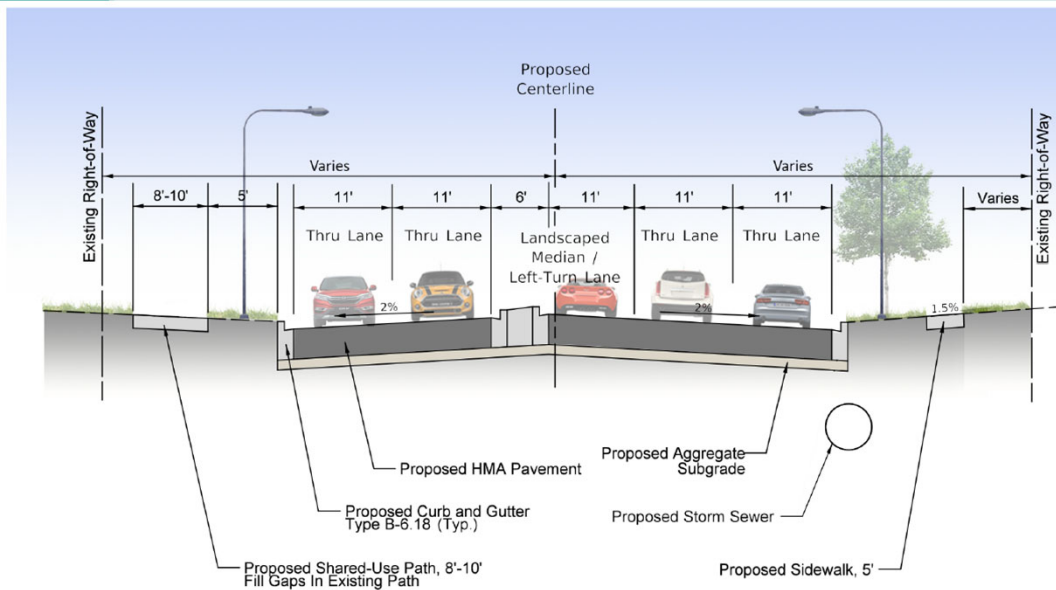
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Alternative 1 – Symmetric Widening



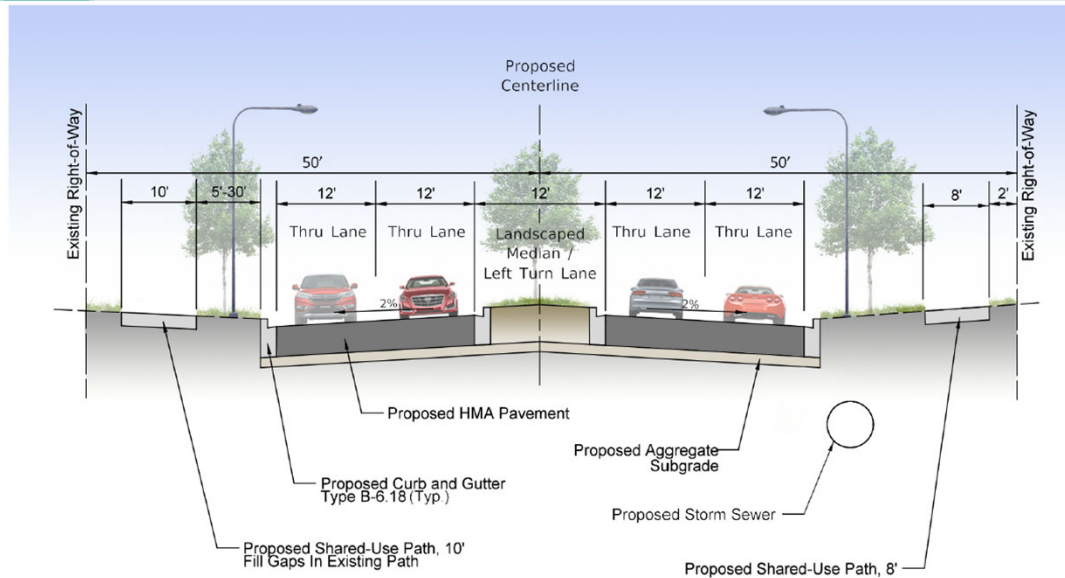
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Alternative 2 – Asymmetric Widening



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Alternative 3 – Narrower Median



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Updates Since PIM #3

Following Public Information Meeting #3

- Reviewed Public Comments
 - 20+ Written Comments and 30+ Email Comments
- Amendment to Enhance the Preferred Improvement
 - 8' Shared-use Path East of 248th Avenue between Tall Grass Greenway Trail and Trumpet Avenue
- Additional Coordination with Chicago Metropolitan Agency for Planning (CMAP)
 - Updated 2050 Build traffic projections
 - Updated Traffic Analysis
 - Performed Geometric Review of Preferred Improvement
- Preliminary Highway Noise Analysis Update in Progress
 - **IDOT/FHWA review/approval required**

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2050 Projected Traffic

Initial CMAP 2050 Build Projection

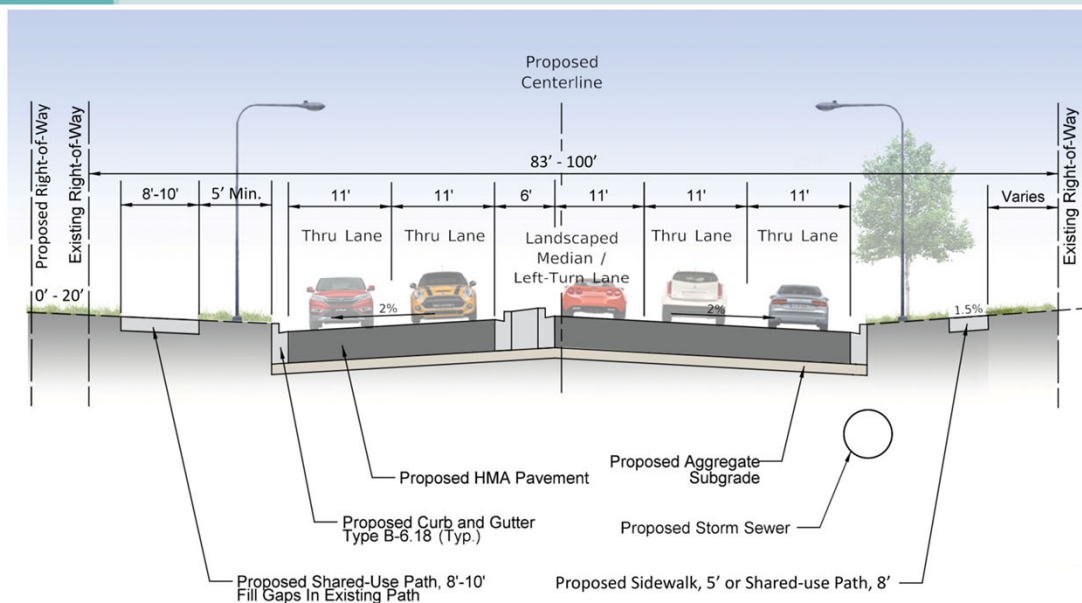
- Included overall growth and development
 - Not at the size of the ICN fully built
- Base projections used for the ICN TIS

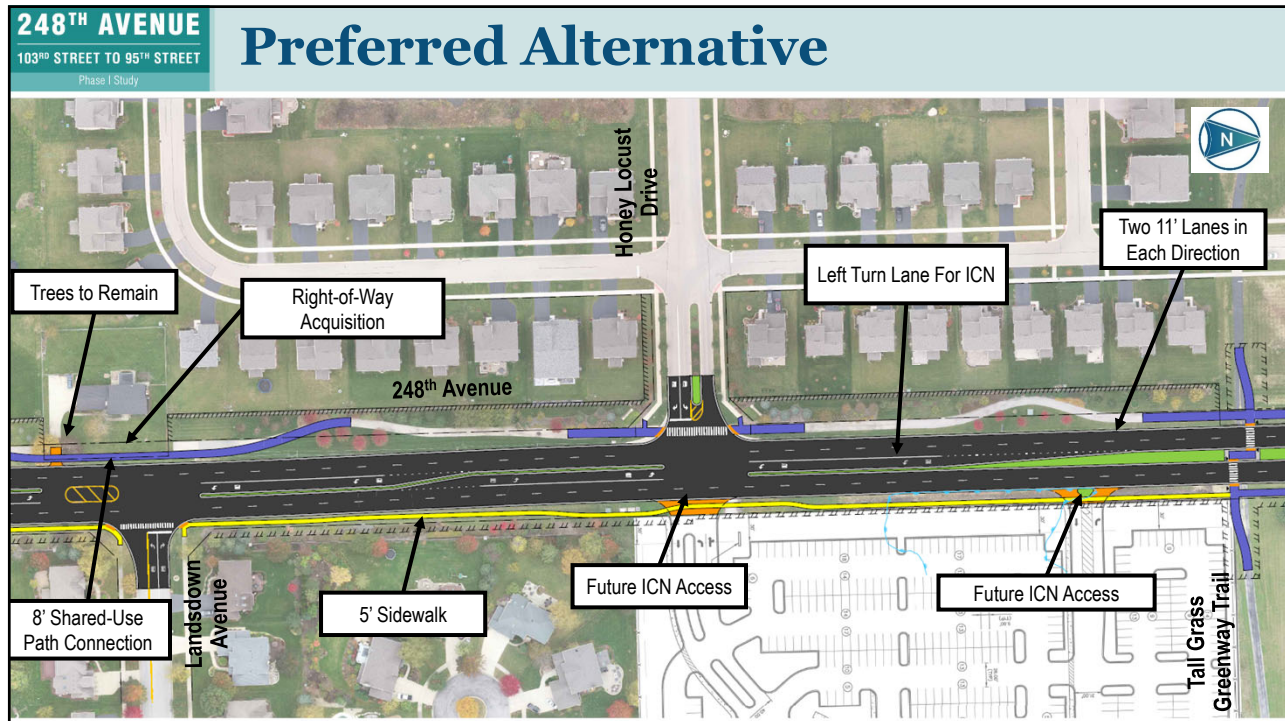
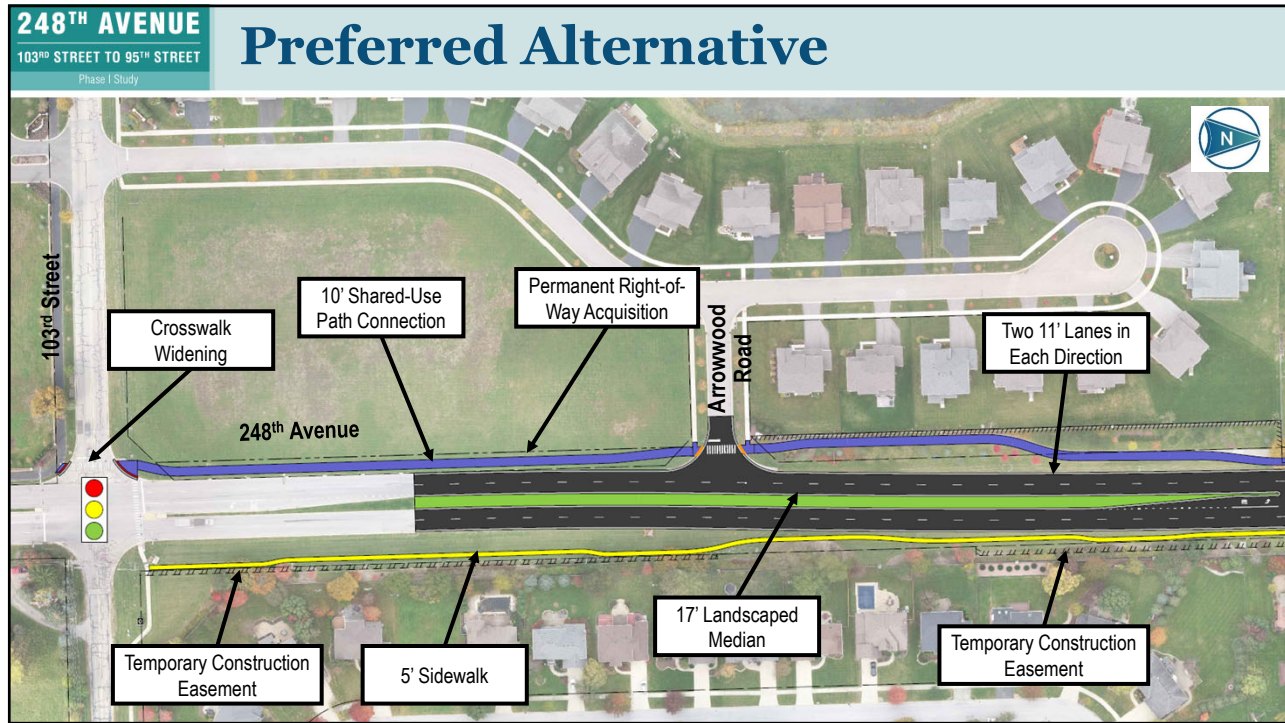
CMAP Advised to Update 2050 Build Volumes

- Modifications to the Design Hourly Volume
- Traffic and Geometric Analysis Update
 - Alternative 2 remains the Preferred Alternative following the updated traffic and geometric analysis.
- Highway Noise Analysis to be reanalyzed - **IDOT/FHWA review/approval required**

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Proposed Typical Section





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Tall Grass Greenway Trail

Joint Maintenance and Jurisdiction

- Naperville Park District
- Forest Preserve District of Will County

TRA-23: Guidelines for Pedestrian Crossings at Uncontrolled Locations

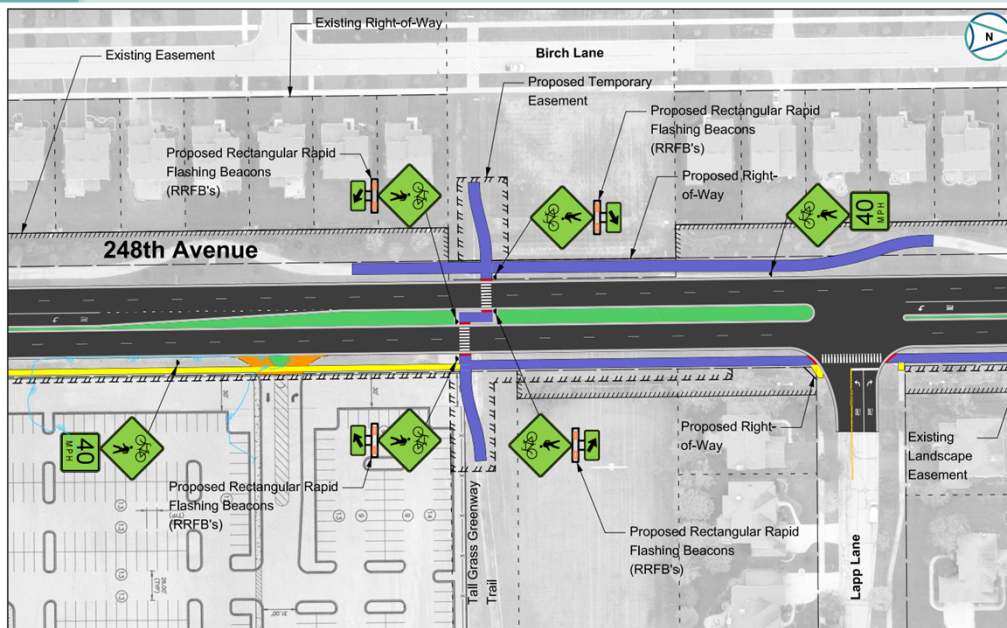
- IDOT Department Policy
- Research completed by SIU-Edwardsville in 2017
- Intent to consolidate research and provide uniform guidance

Tall Grass Greenway Trail – “Site Specific Design”

- Lane Configuration, Speed, Average Daily Traffic

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Tall Grass Greenway Trail Crossing



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Tall Grass Greenway Trail Crossing

- Proposed Rectangular Rapid Flashing Beacon (RRFB)
 - Proven Safety Countermeasure – Federal Highway Administration
 - Push-button Activated or Automatic Detection
 - Increases Driver Compliance
- 40 MPH Advisory Speed at Crossing
 - Advanced Warning Signage to be Located for 45 MPH Design
- Pedestrian Refuge Island Splits Crossing into Two Stages
 - Only Cross One Direction of Traffic
- Offset Crosswalks
 - Orient Pedestrians Towards Oncoming Traffic to Increase Visibility
 - Pedestrians Turn Towards Oncoming Traffic Prior to Crossing
- 8-foot shared-use path proposed on east side to Trumpet Avenue
 - Alternate crossing at traffic signal

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Tall Grass Greenway Trail Crossing

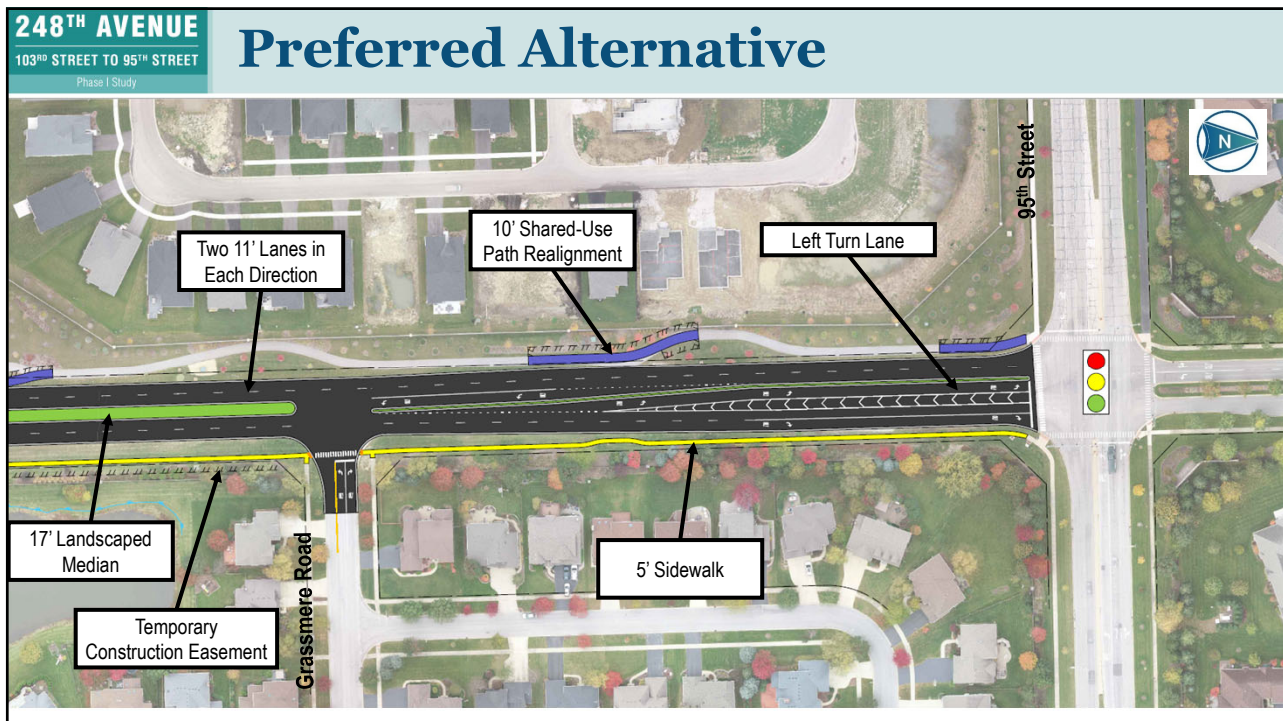
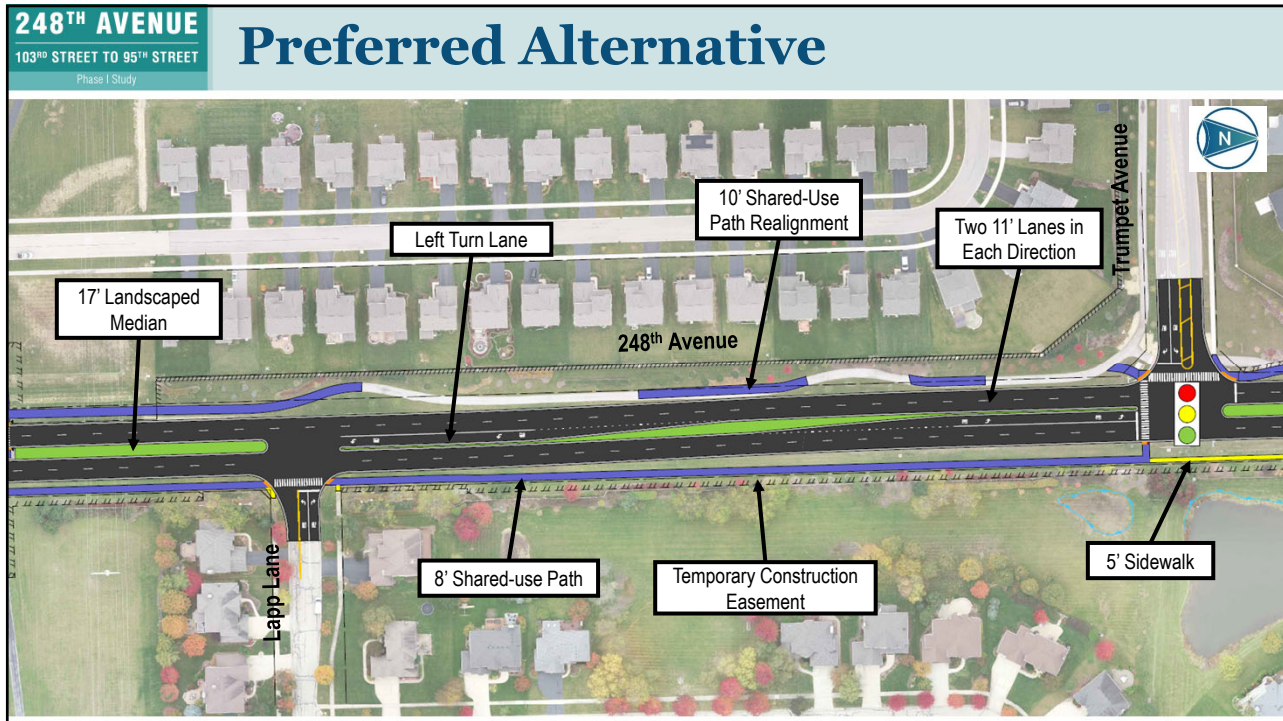
Existing Condition Flashing Beacon



Proposed Condition RRFB



*Two in Each Direction



Highway Traffic Noise Analysis

Purpose of a Highway Traffic Noise Analysis

- ✓ 1. Identify where traffic noise impacts will occur in the future design year with the proposed project.
- TBD 2. Where impacts are identified, evaluate and recommend the installation of noise barrier where they are found to be feasible and reasonable.

Highway Traffic Noise Policy

- U.S. Code of Federal Regulations (23 CFR 772)
- IDOT Bureau of Local Roads and Streets Manual

Highway Traffic Noise Analysis

Decibels, or dB

Traffic Noise Impact Threshold

- 66 decibels or more at receptor location
- 2050 Build Condition, PM peak hour



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Highway Traffic Noise Analysis

Which locations are predicted to experience a noise impact?

- Addition of ICN Traffic to CMAP 2050 Projections
- Preliminary Findings:
 - Now have noise impacts at several receptor locations
 - Where noise **impacts** identified, consider if installation of noise barriers meets federal/state criteria
 - Where **no impacts** identified, no further consideration of barriers is made as part of federal-aid funding process



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Highway Traffic Noise Analysis

Which locations are predicted to experience a noise impact?

- Addition of ICN Traffic to CMAP 2050 Projections
- Preliminary Findings:
 - Existing Conditions: 61 to 64 decibels
 - 2050 Build Conditions: 62 to 66 decibels, plus one at 68 decibels
 - Of 11 analysis locations, 8 have predicted impacts.
 - Generally 0 to 1 decibel increase with addition of ICN traffic
 - Most increases tenths of a decibel.

Preliminary Only - Subject to Further Analysis and Federal/State Review

CNE No.	West or East Side	Between		Modeled Existing Condition (dBA)	2050 CMAP Traffic + Full Build ICN	
		South	North		2050 Predicted Build Condition (dBA)	Consider Abatement?
1	East	103rd	Landsdown	62	<u>66</u>	<u>Yes</u>
3	West	Arrowwood	Landsdown	62	<u>66</u>	<u>Yes</u>
4	East	Landsdown	Tall Grass Greenway	61	65	No
6	West	Landsdown	Honey Locust	64	<u>68</u>	<u>Yes</u>
9	West	Honey Locust	Com Ed Property	61	<u>66</u>	<u>Yes</u>
10	East	Tall Grass Greenway	Lapp	62	<u>66</u>	<u>Yes</u>
12	East	Lapp	Trumpet	61	65	No
14	West	Com Ed Property	Trumpet	61	<u>66</u>	<u>Yes</u>
15	East	Trumpet	Grassmere	61	62	No
17-21	West	Trumpet	95th	63	<u>66</u>	<u>Yes</u>
18-19	East	Grassmere	95th	64	<u>66</u>	<u>Yes</u>

- 66 decibels is the threshold at which IDOT considers a residential receptor to experience a traffic noise impact in the 2050 design year.

- Consideration of Abatement means that analyses must be conducted to determine if the noise barrier is *feasible* and *reasonable* based on Federal/State criteria.

Highway Traffic Noise Analysis

How do we determine where noise barriers may be installed?

- Where Noise Impacts are expected to occur, a Noise Barrier can only be recommended for construction if it is both Feasible and Reasonable.
- If walls are determined to be Feasible and Reasonable, they will be recommended for installation as part of this Phase I Study.

Highway Traffic Noise Analysis

Is a Noise Barrier Feasible?

1. **Physically Able to Construct?**
 - Safety, Sight Distance, Drainage, Utilities, Driveways.
2. **5-decibel Noise Reduction at two receptors?**
 - Tall, long enough, dense material, no openings.

Is a Noise Barrier Reasonable?

1. **8-decibel Noise Reduction?**
 - Minimum one receptor, try for as many as possible.
2. **Meets Cost-to-Benefit Criteria?**
 - Wall cost at \$30 per SF must not exceed \$30,000 times number of benefited receptors.
3. **Do the benefited residents want the wall?**
 - A benefited receptor is one that experiences a 5 decibel or more reduction.
 - Explained in subsequent slide.

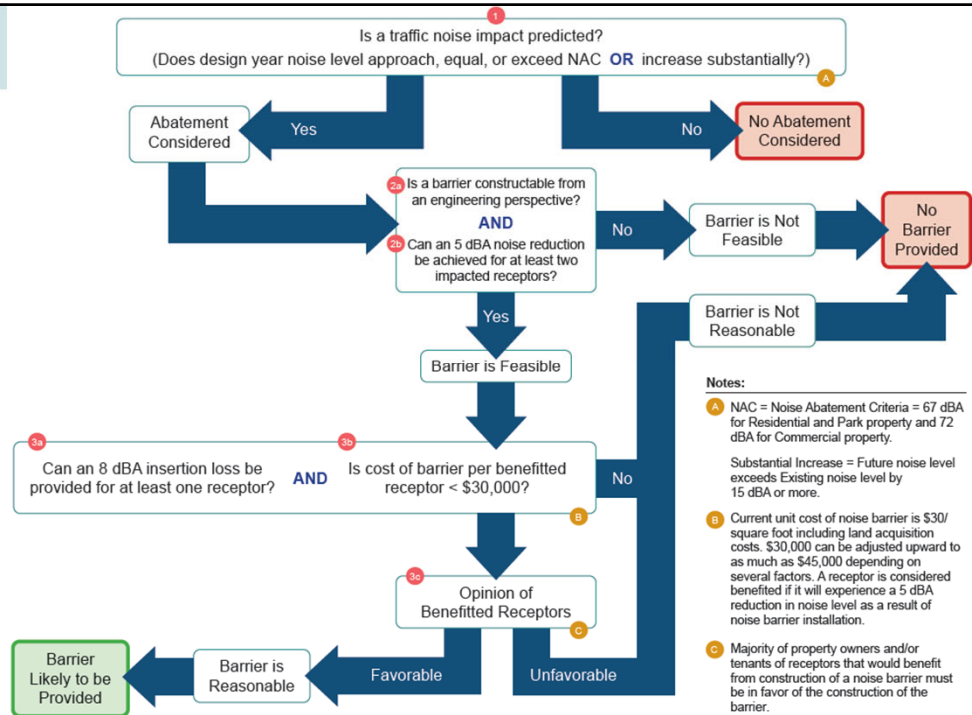
Highway Traffic Noise Analysis

At this point, Feasible and Cost-Reasonable barriers must be reviewed and approved by IDOT before moving to the final Reasonableness step:

Reasonableness: Do benefited residents want the wall?

- Residents benefited by a feasible/reasonable noise barrier will vote on whether they want it installed
- Generally speaking, need 50% or more to be in favor
- If favorable vote, then it is considered fully reasonable
- Will be included in Phase I study as “Likely to be installed as part of this project”

- This is the overall process we just discussed
- Exhibit available on board for review



Highway Traffic Noise Analysis

What are the next steps in Phase I?

- Finalize models and potential wall locations, through Cost-Reasonable step
- Update the Noise Report as Draft, submit for IDOT review
- Voting on benefited residents desire for walls after IDOT review
- Add voting results to report, submit for IDOT final approval
- Noise Analysis becomes part of final Phase I report

Next Steps

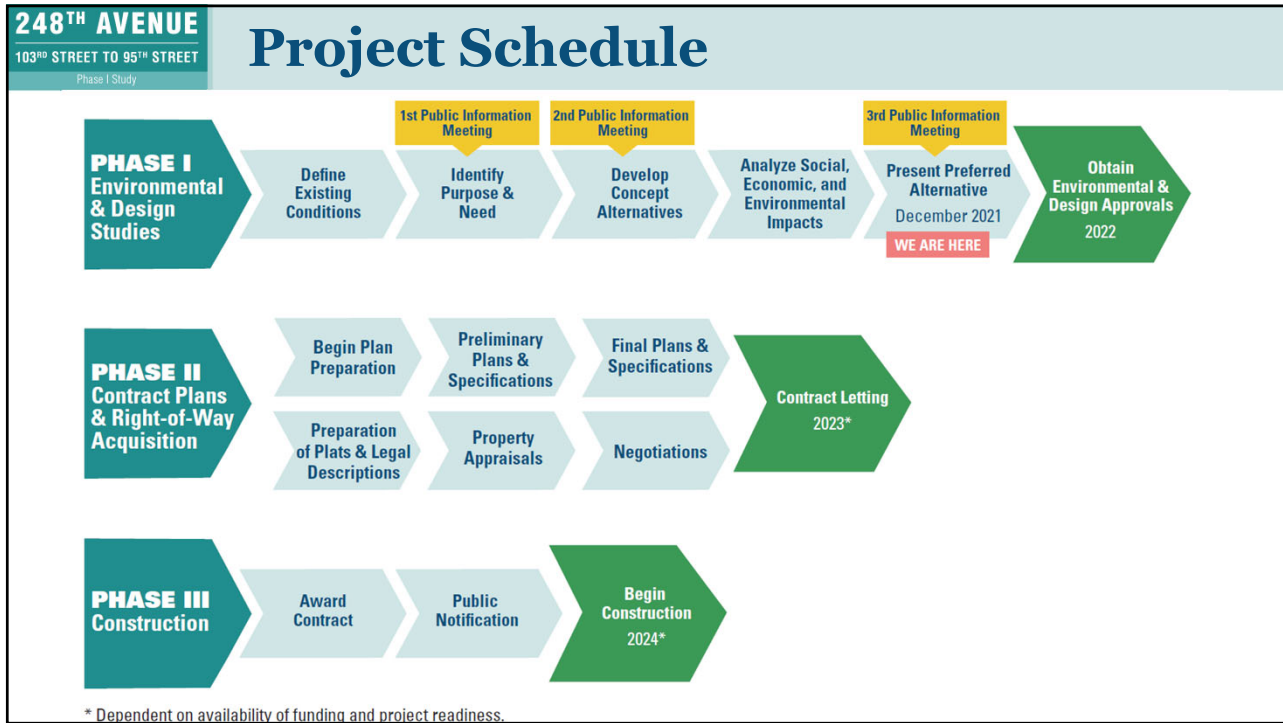
- TAB Concurrence on Preferred Alternative
- City Council Concurrence on Preferred Alternative
- Apply for Federal dollars (2022 STP Call for Projects)
- IDOT/FHWA Approval on Noise Analysis Update
- Obtain Remaining Environmental Approvals
- Obtain Design Approval – Concludes Phase I

Action Items

- TAB Recognize the Need of the Project and Concurrence on Alternative 2 as the Preferred Alternative
- TAB Concurrence on Recommendation to Seek Federal Funding

Questions

Questions



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THANK YOU!