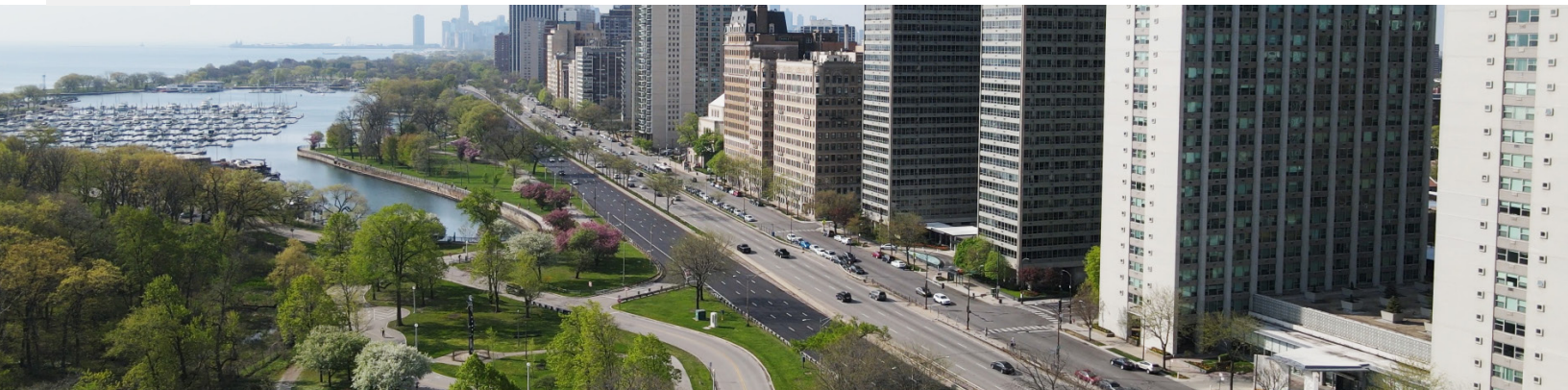




ALTERNATIVES DEVELOPMENT & EVALUATION

August 2024



Thank you for attending the North DuSable Lake Shore Drive Study Public Open House! This handout provides a recap of the alternatives development and evaluation process to date.

PROJECT OVERVIEW

The Illinois Department of Transportation (IDOT) and the Chicago Department of Transportation (CDOT) are managing the NDLSD Phase I Study. The study area boundaries are from Grand Avenue to Hollywood Avenue. This 7-mile length includes 12 roadway junctions, 22 bridges and tunnels, and touches 11 Chicago neighborhoods. Lincoln Park, Lake Michigan, bicycle and pedestrian lakefront trails and historic features surround the Boulevard.

The Phase I Study is following the requirements of the National Environmental Policy Act (NEPA). NEPA requires a rigorous and objective evaluation of alternatives and considers both stakeholder input as well as quantitative, measurable factors.

Throughout the Phase I Study, the project team has been charged with reviewing the current road configuration and redesigning the corridor and adjacent park trails into a more complete multimodal system that safely and comfortably accommodates people walking and bicycling as well as transit users and auto users.

Purpose and Need

The Project Purpose and Need Statement, which is the initial step in the NEPA process, identifies the transportation goals for the project and was developed based upon a combination of technical analysis and stakeholder input. The purpose of the project is to improve the NDLSD multimodal transportation facility. The specific needs to be addressed throughout the study include:

- Improve safety for all users
- Improve mobility for all users
- Address infrastructure deficiencies
- Improve access and circulation

Check out the Study Spotlight on the Purpose and Need on the project website.

Study Spotlights

All spotlights are available on the project website.



northdusablelsd.org/get-involved/e-newsletters-and-study-spotlights

Community Engagement To Date

80+
Stakeholder Meetings

14
Task Force Meetings



5,000+
survey responses to latest survey in 2022



3,500+
e-newsletter contacts



2,000+
written comments

13
Community Meetings

5
Large-Scale Public Meetings



2,000+
e-newsletters distributed



5+
pop-up events



100+
community researchers at Public Life Study

Where are we today?

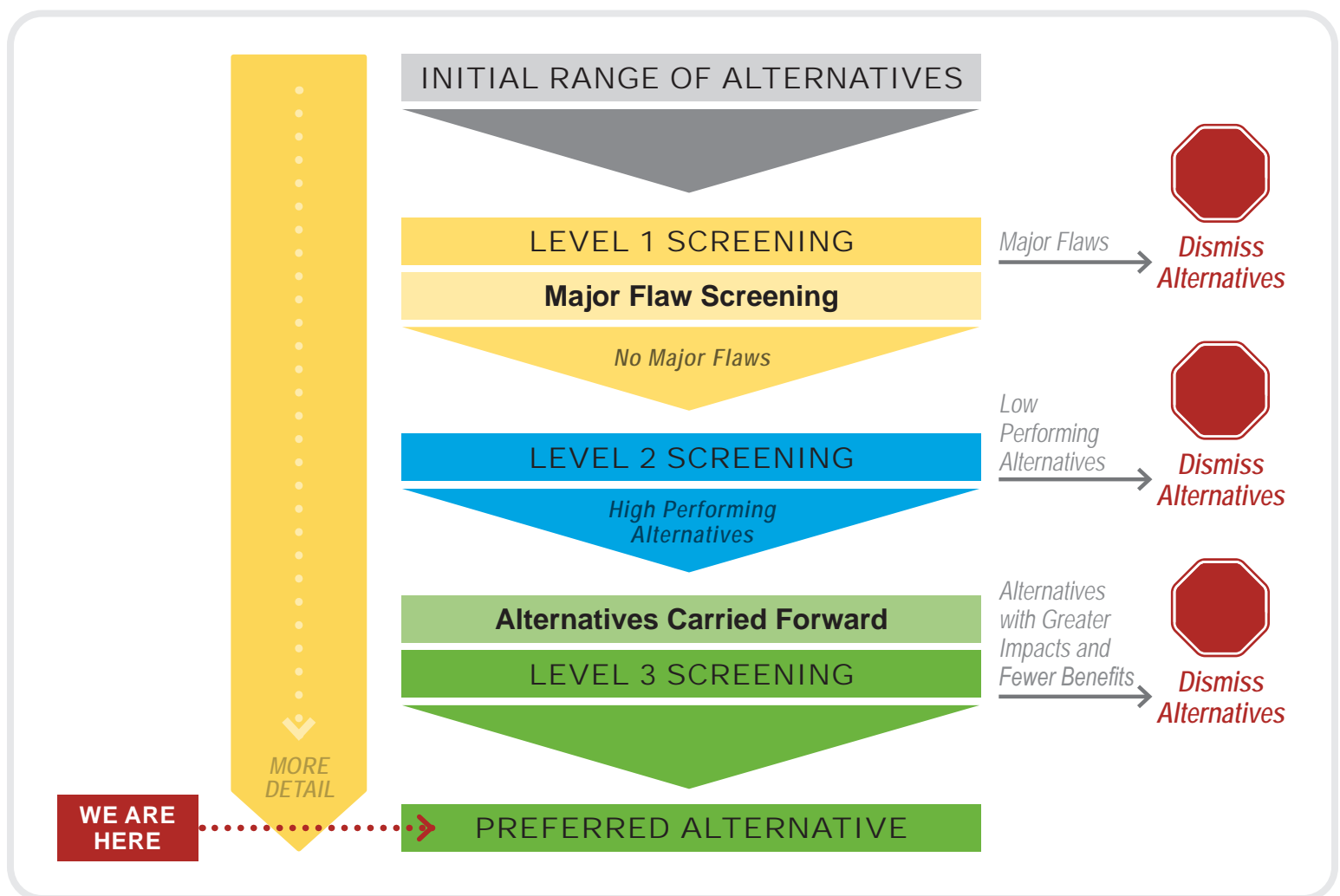
At the Public Open House (Public Meeting #5), we will be reviewing Level 3 (Final) Screening results, sharing the Recommended Preferred Multimodal Roadway Alternative, and discussing next steps for lakefront improvements. The development of the Recommended Preferred Multimodal Roadway Alternative is a culmination of environmental reviews, technical analysis, and community input.

Throughout this handout, we will review the alternatives development and evaluation process (ie: Levels 1, 2, 3 Screening) which brought us to the Recommended Preferred Multimodal Roadway Alternative. **The purpose of this handout is to provide a refresher of all the work that has been done, and that you have contributed to, over many years!**

What is Level 1, 2, and 3 Screening?

Level 1, 2, and 3 Screening is the approach taken to evaluate a wide range of alternatives for the multimodal roadway. Once an initial range of multimodal roadway alternatives was established, the project team used Level 1 Screening (Major Flaw Screening) to review the alternatives and dismiss those that did not satisfy the goals outlined in the approved Purpose and Need Statement or were not practicable. The remaining alternatives progressed to Level 2 Screening, during which the project team assesses how well each alternative addressed the transportation problems identified in the Purpose and Need, as well as the benefits and impacts of the alternatives. The highest performing alternatives advanced to Level 3 Screening and the low performing alternatives were dismissed. Level 3 Screening conducted a detailed analysis of the remaining multimodal roadway alternatives, using both quantitative and qualitative criteria, with the goal of identifying a preferred multimodal roadway alternative.

In addition to close agency coordination, in particular with the Project Study Group (IDOT, CDOT, Chicago Park District and Chicago Transit Authority), public and stakeholder input has been an essential and critical component during each stage of analysis. Community input received during each stage of analysis is highlighted on the following pages.



HOW DID WE GET HERE?

The first step in the alternatives development and evaluation process was to create a wide range of multimodal roadway alternatives. After establishing the project Purpose and Need in coordination with the Task Force and community (2014), stakeholders helped to provide ideas for addressing NDLSLSD's Transportation Needs, and over 600 suggestions were received as part of Task Force Meeting #3 and Public Meeting #2. The resulting

LEVEL 1 SCREENING

ideas were refined into 16 multimodal roadway alternatives and sorted into four categories based on common characteristics: Context Tailored Treatments, Transitways, Managed Lanes, and Tunnels and Causeways. Of the 16 initial multimodal roadway alternatives evaluated as part of Level 1 Screening, four were recommended for dismissal at Public Meeting #3 in 2017.

Initial Range of Multimodal Roadway Alternatives Categories

Transitways

Add dedicated transit space in addition to existing general purpose lanes.

Managed Lanes

Convert one or more existing general purpose lanes to a managed lane to provide high mobility for buses and potentially some autos.

Tunnels and Causeways

Place the Outer Drive in a tunnel beneath the park, in a tunnel on the Lakebed, or a on a causeway in Lake Michigan.

Context Tailored Treatments

Modernize the roadway and add transit improvements at junctions. These treatments provide the base for Transitway and Managed Lane alternatives and may be incorporated in more than one alternative.

RANGE OF ALTERNATIVES CATEGORY	INITIAL RANGE OF ALTERNATIVES	RECOMMENDED FOR DISMISSAL (LEVEL 1 SCREENING)	RECOMMENDED TO BE CARRIED FORWARD TO LEVEL 2 SCREENING
No-Action	No-Action	N/A	N/A
Context Tailored Treatments	Corridor Modernization		Corridor Modernization
	Compressed Roadway		Compressed Roadway
	Frontage Drive		Frontage Drive
Transitways	Bus on Left - Dedicated Transitway		Bus on Left - Dedicated Transitway
	Bus on Right - Shoulder/Weaving Zones		Bus on Right - Shoulder/Weaving Zones
	Dedicated Transitway - Off Alignment		Dedicated Transitway - Off Alignment
	Light Rail Transit	Light Rail Transit	
Managed Lanes	High Occupancy Vehicle Lane		High Occupancy Vehicle Lane
	High Occupancy Toll Lane		High Occupancy Toll Lane
	Express Toll Lane		Express Toll Lane
	Bus Only Lane		Bus Only Lane
	Express Reversible Lanes		Express Reversible Lanes
	Toll Lanes		Toll Lanes
Tunnels and Causeways	Submerged Express Tunnel in Lake	Submerged Express Tunnel in Lake	
	Land Based Express Tunnel	Land Based Express Tunnel	
	Causeway in Lake	Causeway in Lake	

HOW DID WE GET HERE?

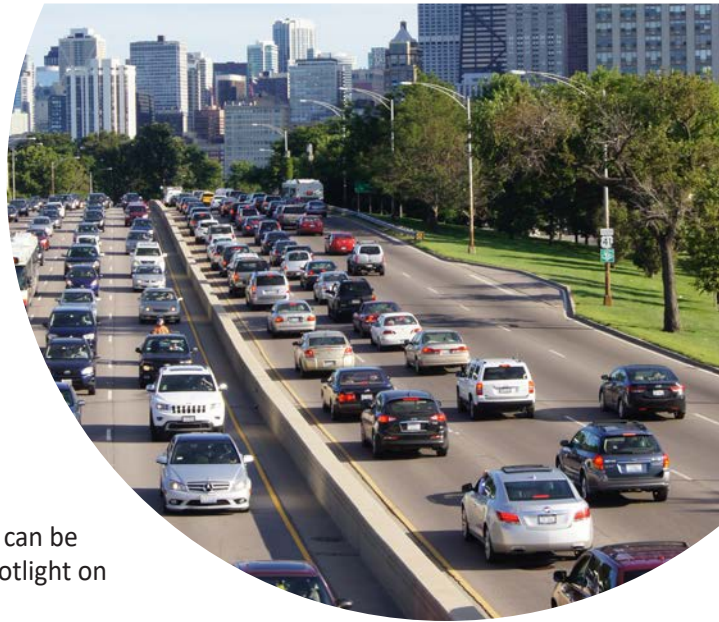
LEVEL 1 SCREENING

Major Flaws Screening | Level 1 Screening

Level 1 Screening, which was the initial step in the multimodal roadway alternatives evaluation process, identified alternatives that had major flaws. A Major Flaw was defined as a relatively higher impact or cost without commensurate benefits. Level 1 Screening was a high level analysis, and the alternatives were developed at a conceptual level of detail. As part of Level 1 Screening, the evaluation process and results were reviewed by stakeholders, as shown in the “Public Engagement Summary” call-out.

The following alternatives were dismissed through the Level 1 Screening process: Light Rail Transit, Submerged Tunnel in Lake, Land Based Express Tunnel and Causeway in Lake. Twelve multimodal roadway alternatives progressed to Level 2 Screening.

Additional details on the Light Rail Transit and Tunnel alternatives evaluation can be found in the Recap of Notable Alternatives Considered & Dismissed Study Spotlight on the project website.



Public Engagement Summary

Public Meeting #1 (2013)

Over 430 members of the public attended, over 300 comments received

Public Meeting #2 (2014)

Over 330 members of the public attended, over 290 comments received

Task Force Meetings #1-#6

Up to 100 task force members attended each of these meetings

Community Meeting

With over 60 community members

Stakeholder Meetings

Over 40 stakeholder meetings, including first responders, organizations focused on the Lakefront Trail and parks, transportation advocates and location-specific business and community organizations

Briefings

With all Aldermen along the lakefront study area



HOW DID WE GET HERE?

Level 2 Screening involved testing how well each multimodal roadway alternative addressed the transportation problems listed in the Purpose and Need, as well as benefits and impacts of the alternatives. The alternative designs were refined further but still at a conceptual level of detail. They were evaluated based upon a general footprint review, travel modeling, and stakeholder input. Twelve multimodal roadway alternatives were evaluated as part of Level 2 Screening and four were recommended for dismissal at Public Meeting #4 (Public Input Opportunity) in 2020. Five multimodal roadway alternatives were recommended to be carried forward to Level 3 Screening.

LEVEL 2 SCREENING

Over time, the project team has revised the names of the multimodal roadway alternatives in an effort to make them more understandable and intuitive. This is of particular note between Level 2 Screening and Level 3 Screening. The former names are in parenthesis in the farthest right column of the table below, and the updated names are highlighted and bolded. The multimodal roadway alternatives carried forward into Level 3 screening were in some cases hybrids of the most desirable features of the alternatives evaluated in Level 2. Check out the Alternatives to be Carried Forward Handout on the project website.

RANGE OF ALTERNATIVES CATEGORY	RANGE OF ALTERNATIVES	RECOMMENDED FOR DISMISSAL (LEVEL 2 SCREENING)	RECOMMENDED TO BE CARRIED FORWARD TO LEVEL 3 SCREENING
No-Action	No-Action	N/A	N/A
Context Tailored Treatments (CTT)	Corridor Modernization		Top Performing CTT with Transit Advantages / The Essential
	Compressed Roadway		
	Frontage Drive		
Transitways	Transit Advantages at Junctions		Dedicated Transitway - Left / The Addition
	Bus on Shoulder - Right	Bus on Shoulder - Right	
	Dedicated Transitway - Left		
	Dedicated Transitway - Off Alignment	Dedicated Transitway - Off Alignment	
Managed Lanes	3+1 Bus Only Lane		3+1 Bus Only Lane / The Exchange
	3+1 Managed Lane		3+1 Managed Lane / The Flex
	2+2 Managed Lanes		2+2 Managed Lanes / The Double Flex
	3+2 Reversible Managed Lanes	3+2 Reversible Managed Lanes	
	4+1 Contraflow Bus Only Lane	4+1 Contraflow Bus Only Lane	

Learn more about Level 2 Screening through resources available on the project website for a:

- Review of all five remaining multimodal roadway alternatives in the Public Meeting #4 (Public Input Opportunity) video: northdusableisd.org/public-input-opportunity
- Review of Transportation Modeling in in the Study Spotlight: northdusableisd.org/get-involved/e-newsletters-and-study-spotlights

Alternatives Recommended to Advance to Level 3 Screening

A Context Tailored Treatments Alternative Category

The Essential Alternative (formerly called Context Tailored Treatment with Transit Advantages)

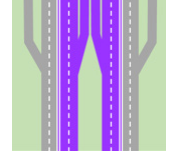
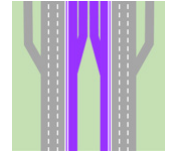
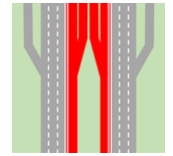
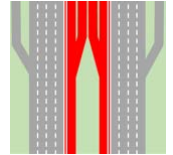
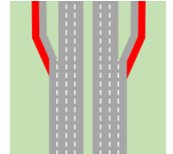
Based on the analyses performed, and feedback received at Public Meeting #3, a hybrid of the three Context Tailored Treatment alternatives was created – the Context Tailored Treatment with Transit Advantages alternative was recommended to advance to the Level 3 Screening process. This top performing alternative had the best combination of improved travel performance for buses and autos with the least impacts compared to the other Context Tailored Treatment alternatives.

B Transitways Alternative Category

The Addition Alternative (formerly Dedicated Transitway – Left): The Dedicated Transitway - Left alternative would add one northbound and southbound dedicated bus lane along the Outer Drive median, plus dedicated access ramps. This alternative provided the relative best travel performance for transit and autos and has a similar or less impacts compared to the other transitway alternatives.

C Managed Lanes Alternative Category

Three alternatives were recommended to advance from the Managed Lanes alternatives category: The Exchange Alternative (formerly 3+1 Bus Only Lane), The Flex Alternative (formerly 3+1 Managed Lane), and the Double Flex Alternative (formerly 2+2 Managed Lanes). These alternatives would convert one or more lanes closest to the median along the Outer Drive to bus only lanes or tolled managed lanes, plus add dedicated access ramps. These alternatives had comparable overall travel performance and similar impacts to each other, but less impacts than the other managed lane alternatives not recommended to advance.



Public Engagement Summary

Public Meeting #3 (2017)

Over 260 members of the public attended, over 280 comments received and over 2,400 surveys completed

Public Meeting #4 (2020, Virtual Public Input Opportunity)

Over 3,200 surveys completed, over 900 comments received, and over 75 community members joined small group discussions

Task Force Meetings #7-#11

Up to 77 task force members attended each of these meetings

7 Community Meetings

With a combined 530 community members

Pop-Up Events

Including outreach events at Chicago Public Library branches, during which the project team discussed the project with over 80 community members

Stakeholder Meetings

Over 20 stakeholder meetings

Briefings

Continued briefings with all Aldermen along the lakefront study area



HOW DID WE GET HERE?

LEVEL 3 SCREENING

During the Level 3 (Final) Screening process, the project team compared the remaining five multimodal roadway alternatives to each other using extensive qualitative and quantitative criteria. The criteria fell into four general categories: performance, social, economic, and environmental factors. These criteria were shared, refined, and supplemented based on Task Force and public input.



PERFORMANCE

- **Person Throughput*** – Total persons traveling through the corridor
- **Transit Mode Share*** – Percentage of travelers using transit
- **Transit Mobility, Reliability*** – Bus travel times, variation in bus travel times
- **Vehicular Mobility*** – Outer Drive bus/auto travel times
- **Volume Change*** – Outer Drive, arterial traffic volume change
- **Inner Drive Mobility** – Bus/auto travel times
- **Safety**
 - Bicyclist and pedestrian
- **Future Flexibility** – Ability to adapt to future transportation needs

**Criteria carried over from Level 2 Screening*



ENVIRONMENTAL

- **Air Quality**
 - Conformity and greenhouse gas emissions
- **Traffic Noise**
 - Changes in traffic noise compared to No Action
- **Impervious Surface Areas**
 - Pavement areas (roadways and paths)
- **Natural Resources**
 - Impacts to trees, natural areas, migratory birds, threatened or endangered species
- **Green Space**
 - Quantity (acres) and quality (programmable space) impacted
- **Shoreline Protection**
 - Benefits to level of protection
- **Water Quality**
 - Changes in baseline quality to proposed conditions
- **Waters of the US**
 - Impacts to Lake Michigan, lagoons, and wetlands
- **Climate Change and Resiliency**



SOCIAL

- **Environmental Justice:** Does an alternative cause disproportionate impacts to low income and minority communities?
- **Equity:** How does an alternative distribute project benefits, impacts, and costs?
- **Pedestrian/Bicycle Experience**
 - Crossing distances at east-west access points
 - Access design
- **Parking Impacts**
 - Impacted number of spaces
- **Displacements/Private Property Impacts**
(Will be considered, no impacts are anticipated)
- **Compatibility with Local Plans**



ECONOMIC

- **Access to employment**
 - Travel times for work trips
- **Construction Cost**
 - Compare 2021 cost
- **Funding/Finance Options**
 - Potential sources
 - Potential scenarios

HOW DID WE GET HERE?

The project team separated screening criteria into two categories: distinguishing and non-distinguishing. Distinguishing criteria contain results that varied amongst alternatives. Non-distinguishing criteria contain results that were the same, or similar, amongst alternatives. Task Force Meetings #12-14 focused on distinguishing criteria results. Non-distinguishing criteria information and results were shared in Study Spotlights made available online. Please review the Study Spotlights shared previously to learn more about the non-distinguishing criteria (to the right). These are available on the project website: <https://northdusablesd.org/get-involved/e-newsletters-and-study-spotlights>.

We would now like to share the Level 3 (Final) Screening results and the Recommended Preferred Multimodal Alternative with you at the Public Open House.

LEVEL 3 SCREENING

Non-Distinguishing Screening Criteria

- Environmental Justice and Equity
- Travel Markets
- NDLS Level 3 Screening – Performance Criteria
- Climate Change
- Funding
- Noise
- Section 106
- NDLS Level 3 Safety Spotlight
- NDLS Level 3 Environmental Spotlight
- Surface Waters
- Social Factors

Study Spotlights

All spotlights are available on the project website.



northdusablesd.org/get-involved/e-newsletters-and-study-spotlights

Public Engagement Summary

Task Force Meetings #12 (2021), #13 (2022) and Task Force Small Group Discussions (2022)

Up to 84 task force members attended each of these meetings

Three Community Meetings

With a combined 500 community members

Pop-Up Events

Including at Bike the Drive

Stakeholder Meetings

Over 20 stakeholder meetings

Briefings

Continued briefings with all Aldermen along the lakefront study area



What We've Heard

PRIORITIZE TRANSIT



DESIGN FOR PEOPLE



ENHANCE PARKS



BUILD IN CLIMATE RESILIENCY



IMPROVE SAFETY & OPERATIONS



PRESERVE CHARACTER



WE WANT TO HEAR FROM YOU!

Provide your input to the project team in multiple ways! Talk to project team members throughout the Public Open House exhibit room, fill out a comment form, or email comments after the meeting to info@ndlsd.org. Public comments are welcome at any time, but comments received by September 9, 2024 will be included as part of the Public Open House record.