North Lake Shore Drive
Phase I Study
Montrose-Wilson-Lawrence Corridor
Community Meeting #3
September 26, 2019
Welcome
Tonight’s Agenda

- NLSD Project Background and Status
- MWL Community Meetings #1 and #2 Recap
- MWL Initial Alternatives Evaluation
- MWL Finalist Alternatives Evaluation
- Recommended Top Performing Alternative
- Q&A/Next Steps
Project Description

• Study area
  - Grand Avenue to Hollywood Avenue
  - 11 neighborhoods, 6 wards
  - 24 bridges and tunnels
  - 12 cross-road junctions

• Infrastructure is over 80 years old and in need of reconstruction
Phase I Study anticipated completion: 2021
- Phase II and Phase III are not funded
- Project Purpose: improve safety, mobility, access, condition/design
- Alternatives Evaluation: Context Tailored Treatments (CTT), Transitways, and Managed Lanes (ongoing)
- Shoreline, Lakefront Trail improvements

For more information:
http://northlakeshoredrive.org
MWL Coordination Process

- Parallels overall NLSD study process
- Supplements past coordination efforts
- Compatible with overall NLSD alternatives

- Meeting #1 (October 17, 2018)
  - Existing conditions review and workshop
- Meeting #2 (January 24, 2019)
  - Alternatives evaluation, finalist alternatives workshop
- Meeting #3 (September 26, 2019)
  - Top performing alternative
Meeting #1 held October 17, 2018
- 41 attendees
- Existing conditions review
- Needs assessment workshop

Meeting #2 held January 24, 2019
- 61 attendees
- Initial alternatives evaluation
- Finalist alternatives identification
- Finalist alternatives workshop
Stakeholder Comment Summary

• Support for improving **safety** and **mobility** for all transportation modes
  – Bike/pedestrian safety
  – Montrose Ave ramp congestion
  – Dedicated transit lanes

• Support for improved park, transit and community **access**
  – Bike/Pedestrian and Transit access to the park
  – Outer Drive ramp design

• Support for additional **green space**, improved aesthetics

• Suggestions for **evaluation criteria**
Montrose-Wilson-Lawrence Corridor
Initial Alternatives
Initial Alternatives Evaluation Process

12 MWL Alternatives, organized into 3 groups

4 alternatives in each group
- Group A (11 – 12 movements)
- Group B (10 movements)
- Group C (8 movements)

A “movement” is an access route to or from the Outer Drive

12 Existing movements in MWL section
- Example: 4 movements at Lawrence Avenue

Information Presented at Community Meeting #2
Initial Alternatives Evaluation Process

Top Performing Alternatives from Groups A, B, and C determined through scoring ★ ★ 4 Finalist Alternatives identified ★ ★

Initial Evaluation Criteria

• Mobility
• Safety
• Park Access
• Green Space

Group A Scoring

Information Presented at Community Meeting #2
## Finalist Evaluation Criteria

### 12 Initial Alternatives

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>• Predicted crash frequency and severity (Outer Drive)</td>
</tr>
<tr>
<td></td>
<td>• Emergency vehicle travel times from NLSD</td>
</tr>
<tr>
<td>Mobility</td>
<td>• Intersection Level of Service (local system)</td>
</tr>
<tr>
<td></td>
<td>• Delay (overall MWL system)</td>
</tr>
<tr>
<td>Park Access</td>
<td>• Number of east-west conflict points (bike/ped)</td>
</tr>
<tr>
<td>Green Space</td>
<td>• Net change in green space</td>
</tr>
</tbody>
</table>

Information Presented at Community Meeting #2
## Finalist Evaluation Criteria

### 4 Finalist Alternatives

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>• Predicted crash frequency and severity (Outer Drive)</td>
</tr>
<tr>
<td></td>
<td>• Emergency vehicle travel times from NLSD, to NLSD*</td>
</tr>
<tr>
<td>Mobility</td>
<td>• Intersection Level of Service (local system)</td>
</tr>
<tr>
<td></td>
<td>• Delay (overall MWL system)</td>
</tr>
<tr>
<td></td>
<td>• Transit travel times*</td>
</tr>
<tr>
<td></td>
<td>• Daily traffic redistribution*</td>
</tr>
<tr>
<td>Park Access</td>
<td>• Number of east-west conflict points (bike/ped)</td>
</tr>
<tr>
<td></td>
<td>• Number of Park exit points (auto)*</td>
</tr>
<tr>
<td></td>
<td>• Parking*</td>
</tr>
<tr>
<td>Green Space</td>
<td>• Net change in green space</td>
</tr>
<tr>
<td></td>
<td>• Net change in green space east of the Outer Drive*</td>
</tr>
<tr>
<td>Cost/Constructability*</td>
<td>• Cost in 2019 $$/relative ease of construction*</td>
</tr>
</tbody>
</table>

*Criteria added for Finalist Alternatives Evaluation based upon additional stakeholder input*
Safety Evaluation

Highway Safety Manual
• Quantitative analysis tool
• Predicted crashes (severity and frequency)
• Relative Comparison

Emergency Vehicle Travel Times
• Travel to Outer Drive
• Travel from Outer Drive

Chicago Fire Department

Weiss Hospital
Mobility Evaluation

**Intersection Level of Service** – quality of travel flow at signalized intersections, like a report card

**System Delay** – time lost due to congestion on Outer Drive and arterial system

**Daily Traffic Redistribution** – highlights extent of traffic redistribution

**Transit Travel Times** – change in travel times along Marine Drive
Park Access Evaluation

Number of Park Exit Points (to Outer Drive)
Example: 2 northbound and 2 southbound exit points

Number of East – West Conflict Points –
Reducing the number of conflict points further enhances bike/ped safety and park access

Parking –
Net change in parking spaces in MWL section
Green Space Evaluation

Net Change in Green Space

- Net overall change
- Net change east of Outer Drive
Cost and Constructability Evaluation

**Cost** – Construction cost within MWL section, in 2019 $$

**Constructability** – Qualitative assessment of relative ease of construction
Analysis Notes

- Study area bounded by Broadway, Lawrence, Marine and Montrose
- Regional travel demand model used
- Extent of traffic redistribution identified, compared to No Build
- 10% or greater threshold selected to highlight differences between alternatives
- Length with 10% or greater traffic increase measured
Alternative A-3 Notes

- Redistribution effects relatively localized, extend to portions of Marine Dr, Clarendon Ave
- Some traffic flows to/from the consolidated ramps, Irving Park Rd ramps
- Arterial capacity not exceeded

Proposed MWL Alternative

- 10% or greater traffic increase
- 10% or greater traffic decrease
- Less than 10% traffic change
Alt B-3 Daily Traffic Redistribution

Alternative B-3 Notes
• Redistribution effects extend to larger portions of Marine Dr, Clarendon Ave
• Some traffic flows to/from the Lawrence Ave ramps
• Some traffic flows to/from the consolidated ramps, Irving Park Rd ramps
• Arterial capacity not exceeded

Proposed MWL Alternative

10% or greater traffic increase
Less than 10% traffic change
10% or greater traffic decrease
Alt B-4 Daily Traffic Redistribution

Alternative B-4 Notes
• Redistribution effects extend to similar portions of Marine Dr, Clarendon Ave
• Some traffic flows to/from the Lawrence Ave ramps
• Some traffic flows to/from the consolidated ramps, Irving Park Rd ramps
• Arterial capacity not exceeded

Proposed MWL Alternative
10% or greater traffic increase
Less than 10% traffic change
10% or greater traffic decrease
Alternative C-3 Notes
• Redistribution effects more extensive, as far west as Broadway
• Traffic flows from Lawrence Ave and Montrose Ave to Wilson Ave (and back)
• Wilson/Marine intersection capacity exceeded

Proposed MWL Alternative
- 10% or greater traffic increase
- 10% or greater traffic decrease
- Less than 10% traffic change
- Intersection capacity exceeded
Daily Traffic Redistribution Summary

- Alternative A-3 had the relative least amount of traffic redistribution
- Capacity not exceeded, with exception of Alternative C-3

Proposed MWL Alternative

- 10% or greater traffic increase
- 10% or greater traffic decrease
- Intersection capacity exceeded
- Less than 10% traffic change
Ratio Scoring Method

- Score individual criteria for each alternative; worst performing alternative is scored as 1, best performing alternative is scored as 10
- Proportional scores for everything in between
- Add individual scores to create overall score for each alternative
- 25 criteria, maximum score is 250

### Ratio Example

<table>
<thead>
<tr>
<th>New Green Space</th>
<th>Score</th>
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<tbody>
<tr>
<td>1 acre</td>
<td>1</td>
</tr>
<tr>
<td>11 acres</td>
<td>5.3</td>
</tr>
<tr>
<td>20 acres</td>
<td>10</td>
</tr>
</tbody>
</table>
Finalist Alternatives Evaluation - Scoring

Max Score = 250

- Green Space (2 factors/20 points max)
- Park Access (3 factors/30 points max)
- Safety (10 factors/100 points max)
- Mobility (9 factors/90 points max)
- Cost (1 factor/10 points max)
Finalist Alternatives – Scoring Results

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Mobility</th>
<th>Safety</th>
<th>Access</th>
<th>Green Space</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Build</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>141</td>
</tr>
<tr>
<td>Alt A-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>191</td>
</tr>
<tr>
<td>Alt B-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>Alt B-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>185</td>
</tr>
<tr>
<td>Alt C-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>107</td>
</tr>
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</table>

Top Performing Alternative: Alt B-3
Top Performing Alternative Highlights

Alternative A-3

<table>
<thead>
<tr>
<th>Category</th>
<th>Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>• Severe crashes reduced by 33%, multi-vehicle crashes reduced by 9%</td>
</tr>
<tr>
<td></td>
<td>• Bike and ped Lakefront Trails separated, grade separated crossings</td>
</tr>
<tr>
<td>Mobility</td>
<td>• Intersection LOS improved</td>
</tr>
<tr>
<td></td>
<td>• System delay reduced up to 56% (AM)</td>
</tr>
<tr>
<td>Access</td>
<td>• Bus stop/turnaround facilities</td>
</tr>
<tr>
<td></td>
<td>• East-west bike/ped improvements</td>
</tr>
<tr>
<td></td>
<td>• East-west conflict points reduced</td>
</tr>
<tr>
<td>Green Space</td>
<td>• Green space increased by 1.55 acres</td>
</tr>
</tbody>
</table>
Questions?
Next Steps

MWL Corridor

• Staff will be available at the back of the room to answer questions

• Provide any additional feedback by **October 18, 2019** to be considered for meeting record

NLSD Study

• Integrate MWL Alternative A-3 into corridor-wide alternatives

• Continue evaluation of corridor-wide alternatives

• Northern Terminus Traffic Study Meetings – **Fall 2019**

• Task Force Meetings - **Winter/Spring 2020**
Thank You

Staff will be available at back of the room to answer questions.

Submit any additional comments by October 18, 2019

www.northlakeshoredrive.org