Today’s Agenda

• Introductions
• Project Background
• Project Study Group
  – Chicago Transit Authority
  – Chicago Park District
• Improvement Alternatives
• Northern Terminus Traffic Study (NTTS)
• Next Steps
• Q&A
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Chicago Park District
Lake Shore Drive

Holiday Inn Chicago
Mart Plaza River North
History of Lake Shore Drive
History of Lake Shore Drive
History of Lake Shore Drive
North Avenue to Oak Street
1909 Plan of Chicago
Mass Production
Plan of Chicago Promo- 1927
1939 WPA Project
Grand Avenue to Hollywood Avenue

- 11 neighborhoods in 6 wards
- 7 miles of roadway
- 22 bridges and tunnels
- 12 junctions
Stakeholder Involvement

Task Force
8 Meetings 2013-2018

Stakeholder Meetings
10+ Meetings Over Past Year

• City of Chicago Aldermen
• Lakefront Improvement Committee
• Metropolitan Planning Council/Active Transportation Alliance
• Chicago Streetcar Renaissance

• Office of Emergency Management and Communications
• Chicago Police Department
• Location-Specific Stakeholders; Addison Street & Wilson Avenue
NLSD is a critical traffic artery
Travel Demand = 70,000 to 155,000 vpd.

Significant traffic bottlenecks
- Chicago Avenue
- LaSalle Drive
- Fullerton Parkway
- Belmont Avenue
- Irving Park Road
• **5-Year crash history:**
  - 5,800 crashes
  - 17 fatal and 1,005 injury crashes
  - Average of 1,100 crashes/year.

• **Predominant Crash Types:**
  - Rear End – 37%
  - Sideswipe – 21%
  - Fixed Object – 20%
NLSD is also a critical transit corridor

Outer Drive: 42,300 riders/day
7 express bus routes

Inner Drive: 26,500 riders/day
2 local bus routes

Total Corridor Transit Ridership = 69,000 riders/day
Lakefront Trail serves:
- Bicycle commuters
- Recreational users
- Tourists

Peak Trail Usage:
25,300 users*/day
at highest use areas

*Users = Pedestrians, Cyclists and others. Usage data from August 2010
Existing Conditions - Infrastructure

• Some bridges are in poor structural condition.

• Many bridges are functionally obsolete for traffic and pedestrian demands.
Wave action, flooding and ice buildup are regular problems along some portions of NLSD and the Lakefront Trail.
NLSD Purpose and Need

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

- The complete Purpose & Need document can be found on the project website:
  http://northlakeshoredrive.org/info_environment_documents.html
Study Progress to Date

Phase I
Preliminary Engineering and Environmental Studies

Phase II
Contract Plan Preparation and Right-of-Way Acquisition

Phase III
Construction

Identify & Evaluate Alternatives

Alternatives Carried Forward

Select Preferred Alternative

Obtain Environmental & Design Approvals


■ = Task Force Meeting
○ = Public Meeting
● = Public Hearing

We Are Here
Public Meeting #3

- Meeting held July 12, 2017
- 262 Attendees
- Exhibits and PowerPoint:
  - Study Background/Phase I Process
  - Initial Range of Alternatives
  - Level 1 Screening
  - Context Tailored Treatments Alternatives
- 280 Comments received
- **2,439 Surveys received**
Public Meeting #3 Survey Results

North Lake Shore Drive Users are Multi-Modal

- Car, motorcycle: 84%
- Bus: 73%
- Pedestrian: 71%
- Rideshare, Taxi: 69%
- Bicycle: 63%

Additional responses: Other (2%)  I don’t use North Lake Shore Drive (0.10%)
Public Meeting #3 Survey Results

North Lake Shore Drive Motor Vehicle User Destinations

- Downtown Chicago: 48%
- Surrounding neighborhoods: 22%
- Other area: 19%
- Lakefront/Beach: 6%
- Lincoln Park: 5%
Public Meeting #3 Survey Results

What Would Make Riding the Bus on North Lake Shore Drive a Better Option?

Motor Vehicle Users Provide Input

- If it was more cost-effective than other modes: 3%
- Other: 14%
- If bus speed along North Lake Shore Drive was faster than it is now: 15%
- I would not switch to a bus: 21%
- If bus travel time on North Lake Shore Drive was consistent and not affected by traffic*: 46%

*For self-selected bus riders, this response increases to 61%.
Chicago Transit Authority
7 “feeder express” routes & 2 local routes carry 69,000 avg. weekday trips

CTA buses arrive every 2-8 minutes on all routes during the morning peak period
• NLSD connects the region’s densest residential corridor with its densest employment center

• The NLSD corridor is the least car-dependent in the City:
  • 41% of households have zero cars, compared with 26% city-wide

• NLSD bus riders are choice riders, choosing to ride the bus
  • 39% earn > $75k; 25% earn > $100k

• CMAP projects a 11% population increase and a 23% increase in transit ridership within the NLSD corridor by 2040
NLSD is a Critical Transit Corridor

CTA buses carry more than 30% of all people travelling on Lake Shore Drive’s most congested segments during weekday peak hours.
NLSD Bus Performance

CTA-Metra Travel Time Comparison (8-9 AM)

- #135 Express Bus from Belmont to Downtown Chicago:
  - Distance: 6.5 miles
  - Time: 32 minutes

- Metra - BNSF from Naperville to Downtown Chicago:
  - Distance: 28 miles
  - Time: 33 minutes

Source: CTA (Oct. 2015); Metra (Oct. 2015)
* Downtown Endpoint for CTA: W. Adams & S. Wacker; for Metra: Union Station
Slow & Unreliable Travel Times on Lake Shore Drive

#147 – Outer Drive Express

Uncongested
9 Minutes
37 mph
Median at 6-7 AM

Typical Day
26 Minutes
13 mph
Median 8-9 AM

Slow Day
34 Minutes
10 mph
80th Percentile 8-9 AM

Bad Day
40 Minutes
8 mph
90th Percentile 8-9 AM

5.3 miles on LSD
Improving Transit Access to the Parks

Prioritizing Buses at Major Lakefront Destinations will:

• Make CTA a more attractive option for park visitors
• Improve park access for all users
• Improve quality of the park experience
Chicago Park District
Public Meeting #3 Survey Results

A Mix of Lake, Park, and City Views When Traveling Along North Lake Shore Drive Is Important

Agree 84%

No opinion 7%

Disagree 9%
Public Meeting #3 Survey Results

How Do You Use The Lakefront Trail and Park Paths?

- 81% Walk
- 65% Bike (Recreational)
- 42% Jog
- 32% Bike (Commuter)
- 4% Rollerblade/Skateboard

Additional responses: Other (3%)
Chicago Park District Coordination

- NLSD Coordination
- Lakefront Trail Separation
- Lessons Learned

Lakefront Trail Separation near Fullerton Avenue
Chicago Park District Coordination

https://www.chicagoparkdistrict.com/parks-facilities/lakefront-trail

Please Note: A small section of the lakefront trail between Lake Shore Dr. and Ontario St. has recently been shut down due to recent storm damage. The pedestrian portion of the area is open for both vehicular traffic and repairs will take place on the weather allows in the hopes that the area will be cleaned up as needed.

Chicago’s 18-mile Lakefront Trail welcomes residents and visitors from all around the City. Running from the north, to 71st St. on the south, the trail provides important access for recreational purposes and has increasingly become an active transportation option for many Chicagoans. On any given day activity along the trail includes people preparing for work, training for marathons, caregivers with children, strollers, tourists, bikers, teens on skateboards, and thousands of other people taking a leisurely walk, jog, or ride.

<table>
<thead>
<tr>
<th>Park</th>
<th>Segment</th>
<th>Status</th>
<th>Estimated Construction Start</th>
<th>Estimated Construction Completion</th>
<th>Images</th>
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<tbody>
<tr>
<td>Burnham Park</td>
<td>35th to 41st Street</td>
<td>Complete</td>
<td>Fall 2016</td>
<td>Trail Separation – Completed June 2017</td>
<td>View 35th - 41st separation plan</td>
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<tr>
<td>Burnham Park</td>
<td>41st to 55th Street</td>
<td>Construction</td>
<td>Mid-August 2017</td>
<td>Spring 2018</td>
<td>View 41st - 55th separation plan Note: This plan shows the lakefront trail configuration during CDOT’s 41st Street bridge construction and the final separated trail layout after the bridge is completed. Combined trail use with temporary detours will continue to be available during construction of these projects.</td>
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<tr>
<td>Grant Park</td>
<td>From Chicago River to approx. Roosevelt Rd.</td>
<td>Construction</td>
<td>Early October 2017</td>
<td>Spring 2018</td>
<td>View Grant Park separation plan</td>
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<td>Lincoln Park</td>
<td>Ardmore to Montrose</td>
<td>Construction</td>
<td>Spring 2018</td>
<td>Late Summer 2018</td>
<td>View Ardmore-Montrose separation plan</td>
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<td>Lincoln Park</td>
<td>Montrose to Fullerton</td>
<td>In Design</td>
<td>Summer 2018</td>
<td>Late Summer 2018</td>
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</table>
Lakefront Trail and Park Access

Design Guidelines

• Separate users
• Wide, welcoming access points

• ¼ mile spacing of pedestrian/bicycle access points
Lakefront Trail and Park Access

**Design Guidelines:** Trail separation

- **Bike trail:** 12’ paved
- **Grade-separate bike trail from access path**
- **Pedestrian trail:** 14’ paved
  - 3’ crushed limestone shoulders
- **Lakefront promenade**
Lakefront Trail and Park Access

Design Guidelines: Underpasses & Bridges

Access without interaction with vehicles

Skylight

Comfortable width; Opportunity to separate bikes and pedestrians

Museum Campus, Chicago, IL
Project Improvement Alternatives Review
<table>
<thead>
<tr>
<th>INITIAL RANGE OF ALTERNATIVES CATEGORY</th>
<th>INITIAL RANGE OF ALTERNATIVES</th>
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<tr>
<td>No-Action</td>
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<tr>
<td>Transitways</td>
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<tr>
<td>Managed Lanes</td>
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<tr>
<td>Tunnels and Causeways</td>
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<tr>
<td>Context Tailored Treatments</td>
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</table>
Context Tailored Treatments

Corridor Modernization Concept (Alternative 1)
- Modernizes existing facility to improve safety and reduce bottlenecks.

Compressed Roadway Concept (Alternative 2)
- Minimizes transportation footprint.

Frontage Drive Concept (Alternative 3)
- Depresses Outer Drive below grade and splits Inner Drive into one-way frontage drives: Grand to ELSD and Belmont to Montrose.

It is recommended that this category of alternatives be further evaluated.
Chicago Avenue
Shoreline Protection

Revetment Wall Alternative - Between Oak Street Beach and North Avenue (Section 2a)

<table>
<thead>
<tr>
<th>DRIVE</th>
<th>WATER LEVEL (ft CCD)</th>
<th>DEPTH (ft)</th>
<th>SUBMERGED STONE BENCH</th>
<th>FLOOD BERM ELEVATION (ft CCD)</th>
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<tbody>
<tr>
<td>Drive - At Grade</td>
<td>20 Yr (+4.85)</td>
<td>-13.15</td>
<td>Yes</td>
<td>19.35</td>
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</table>
Oak Street Curve

- Expanded North Ave Beach
- North Ave Beachhouse
- Relocated Oak Street Beach
- Overlook Plaza
- Increased Park Space
- Ped Path
- Bike Path
- North Lake Shore Drive
- Oak Street Ped/Bike Bridge
- ADA Ramp Accessible
- Entry Promenade
- Increased Park Space
- Relocated Oak Street Beach Food + Drink
- Ped Path
- Bike Path
- Increased Park Space
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<th>INITIAL RANGE OF ALTERNATIVES CATEGORY</th>
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<td>Transit Advantages at Junctions</td>
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<td>Transit Advantages at Junctions</td>
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<tr>
<td></td>
<td>Bus on Shoulder - Right</td>
<td></td>
<td>Bus on Shoulder - Right</td>
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<tr>
<td></td>
<td>Dedicated Transitway - Left</td>
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<td>Dedicated Transitway - Left</td>
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<td></td>
<td>Dedicated Transitway - Off Alignment</td>
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<td>Light Rail Transit</td>
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<td>Managed Lanes</td>
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<td>Express Reversible Lanes</td>
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<td>Tunnels and Causeways</td>
<td>Submerged Express Tunnel in Lake</td>
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<td>Land Based Express Tunnel</td>
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<td></td>
<td>Frontage Drive</td>
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<td>Frontage Drive</td>
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</table>
Transitways Alternatives

Bus on Right Shoulder

Dedicated Transitway on Left

Dedicated Transitway Off Alignment
Managed Lanes Alternatives

3+1 Managed Lane

2+2 Managed Lanes

3+2 Reversible Managed Lanes

4+1 Contraflow Managed Lane
Northern Terminus Traffic Study (NTTS)
• Incorporate feedback from TF #8
• Continue alternatives development and conduct Level 2 screening
• Task Force #9
  – Summer 2018
  – Transitways & Managed Lanes Review
• Public Meeting #4
  – Fall/Winter 2018
Thank You

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northlakeshoredrive.org