CMAP/TAP FY 2016-2020 CMAQ PROJECT APPLICATION
BICYCLE FACILITY

I. PROJECT IDENTIFICATION

Project Sponsor
Chicago Department of Transportation

Other Agencies Participating in Project
Chicago Park District

☐ New Project
☒ Existing CMAQ/TAP Project
☐ Add CMAQ/TAP to Existing Project

TIP ID for Existing Project
01-06-0002

Contact Information – Name, Title, Agency, Address, Phone, e-mail (e-mail required)

Primary:
Keith Privett, Coordinating Planner, CDOT
30 N. LaSalle St., Suite 500, Chicago, IL 60602
312/744-1981 keith.privett@cityofchicago.org

Secondary:
Tanera Adams, Civil Engineer IV, CDOT
30 N. LaSalle St., Suite 400, Chicago, IL 60602
312/742-2590 tanera.adams@cityofchicago.org

II. PROJECT LOCATION

- Projects not readily identified by location must provide a title on the last line of this section
- Attach a map sufficient to accurately locate this project in a GIS system

Name of Street or Facility to be Improved
43rd Street Access Bridge to the Lakefront Trail

Marked Route #

Project Limits: North/West Reference Point/Cross St/Intersection
43rd Street

Marked Route #

Municipality & County
Chicago / Cook

Project Limits: South/East Reference Point/Cross St/Intersection
Lake Shore Drive

Marked Route #
US 41

Municipality & County
Chicago / Cook

Other Project Location Information or Project Title

III. PROJECT FINANCING AND CMAQ FUNDING REQUEST

Please review the instructions.

	Starting Federal Fiscal Year*	Total Phase Costs	(New) CMAQ/TAP Funds Requested	Other Federal Funds Including prior CMAQ/TAP awards	
				Fund Type	Amount
Engineering Phase 1	**2007**	**$ 705,000**	**$**	**CMAQ**	**$ 564,000**
Engineering Phase 2	**2012**	**$ 1,590,000**	**$**	**CMAQ/STP**	**$ 1,272,000**
Right-Of-Way Acquisition	**2012**	**$ 600,000**	**$**		**$**
Construction (Including Construction Engineering)	**2016**	**$ 21,650,000**	**$ 17,320,000**		**$**
Engineering (For Implementation Projects)		**$**	**$**		**$**
Implementation		**$**	**$**		**$**
Alternatives Analysis		**$**	**$**		**$**
*Phase must be accomplished within 3 years Total Project Costs		**$ 25,545**	**$ 17,320**		

*For TAP funds, cost increases beyond the initial programmed amounts will be the responsibility of sponsors.

Source Of Local Matching Funds	**ILL, TBD-LOC**

If Soft Matching Funds Are Intended To Be Used, Please Contact CMAP Staff.

Have The Matching Funds Been Secured? (Provide Details):	**Not yet for requested scope**

CMAP/TAP FY 2016-2020 CMAQ PROJECT APPLICATION
BICYCLE FACILITY – PAGE 2

IV. PROJECT EMISSIONS BENEFIT DATA

Indicate the current status of the bicycle environment where the proposed facility will be constructed. Are bike lanes present? If so, give width.

This project creates bicycle access at 43rd Street to the Lakefront Trail to cross over Lake Shore Drive, two CN railway tracks and four Metra Electric tracks. It would replace a pedestrian-only bridge that does not provide proper access for cyclists, people with disabilities, skaters, and parents with strollers and is also beyond its useful life, substandard and in poor condition.

The Lakefront Trail is an 18.5-mile, multi-use trail that extends from Ardmore Avenue on the North Side to 71st Street on the South Side, passing through Downtown Chicago along the way. Bike lanes extend the corridor 1 mile north to Loyola University and 3.2 miles south along South Shore Drive and South Lake Shore Drive to a 1.2-mile signed route on Ewing to the Burnham Greenway. This segment of the Lakefront Trail and the south extensions are included in the Grant Illinois Trail and the recently designated Illinois segment of US Bike Route 36.

Bicycle users can also connect to neighborhood bike lanes/routes nearby the bridge, including Drexel Boulevard, Oakwood Boulevard, 47th Street, Woodlawn Avenue, and Martin Luther King Jr. Drive.

Indicate the connectivity of bikeways resulting from the project:

☐ Project fills a gap between existing bikeways ☒ Project intersects an existing bikeway

☐ Project extends an existing bikeway ☐ Project is a new isolated bikeway segment

Describe how the proposed bicycle facility integrates with transit service.

Bicycle users can connect to CTA Route 43 (43rd Street), which has a bus stop less than 0.25 miles away from the 43rd Street Bike/Ped Bridge. The nearest CTA train station is the 43rd Green Line Station, which is about 1 mile away from the bike/ped bridge. Other CTA routes that bicycle users can connect to include Route 3 (Martin Luther King Jr. Drive), Route 4 (Cottage Grove Avenue), Route 39 (Pershing Road), and Route 47 (47th Street).

Provide the following for the road(s) of the facility or adjoining to the off-road facility

43rd Street: Traffic volumes (AADT): **7000**, # of Thru Lanes: **2 (1 each direction)**,
Lane Width: **21 feet (including parking lane)**, Width of Outside Paved Shoulder: **n/a**,
Speed Limit: **30 mph**, % of Heavy Vehicles: **n/a**,
Pavement Condition: **74 (pavement condition index)**, % of On-street Parking Occupied: **50%**.

Lake Shore Drive: Traffic volumes (AADT): **94900**, # of Thru Lanes: **8 (4 each direction)**,
Lane Width: **10 feet**, Width of Outside Paved Shoulder: **1.5 feet**,
Speed Limit: **40/45 mph**, % of Heavy Vehicles: **n/a**,
Pavement Condition: **88 (pavement condition index)**, % of On-street Parking Occupied: **n/a**

Is the project identified in an approved or adopted plan: ☒ Yes ☐ No

This bridge is included in the in the "very high" priority group of the City's 2003 South Lakefront Access Study (see attachment), which explored improvements for cyclists, pedestrians, and people with disabilities to reach open space along Lake Michigan from Soldier Field to the Illinois-Indiana border. It is the highest ranking project in the plan's priority calculations that has yet to be constructed. The plan – and this project – support the objective from Chicago's Lakefront Protection Ordinance to provide public lakefront access at quarter-mile intervals, something currently not consistently provided to South Side residents.

The Lakefront Trail is named in many plans. In the 2009 Update of the Northeast Illinois Regional Trails and Greenways Plan, it a component of the Primary Regional Trail System. Improvements to the Lakefront Trail and trail access are also a "First Group" recommendation of the Chicago Trails Plan – detailed on pages 142-150 (attached) – to improve the Lakefront Trail and is also part of the plan's proposed Chicago Trails Loop, a citywide circuit of trails.

In Chicago's Bike 2015 Plan, strategy 4.4 of the Bikeway Network chapter (p. 11) is: "Improve access to the Lakefront Trail and other popular trails." Objective Two (pp. 9-10) in the same chapter is: "Establish new trails, improve existing trails and improve access to trails." Specifically, it follows strategy 2.1: "Construct grade-separated connections at appropriate locations to connect trails and provide safe crossings of busy roadways" and few Chicago roadways are busier than Lake Shore Drive.

V. PROGRAM MANAGEMENT INFORMATION

Is Right-Of-Way Acquisition required for this project? ☒ Yes ☐ No If so, has it been acquired? ☐ Yes ☒ No

Preliminary Design Status: ☐ N.A. ☐ Not Begun ☐ Agreement executed by Central Office ☐ Engineering Underway
☐ Submitted for review ☐ Responding to review comments
☐ Agreement sent to District 1for signatures ☒ Design approval granted
Date approval is anticipated or was granted: **4/3/2013**

Estimated Completion (Construction) Year: **2018**

VI. PROJECT DESCRIPTION

Please describe improvements, including how the project integrates in to the area with regard to different trip attractors.

CDOT seeks to build a safe and accessible bicycle and pedestrian bridge at 43rd Street that will cross over Lake Shore Drive, two CN railway tracks and four Metra Electric tracks to connect Bronzeville to Chicago's Lakefront Trail.

The bridge will replace an existing pedestrian-only bridge built in 1938 and 1954 that is beyond its useful life and in need of extensive repairs; is inaccessible to bicyclists and persons with disabilities; and is barely useable by pedestrians due to a narrow deck, deficient stairs and railings that are lower than current AASHTO requirements and lack restricted spacing per OSHA standards. (A 2009 Bridge Condition Report is available upon request.)

A new bridge will improve travel for cyclists for both work and recreation north to Burnham Park, Museum Campus, and downtown Chicago and south to Jackson Park and the Museum of Science and Industry (both approximately 2 miles from the bridge). Among those who will enjoy the benefits are transit riders alighting the CTA's 43rd Street bus route at its eastern terminal, residents of the Vivian Gordon Apartments, a CHA Senior Housing apartment high-rise immediately to the north; and students at nearby Jackie R. Robinson Elementary School. Inland, popular destinations in the area include King High School, grade schools, churches, Kennicott Park Fieldhouse, new housing developments, and historic Drexel Blvd.

The bridge uses an innovative double-curved arch mono-truss structure to form a large, graceful S-curve that echoes the curves of the walkways in Burnham Park. As the bridge crosses over the railroad tracks and Lake Shore Drive, a reverse horizontal curve will provide expanded panoramic views of the park, Lake Michigan, and the Chicago skyline for bicyclists and pedestrians crossing the bridge. The design derives from a winning entry in the "Bridging the Drive" Design Competition, exhibited at the Chicago Architecture Foundation.

The bridge will be 20' wide across the decks and 16' wide on access ramps (6' lanes each way with 2' shoulders). Including all ramps, the 43rd Street Bridge will run 1,425 feet. Railings will follow current AASHTO bicycle and pedestrian facility guidelines with a 4'-6" height and rub rail set at 3'-6". The bridge will maintain minimum clearances of 23'-6" over the CN railroad tracks, 22'-1" over the Metra Electric and NICTD tracks, 3' over Metra and NICTD catenary support cables, 17'-3" over Lake Shore Drive, 20' away from the edge of Lake Shore Drive, and (per AREMA standards) 25' away from the centerline of the nearest railroad track and 7' away from the nearest rail maintenance road. Although meant for bicyclists and pedestrians, it will be wide and strong enough to allow use by maintenance and emergency vehicles when required.

Continuous lighting parallel to the surfaces of the bridge decks will further highlight the curves and provide even, low-glare illumination for the bridge. Energy-efficient color-corrected luminaries are housed in the continuous stainless-steel shrouds at the base of the guardrails. These are protected from vandalism by high-impact plastic lenses, but accessible for maintenance. Accent lighting will highlight the features of the main span arches and vertical support members.

The bridge incorporates the long approach ramps necessary to meet the Americans with Disabilities Act (ADA) standards, with slopes no steeper than 1:20 on the east approach and 1:12 with a 5' landing every 30' on the west approach. The ramps avoid sharp switchbacks that would be difficult for bicyclists to navigate. These ramps are designed to help the bridges blend into the park environment, supported on slender columns tapering into a retained-fill structure accented with rusticated prairie-stone cladding. Stairs will provide alternate access to the structures and wayfinding kiosks at each entrance will include maps indicating nearby destinations.

The landing areas will have a park atmosphere with low maintenance native plant and grass landscaping. These native plants serve important environmental roles including; slowing runoff, facilitating infiltration, assisting in the uptake of moisture through transpiration, assimilating nutrients, filtering out particulates and stabilizing channels and slopes.
At the east approach in Burnham Park, the ramp leading from the bridge will turn south to intersect the Lakefront Trail; the landing area will include park benches, and additional light fixtures to create a well-lit, safe atmosphere. On the western end, an access park will be created to accommodate the ramp and stair approaches. The "dead end" terminus of 43rd Street will be removed for the park, as will an existing two-story building used by the Paradise Missionary Baptist Church, which is being relocated.

NOTE: CDOT applied for 2014 TIGER funds for this bridge and a new access bridge at 41st Street with support letters from CTA, CMAP, ActiveTrans, MPC, and the Quad Communities Development Corporation. USDOT awarded funds only for 41st.

DETAILED ESTIMATE OF CONSTRUCTION COSTS

Item	Description	Unit	Quantity	Unit Price	Total
1	Tree Removal (6 to 15 Units Diameter)	UNIT	150	$20.00	$3,000
2	Tree Removal (Over 15 Units Diameter)	UNIT	125	$25.00	$3,125
3	Temporary Fence	FOOT	1000	$2.00	$2,000
4	Earth Excavation	CU YD	80	$28.00	$2,240
5	Furnished Excavation	CU YD	200	$50.00	$10,000
6	Porous Granular Embankment, Special	CU YD	2,074	$60.00	$124,440
7	Topsoil Furnish and Place, 4"	SQ YD	3500	$4.00	$14,000
8	Seeding, Class 1	ACRE	0.75	$1,800.00	$1,350
9	Nitrogen Fertilizer Nutrient	POUND	68	$1.50	$102
10	Phosphorus Fertilizer Nutrient	POUND	68	$1.50	$102
11	Potassium Fertilizer Nutrient	POUND	68	$1.50	$102
12	Mulch, Method 2	ACRE	1.5	$1,500.00	$2,250
13	Temporary Erosion Control Seeding	POUND	25	$15.00	$375
14	Perimeter Erosion Barrier	FOOT	3000	$3.00	$9,000
15	Hot-Mix Asphalt Surface Course, Mix "D", N50	TON	100	$120.00	$12,000
16	Portland Cement Concrete Sidewalk 5 Inch	SQ FT	1600	$5.00	$8,000
17	Pavement Removal	SQ YD	600	$25.00	$15,000
18	Hot-Mix Asphalt Surface Removal, 1 1/2"	SQ YD	625	$3.00	$1,875
19	Driveway Pavement Removal	SQ YD	20	$25.00	$500
20	Combination Curb and Gutter Removal	FOOT	530	$5.00	$2,650
21	Sidewalk Removal	SQ FT	4200	$3.00	$12,600
22	Removal of Existing Structures	EACH	1	$300,000.00	$300,000
23	Concrete Removal	CU YD	250	$300.00	$75,000
24	Structure Excavation	CU YD	1,185	$75.00	$88,875
25	Concrete Structures	CU YD	970	$750.00	$727,500
26	Concrete Superstructure	CU YD	620	$900.00	$558,000
27	Bridge Deck Grooving	SQ YD	2,194	$5.00	$10,970
28	Protective Coat	SQ YD	2,794	$2.50	$6,985
29	Furnishing & Erecting Structural Steel	L SUM	1	$9,546,000.00	$9,546,000
30	Stud Shear Connectors	EACH	6,912	$3.50	$24,192
31	Reinforcement Bars	POUND	153,570	$1.35	$207,320
32	Reinforcement Bars, Epoxy Coated	POUND	292,320	$1.50	$438,480
33	Bar Splicers	EACH	32	$30.00	$960
34	Pedestrian Rail (Special)	FOOT	2,900	$450.00	$1,305,000
35	Name Plates	EACH	1	$500.00	$500
36	Permanent Casing	FOOT	2,720	$100.00	$272,000
37	Drilled Shaft in Soil	CU YD	1,147	$1,350.00	$1,548,450
38	Drilled Shaft in Rock	CU YD	13	$1,350.00	$17,550
39	Preformed Joint Strip Seal	FOOT	96	$225.00	$21,600
40	Anchor Bolts, 1"	EACH	32	$150.00	$4,800
41	Anchor Bolts, 1 1/2"	EACH	32	$175.00	$5,600
42	Concrete Sealer	SQ FT	12,182	$2.50	$30,455
43	Geocomposite Wall Drain	SQ YD	932	$25.00	$23,300
44	Pipe Underdrains for Structures 4"	FOOT	1,028	$25.00	$25,700
45	Catch Basins to be Adjusted	EACH	1	$525.00	$525
46	Manholes to be Adjusted	EACH	1	$525.00	$525
47	Valve Vaults to be Adjusted	EACH	1	$525.00	$525
48	Removing Inlets	EACH	1	$200.00	$200
49	Relocate Overhead Sign Structure - Cantilever	EACH	1	$20,000.00	$20,000
50	Furnishing & Installing Post-Tensioning Bars	EACH	96	$500.00	$48,000
51	Floating Bearings, Guided Expansion, XX kips	EACH	4	$3,500.00	$14,000

52	Floating Bearings, Guided Expansion, XXX kips	EACH	4	$3,500.00	$14,000
53	Floating Bearings, Non-Guided Expansion, XXX kips	EACH	4	$3,500.00	$14,000
54	Stone Façade	SQ FT	8,448	$30.00	$253,440
55	Relocate Metra Signal Communication Lines	EACH	2	$50,000.00	$100,000
56	Drainage Scuppers (Special)	EACH	8	$1,500.00	$12,000
57	Drainage System	L SUM	1	$50,000.00	$50,000
58	Lighting	L SUM	1	$250,000.00	$250,000
59	Landscaping Enhancements	L SUM	1	$500,000.00	$500,000
1-59	**SUBTOTAL**				**$16,741,163**
60	Mobilization (5%)		5	% of above	$837,058
61	Maintenance of Traffic (2.5%)		2.5	% of above	$418,529
62	Contingency (10%)		10	% of above	$1,674,116
1-62	**SUBTOTAL**				**$19,670,866**
	Construction Engineering		10	% of above	$1,967,087
	TOTAL CONSTRUCTION COST				$21,637,953
					round to
TOTAL COST OF CONSTRUCTION ITEMS					**$21,650,000**

ESTIMATES MUST BE BASED UPON QUANTITIES AND UNIT COSTS WHENEVER POSSIBLE.
LUMP SUM AMOUNTS ARE NOT ACCEPTABLE.

PROJECT MILESTONE SCHEDULE

Municipality: City of Chicago
Project: 43rd Bicycle and Pedstrian Bridge Over Metr
Scope of Work: Construction of a new pedestian bridge
TIP #: 01-06-0002
TIP Years (Ph II / Const):
Section #: 05-B5157-00-BR
Last Constr & E3 Cost (d: 3/21/2011 : $ 19,500,000.00
Current Constr & E3 Cost 2/1/15 $ 21,650,000

Contact Information

Municipality	Tanera Adams 312-742-2590
Council/Liaison	Keith Privett 312-744-1981
Consultant	AECOM - Mike Eichten 312-373-6567
IDOT	

Date Prepared: 3/28/2011 Date Revised: 2/21/2015

	Projected Dates			
	Initial Est.	Kick-Off	Revised/Actual	
1. Project Scoping				Notes
2. IDOT Phase I Kick-off Meeting	6/7/2007		6/7/2007	
3. 1st State/Federal Coordination Meeting	8/31/2009		8/31/2009	
4. Categorical Exclusion Concurrence	8/31/2009		8/31/2009	
5. Design Variance Concurrence	5/20/2011		3/1/2012	
6. Submit Draft Phase I Report (PDR) to IDOT (a)	4/21/2011		4/21/2011	
7. Public Hearing/Meeting (or N/A)	N/A			
8. Right-of-Way Kick-off Meeting (or N/A)	N/A			
9. Submit Final Phase I Report (PDR) to IDOT (b)	6/1/2011		2/27/2012	
10. Submit Phase II Engr. Agreem't to IDOT (or N/A)	4/3/2013		2/19/2014	
11. Phase I Design Approval	7/1/2011		4/3/2013	
12. ROW Aquistion Initiation (or N/A) (c)	11/1/2012		9/30/2013	
13. Phase II Engr. Agreement Approval (or N/A)	11/24/2014		11/24/2014	
14. Submit Pre-Final Plans and Estimates (d)	11/9/2015			
15. Submit Phase III Engr. Agreement to IDOT	4/31/2016			
16. Submit Final Plans, Specs & Estimates (PS&E) (e)	1/18/2016			
17. ROW Acquisition Complete	10/1/2015			
18. Construction Letting	6/27/2016			

Notes:

(a) 3 to 6 month review required per complexity and submittal quality
(b) 1 to 3 month review
(c) Minimum 9 to 18 months required from plats to acquisition
(d) 1 to 4 month review
(e) 7 to 10 days before Springfield BLR due date

See IDOT Local Roads' **Mechanics of Project Management** "Federal Aid Project Initiation to Completion" Flow Chart for sequence of events and estimated review times.

LAKE MICHIGAN

FUTURE BEACH HOUSE

BURNHAM PARK

SOUTH LAKE SHORE DRIVE (NORTHBOUND)

SOUTH LAKE SHORE DRIVE (SOUTHBOUND)

EAST OAKWOOD BOULEVARD

METRA ELECTRIC & CN RAILROADS

S OAKENWALD AVENUE

PARK #532

SOUTH OAKENWALD AVENUE

E 40TH PLACE

EAST 41ST STREET

EAST 41ST PLACE

EAST 42ND STREET

EAST 42ND PLACE

EAST 43RD STREET

S LAKE PARK AVENUE

SOUTH LAKE PARK AVENUE

SOUTH GREENWOOD AVENUE

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

- PREFERRED SPECIMEN TREES
- MATURE HEALTHY TREES (>15" DBH)
- MAPLE COMMUNITY
- INDIVIDUALS RECOMMENDED FOR TRANSPLANT
- HAWTHORN COMMUNITY

PROJECT OVERVIEW EXHIBIT

41st /43rd Street Bike-Ped Access Bridges to Lakefront Trail

- NEW PATH
- PROPOSED PATH

N

APRIL 2010

CORDOGAN, CLARK & ASSOCIATES
ARCHITECTS
716 NORTH WELLS STREET CHICAGO, IL 60610 312.943.7300

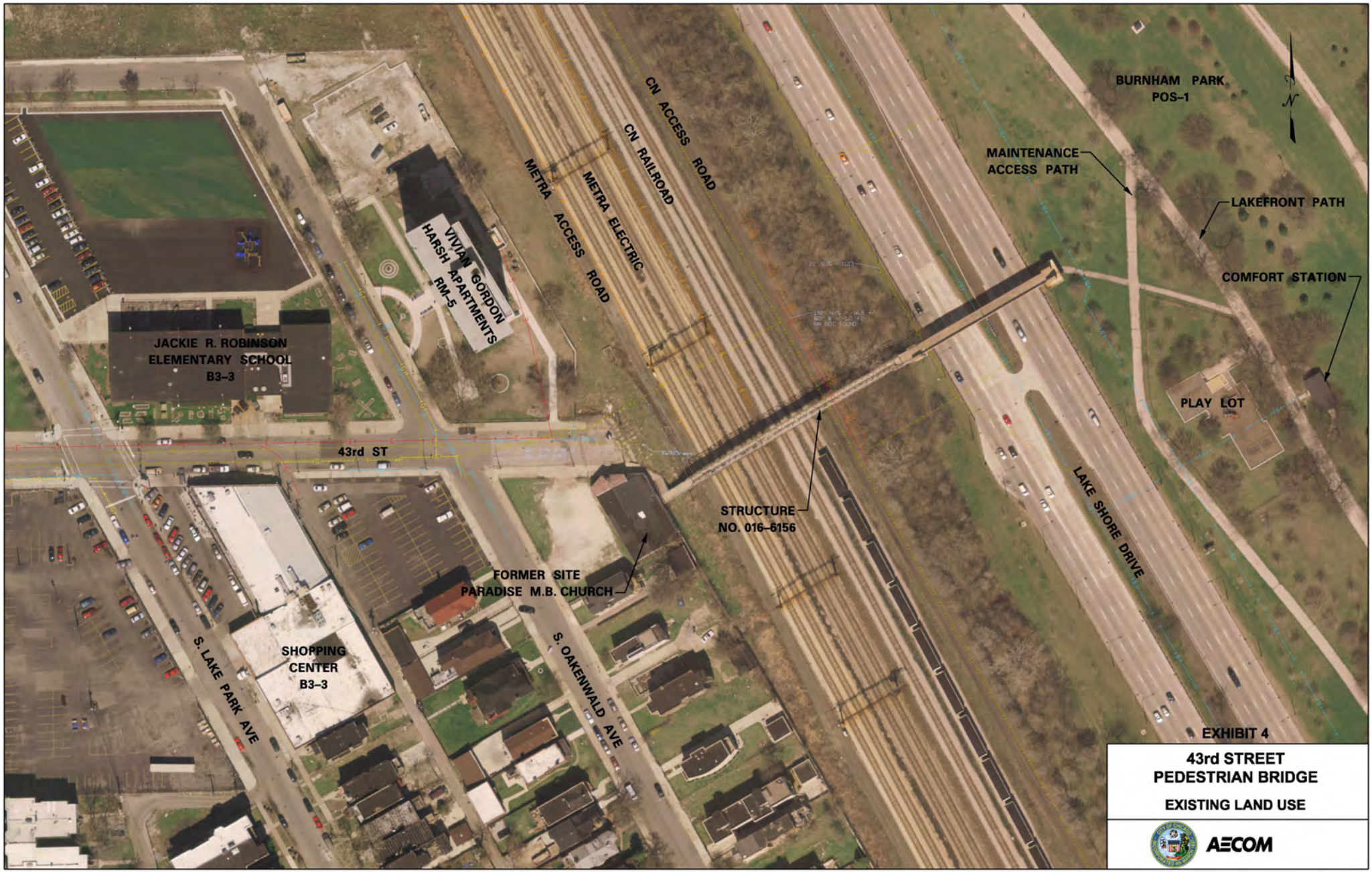


EXHIBIT 4

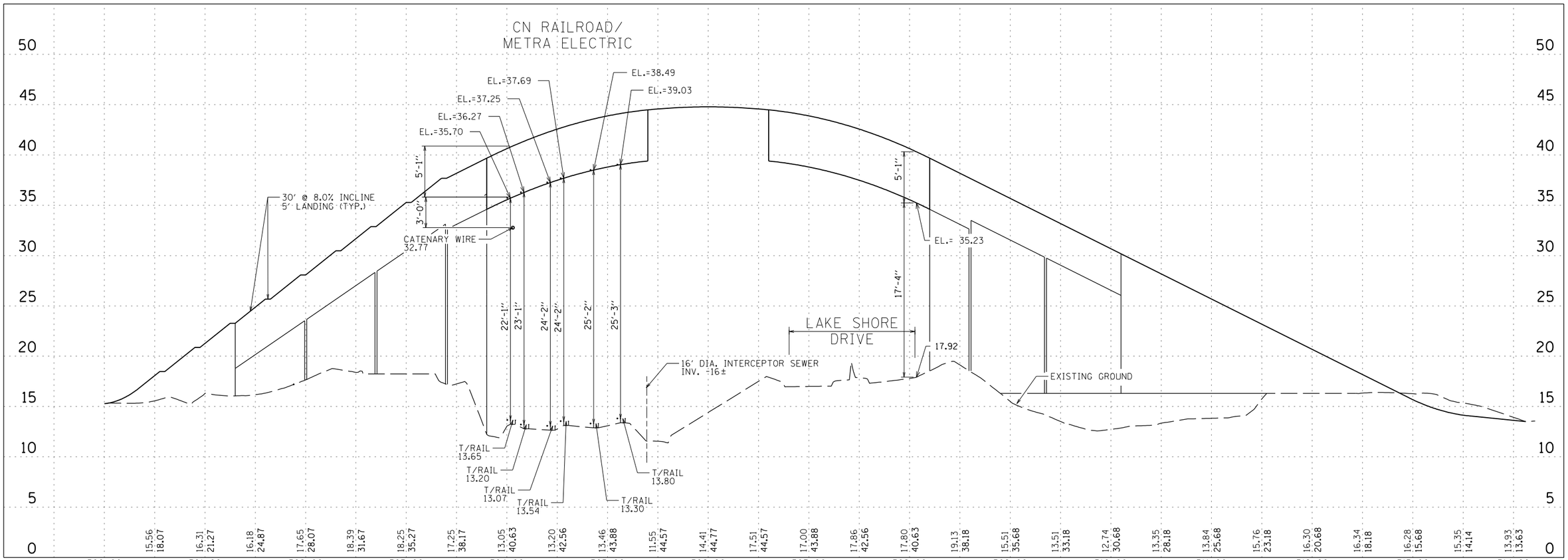
43rd STREET PEDESTRIAN BRIDGE

EXISTING LAND USE

AECOM

CDOT
CHICAGO DEPARTMENT
OF TRANSPORTATION

43rd Street Bike-Ped Access Bridge to Lakefront Trail



DESIGN: MXF				
DRAWN: KL				
CHECKED: MJE				
APPROVED:				
DATE: 3/22/10				
SCALE: 1"=100'				
FILE: 41-PP.DGN	NO.	BY	DATE	DESCRIPTION
	REVISIONS			

KEY PLAN:

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

AECOM
303 E. WACKER DRIVE, SUITE 900
CHICAGO, IL 60601
(312) 373-7700
FAX: (312) 938-1109

43rd Street Bike-Ped Access Bridge to Lakefront Trail

PROPOSED BRIDGE CLEARANCE DETAIL

EXHIBIT 10

CONTRACT NO.

SHEET NO.

APRIL 2010

Illinois Department of Transportation

Project Development Report for Group II
Categorical Exclusions and Design Approval

Route: 43rd Street Pedestrian Bridge

County: Cook

Local Agency: Chicago Department of Transportation

Project No: HPP-CMM-6000(241)

L.A. Section No: 05-B5157-00-BR

Project Length: 1415 ft.

Street/Road Name: 43rd Street Pedestrian Bridge Over Metra Electric/CN RR and Lake Shore Drive

Termini: From East 43rd Street and South Oakenwald Avenue on the west to Burnham Park on the east

☐ For Township or Road District bridge projects: The County Engineer certifies that the project design speed exceeds the minimum design speed recommended for this classification of roadway as provided in the BLRS Manual in order to prevent a deficient NBIS rating for approach roadway alignment appraisal. All elements have been designed to the chosen design speed unless noted otherwise in Section 2(e) and/or the attached BLR 22120.

County Engineer — Date

☐ Categorical Exclusion and

Design Approval Recommended

Daniel Burke — 11/27/12
Local Agency — Date

John Fortmann — 2-11-13
Regional Engineer AJQ — Date

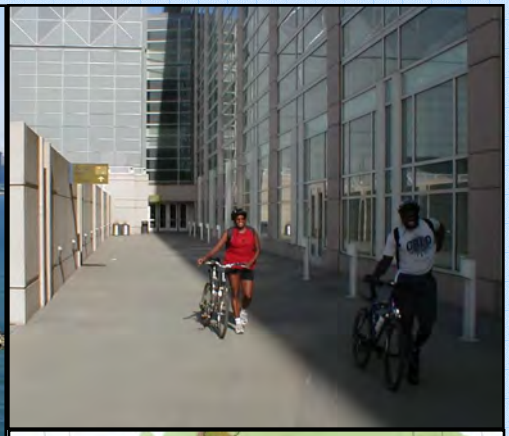
This project will not have any significant impacts on the human environment; therefore, the FHWA approves the project as a Categorical Exclusion on April 3, 2013
Date

☒ Design Approval

James K. Klein, SD — 4/3/13
Bureau of Local Roads & Streets — Date

South Lakefront Access Study

December, 2003



Prepared for:

City of Chicago
Richard M. Daley, Mayor
Department of Transportation
Miguel d'Escoto,
Commissioner

The Chicago Department of Transportation, while planning for the 2002-03 reconstruction of South Lake Shore Drive, recognized the barriers for pedestrians, bicyclists, and transit users to access the lakefront. The reconstruction addressed this challenge by including substantial pedestrian access improvements – particularly in the vicinity of Jackson Park.

The South Lakefront Access Study supplements that analysis by analyzing bicycle, pedestrian and transit access issues from McCormick Place to the Indiana border, identifying additional locations where access is needed, and recommending improvements at existing access points.

The Study Area

The study area extends from Roosevelt Road south to the Indiana state line and from Lake Michigan to 2 miles inland. From Roosevelt Road to 71st Street, the Lakefront Trail is substantially in Burnham Park and Jackson Park. Here, the Metra and Canadian National (CN) railroad tracks and Lake Shore Drive (US 41) are formidable barriers, requiring access via underpasses, viaducts, or on existing roadways. Further south, from 71st Street to the Indiana border, there is no continuous off-street path and public access to the lakefront is more limited. Here, the key pedestrian concerns are marking a continuous lakefront route, creating new off-street segments of the Lakefront Trail, improving pedestrian safety at intersections near the lakefront, and connecting to trails in Indiana.

While the study area extends north to Roosevelt Road, the focus will be predominantly south of McCormick Place. The following page illustrates the study corridor.

Lakefront History

In 1836, a year before the incorporation of Chicago, commissioners of the Illinois and Michigan Canal looked over the lakefront and wrote that east of Michigan Avenue, the lakefront should be "forever open, clear, and free" (of development). In the 1850s, this ideal was set aside when a train trestle was constructed to foster industrial development and provide protection from storms. The lake between the trestle and Michigan Avenue was eventually filled with a variety of industrial wastes and debris from the 1871 Chicago Fire. The area was unsightly and avoided by most Chicagoans.

After the 1871 fire, the city experienced rapid industrial and population growth. Open space became scarce. In the 1890s, it became recognized that the lakefront was a valuable resource and a decade of significant lakefront park development in Chicago ensued. That decade witnessed the construction of Jackson and Grant Parks, among others, and the concept plan for connecting parks with a scenic drive.

Jackson Park was developed from dredged land to host the 1893 Colombian Exposition World Fair, then converted to a public park just six months after the fair ended. Including Washington Park and the Midway Plaisance, over 1,055 acres of parks were created to serve the fair's 27 million visitors.

The White City, Jackson Park
1893 World Fair

Study Objectives

Chicago's lakefront has extensive public park and recreation spaces along its shores. The 18.5-mile long Lakefront Trail provides access to cultural resources, museums, natural areas, and downtown employment. *The South Lakefront Access Study* will identify methods to improve pedestrian, bicycle and transit access into and along the south lakefront park system. By improving access, there are additional benefits, such as increased usage of parks and cultural facilities, improved bicycle and pedestrian safety, and reduction of emissions through increased usage of alternative transportation modes. Elements of the study include:

- Soliciting input from area residents.
- Meeting with public and private stakeholder groups.
- Examining previous planning studies and pending developments.
- Determining demand for bike and pedestrian facilities.
- Evaluating access to lakefront destinations.
- Identifying improvement projects.
- Developing concept plans and cost estimates for each project.

The goal of the South Lakefront Access Study is to improve pedestrian, bicycle, and transit access along Chicago's south lakefront through the following objectives:

- Identify barriers that impede access to the south lakefront parks, pedestrian and bicycle paths, and museums;
- Determine bicycle, pedestrian, and transit origins and destinations in the corridor and estimate the latent demand for these facilities;
- Develop proposals for projects to remove barriers and improve park access from adjacent residential neighborhoods;
- Prioritize identified projects;
- Prepare project descriptions, cost estimates, and supporting materials for future grant applications; and
- Create a comprehensive signage strategy.

Planning Methods & Resources

1. Public participation

Since the study aims to identify opportunities to improve public access to the lakefront, public involvement is an important part of the planning process. Local residents and park users provide critical perspectives and can identify potential problems early in the process. Numerous government agencies, interest groups, neighborhood organizations, park users and local residents were invited to public meetings to ensure affected parties have the opportunity to participate.

There were two sets of public meetings. The first group of public meetings was in July 2001. A meeting was conducted in each of three areas of the study: Burnham Park, Jackson Park, and South Chicago. The goals of these meetings included introducing the study team, presenting the goals and objectives of the study, and facilitating a discussion of initial findings and field research. The most important agenda item of this meeting was the solicitation of public opinions to confirm field research findings, identify access barriers, and identify opportunities to improve lakefront access.

A second set of meetings and presentations occurred in June 2002. A public meeting was held for all three study areas at the Jackson Park Fieldhouse, a central location in the study area. At this meeting, the draft of the plan and an overview of the identified access improvement concepts were presented.

Other public participation efforts included an opinion survey concerning access and safety, which was distributed at the first public meeting and mailed to all schools in the study area. Interviews were conducted with interest groups, such as Friends of the Park and the Chicagoland Bicycle Federation, to obtain their perception of access issues.

An in-depth description of the public involvement process is in **Appendix A**.

2. Planning resources

Previous studies of bicycle and pedestrian facilities, the roadway network along the lakefront, public transportation systems, parks, and land uses were reviewed during the data collection process. In these studies, planners, civil leaders, government agencies, and the public already identified desired improvements. This study does not seek to replicate their work, but rather to compile, verify, and strengthen their findings. Improvements identified in the studies listed below formed an initial list of access improvement projects. This list was later expanded and prioritized based on public input and field observations.

Studies and data sources collected and analyzed included:

- The Lakefront Plan of Chicago, City of Chicago
- Grant Park Framework Plan study, Chicago Park District
- Burnham Park Framework Plan, Chicago Park District
- Jackson Park Framework Plan, Chicago Park District
- Midway Plaisance Framework Plan, Chicago Park District
- South Shore Cultural Center Framework Plan, Chicago Park District
- Bicycle Facilities Development Plan, Chicago Department of Transportation
- Streets for Cycling Plan, Chicago Department of Transportation
- Lakefront Trail development standards, Chicago Park District
- Lakefront Bikeway Signing Plan, Chicago Department of Transportation
- Phase I study for South Lake Shore Drive reconstruction, Illinois Department of Transportation
- Final Report, Strategic Regional Arterial Study, Lake Shore Drive/Stony Island Avenue from Interstate 94 to Hollywood Avenue, Illinois Department of Transportation
- Shoreline Reconstruction Plans, City of Chicago, Department of Environment
- Vision for the Hyde Park Retail District, Chicago Department of Planning & Development
- Jackson Park Guidelines, Department of Planning and Development
- Redevelopment Plans of the USX South Works Site, Chicago Department of Planning and Development
- Northwest Indiana Transportation Enhancement Plan for Bikeways
- Hammond Bike Trail System Map, City of Hammond, Indiana
- The Vision 2020 – Northwest Indiana Regional Transportation Plan, Northwest Indiana Regional Planning Commission
- Chicago Lakefront Trail user counts, Chicago Department of Transportation & Chicagoland Bicycle Federation
- Bicycle Level of Service Analysis for Chicago Streets, Chicagoland Bicycle Federation
- Chicago Bike Rack Installation Program, Chicago Department of Transportation

- Average Daily Traffic Data, Illinois Department of Transportation & Chicago Department of Transportation
- Traffic accident data, Illinois Department of Transportation & Chicago Department of Transportation
- U.S. Census Data, 1980, 1990, 2000
- Chicago Regional Land Use Map, Northeastern Illinois Planning Commission

As previously stated, meetings were conducted with organizations interested in the development of the lakefront parks, infrastructure, transportation, government, and the adjacent neighborhoods. These organizations, both public and private, have great knowledge of and an intimate perspective of the corridor. The organizations include:

- Chicago Park District
- Chicago Department of Planning & Development
- Chicago Department of the Environment
- Chicago Transit Authority
- Cook County Forest Preserve District
- Metra
- Friends of the Parks
- Chicagoland Bicycle Federation
- League of Illinois Bicyclists
- Alderman Madeline Haithcock, 2nd Ward
- Alderman Toni Preckwinkle, 4th Ward
- Alderman Leslie Hairston, 5th Ward
- Alderman William Beavers, 7th Ward
- Alderman John Pope, 10th Ward
- Ambriz & Associates
- Central Station Development Corporation
- Chicago Consultants Studio
- Draper & Kramer

3. Latent Demand Study

The Latent Demand Study (LDS) Model was developed to give bicycle planners the ability to quantify potential bicycle travel demand. The LDS model estimates the probabilities of bicycle travel on streets or paths based on their proximity to bicycle trip generators and/or attractors. It provides an indication of the relative level of desired bicycle use if a bicycle facility is provided on a road segment.

This study can be used to estimate which origins and destinations receive the most bicycle and pedestrian traffic and determine the relative demand for improvements. This can serve as an essential criterion to prioritize project implementation.

LDS uses demographic data, employing simplified geocoding and data input for spreadsheet-based gravity computations. Attractors and generators include home-based work markets per census block group, commercial employment per traffic analysis zone, public parks, and elementary and middle school students.

Sprinkle Consulting, Inc. (SCI), a nationally recognized leader in latent demand studies, conducted the LDS for this study. The results are described in Chapter 4 and the methodology is detailed in **Appendix B.**

43rd Street Pedestrian Bridge Replacement

1. Project Description

In order to satisfy the Lakefront Protection Ordinance of 1973, which requires pedestrian access to the lakefront every ¼ mile, this project proposes the replacement of the existing pedestrian bridge between Burnham Park and Lake Park Avenue at 43rd Street. Please see the attached location map and aerial photograph.

The nearest alternate pedestrian access points are:

- 39th Street, nearly ½ mile north, via an automobile bridge.
- 47th Street, nearly ½ mile south, via underpass and pedestrian bridge

This proposed bridge would replace an existing pedestrian footbridge with stairs that spans the Illinois Central/Metra railroad tracks and South Lake Shore Drive. The recommended pedestrian bridge is a long structure (approximately 550 feet) that would provide a needed connection between residential neighborhoods and the Lakefront Path. Ramps meeting ADA standards would ensure access to wide range of users. See the attached rendering of the bridge and its access ramps.

This bridge, as with all bridges along Burnham Park, will have to provide clearance over the railroad tracks and LSD of 23.5 feet and 17.5 feet, respectively. These overhead clearance requirements significantly increase the length of the approach ramps, which, because of ADA requirements, have a minimum slope of 20:1 (20 feet of ramp for each foot of height). Thus, the ramps over the railroad are required to be as long as 470 feet.

The west footprint of the recommended bridge's ramp would be located within the 43rd Street right-of-way or on a parcel currently occupied by a church. The Chicago Park District is planning to obtain this parcel. They plan to remove the existing building and develop the site in conjunction with possible improvements to the pedestrian bridge.

While the space available for bridge ramps is constricted on the west side, in contrast, the area available for bridge ramps to the east in Burnham Park is generally unconstrained. This allows more freedom with ramp design and placement as shown in the attached renderings.

Burnham Park will be "extended' into the adjacent neighborhood with a park-like entrance treatment on the west side of the bridge. The entry treatment may include benches, wayfinding or informational kiosks, and landscaping.

Interpretive kiosks would be installed on the east and west side of the proposed pedestrian bridge to illustrate destinations on both sides of the bridge.

2. Existing conditions

Barriers to Lakefront Access. Certainly, the existing barriers to lakefront are the railroad and Lake Shore Drive, as well as the walking distances required to get to the nearest accessible crossing. The traffic volume of LSD at 43rd Street is 75,000 vehicles per day.

Existing Conditions. The existing bridge is in fair condition, except for the staircases on both sides of the bridge, which are heavily rusted. An August 2001, condition analysis by the Chicago Park District indicated that the stairs on the east side have experienced a high level of oxidation and will require replacement soon. If the stairs are replaced, access to the bridge must comply with ADA design standards. In addition to the deficient stairs, the railing are lower than current requirements and do not have the restricted spacing per OSHA. Most importantly, the existing width of bridge is narrower than current standards. Thus, replacement of the structure is the most likely alternative.

A building currently hides the west access to the bridge. This is a safety concern for local residents, as they cannot determine if an undesirable element is hiding on the bridge or behind the building. The Chicago Park District is attempting to purchase the church building and redevelop the lot with a gateway entrance to Burnham Park. Final development plans are not available at this time.

Pictures of the existing bridge are attached.

Neighborhood Characteristics. The surrounding Oakland neighborhood is predominately residential and has a population of 6,100 (2000 U.S. Census). It is relatively densely populated (10,300 residents per square mile), but has been experiencing depopulation over the last twenty years (according to 1980, 1990 and 2000 U.S. Census data). However, new residential developments are planned and the population and density should increase.

Bikeway Network. Many of the roads leading to the new bridge are residential streets that are typically bicycle-friendly and pedestrian- friendly. No Bicycle Level of Service rating information is available for 43rd Street, but it is residential street with low traffic levels and is appropriate for on-street bicycle riding by most user groups. The nearest bike lanes are on Drexel Boulevard, four blocks to the west.

3. Justification of the proposed improvement(s)

Latent Demand. In the analysis of Latent Demand, as described in Section 4 of the report, the score for this location was 98 (out of 100). This indicates that a strong demand for improved access to the lakefront exists at this location.

Prioritization. The primary justification for this project is the improved bicycle and ADA accessibility of the new structure. This project, because of its proximity to schools, new residential developments, and need for ADA-accessible facilities to the lakefront, was considered to be a Tier 1 project, indicating implementation as soon as possible, but preferably within five years.

3. Origins & Destinations

Burnham Park and the Lakefront Path to the east are popular recreational destinations. The Lakefront Path is 18.5 miles long, extending from 71st Street in the south, through downtown, to Ardmore (5900 north). The Lakefront Path provides access to many attractions along the lake, such as the beaches, the museums, the parks, McCormick Place, Soldier Field, etc.

Other popular destinations in the area include King High School, grade schools, churches, Kennicott Park Fieldhouse, new housing developments, and historic Drexel Boulevard.

Employment centers such as McCormick Place, Michael Reese Hospital, Mercy Hospital, Hyde Park, and downtown are within easy biking distance of this access point.

Origins include the Lake Park Crescent development and the neighborhoods west of Lake Shore Drive.

4. Assumptions made in describing project needs

Neighborhoods will embrace the idea of improved access (some may not want outsiders or the channeling of traffic through their neighborhood).

The City will allow closing the west side of the street.

Railroad allows construction of piers within their rights-of-way and the bridge within their air-space.

The City, the Chicago Park District and IDOT allow construction of abutments alongside South Lake Shore Drive and the bridges within the air-space over Lake Shore Drive.

The Chicago Park District approves design and allows construction of ramps in park.

The Chicago Park District allows wayfinding signs to be installed along the Lakefront Path.

5. Project Map

A project location map and aerial map are attached.

6. Cost Estimate

The minimum cost to demolish the existing bridge and construct a new truss bridge with access ramps is estimated at $3.68 million. If more elaborate ramps and a more architectural significant bridge are preferred, the estimated costs increase to $5.10 million.

A cost summary and breakdown of cost estimates for the proposed pedestrian bridge are attached. The costs for the access ramps for each side of bridge are broken out into individual cost items.

For the bridge structure, costs are calculated per linear foot. The cost per linear foot increases as the bridge complexity increases. Cost estimates are provided for four basic types of bridges: a truss bridge, a concrete bridge, a concrete and steel bridge, and a cable-stayed bridge.

43rd Street Pedestrian Bridge Replacement

LOCATION MAP

43rd Street Pedestrian Bridge Replacement

West access to the 43rd Street Pedestrian Bridge. Notice the building hides the bridge entrance. Stairs and sidewalks are in poor condition.

East access to the 43rd Street Pedestrian Bridge. The metal staircases are in poor condition, according to a Park District inspection.

The existing bridge deck. Notice the large apartment buildings in the background.

Picture of support structure over railroad tracks.

Project Prioritization

The projects identified in Chapter 6 must be prioritized in a systematic manner to create an implementation and capital improvement schedule. Criteria can be defined to measure or determine how effective recommended projects will be to meet the goals of improving lakefront access. Among the project criteria considered are:

- Public input. Did the public have stronger feelings towards specific improvement projects? Does the public support this improvement? Does the project address an access concern identified by the public, an interest group, or governmental entity?
- Agency interest. All projects will require a sponsor for funding and implementation. Have public agencies indicated interest in completing a project?
- Ability to implement. Is the improvement realistic in its vision or scope? Are there the available technology, funding sources, and other resources for a project to be realized?
- Latent Demand Study. Did the latent demand study demonstrate a need for the project now or in the future?
- Bicycle and Pedestrian Level of Service. Do users feel comfortable using the existing facilities? What is the existing Level of Service on corridors that lead to lakefront access points?
- Construction cost & benefit. Is the project's cost reasonable? Does a project offer sufficient rewards relative to the expenditure of public funds? Can smaller, less expensive improvements provide a similar access benefit?
- Funding availability. Can the funding be acquired through grants and are matching funds available, if necessary? Are there any existing internal funding sources that will underwrite the project cost?
- Future maintenance. How will the new facility be maintained? Has an agency supported the project and agreed to maintain the facility?
- Field observations. Are there any obvious obstructions or barriers that impede bicycle and pedestrian movements along or towards the lakefront?
- Relation to the bicycle and pedestrian network. Does a proposed recommendation improve connectivity to the lakefront? Is there a nearby existing access point to the lakefront usable by people with disabilities?

Prioritization Criteria

The next step in the prioritization process is to rate each individual project's ability to satisfy the prioritization criteria in relation to the goal of the study. The factors that were determined to be the most important to prioritize the recommended projects are: need for facilities, need for safety improvements, demand, and connectivity to destinations, planning consistency, and cost. The criteria are described below.

Need for Facilities

Need for facilities is measured in two parts: ADA improvements and existing conditions for sidewalks connecting paths, and street pavement.

ADA access impacts not only those with disabilities but also all non-motorized wheeled devices, such as strollers, bicycles and roller blades, by creating safe and accessible facilities. ADA design guidelines ensure a smooth and accessible transition for wheeled devices between streets and sidewalks. If access conditions are poor in a given area, users may seek alternate routes or be forced into poor decisions that put them in danger.

To assess existing conditions, sidewalks, paths and street pavement were rated as either "good," "fair," or "poor." Cracked sidewalks, discontinuous sidewalks and pavement with potholes impact a person's ability to travel through a corridor and might compel him/her to seek alternate routes or transportation modes.

Expert Choice Software to Gauge Criteria

The software program "Expert Choice" is used to judge the relative importance of each criterion factor. Expert Choice is based on the Analytic Hierarchy Process (AHP), a methodology for decision making. It provides users with the tools to construct decisions and include value judgments in decision frameworks. This framework is a hierarchy, used to organize all the relevant factors to solve a problem in a logical and systematic way. It defines the decision-making goal, compares and rates decision-making criteria, and provides a basis to rank solutions or alternatives.

The criteria used in this study are summarized below in **Table 18.**

TABLE 18: PRIORITIZATION CRITERIA SUMMARY

Name	Definition
Need	Need to meet ADA standards and improve existing physical conditions.
Safety	Improve personal safety and reduce accidents or conflicts. Improve the Level of Service.
Demand	Demand quantified in Latent Demand Study and support for a project.
Connectivity	Connectivity to lakefront path, bikeways, origins, and destinations.
Planning	Consistency with previously produced plans.
Cost	Relative cost to construct the facility and obtain funding. Cost-benefit of a project if implemented.

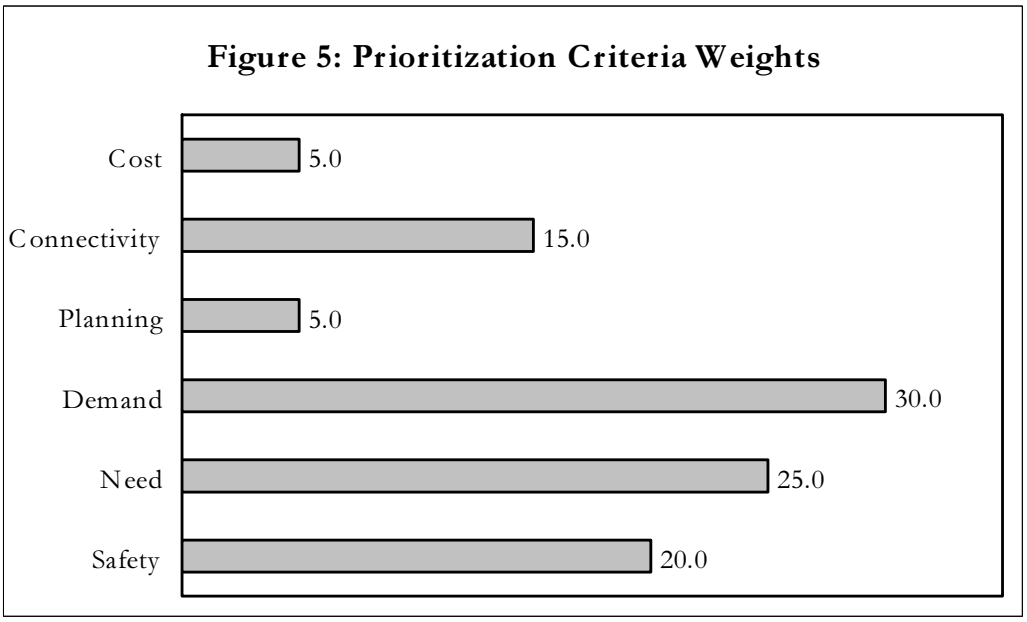
To facilitate the comparisons, Expert Choice asks the user how much more important or preferred *criterion X* is compared to *criterion Y*. A judgment is made using the AHP verbal or graphical scale or an equivalent 1 to 9 numerical scale. Expert Choice goes beyond conventional decision analysis techniques by not requiring numerical guesses such as: "how much is "A" worth on a scale of 1 to 100?" Such guesses are hard to make and even harder to justify.

After the pair-wise comparison judgments are completed, they are synthesized by Expert Choice. Expert Choice determines if the comparisons are logical and consistent. It determines an "inconsistency measure" and allows the user to revise comparisons in the hierarchy to reduce the inconsistencies and thereby improve the validity of the ranking.

The result of the pair-wise comparison is the prioritization of the criteria in ratio scale numbers. That is to say, if alternative A has a final priority of "40" and alternative B has a priority of "20," then A is not only better in some vague sense, but also is twice as good as B. Such ratio scale measurements of identified priorities are powerful: they are capable of unifying measurements across varying concepts both tangible and intangible.

A pair-wise comparison of the prioritization criteria was computed for this study. The comparison was a joint effort between the consulting team and CDOT. The weights were rounded to the nearest multiple of five percent. **Figure 5** below illustrates the results of this comparison.

Figure 5: Prioritization Criteria Weights



Prioritization Score Results

The tables below show the prioritization calculations for projects in each study area and the weighted prioritization score. Note that the calculated prioritization scores are subject to change if there is a change in existing conditions or available funding programs.

The following formulas were used to weigh score and prioritize projects:

- SAFETY SCORE (20 Points Max) =
  BLOS (2 points per grade) + PLOS (2 points per grade) +
  Reported Accidents (0.2 each)
- NEED SCORE (25 Points Max) =
  ADA (15 if no, 7.5 if not applicable, 0 if yes) +
  Structural Condition (10 if fair/poor, 5 if average, 0 if good)
- DEMAND SCORE (30 Points Max) =
  Latent Demand (25% of Score) + Support (5 if good, 2.5 if average, 0 if poor)
- PLANNING SCORE (5 Points Max) =
  5 points if funded or 1 point per plan
- CONNECTIVITY SCORE (15 Points Max) =
  Adjacency Proximity to LF Trail (5 if on or adjacent, 2.5 if partial, 0 if not) +
  Connection to Activity Centers (5 if good, 2.5 if average, 0 if poor) +
  Distance to current ADA access at (5 x fraction of # miles to access + point away)
- COST SCORE (5 Points Max) =
  Affordability (2.5 minus 0.5 x cost in per $ million in cost +
  Cost Effectiveness (2.5 x Latent Demand Score/cost in $ thousands)

North Segment (Burnham Park) Project Priorities

The table below illustrates the project prioritization for the North Segment of the study area. A project's criteria are ranked on a scale from 0 to 100. A total score of "0" indicates a complete inability to meet the criteria and improve lakefront access. A total score of "100" indicates the ability to meet the criteria.

In Burnham Park, the projects that received the highest total score or highest priority score are replacement of pedestrian bridges. This type of project scored very high in the three most significant prioritization factors: safety, need, and demand. The emphasis is to improve existing pedestrian bridges to be ADA accessible and have structures that are safe and easy to access. The three lowest priority projects in Burnham Park are wayfinding projects. Wayfinding is helpful and inexpensive, but it typically does not solve a safety concern and the public need is not perceived to be great.

The Roosevelt Road/Columbus Underpass and 18th Street Pedestrian Bridge were constructed as part of the New Solider Field Project. Also, substantial work on 31st Street On-Street Access and improvements to the 55th Street Pedestrian Underpass were completed as part of South Lake Shore Drive. These projects are not shown below.

TABLE 19: PRIORITIZATION OF PROJECTS – NORTH SEGMENT

Project Name	Safety Score	Need Score	Demand Score	Planning Score	Connect Score	Cost Score	Total Score (Weighted)
23rd / McCormick Place	16.8	15.0	29.8	2	12.5	5.0	**81.1**
Lakefront Trail Wayfinding	4.0	17.5	23.8	5	10.0	4.9	**65.2**
Neighborhood Wayfinding	14.0	17.5	15.0	0	2.5	4.8	**53.8**
27th Street	16.0	25.0	24.5	3	10.0	0.1	**78.6**
29th Street	16.0	25.0	23.0	1	11.3	0.4	**76.6**
33rd Street	14.0	25.0	22.5	2	8.8	0.9	**73.1**
35th Street	14.0	25.0	30.0	2	12.5	0.5	**84.0**
37th Street	14.0	25.0	26.3	2	8.8	1.1	**77.1**
39th / Oakwood	14.2	20.0	26.3	3	7.5	5.0	**75.9**
41st Street	16.0	25.0	29.0	3	8.8	0.7	**82.4**
43rd Street	16.0	25.0	29.5	4	12.5	0.4	**87.4**
45th Street	16.4	25.0	22.8	2	11.3	0.9	**78.3**
47th Street Pedestrian Bridge *(f)*	16.2	20.0	25.8	5	15.0	1.8	**83.7**
49th Street *(se)*	16.6	25.0	19.8	3	8.8	0.02	**73.1**
51st Street	16.0	20.0	25.3	2	12.5	1.2	**76.9**
53rd Street *(se)*	14.2	25.0	23.0	2	8.8	0.03	**73.0**
Hyde Park Wayfinding	16.0	12.5	23.5	1	7.5	4.9	**65.7**

Notes: (f) funded (se) only feasible in conjunction with shoreline expansion; cost score reflects penalty.

Prioritization Time Frames

The weighted prioritization scores were calculated for each project and are in **Tables 19 - 21**. The recommended projects are divided into five groups based on those prioritization scores. These divisions can be used to devise a relative time frame for prioritization (see **Table 22** below). The time frame or levels of prioritization are named Tiers 1 through 5:

TABLE 22: PRIORITIZATION TIME FRAMES & CORRESPONDING SCORES

Prioritization Time Frame	Prioritization Score
Tier 1	90 to 80
Tier 2	80 to 75
Tier 3	75 to 65
Tier 4	65 to 55
Tier 5	55 and Under

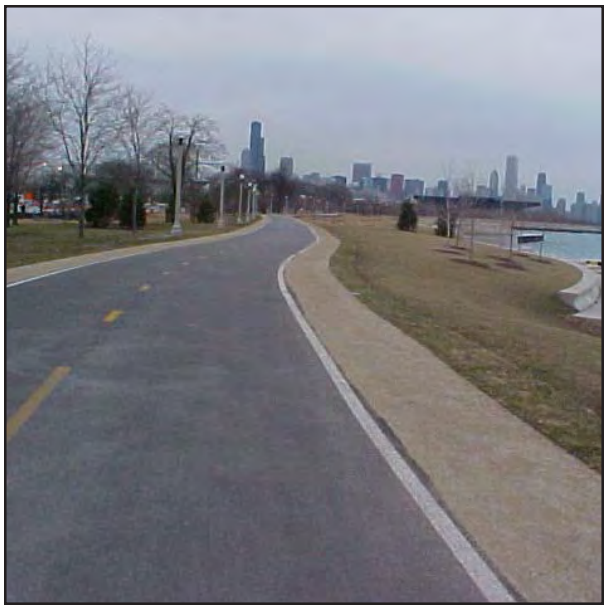
Projects in Tiers 1 and 2 solve serious, immediate safety concerns and were mentioned by the public or interest groups as important. They complete gaps in services or address an area where there is no nearby substitute access point. Tier 1 projects should be considered for implementation as soon as possible. Tier 2 priority projects should be considered within five years, unless circumstances change or they are bundled with other improvements.

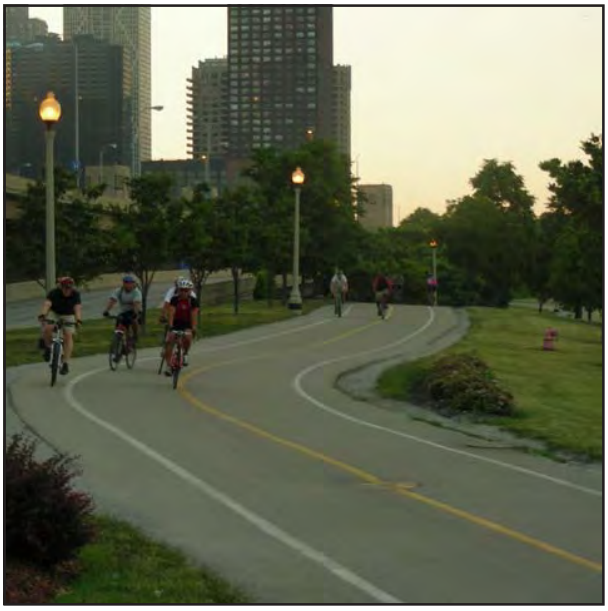
TABLE 23: TIER 1 AND 2 PROJECTS

	Project Name	Totals	Planning-Level Cost Estimate*
Tier 1	23rd Street / McCormick Place	81.1	$92,000
	35th Street Pedestrian Bridge	84.0	$3.48 million
	41st Street Pedestrian Bridge	82.4	$3.78 million
	43rd Street Pedestrian Bridge	87.4	$4.39 million
	47th Street Pedestrian Bridge *(f)*	83.7	$1.5 million
	67th Street & South Shore Dr	82.1	$170,000
	Cornell & Plaisance Pedestrian Crossing	89.0	$200,000
Tier 2	27th Street Pedestrian Bridge	78.6	$6.36 million
	29th Street Pedestrian Bridge	76.6	$5.46 million
	37th Street Pedestrian Bridge	77.1	$3.59 million
	39th / Oakwood On-street Access	75.9	Low / To be determined
	45th Street Pedestrian Bridge	78.3	$4.17 million
	51st Street Pedestrian Bridge	76.9	$2.93 million
	Plaisance / Metra Underpass	76.6	$128,000
	Plaisance Shared-Use Path	76.4	$293,000
	Rainbow Park Access	76.4	$736,000
	USX Parks & Path	75.9	USX

*Notes: * Minimum estimated cost to construct improvement in 2002 dollars.*
USX -- Part of the infrastructure plans for the USX redevelopment.

TRAIL 18: LAKEFRONT TRAIL (SOUTH)





Trail 18: Lakefront Trail (South)

Opportunity: Existing lakefront Chicago Park District parks

North endpoint: Lake Shore Drive and Chicago River (350 N, 500 E)

South endpoint: 2600 East South Shore Drive (7100 S)

Length: 9.9 miles (9.9 miles built)

Participants: Chicago Department of Transportation (CDOT)
Chicago Park District (CPD)
Illinois Department of Transportation (IDOT)

Community areas: Near North Side, (8), Loop (32), Near South Side (33), Douglas (35), Oakland (36), Kenwood (39), Hyde Park (41), Woodlawn (42), South Shore (43)

Features and connections: Lake Michigan, DuSable Harbor, Grant Park, Millennium Park, Monroe Harbor, Art Institute of Chicago, Shedd Aquarium, Field Museum, Adler Planetarium, Soldier Field, Northerly Island, Burnham Harbor, McCormick Place, Burnham Park, Jackson Park, Museum of Science & Industry, Midway Plaisance, University of Chicago, Jackson Harbor, La Rabida Children's Hospital, South Shore Cultural Center

Other trail linkages: Lakefront Trail (North) (existing)
Chicago Riverwalk (Downtown) (partially built)
Boulevard Bikeway (potential)
Lakefront Trail (South) Extension (potential)

Chicago Trail Loop: Yes

Description and comments. The lakefront trail is part of Chicago's extraordinary lakefront park system, the jewel in Chicago's open space crown, and a key component of the Grand Illinois Trail. Approximately eighteen miles of this shared use trail are already in place, including approximately ten miles south of the Chicago River. It passes through Grant Park, Burnham Park, the Museum Campus, and Jackson Park. At East 67th Street it leaves the waterfront and continues along South Shore Drive outside the west and south walls of the South Shore Cultural Center.

This shared use trail enjoys tremendous use. To meet this demand, the Chicago Park District is in the middle of a series of projects that will upgrade the trail to a consistent cross-section that includes a fourteen-foot paved section, (six-foot travel lanes in each direction with a one-foot paved shoulder on either side), along with a three-foot wide soft surface on each side for running, jogging, and walking.

In 2004, the 57th to 63rd Street segment was completed as part of the South Lake Shore Drive Reconstruction Project while other segments are coordinated with the Shoreline Protection Project. (37th to 40th Street has been completed, 40th to 41st Street is currently in construction, and 43rd to 51st Street is programmed.)

A grade separated underpass at Solidarity Drive in the Museum Campus area opened in 2009. An access path along Marquette Road connecting with the city's on-street bike lane is currently being designed.

A significant challenge for this part of the Lakefront Trail (South) is access from the neighborhoods west of Lake Shore Drive and - north of 47th Street - the Metra Electric Line. Several of these access projects have been completed or are in progress. At 57th Street, 59th Street, and Marquette Drive, three new underpasses of South Lake Shore Drive were completed as part of roadway reconstruction. A bridge and underpass combination was completed at 18th Street in 2003 and a bicycle-pedestrian access bridge at 47th Street was replaced in 2005. A pedestrian access bridge at 35th Street over the Metra and the Drive is scheduled for construction as early as 2010 (pending funding) and bridges at 41st and 43rd Streets are currently under design. CDOT's South Lakefront Access Study prioritized these and additional improvements for which funding is sought.

At Millennium Park, the new Bike Station provides secure parking, showers, and repair service to commuters. A study is underway to develop improved access from the Lakefront Trail (South) as part of the potential redesigns of the park spaces in between.

As a whole, the Lakefront Trail and its future extensions are a key element of the several combined routes. In addition to being part of the Chicago Trail Loop and the Grand Illinois Trail, cyclists can continue south to the Burnham Greenway and then onward on routes that go as far as Joliet and Michigan City, IN.

R.O.W. availability. The Lakefront Trail (South) is in place through public parks owned by the Chicago Park District.

Engineering feasibility. There are no engineering obstacles to improving the existing trail as noted above.

Land use compatibility. A shared use trail is compatible with, and complementary to, existing residential, commercial, institutional, and recreational uses.

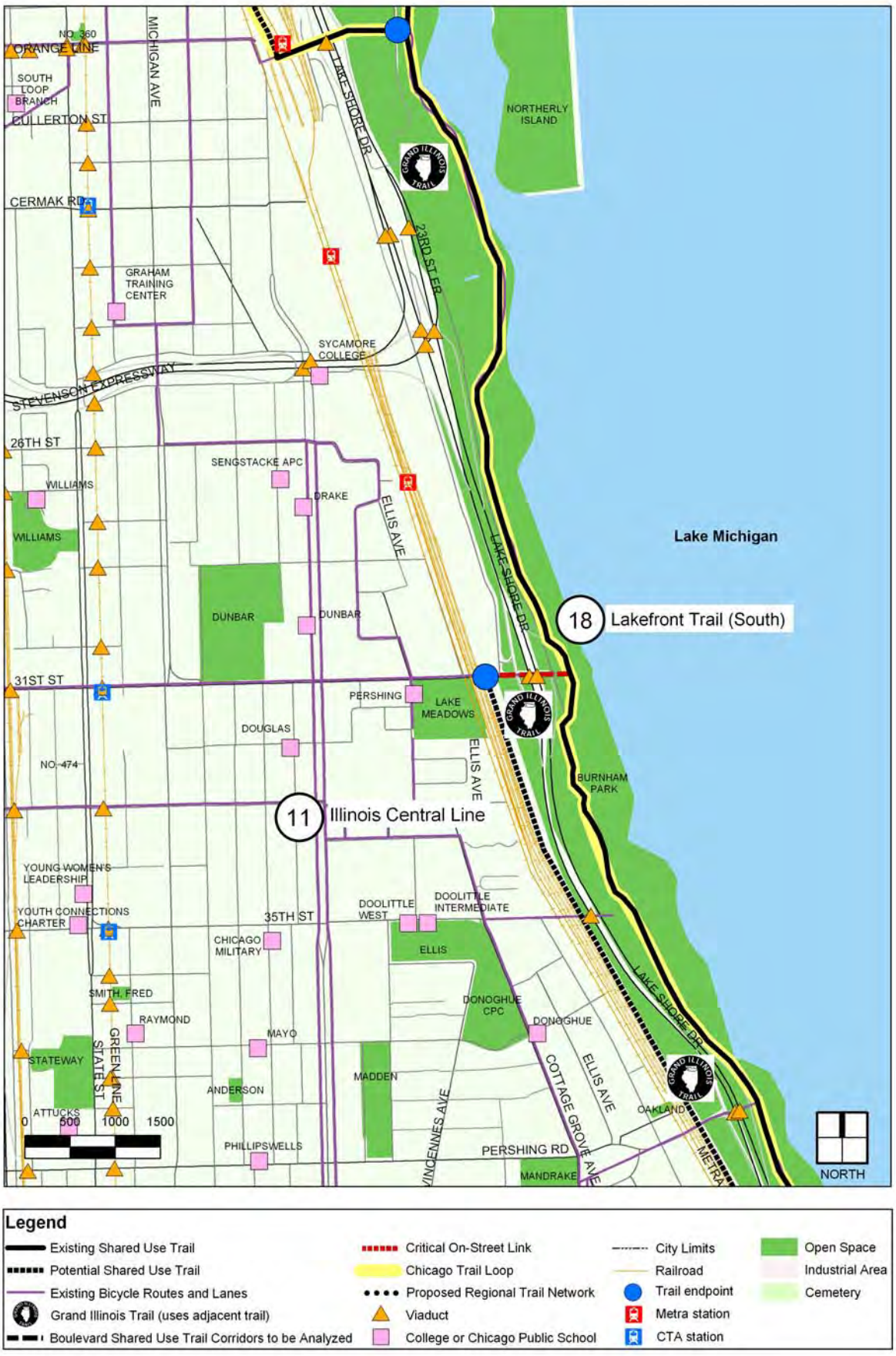
Cost estimate. Low, due to the fact that all of the trail is in place, and needs only improvements and enhancements, but medium to high for some grade separated access improvements.

Use estimate. High, due to connections to Lake Michigan, the lakefront parks, and the entire lakefront shared use trail system.

Alternate uses. None.

Fatal flaws. None.

17 Lakefront Trail (North)
7 Chicago Riverwalk (Downtown)
18 Lakefront Trail (South)
33 St. Charles Air Line
33 St. Charles Air Line
Lake Michigan
KINZIE ST
CLARK ST
RED LINE
LOWER MICHIGAN AVE
PURPLE BROWN LINE
NO. 444
AURORA UNIVERSITY
HAROLD WASHINGTON CITY COLLEGE
ROBERT MORRIS COLLEGE
MILLENNIUM PARK
NATIONAL-LOUIS UNIVERSITY
MADISON ST
BLUE LINE
SCHOOL OF THE ART INSTITUTE
De Paul University
VAN BUREN ST
ROOSEVELT UNIVERSITY
GRANT PARK
McCORMAC COLLEGE
JONES
HARRISON ST
COLUMBIA COLLEGE
SPERTUS COLLEGE
PLYMOUTH CT
EAST-WEST UNIVERSITY
DEARBORN
ROOSEVELT
ROOSEVELT RD
SOUTH LOOP
INDIGO BIRD
13TH ST
NO. 513
BURNHAM PARK
COTTON TAIL
COLISEUM
PERSPECTIVES CHARTER
NORTHERLY ISLAND
16TH ST
PING TOM PARK
South Branch Chicago River
NO. 360
SOUTH LOOP BRANCH
METRA
LAKE SHORE DR
MICHIGAN
INDIANA
ORANGE/GREEN L
STATE
0 500 1000 1500
NORTH
Legend
Existing Shared Use Trail
Potential Shared Use Trail
Existing Bicycle Routes and Lanes
Grand Illinois Trail (uses adjacent trail)
Boulevard Shared Use Trail Corridors to be Analyzed
Critical On-Street Link
Chicago Trail Loop
Proposed Regional Trail Network
Viaduct
College or Chicago Public School
City Limits
Railroad
Trail endpoint
Metra station
CTA station
Open Space
Industrial Area
Cemetery


18 Lakefront Trail (South)
11 Illinois Central Line
Lake Michigan
NORTHERLY ISLAND
LAKE SHORE DR
MICHIGAN AVE
ORANGE LINE
SOUTH LOOP BRANCH
CULLERTON ST
CERMAK RD
GRAHAM TRAINING CENTER
SYCAMORE COLLEGE
STEVENSON EXPRESSWAY
23RD ST EB
26TH ST
SENGSTACKE APC
DRAKE
WILLIAMS
ELLIS AVE
DUNBAR
31ST ST
PERSHING
LAKE MEADOWS
DOUGLAS
BURNHAM PARK
YOUNG WOMEN'S LEADERSHIP
YOUTH CONNECTIONS CHARTER
35TH ST
DOOLITTLE WEST
DOOLITTLE INTERMEDIATE
CHICAGO MILITARY
ELLIS
SMITH, FRED
RAYMOND
MAYO
DONOGHUE CPC
DONOGHUE
STATEWAY
STATE ST
GREEN LINE
MADDEN
ANDERSON
COTTAGE GROVE AVE
OAKLAND
ATTUCKS
PHILLIPSWELLS
VINCENNES AVE
PERSHING RD
MANDRAKE
METRA
NORTH
0 500 1000 1500
Legend
Existing Shared Use Trail
Potential Shared Use Trail
Existing Bicycle Routes and Lanes
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Legend

- Existing Shared Use Trail
- Potential Shared Use Trail
- Existing Bicycle Routes and Lanes
- Grand Illinois Trail (uses adjacent trail)
- Boulevard Shared Use Trail Corridors to be Analyzed
- Critical On-Street Link
- Chicago Trail Loop
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- Metra station
- CTA station
- Open Space
- Industrial Area
- Cemetery

18 Lakefront Trail (South)
Lake Michigan
JACKSON PARK
67TH ST
18 Lakefront Trail (South)
HASAN
OKEEFFE
SOUTH SHORE CULTURAL CENTER
19 Lakefront Trail (South) Extension
71ST ST
0 500 1000 1500
BLACK BRANCH
NORTH
Legend
Existing Shared Use Trail
Potential Shared Use Trail
Existing Bicycle Routes and Lanes
Grand Illinois Trail (uses adjacent trail)
Boulevard Shared Use Trail Corridors to be Analyzed
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Chicago Trail Loop
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